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## A Descriptive Study of the Development and Validation of a Curriculum Development Process for Occupational Therapy in an Institution of Higher Education

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A DESCRIPTIVE STUDY OF THE DEVELOPMENT AND VALIDATION OF  
A CURRICULUM DEVELOPMENT PROCESS FOR OCCUPATIONAL  
THERAPY IN AN INSTITUTION OF HIGHER EDUCATION

by

Alfred G. Bracciano

A Dissertation  
Submitted to the  
Faculty of The Graduate College  
in partial fulfillment of the  
requirements for the  
Degree of Doctor of Education  
Department of Educational Leadership

Western Michigan University  
Kalamazoo, Michigan  
June 1992

A DESCRIPTIVE STUDY OF THE DEVELOPMENT AND VALIDATION OF  
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Alfred G. Bracciano, Ed.D.

Western Michigan University, 1992

This was a descriptive study of a curriculum development process for occupational therapy at Saginaw Valley State University in Michigan. A four-stage process was designed and documented. These stages included: (1) feasibility, (2) curriculum design and development, (3) review and evaluation-validation for each component, and (4) implementation stage.

The study was conducted to develop a curriculum development process that was academically appropriate for occupational therapy programs for institutions of higher education and which met identified needs as set forth by the feasibility study and the American Occupational Therapy Association (AOTA), Division of Education. Further, the study undertook to validate the model process developed and to establish a documented process that other institutions of higher education could use to develop a similar AOTA recognized occupational therapy program.

Stage 1 data included survey data from employers, college students, and high school students. Analysis of data indicated a high level of support for an occupational therapy program. Stage 2, curriculum development, utilized an analysis of three sets of data

which included: (1) AOTA (1991a) Essential Elements for curriculum, (2) curriculum program documents and materials from sister institutions offering occupational therapy programs, and (3) assessment of curricular content of the site institution. Stage 3, the validation study, incorporated: (a) Joint Committee (1981) Standards for Program Evaluation in an evaluation of the curriculum program and (b) an external and internal review process. Stage 4, the implementation phase, was initiated during the study. This stage is based on findings and review of prior components in the process. Descriptive data during the initial steps of implementation are recognized and discussed. The curriculum development process is viewed as a sequential course of events regulated by a systematic method of formative and summative review and evaluation, internally and externally.

The findings from this study indicate that the curriculum development and validation process for an occupational therapy program are academically appropriate for institutions of higher education. It is indicated that the curriculum development process undertaken in this study will facilitate accountability in the development and implementation of new educational programs in occupational therapy within institutions of higher education.



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## ACKNOWLEDGMENTS

There are a number of people I would like to thank who have helped me through this long process. I would like to thank my Committee Chair, Dr. Patrick Jenlink, for his assistance in clarifying and identifying our goals and objectives for this document and project. I would also like to thank Dr. Robert Brinkerhoff for his perceptive review and analysis of each of the drafts. A special thanks to Dr. Crystal Lange, who provided me with the opportunity to undertake this project at Saginaw Valley State University and was a source of support and input. I would be remiss without thanking Dr. Edgar Kelley, who got me started on this journey with his "so what" question and persistent emphasis on influencing and contributing to the betterment of the profession and society at large through my doctoral studies and work. I would also like to thank Lee Pakko, who put up with the many delays and months of waiting between drafts and who remained calm throughout the process, and Karen Currie for her assistance with the charts used in the text.

Special thanks to my parents, Alfred and Olga, who instilled in me my love for learning and writing and who provided me with a model for continued growth and learning. My deepest love and thanks belong to my wife, Tamara, and my children, Christian Michael and Elizabeth Marie. Without their support, patience, and love, this entire undertaking would have been impossible.

Alfred G. Bracciano

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## CHAPTER I

### INTRODUCTION

There have been dramatic changes in the health care delivery system in the United States during the past three decades in the complexity of the system, changes in reimbursement methods, escalating costs, technological advances, and the concurrent increase in personnel needs and medical specialization. Coupled with the advances in the health care delivery system has been the dynamic change in the population of the United States, which has markedly impacted the health care delivery system (Rehabilitation Services Administration, cited in Institute of Medicine, 1989).

The changing face of the United States population coupled with burgeoning demand for specialized health care services has altered and influenced the profession of occupational therapy. The changes in the health care delivery and reimbursement systems of the United States have caused demand for occupational therapy personnel and services to increase (Institute of Medicine, 1989). The escalating need and demand for occupational therapy has facilitated the output of the existing educational programs in occupational therapy (Silvergleit, cited in American Occupational Therapy Association [AOTA], 1989e).

### Definition

Occupational therapy is a health and rehabilitation profession that provides services to individuals of all ages who are physically, psychologically, or developmentally disabled. Therapists provide treatment to individuals who may be suffering from the effects of strokes, developmental disabilities, cerebral palsy, arthritis, diabetes, burns, orthopedic injuries, spinal cord injuries, and psychiatric disorders. The occupational therapy professional designs the rehabilitation process individually for each client and, through evaluation and treatment, seeks to achieve restoration or improvement of impaired functions. The goal of occupational therapy is to assist clients in achieving a maximum level of independent living by developing the capacities that remain after disease, accident, or deformity (AOTA, 1989b).

### National Manpower Needs

The profession of occupational therapy has been growing at an exponential rate with the American Occupational Therapy Association (AOTA) detailing manpower shortages prior to 1985. In the 1985 report, Occupational Therapy Manpower: A Plan for Progress, the Ad Hoc Commission of the American Occupational Therapy Association (AOTA) identified and described the personnel shortages of occupational therapists and occupational therapy assistants in the United States. Since the report was issued in 1985, the AOTA has concluded that the situation has become worse instead of better. It is

projected that between 1991 and the 21st century, jobs for occupational therapists will increase by over 50% (Silvestri & Lukasiewicz, 1987). According to projections of the U.S. Bureau of Labor Statistics (U.S. Department of Labor, 1988-89), occupational therapy will rank 17th among all professions in growth through the year 2000.

Silvestri and Lukasiewicz (1987) projected that total employment of registered occupational therapists will top 45,000 by the year 2000. In 1989, the AOTA determined that there was an actual shortage of occupational therapists of 25%. This figure was derived from combining two models used to forecast personnel needs: one based on need, the other on demand (Silvergleit, cited in AOTA, 1989e).

The need based model is used to determine the number of therapists who would be required to provide services to all persons who need them. AOTA, using the need based model, has estimated the shortage of occupational therapists to be at 40% (Silvergleit, cited in AOTA, 1989e). The demand based model is an economic concept based on the number of jobs or the level of service that the society is willing to support economically. The AOTA estimates the shortage based on the demand based model to be 16% (Silvergleit, cited in AOTA, 1989e).

According to data collected by the AOTA, in 1989, there were 68 accredited educational programs for the occupational therapist, with approximately 8,103 students enrolled (AOTA, 1989a). The educational programs graduate approximately 2,300 students annually. It

is estimated that there are approximately 500 occupational therapists who leave the profession annually. Assuming that recent graduates fill the positions vacated by these veteran therapists, it can be estimated that more than 1,800 additional jobs exist for therapists to fill each year (Silvergleit, 1989). The AOTA (cited in Silvergleit, 1989), in a 1988 study of occupational therapy graduates, found that new therapists had an average of four job offers each. The AOTA has postulated that even when accounting for some degree of overlap to the job offers, projections using the hypothetical figure of only two offers per graduate would provide an additional 4,600 jobs for new graduates per year (Silvergleit, 1989).

The critical shortage of occupational therapy personnel is obvious and has been well documented in both the lay and professional literature. The AOTA and federal agencies project the personnel situation to get worse before it gets better. There are a number of sociological factors fueling the increased demand for occupational therapy personnel.

Bruhn (1991) has postulated that one factor is the discharge of patients from acute care hospitals to rehabilitation facilities, thereby bypassing the prospective payment limitations. An additional component is the addition of occupational therapy as a Medicare-covered rehabilitation agency service under Part B of the Medicare regulations effective since July 1987. Coverage of occupational therapy under Medicare Part B services for skilled nursing facilities facilitates the providers to bill Medicare for these services (Bruhn, 1991). In addition, coverage under Medicare Part B will

provide an incentive for occupational therapy practitioners toward provision of service in the private practice arena. The AOTA, in recognition of the growth and influence of private practitioners, has established a new Special Interest Section in Private Practice.

The trend toward early discharge from acute care settings to the home, due to changes in reimbursement, has also facilitated the demand for occupational therapy personnel in the area of home health care. An additional factor influencing the continued growth and demand for occupational therapy personnel has been the passage of the Education of the Handicapped Act Amendment of 1986 (Public Law 99-457) mandating the provision of services to the handicapped children in the school systems (Humphry & Link, 1990). The provision of occupational therapy in school settings has led to school based employment being the second largest area of practice for occupational therapists, surpassing the historical trend of mental health.

Other social factors will impact the delivery of occupational therapy services including the growth in the number of frail elderly. It is estimated that by the year 2000, there will be double the number of elderly who will need nursing home care at some point in their lives. There are currently 1.3 million nursing home residents (Bruhn, 1991). With the continued advances in medicine and medical treatment, there has been continued improvement in survival rates and an increase in the numbers of individuals with chronic disease processes: survivors of accidents, spinal cord injuries, head injuries, birth defects, and low birth weight babies. All of these disabilities may require the intervention and treatment by



occupational therapy personnel. Barring major changes in medical insurance coverage or reimbursement of services, this trend in the growth of the frail elderly will continue to influence the delivery of health care and particularly the provision of occupational therapy services to these populations.

#### Impact of the Personnel Shortage on the Educational System

What influence will the manpower shortage have on the profession of occupational therapy? The influence will be a dramatic one. The AOTA (1985) report on Occupational Therapy Manpower addressed the issues influencing the shortage of therapists: the geographic maldistribution of personnel in rural areas, the location of educational programs and fieldwork sites, and the scope of occupational therapy practice.

Bruhn (1991) also identified the shortage of occupational therapy personnel and the lack of graduate-degree programs as major issues facing occupational therapy. Grant (1991) identified the undergraduate curriculum reform movement precipitating serious reviews of undergraduate professional programs in the sponsoring universities. Strickland (1987) called for an examination of occupational therapy curricula to determine whether they are meeting the needs of the changes in the student demographics. Recruitment of students has been the Number 1 priority of the AOTA and has been voiced as a major concern for the profession along with retention of occupational therapists and occupational therapy assistants (Strickland, 1987).

The AOTA (1985), through the Ad Hoc Commission, made a number of recommendations to alleviate the shortage: encouraging the expansion of occupational therapy educational programs, promoting the development of new educational programs in underserved areas, and recruiting more students to occupational therapy educational programs.

Since the call for additional occupational therapy programs has been forwarded by the AOTA, there has been a minimal increase in the number of new educational programs nationally. Though the AOTA has persistently called for establishment of new entry level educational programs to respond to the shortage, there has been little movement by higher education in Michigan to respond to this need. In Michigan in 1991, no new baccalaureate level programs in occupational therapy have been accredited by the AOTA and American Medical Association (AMA) for over 42 years (AOTA, 1990c).

Though the AOTA has advocated the development of new educational programs for occupational therapists, there have been no definitive methods or procedures outlining the curriculum development process which can be used by developing programs in occupational therapy.

### Rationale

While there is ample research documenting the shortage of occupational therapy personnel and the need for developing occupational therapy educational programs, there is little research outlining the stages of curriculum development for prospective institutions

interested in establishing an occupational therapy program.

This study, then, seeks to address the lack of specific data by examining the curriculum development process as undertaken by Saginaw Valley State University, University Center, Michigan. In communications with the AOTA, the diversity of curriculum content and the lack of a unifying method for establishing and validating the need for and the process of curriculum development at universities establishing new programs were major concerns of the Education Division.

Lack of a unifying format or process for program development and program validation was identified as an area of need by the AOTA Education Division. This study (a) elaborates on the curriculum development process (CDP) and (b) identifies a method of evaluating the curriculum development process which can be used as a framework by other institutions of higher education interested in establishing an occupational therapy curriculum and program. Use of the evaluation process by other researchers facilitates a review and analysis of the nature of the curriculum development process specific to each institution, while providing external guidelines to insure validity and accountability.

The overriding questions that the study seeks to answer are:

1. What processes are needed to validate the need for an occupational therapy educational program?
2. Assuming that there is a need for a program, what format can be followed to develop an occupational therapy curriculum to insure program validity?

Specifically, this study examined the curriculum development process (CDP) for occupational therapy programs with reference to three underlying components: (1) feasibility--determining the need for developing an occupational therapy educational program at a prospective university; (2) curriculum--identification of the technical aspects of designing a curriculum; and (3) validation--examination and identification of the process needed to evaluate and validate the overall program design and development, curriculum development, and the feasibility of program development.

### Overview

There are five planned chapters in this dissertation.

#### Chapter I: Context and Significance of the Problem

Chapter I consists of a review and description of the research problem, the purpose of the study, and the rationale and procedures that follow. The benefits of the research question are also analyzed and discussed along with the implications for the profession of occupational therapy.

#### Chapter II: Review of the Related Literature

The literature as it relates to occupational therapy educational programs, manpower needs, curriculum design elements, and curriculum design processes is reviewed in Chapter II.

### Chapter III: Implementation of the Curriculum Development Process at Saginaw Valley State University

The curriculum development process as implemented at Saginaw Valley State University (SVSU) is described in Chapter III. Stages of development, procedures used, and review and analysis of the process as implemented by Saginaw Valley State University are discussed.

The procedures used to develop the survey instruments as well as the methods used for the validation of the instruments are also discussed in Chapter III. Curriculum development was accomplished through the use of the AOTA (1991a) Essentials and Guidelines of an Accredited Educational Program for the Occupational Therapist. Curriculum content was designed through the use of the AOTA Essentials and Guidelines.

### Chapter IV: Evaluation of the Curriculum Development Process

Discussed in Chapter IV are the procedures used to develop and evaluate the effectiveness of the curriculum development process. Examined and reviewed in this chapter are the standards used and the general curriculum design criteria. Identification of constituent groups involved, their feedback, and input are also discussed.

Internal and external review of the curriculum development process as implemented by Saginaw Valley State University also discussed. Program evaluation was established through the use of the Joint Committee on Standards for Education Evaluation's (1981) Standards for the Evaluation of Educational Programs, Projects, and Materials. An analytical matrix consisting of the standards was

used to review how the standards were met along with a description of concerns and recommendations regarding the program. The Joint Committee Standards were analyzed and reviewed by the SVSU Occupational Therapy Task Force Committee and the Education and Research Division of the American Occupational Therapy Association.

#### Chapter V: Summary, Conclusions, and Recommendations

The strengths and weaknesses of the curriculum development process are reviewed in Chapter V. Conclusions and summary of the results of the study are discussed as are implications of the curriculum development process as it relates to the profession of occupational therapy.

##### Summary

There has been continued growth in the profession of occupational therapy with projections of continued expansion into the next decade. Coupled with this growth has been an increasing disparity between employment demands, societal needs, and the ability of the educational programs to balance graduates with the growth resulting in a manpower shortage. With this shortage have come persistent calls by the profession for the establishment of additional educational programs to provide an adequate pool of professionally educated therapists. There is, however, no format available or in use by the AOTA for establishment or validation of the curriculum development process.

Examined in this research, then, was the curriculum development process undertaken at an institution of higher education which was used to establish an occupational therapy educational program. Additionally, this research identified the steps used to validate the need for the program, the steps used to validate the curriculum, and provided a method for evaluation of program and curriculum development which can be utilized by other institutions similar to Saginaw Valley State University.

Though the requirements for curriculum development will vary dependent upon the internal and external requirements of the host institution, the evaluation and subsequent validation of the program design process can be used and refined by other researchers to standardize the curriculum development process.

## CHAPTER II

### REVIEW OF THE RELATED LITERATURE

#### Introduction

The purpose of this descriptive study was to document and validate development of a model for the curriculum development process for occupational therapy as formulated and undertaken at Saginaw Valley State University, University Center, Michigan. This study presents a process which can be utilized by other individuals to determine: (a) the need for a program in occupational therapy; (b) the design of an occupational therapy curriculum, the technical aspects of development, the evaluative component, and the internal/external review process; and (c) an evaluation method for program and curriculum development which can be used to guide and validate the curriculum development process. This chapter reviews the field of literature pertaining to the areas of curriculum development, curriculum design, curriculum paradigms, evaluation, and curriculum development in occupational therapy.

With the initiation of dialogue with Saginaw Valley State University, Department of Nursing and Allied Health Science, in the Winter Semester 1989, the need to identify, review, and collate data and information regarding occupational therapy manpower statistics was identified as being necessary to aid in determining the direction for further study. Analysis of this information provided



decision makers with an outline for further regional and local study in order to validate or disprove the need for an additional occupational therapy educational program in Michigan. Assuming that there was a determination of need for a fourth program in occupational therapy in Michigan, a review of the literature for curriculum development was also undertaken to identify the steps necessary for the development and validation of the process and program.

### Historical Perspectives

Occupational therapy, as have many health professions, has been undergoing a period of dramatic growth and development. According to data from the American Occupational Therapy Association (AOTA, 1989c) in 1989, there were approximately 37,600 occupational therapists actively practicing in the United States. The AOTA has been tracking a growing manpower shortage of occupational therapists since the 1985 report by the Ad Hoc Commission which delineated the shortage of occupational therapists and documented the geographic maldistribution of therapists. The AOTA Research Information and Evaluation Division reviewed current data and information and determined that there was a manpower shortage of 25% (Silvergleit, cited in AOTA, 1989b) (see Figure 1). By using the 25% factor, the AOTA (1989b) determined that there were 9,400 additional therapists required in the United States in 1989 (see Table 1). Vacancy rates for occupational therapists range between 10% and 20% at various locations around the country (Silvergleit, cited in AOTA, 1989b). The AOTA projected the overall vacancy rate to be approximately 16%

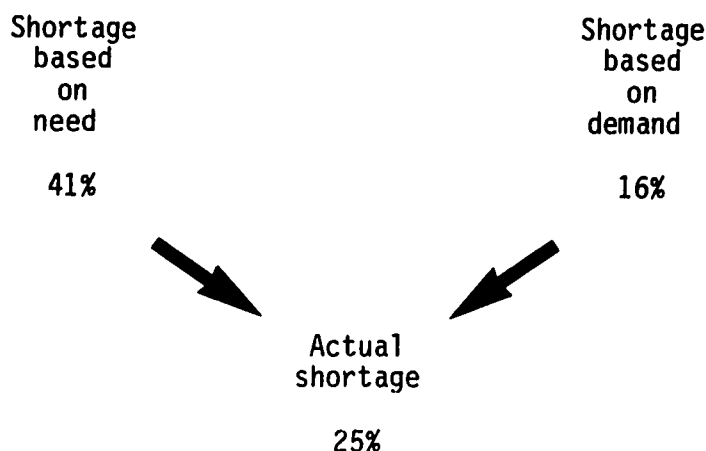


Figure 1. Shortage Estimate for Occupational Therapists.

nationally. Vacancy rates are lower in some metropolitan areas and vary according to setting and geographical region (see Table 2).

The U.S. Department of Labor, Bureau of Labor Statistics (BLS, 1988-89) estimated that jobs for occupational therapists will increase by 52% by the year 2000. The BLS identified a number of factors which it anticipated would facilitate this strong growth in employment opportunities for occupational therapists. These factors included: revisions in federal legislation involving services for handicapped children, thereby increasing employment in the area of school services; the trend of occupational therapists increasing their share of hospital employment; and projected increases in private practice opportunities due to improved reimbursement.

Graduates of occupational therapy programs are finding a competitive market for their services. The AOTA determined that recent graduates from occupational therapy programs averaged four job offers directly after graduation (AOTA, 1989a) (see Table 3).

Table 1

**Manpower Needs for Occupational Therapists-Registered and  
Certified Occupational Therapist Assistants  
(Based on 75% of highest state ratio)<sup>a</sup>**

Year	U.S. population	Occupational therapists-registered		Certified occupational therapist assistants	
		Current	Needed	Current	Needed
1989	247,498,000	37,600	53,000	9,300	31,700
1995	259,559,000	47,200	56,700	13,600	33,700

**Shortage**

Year	Occupational therapists-registered		Certified occupational therapist assistants	
	No.	%	No.	%
1989	15,441	41	22,400	240
1995	9,500	20	20,100	148

**Note.** 1995 current workforce projected at current levels of educational output and attrition.

<sup>a</sup>Data taken from Geographical Membership Data by American Occupational Therapy Association, 1989, Rockville, MD: Author.

Table 2  
Occupational Therapist-Registered Vacancy Rates

Area covered	Rate %
<b>Nationwide</b>	
Hospitals (1988)	14.7
Schools (1985-86)	16.2
<b>State</b>	
<b>New York (1987)</b>	
Hospitals	18.4
Nursing homes	12.7
Home health agencies	7.8
Illinois hospitals (1988)	12.3
Florida hospitals (1988)	15.7
Georgia (1987)	14.9
Hospitals	16.1
Nursing homes	9.4
Home health care	18.6
<b>Area hospitals</b>	
Dallas/Fort Worth (1987)	8.1
Metropolitan Chicago (1988)	8.7
Western Pennsylvania (1987)	12.0

Note. Data taken from Geographical Membership Data by American Occupational Therapy Association, 1989, Rockville, MD: Author.

Table 3  
Job Offers for New Graduates  
(1988 Data)

	Average number of job offers		Average months until job	
	Employed Full time	Employed Part time	Employed Full time	Employed Part time
Occupational therapists-registered	4.0	2.6	<1	1.4
Certified occupational therapist assistants	3.2	2.2	1.7	1.4

Note. Data taken from Education Data Survey: Final Report by American Occupational Therapy Association, 1989, Rockville, MD: Author.

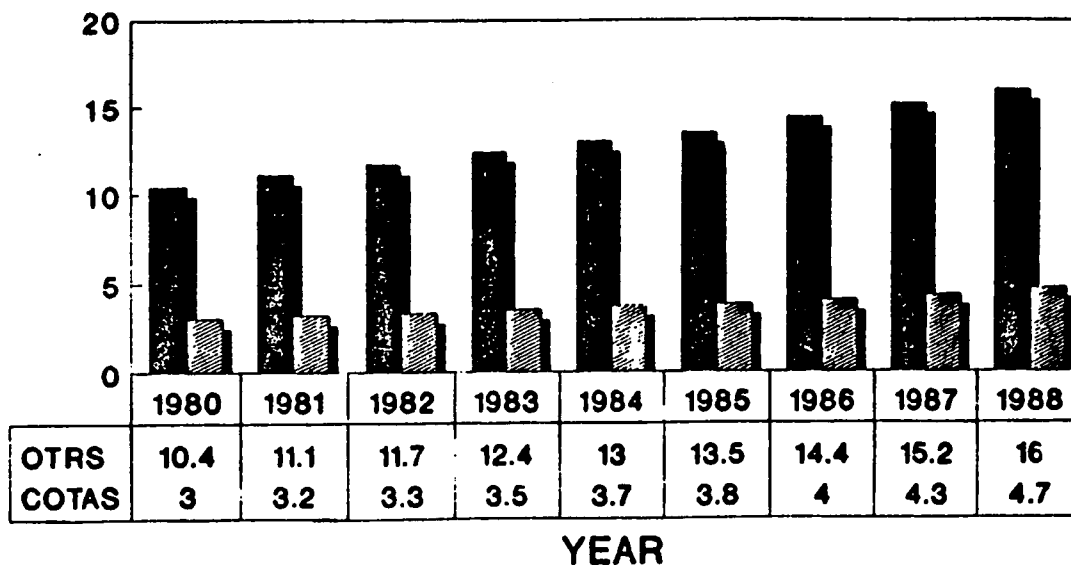
Starting salaries for occupational therapists have increased by approximately 50% in the past 5 years with entry-level salaries for first year occupational therapists averaging \$25,593; salaries of self-employed therapists averaged \$31,055 (Silvergleit, cited in AOTA, 1989e). Agencies and facilities frequently offer sign-on bonuses and incentive pay to attract occupational therapists (Strickland, 1987).

The Rehabilitation Services Administration (RSA, cited in Institute of Medicine, 1989) identified occupational therapy among other rehabilitation service providers, including speech therapists, physical therapists, respiratory therapists, and others. The RSA has indicated that among these providers, the shortage of occupational therapists ranks as fifth highest. The RSA has also reported

that occupational therapy ranks as the second highest profession in terms of having an inadequate pool of qualified applicants (RSA, 1985).

The AOTA (1991b) has reported that the geographic maldistribution identified by the Ad Hoc Commission in 1985 continues. The supply ratio of therapists to 100,000 population varies from a low of 2.1 in Mississippi to 29.1 in New Hampshire (see Figure 2). The AOTA recommendation for the distribution of occupational therapists to 100,000 population is 22:100,000. This figure is derived by applying the 75th percentile of the state with the highest ratio. Michigan currently has a manpower ratio of 19:100,000 (Silvergleit, cited in AOTA, 1989e). A difficulty in extrapolating this target ratio is that it fails to take into account any factors other than population size. The ratio also ignores differences in population characteristics or other factors which may influence the distribution of therapists such as the clustering of health care facilities, the location of educational programs, and regional and rural needs and demands.

The National Academy of Science, Institute of Medicine (1989), conducted a study of manpower shortages in occupational therapy and other health care professions. The researchers concluded that the shortage situation for occupational therapy will worsen, due in part to: the aging population, increasing numbers of patients surviving disabilities, career options for women, and changes in reimbursement and employment opportunities. The U.S. Department of Labor, Bureau of Labor Statistics (cited in Institute of Medicine) predicted in



Legend: OTRS = Occupational Therapists-Registered.  
COTAS = Certified Occupational Therapist Assistants.

Figure 2. Occupational Therapists Per 100,000 Population, 1980-1988.

Source: Available from American Occupational Therapy Association, Rockville, MD.

1989 a strong growth in employment for occupational therapists with a high growth rate for the profession (Institute of Medicine, 1989).

With the well-documented data regarding the personnel shortage in occupational therapy and the prospects for continued strong growth of the profession, recruitment and retention of occupational therapists along with development of new educational programs has become a major concern and priority of the profession (AOTA, 1985, 1990a; Bruhn, 1991; Strickland, 1987, 1989).

With the emphasis by AOTA on increasing the number of educational programs and graduates, opportunities for development of occupational therapy curricula in underserved areas has been

forwarded as a means of improving the growing manpower shortage. Despite this urgent need for educational programs, there is a paucity of information available to individuals interested in developing or designing an occupational therapy curriculum.

### Curriculum Development

There have been a number of theories and definitions forwarded regarding curriculum and curriculum development. The definition or organization of curriculum development is dependent in part on the influence of the societal or organizational needs and views of the involved constituents. Definitions of curriculum have differed and reflect the various schools of thought in the curriculum field. Changing societal expectations, changes in the conception of the knowledge base, changes in the educative process, and the role of the individual in the learning experience all contribute to the difficulty in formulating an individual definition. Definitions of curriculum have, at times, been overly expansive as well as being too restrictive.

Tanner and Tanner (1980), in reviewing definitions of curricula have found the term defined as "(1) the cumulative tradition of organized knowledge, (2) modes of thought, (3) race experience, (4) guided experience, (5) cognitive/affective content and process, (6) an instructional plan, (7) instructional ends or outcomes, [and] (8) a technological system of production" (p. 36). Tanner and Tanner contended that there may not be agreement on a universally accepted definition.



An evolving definition of curriculum which views the curriculum as an experience rather than as a product can be seen in the definition postulated by Doll (1970). He originally defined curriculum as, "all of the experiences that learners have under the auspices of the school" (p. 8). His working definition of curriculum further evolved to clarify that the "curriculum of a school is the formal and informal content and process by which learners gain knowledge and understanding, develop skills, and alter attitudes, appreciations, and values under the auspices of that school" (p. 8). This definition identifies the formal and informal aspects of schooling as well as the content and process of learning.

Tanner and Tanner (1980), in contending that each school or university is unique in its organization and treatment of knowledge, proposed that curriculum should be defined as "that reconstruction of knowledge and experience, systematically developed under the auspices of the school (or university), to enable the learner to increase his or her control of knowledge and experience" (p. 38). Tanner and Tanner viewed the curriculum as the unifying format which is related to the learner's ability to increase one's control of knowledge and experience. Such a view, they contended, unifies rather than fragments the school and curriculum and takes into account the personal-social problems and needs of the community or constituency.

Bevis (1982) articulated the view that the curriculum was made up of learning activities which are organized in a specific way to achieve educational goals. Torres (1975) also viewed curriculum

development as an attempt to define the functioning of the whole while identifying the relationship among its parts. Both Torres (1975) and Bevis (1982) defined curriculum development and the curriculum development process as being dynamic in nature and an ongoing process. Stanton and Torres (1982) further refined the concept of curriculum as a framework or matrix which can organize thoughts, establish a uniform language, and provide a method for validating actions.

Wiles and Bondi (1989) viewed curriculum as a plan for learning which consists of the two dimensions of vision and structure. Wiles and Bondi believed that the vision in a curriculum is a set of "assumptions about people and the world" which assumes the "form of some conceptualization of reality" (pp. 3-4). In Wiles and Bondi's view, the curriculum possesses an organization or method of translating the visionary aspects of the plan into a variety of experiences for the learner.

Other authorities view the term curriculum broadly. Brubaker (1982) defined curriculum as "what persons experience in a setting" (p. 2). Nicholls and Nicholls (1978) also described curriculum development as a dynamic and continuing process. They defined curriculum as the planning of learning opportunities intended to bring about certain changes in pupils in conjunction with the assessment of the extent to which these changes have taken place.

Phenix (1962) placed the emphasis on the content of the instructional program itself. He contended that "the curriculum should consist entirely of knowledge which comes from the

disciplines" (p. 64). With this view, individual definitions of curriculum would mirror the variety of professional orientations.

Taba's (1962) definition of curriculum also emphasized the primacy of curriculum as the method for transmitting content rather than as the content itself. In Taba's view, curriculum is thought of as a "plan for learning" (p. 11).

Another theory of curriculum which is viewed as dependent upon the orientation is espoused by Oliva (1982). Oliva envisioned curriculum as "a plan or program for all the experiences which the learner encounters under the direction of the school" (p. 10).

Armstrong (1989), in reviewing definitions of curriculum delineated five basic conceptualizations:

- (1) Curriculum is the school's adopted program of studies; (2) curriculum consists of contents of the various courses taught in the school; (3) curriculum involves planned interactions among instructors, learners, and learning resources in the school or in other appropriate instructional settings; (4) curriculum encompasses all of the experiences offered to learners under the authority of the school or under the authority of other appropriate instructional agencies; and (5) curriculum includes all planned and unplanned experiences of learners in the school and in other appropriate instructional settings. (p. 3)

Armstrong (1989) contended that researchers and educators need to view curriculum within the context of its applicability and relevance to a variety of educational settings. Armstrong defined curriculum as: "a master plan for selecting content and organizing learning experiences for the purpose of changing and developing learners' behaviors and insights" (p. 3).

## Curriculum Paradigms

Though there is a variety of definitions of curriculum, there is general agreement as to the scope of curriculum development. As the majority of definitions have put forth, the underlying concept of curriculum is that of a plan for learning which meets the needs and content intrinsic to the learner and setting. Organizing and conveying the curriculum content to the learner enables the individual to elevate and control his or her knowledge, behavior, and experiences.

Curriculum and curriculum development occurs in an infinite number of settings, in a variety of experiences, and at a number of levels. Curriculum development may occur at basic segmental levels within specific subjects. Revisions of individual subjects or courses of study without regard for or consideration of the relationships the course may have with other subjects are often undertaken in educational settings. Development of individual instructional units or lesson plans are frequently referred to as microcurriculum work. Armstrong (1989) and Tanner and Tanner (1980) referred to the development of isolated, smaller segmental elements of subject groups, establishing or adopting segmental practices in response to external demands and pressures as constituting microcurricular development. Tanner and Tanner (1980) viewed this segmental approach to microcurriculum as neglecting the relationships of the parts to the whole.

Armstrong (1989) believed that the "more curriculum work focuses on the development of widely applicable guidelines and provides relatively few specific details about how programs are to be implemented, the more it tends toward macrocurriculum" (p. 4). Tanner and Tanner (1980) concurred with Armstrong's view of the macrocurriculum and emphasized the necessity for curriculum horizontal articulation which they viewed as the relationship among the studies or the scope of the curriculum.

The importance of the macrocurriculum is viewed by most theorists as the basic underpinnings of an effective curriculum. Individuals developing curricula need to identify and continuously reassess the macrocurriculum. Failure to identify the interrelationships of studies and the holism of the macrocurriculum may lead to segmental and often ineffective learning.

Kuhn (1970) conceptualized paradigm as a consensual model through which problem solutions are derived, thereby enabling the practitioners in a specific field to make progress. Initial theories regarding development or improvement of curriculum were posited by Dewey in 1902 (cited in Armstrong, 1989). Dewey remarked that the fundamental factors which were considered sources or influences in the educative process were: (a) the learner (the immature, undeveloped being), (b) organized subject matter (the specialization and divisions of the curriculum), and (c) society (certain social aims; meanings, values incarnate with the matured experience of the adult). Dewey warned against the tendency to treat these three fundamental factors as separate and antagonists, instead of viewing

them as interactive.

Further development of a curriculum development paradigm grew out of a longitudinal study by the Progressive Education Association (cited in Armstrong, 1989), the Eight-Year Study (1933-1941). This paradigm was based on the same basic three factors identified earlier by Dewey (cited in Armstrong, 1989). Giles, McCutchen, and Zechiel (1942) reported how curriculum development and evaluation for the Eight-Year Study analyzed four fundamental factors related to: (1) the formulation or identification of educational objectives, (2) selecting the means for attaining these objectives (curriculum), (3) organizing these means or methods, and (4) evaluating the outcomes.

Though the various elements of the Eight-Year Study and the inquiry undertaken by Giles et al. (1942) led to further clarification of Dewey's (cited in Armstrong, 1989) initial hypothesis, the elements identified were not sufficiently refined to be considered a curriculum paradigm.

Tyler (cited in Kliebard, 1970) further refined the paradigm for analyzing and developing curricula by identifying four questions which needed to be considered in the curriculum development process:

1. What educational purposes should the school seek to attain?
2. What educational experiences can be provided that are likely to attain these purposes?
3. How can these educational experiences be effectively organized?

4. How can we determine whether these purposes are being attained? (p. 260)

Though there is disagreement whether Tyler's (cited in Kliebard, 1970) questions can be viewed as a four-step sequence, there is considerable similarity between Tyler's process and the basic essentials espoused by Dewey (cited in Armstrong, 1989).

Many curricularists (Doll, 1989; Nicholls & Nicholls, 1978; Worthen & Sanders, 1987) envisioned Tyler's (cited in Kliebard, 1970) paradigm as a four-component sequence of inquiry consisting of: (1) identifying objectives, (2) selecting the means for the attainment of these objectives, (3) organizing these means, and (4) evaluating the outcomes.

Tyler's (cited in Kliebard, 1970) paradigm of curriculum development initially was viewed as being linear in nature. The major thrust of Tyler's model was the additional component of evaluation which led to a reconsideration of purpose (Wiles & Bondi, 1989). Curricularists have often debated whether the model adheres to a segmental, sequential process. In fact, the paradigm is viewed as being cyclical in nature due to the evaluative aspect of the model which warrants continuous revision and analysis. Curriculum development is viewed as developmental and dynamic in nature.

Taba (1962) refined Tyler's (cited in Kliebard, 1970) approach to curriculum development by identifying seven major steps which needed to be considered: (1) diagnosis of needs, (2) formulation of objectives, (3) selection of content, (4) organization of content, (5) selection of learning experiences, (6) organization of learning

experiences, and (7) determination of what to evaluate and means of doing it.

Alternative proposals to Tyler's (cited in Kliebard, 1970) model of curriculum development have been forwarded by Macdonald, Wolfson, and Zaret (1973) in what they termed a humanistic-existential-personal approach. Though they attempted to clarify the sociocultural forces influencing society and their conceptions of learning, their approach, according to Tanner and Tanner (1980), is developed around the underlying sources identified by Tyler: (a) the learner, (b) society, and (c) philosophy. Tanner and Tanner contended that in fact the broad-fields approach forwarded by Macdonald et al. is consistent with and subsumed in Tyler's rationale.

Though there has been continued debate over the emergence of a model or paradigm for use by educational specialists, the refinement of the Tyler rationale has been used as a conceptual model by most theorists in curriculum development (Worthen & Sanders, 1987). Though there has been continued modifications and refinements of the paradigm, the model provides the researcher with a problem-solving process in which applicable data and information are drawn from three major areas: (1) society (social ideals and the social situation), (2) the nature of the learner, and (3) codified or systematized knowledge which provides for the selection and organization of subject matter and learning experiences. These three sources are viewed as being interrelated and interdependent. The needs and philosophical approach of the school, agency, or educator will



provide the foundation guiding the development of curriculum based on the perceived concerns of the host setting and the internal and external constraints placed upon it.

### Evaluation

The development of new educational programs in occupational therapy presents the profession with unique opportunities, including expansion of professional roles; opportunities for the expansion of research and technology; and perhaps the most important benefit, provision of an adequate supply of competently educated and trained practitioners. Development of new programs also carries with it the negative potentiality of over-expansion and uncontrolled growth. A crucial factor in the curriculum development process frequently overlooked by developing programs is the component of evaluation. In conversations with the AOTA Division of Education, indiscriminate expansion and development of occupational therapy educational programs by some regions by private colleges has created an overabundance of occupational therapy students with the associated difficulties of lack of internship sites, geographic maldistribution of therapists, and a decrease in program quality.

It is advocated in this dissertation that adherence to the curriculum development model with the associated evaluative component would provide decision makers with the input and data required to improve accountability in the development process. In addition, use of the curriculum development model may prevent unchecked growth and unsubstantiated development of new programs in regions which may

be oversupplied with therapists.

There have been a variety of articles and texts written about the general theme of evaluation, but little has been written about evaluating programs and projects intended to improve the curriculum (Doll, 1989). Members of the Joint Committee on Standards for Educational Evaluation (1981) developed the Standards for Evaluations of Educational Programs, Projects, and Materials due, in part, to their perception that there were no adequate standards available to guide research and development.

Evaluation has been defined by many authors and researchers. Evaluation as a means of providing information for decision making has been espoused and refined by Cronbach (1980), Phi Delta Kappa, Inc. (1971), and Guba (1966). Stone (1978) viewed evaluation as a means by which accountability for effectiveness may be measured. Phi Delta Kappa, Inc. (1981) defined evaluation as "the process of delineating, obtaining, and providing useful information for judging decision alternatives" (p. 37). Phi Delta Kappa, Inc. viewed evaluation as a method of devising strategies and identifying alternative actions which can lead to educational improvements.

Green and Stone (1977) defined evaluation in a broad fashion and reported that "evaluation (appraisal) is the systematic documentation of the consequences (results or effects) of programs (curriculums) and the determination of their worth (merit) in order to make decisions about them" (p. 4). They further elaborated that the term evaluation implies decisions and judgments.

Doll (1989) defined evaluation as a "broad and continuous effort to inquire into the effects of utilizing educational content and process to meet clearly defined goals (p. 237). Torres (1975) elaborated the assumption that evaluation is a process of data collection or evidence in relation to the attainment of specific objectives for which one is accountable. Worthen and Sanders (1987) defined evaluation as the act of rendering judgments to determine value without questioning or diminishing the important roles evaluation plays in decision making and political activities.

For the purposes of this paper, the definition and description of evaluation as espoused by Worthen and Sanders (1987) is adhered to. Worthen and Sanders, in defining evaluation in education, viewed evaluation as a formal "determination of the quality, effectiveness, or value of a program, product, project, process, objective, or curriculum" (p. 22). Worthen and Sanders cited the components of evaluation which include: (a) determining standards for judging quality and deciding whether these standards should be relative or absolute, (b) collecting relevant information, and (c) applying the standards to determine quality.

Though there are many perspectives and theories regarding evaluation, there are some basic underlying assumptions and elements generic to the field. Scriven (1967) described the summative and formative roles of evaluation. Formative evaluation is concerned with program improvement. Formative evaluation may occur during the operation of a program. Conversely, summative evaluation is concerned with determining the overall effectiveness of a program.

Scriven viewed summative evaluation as being conducted at the end of a program to provide information and data to a potential audience regarding the value or merit of a program. Worthen and Sanders (1987) articulated the concept that formative evaluation should facilitate decisions regarding program development, modification, or revision, whereas summative evaluation is conceptualized as facilitating decisions regarding program continuation, termination, expansion, or adoption.

One's approach to evaluation is determined by one's philosophical, methodological preferences, situational components, and expertise. Worthen and Sanders (1987) identified a system of classification for the differing approaches to evaluation. These classifications include:

1. Objectives-oriented approaches are distinguished by their focus on specifying goals and objectives and determining the degree to which these are achieved. Examples of these approaches include Tyler (1942), Hammond (1973), and Provus (1973).

2. Management-oriented approaches are exemplified by Stufflebeam's (Phi Delta Kappa, Inc., 1971) Context, Input, Process, and Product (CIPP) Model and Alkin's (1969) University of California-Los Angeles (UCLA) Evaluation Model, which focus on identifying and filling the concerns and needs of decision makers.

3. Consumer-oriented approaches, such as Scriven's (1967) Concerns and Checklists and similar systems developed by Tyler and Klein (1967) and Morrisett and Stevens (1967), concentrate on developing evaluative data on educational products which are used by

educational consumers.

4. Expertise-oriented approaches evidenced by the broad categories of formal professional review systems, informal professional review systems, ad hoc panel reviews, and ad hoc individual reviews (Worthen & Sanders, 1987), which rely on the assessment and professional expertise of an identified individual or organization.

5. Adversary-oriented approaches are where both sides of issues or questions are argued and addressed (those opposed and those in favor), such as Owens (1971), Owens and Owens (1981), and Madaus (1981).

6. Naturalistic and participant-oriented approaches are those in which naturalistic inquiry and the involvement of participants play a primary role in determining the values, criteria, needs, and data for the evaluation as exemplified by Stake's (cited in Armstrong, 1989) Countenance Model, Parlett and Hamilton's (cited in Worthen & Sanders, 1987) illuminative evaluation, and Guba and Lincoln's (1981) naturalistic method of inquiry.

Torres (1975) has elaborated that evaluation for the purpose of program improvement is essential if one is to be accountable to the various publics. Torres (1975) and Stone (1978) suggested that the lack of a systematic, total, and comprehensive approach to evaluation may reflect a lack of sophistication or insecurity and fear of the results. Lynch (1978), in identifying evaluation as a systematic process, described the who, what, and where aspects of evaluation.

Brinkerhoff, Brethower, Hluchyj, and Nowakowski (1983) described a number of criteria which should be considered to assist in clarifying the reason or purpose of an evaluation and whether the evaluation is then defensible. These criteria include whether the purpose for the evaluation is: (a) clear, is it understood by constituent groups; (b) accessible, is the information disseminated to those who have a right to know; (c) useful, will the information accumulated be used; (d) relevant, is the evaluation to provide useful information which can assist the program; (e) humane, can the evaluation be achieved without harm to involved or affected constituents; (f) compatible, is the evaluation consistent with the goals of the host setting, client, participants, and stakeholders; and (g) worthwhile, do the benefits justify the cost of the undertaking.

An additional component of evaluation in the curriculum development process is the meta-evaluation. Worthen and Sanders (1987) described the meta-evaluation as the evaluation of an evaluation. The authors clarify the importance of the formative meta-evaluation and the summative-evaluation which provides credibility to the final results. Development of a meta-evaluation was begun under the guidance of Stufflebeam (1975) with the culmination of the work by the Joint Committee on Standards for Educational Evaluation (1981) Standards for Evaluations of Educational Programs, Projects, and Materials. Though application of the Joint Committee Standards has been used by researchers in the field of education, review of the literature with regard to their application in the field of occupational therapy revealed that there have not been any published

studies utilizing the standards as part of the curriculum development process.

### Curriculum Development in Occupational Therapy

The basic components underlying curriculum development models consist of four fundamental factors: (1) the formulation or identification of educational objectives, (2) selecting the means for attaining these objectives (curriculum), (3) organizing these means or methods, and (4) evaluating the outcomes (Armstrong, 1989). Curriculum has been defined as the cumulative tradition of organized knowledge (Tanner & Tanner, 1980), modes of thought (Wiles & Bondi, 1989), an instructional plan (Taba, 1962), and others. All definitions of curriculum, however, contain the underlying concepts of both the formal and informal content and processes which students gain knowledge, understanding, and control of the experience. The plan for learning should meet the needs and content intrinsic to the learner and setting. Organizing and conveying the curriculum content in a cohesive fashion enables the learner to elevate and control his or her knowledge, behavior, and experiences.

The curriculum development process has been described as dynamic and ongoing and the importance of the macrocurriculum in providing a focus and vision has been emphasized by curricularists (Armstrong, 1989; Tanner & Tanner, 1980). Macrocurriculum has been defined as the development of widely applicable guidelines which provide few specific details regarding how the program is to be implemented (Armstrong, 1989). The macrocurriculum should be

consistent with the needs and philosophical approach of the school, agency, or educator as it will provide the basic foundation guiding further development and refinement as well as providing horizontal articulation of the coursework. Development of a macrocurriculum will be dependent upon the intrinsic needs and settings inherent in the institution where the curriculum development process is being implemented.

Though there has been a continued call for aggressive expansion of occupational therapy educational programs (AOTA, 1985; Strickland, 1987; Teske & Spelbring, 1983) with a concurrent debate over the competency of entry-level education in the profession of occupational therapy, there is a paucity of information available regarding curriculum development.

According to the American Occupational Therapy Association (1991a), the Essentials and Guidelines for an Accredited Educational Program for the Occupational Therapist (Essentials), provide the "minimum standards of quality used in accrediting programs that prepare individuals to enter the occupational therapy profession" (p. 1). The Essentials provide the minimum requirements which an accredited program is held accountable for in order to meet accreditation by the AOTA and the Committee on Allied Health Education and Accreditation (CAHEA).

Controversy over a theoretical base as well as the role and clarity of the Essentials (AOTA, 1991a) in defining occupational therapy practice and education have continued to be addressed in the professional literature (Heater, 1992; Wittman, 1990; Yerxa, 1991).



Lack of a consensus on the content, process, or desired outcome of occupational therapy education were articulated by Yerxa and Sharrott (1986).

Yerxa (1986) stated that the Essentials (AOTA, 1983) are so nonspecific that they are of little help in curriculum design and that there is a lack of clarity regarding the sort of person who should enter practice after graduation. Revising and developing the educational Essentials that would allow flexibility in curriculum design and fieldwork education to insure the quality of the preparation and practice of occupational therapists was recommended by Teske and Spelbring (1983). Nelson, Cash, and Bauer (1990) articulated their finding that the Essentials provide an overall method of developing general curriculum areas, though they are not helpful in determining specific academic content areas.

Yerxa (1986) proposed a number of steps to achieve consensus regarding the issues facing the profession and to resolve what she viewed as a crisis in entry-level education. Yerxa suggested that occupational therapy return to the tradition of liberal arts education, contending that such an education will produce a new breed of occupational therapists. She also called for occupational therapy educational programs to facilitate working relationships with and ideally be located within liberal arts colleges.

Marshall (1991), in her survey of occupational therapy professional and technical programs, found that though the AOTA's Commission on Education developed the accreditation process to provide the public with graduates who can deliver quality services, educational

programs have designed their curriculum specific to the parameters or limitations established by their institutions. Marshall found that there was a variety of admissions criteria, general studies prerequisites, and professional or technical education curriculum content in the educational programs surveyed. Though Marshall noted the variety in the educational curriculum of the entry-level baccalaureate degree programs in occupational therapy, she failed to recommend any suggestions or procedures to enhance the curriculum development process.

The AOTA (1987) Entry Level Study Commission recommended that practice should be characterized by critical thinking and clinical reasoning. Depoy (1990) called for a mastery level of clinical occupational therapy practice. Continued dialogue in the field of occupational therapy regarding the delimitation of the profession has been forwarded by a number of theorists (Kielhofner & Barris, 1986a, 1986b; Labovitz & Miller, 1986; Mosey, 1985; Van Deusen, 1990; Yerxa & Sharrott, 1986). Advocating a knowledge based curriculum which guides professional practice as well as establishing the "academic justification for the profession's association with the university" has been forwarded by Ottenbacher (1990, p. 8).

A new direction in occupational therapy education has been suggested by Schwartz (1991), based on recent research on clinical reasoning. Schwartz contended that education should be refocused from the teaching of facts and techniques to teaching methods of inquiry that stimulate the students higher-level reasoning abilities, or what she and other researchers term clinical reasoning.

Adelstein, Cohn, Baker, and Barnes (1990) called for the need for therapists who can critically analyze and adjust to the continuously changing practice environment.

With the continued debate and concern with the development of a theoretical base of knowledge and practice for the profession of occupational therapy, there is a dearth of information available regarding the curriculum development process itself.

Goal setting, identification of a philosophy and conceptual model, and the specification of competencies were outlined as a process of curriculum revision undertaken by Madigan, Loomis, and Seefeldt (1985) in response to problems impacting the undergraduate curriculum at the University of Illinois, Department of Occupational Therapy, in Urbana.

Nelson et al. (1990) reviewed the content of occupational therapy professional curricula as it related to the area of adult physical dysfunction. Their study revealed that there was a great deal of diversity in the curriculum content and emphasis in the areas of medical conditions, approaches to evaluation, and treatment.

Humphry and Link (1990) reviewed occupational therapy academic programs to analyze the preparation of students in the area of pediatrics, or early intervention programs. They recommended that the profession and educational programs review their curricula with regard to basic knowledge and skill levels relevant to early intervention. Curriculum review of other expanding specialty areas of practice, such as home health care, have also been recommended by others (Stoffel & Gwin, 1989).

The contention that academic programs should provide information that is consistent with clinical practice has been forwarded by Taylor and Manguno (1991). Taylor and Manguno found that the traditional treatment approaches used in occupational therapy over the past decades have changed, and that educators need to be aware of trends in existing occupational therapy practice in order to prepare competently educated therapists.

### Summary

In reviewing the literature regarding the process of curriculum development, it is obvious that there have been a number of studies attempting to clarify the conceptual models and context of occupational therapy practice (Marshall, 1991; Mosey, 1985; Yerxa, 1987). The continued discussion and debate regarding review of existing curricula offering occupational therapy programs is of little value to an individual or institution in the process of attempting to develop a new program from the start. There is little information available to explain the curriculum development process or to facilitate the appropriate selection of course content, consensus, and validation within an institution of higher learning in the process of developing an occupational therapy educational program.

A review of the literature for information regarding the manpower shortage in occupational therapy and the role of the curriculum development process was undertaken to facilitate further regional and local data collection and to aid in the process of curriculum development. Review of the data indicated that there was

indeed a marked personnel shortage of occupational therapists nationally, compounded with a geographic maldistribution. Review of curriculum development, the process, and procedures found little data and information with regard to the curriculum development process as it relates directly to the profession of occupational therapy.

Curriculum development in the generic sense was identified as being dynamic and cyclical in nature, consisting of seven broad components which will vary dependent on setting, circumstances, and constituencies. These components include: (1) identification of needs and purposes, (2) select and organize participants, (3) develop a master program management scheme, (4) develop components intrinsic to specific settings, (5) pilot test/evaluate and analyze/reorganize, (6) disseminate data and information/implement, and (7) evaluation and revision.

This study presents a model for the curriculum development process as formulated and undertaken at Saginaw Valley State University. This study presents a process which can be utilized by other individuals to determine (a) the need for a program in occupational therapy; (b) the design of an occupational therapy curriculum, the technical aspects development, the evaluative component, and the internal/external review process; and (c) an evaluation method for program and curriculum development which can be used to guide and validate the curriculum development process.

Through the use of the curriculum development process in the design and validation of the expanding number of occupational

therapy educational programs, the disparity between practice and curricula can be avoided. In addition, by standardizing those components necessary for curriculum development and implementation, continued viability of the profession is enhanced through standardization of entry-level requirements. Utilization of the curriculum development process by developing programs will also insure consistency in program validation and design with regard to regional and local need through the use of the feasibility component of the curriculum development process. Use of the evaluative component of the curriculum development process will provide researchers and program developers with a method for structuring and consistently reviewing the development process.

With the review of literature completed and a national shortage of occupational therapists identified, the curriculum development process was undertaken by this investigator at Saginaw Valley State University (SVSU). The curriculum development process for occupational therapy as implemented at SVSU, the methodology, feasibility study components and findings, and the subsequent curriculum development and design are discussed and analyzed in Chapter III.

## CHAPTER III

### METHODOLOGY

#### Introduction

The purpose of this descriptive study was to document and validate the development of a model from the curriculum development process for occupational therapy as formulated and undertaken at Saginaw Valley State University (SVSU), University Center, Michigan. This study presents a process which can be utilized by other individuals to determine: (a) the need for a program in occupational therapy; (b) the design of an occupational therapy curriculum consisting of the technical aspects of development, an evaluative component, and the internal and external review process; and (c) an evaluation method for program and curriculum development which can be used to guide and validate the curriculum development process.

Prior to an in-depth study undertaken by SVSU, a review of the literature indicated a national shortage of occupational therapy personnel coupled with a geographic maldistribution. Projections for continued future growth of the profession indicate strong demand and need for occupational therapists into the next decade. The data and information reviewed, however, did not specifically evaluate the need or demand for occupational therapists in the geographic region served by SVSU. Prior to the development or implementation of any curriculum development process, identification and documentation

of need must be established to insure the validity and feasibility of the program. To accomplish this, SVSU undertook a comprehensive feasibility study to quantify the need and interest in an occupational therapy program if offered at SVSU.

As envisioned and outlined at initial and subsequent meetings between the administration of SVSU and this investigator, the curriculum development process undertaken at SVSU consisted of five major components: (1) review of the literature and social indicators regarding national manpower data, (2) evaluation of local and regional need for occupational therapists coupled with evaluation of student interest in order to determine the feasibility of developing an occupational therapy program, (3) development of the curriculum of study for the education of occupational therapists, (4) validation of each of the components of the development process through both internal and external means, and (5) implementation. With the development process identified and outlined, an occupational therapy feasibility study was undertaken by SVSU.

This chapter consists of three sections: The first section describes the operational matrix for curriculum development as undertaken at SVSU. The second section outlines the steps undertaken by SVSU to accumulate data and information regarding the feasibility of developing an occupational therapy educational program. The third section describes the steps utilized to develop the core curriculum for the occupational therapy program, the prerequisite classes, professional classes, and their relationship to the American Occupational Therapy Association (AOTA) Accreditation Standards.



Evaluation of the curriculum development process is addressed in a following chapter.

### A Model for Curriculum Development in Occupational Therapy

Curriculum development encompasses many diverse activities in scope, function, and setting. As the profession adapts to the changing social and cultural expectations with the expansion of new educational programs, a method of curriculum development is needed to provide both direction to those individuals establishing new programs as well as to provide a means of accountability. Determination of the need and content of developing programs and providing a forum and method of input to constituent groups and stakeholders both internally and externally will also be facilitated through adherence to a model of development.

As has been shown through the review of literature, demand for occupational therapists has provided the profession with many opportunities for advancement; it does, however, create unique difficulties with potentially negative consequences for the profession, including: (a) dilution of the core concepts of occupational therapy over expansion of educational programs in areas adequately served by existing programs, (b) oversupply of graduates and students in regions unable to handle the influx, and (c) a deterioration of the professional expectations and education of therapists due to institutions of higher education responding to the perceived internal monetary benefits of developing a program to the exclusion

of service area needs and responsibilities.

The model of curriculum development for occupational therapy is based on four fundamental questions originally forwarded by Tyler (1949), which need to be analyzed prior to the development or implementation of a plan for data and information collection. This sequence is considered dynamic and cyclic and consists of: (a) identifying objectives, (b) selecting the means for the attainment of these objectives, (c) organizing these means, and (d) evaluating the outcomes.

These foundational questions provide the basis for the curriculum development model which was envisioned at SVSU. The curriculum development model as envisioned at SVSU consisted of four broad components: (1) perception of local or regional need for occupational therapists; (2) determination and validation of the need for occupational therapists/graduates in a defined catchment area; (3) design of the curriculum, preprofessional and professional level courses, admissions requirements, and retention policies and procedures; and (4) evaluation and validation of each of the components on both an internal and external basis.

The curriculum model components are viewed as being hierarchical in nature, except for the evaluative component which is envisioned as being global and cyclical, overriding each of the other functions (see Figure 3). Progression from one stage to the next is dependent upon the validation of the issue or task at hand and is sequential. An operational flow chart outlining the model of curriculum development was established to insure adherence to

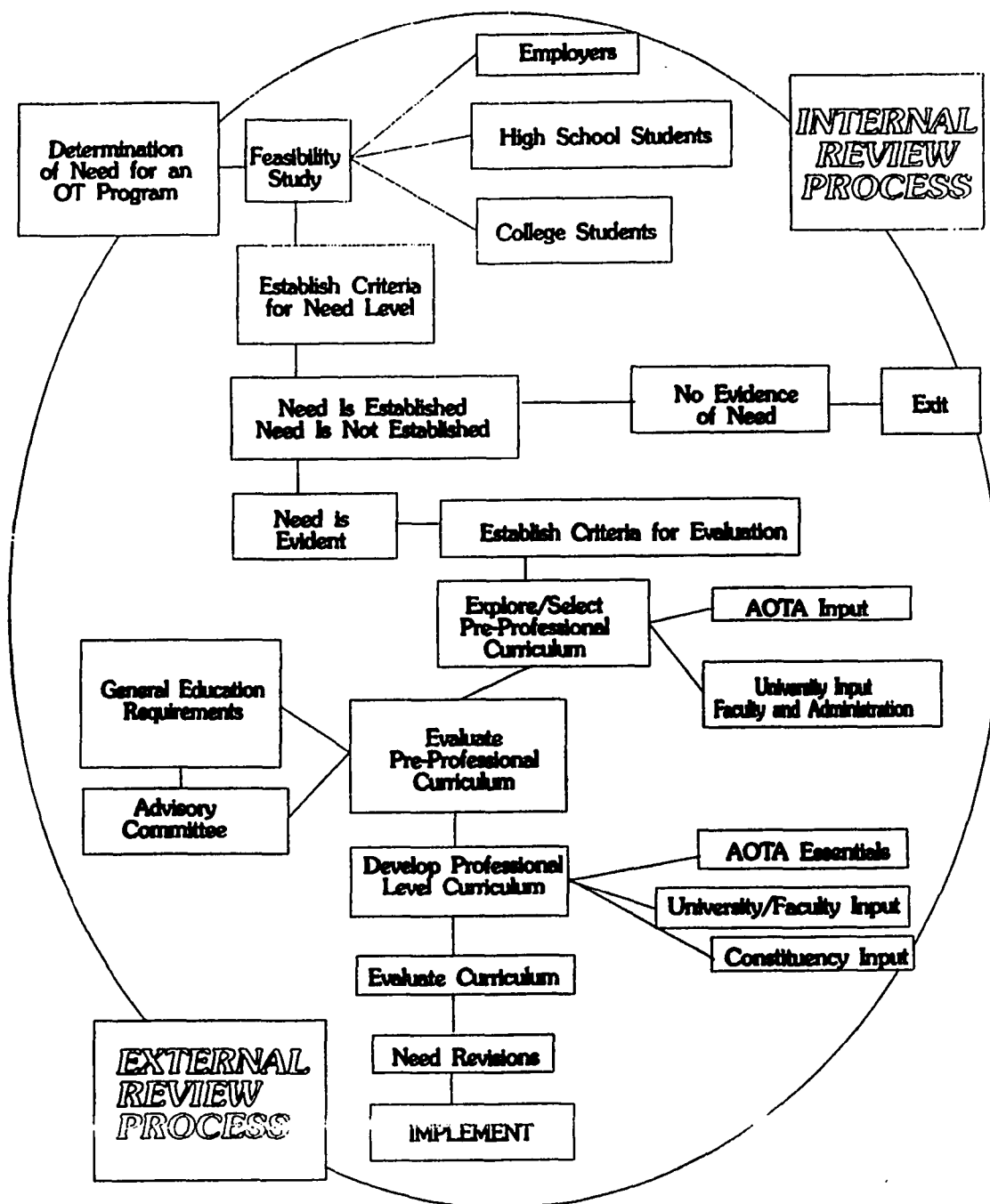


Figure 3. Operational Matrix for Curriculum Development for Occupational Therapy.

university requirements and to facilitate grounding of the process and insure accountability. The model for curriculum development adheres to the following stages of development: (a) feasibility component (to determine the need for an occupational therapy program), assuming need is established proceed to Stage 2 (see Figure 4); (b) curriculum design and development; (c) review and evaluation of each step of the process, a continual cycle of review and adaptation; and (d) implementation, based on the findings and review of the earlier components.

Entrance to the curriculum development model occurs when there is the perception of the need for a program of study which leads to the necessity of determining the need for additional therapists and graduates (see Figure 4). This task is achieved through the use of a feasibility study consisting of three survey instruments assessing student interest and employer needs and analyzing the results through simple content frequencies. Determination of the need criteria is required and is optimally determined through the establishment of a task force consisting of stakeholders. Establishing a task force committee facilitates communication, internal and external input, and feedback into the process of development.

With the data and information collected and analyzed according to the criteria established by the task force group, evidence of need is determined. If the established criteria is not met, the curriculum development process may be terminated at this level. If, in fact, need for the program is evident, the next step in the curriculum development model is implemented: determining and

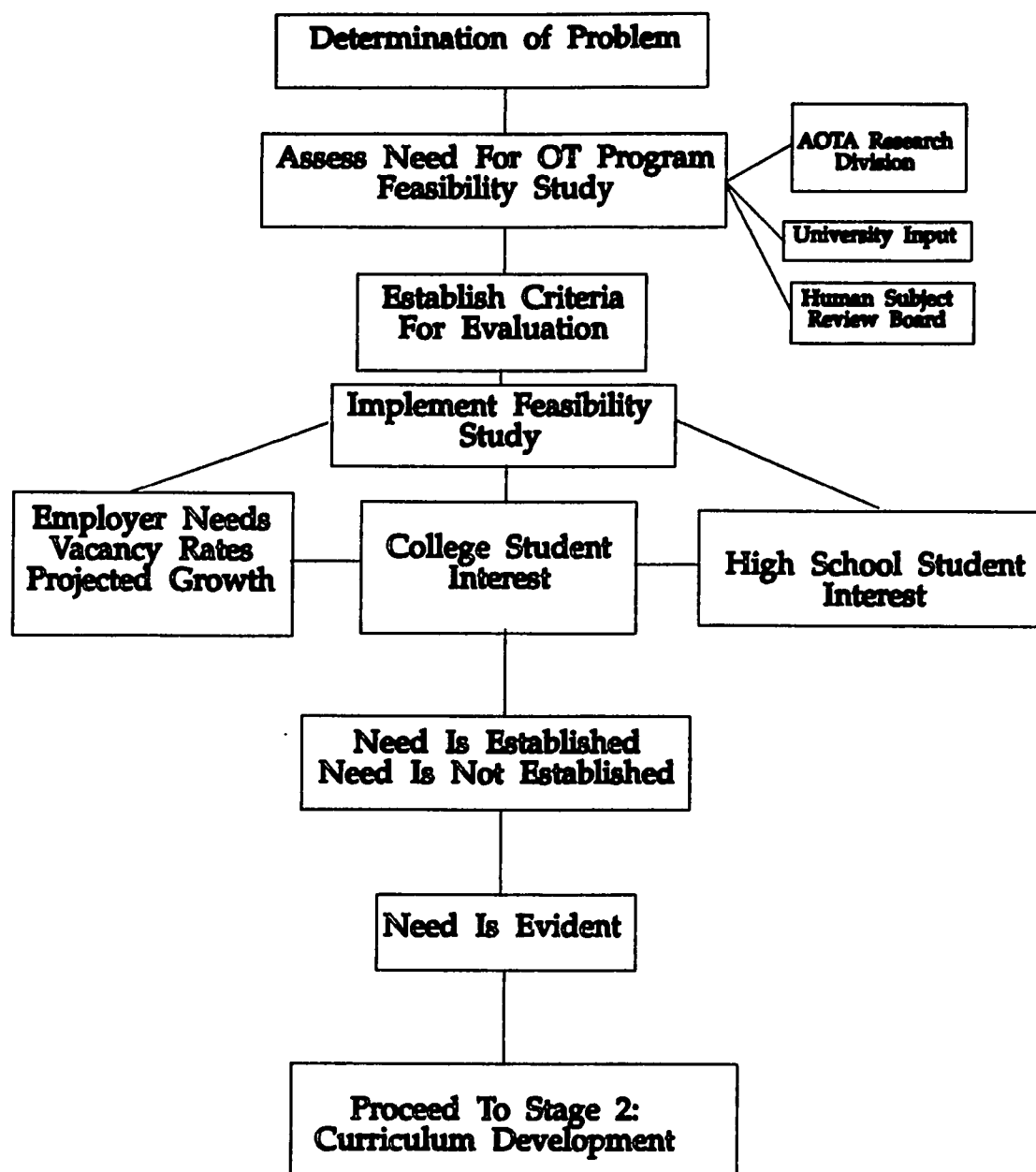


Figure 4. Sequence of Steps in Feasibility Component.

establishing the criteria for curriculum development and evaluation. As with the earlier stages of development, this is best accomplished through the use of both internal and external organizations and individuals. At SVSU, this was accomplished through input by the Occupational Therapy Task Force Committee, the host department (College of Nursing and Allied Health), externally by the AOTA Division of Education, and by review by stakeholders (i.e., members of the Saginaw Valley Occupational Therapy Association).

It was determined that selection of the curriculum be developed through external input by the AOTA, and internally through faculty and administrative feedback (see Figure 5). Appropriate and necessary revisions were made to the curriculum following review by the listed groups and individuals. Professional level courses were designed based on the AOTA (1991a) Essentials, university and faculty input at SVSU, and feedback provided by the constituency groups involved in the earlier phases of development. Evaluation of the curriculum with necessary revisions and adaptations occurred during formative evaluation and review by the internal and external review process which will be elaborated on in an upcoming section of this chapter.

The evaluative component of the curriculum development model consists of both formative review, internally and externally of each of the singular components of the process (see Figure 6). Internal and external review of the process occurs through the involvement and participation of stakeholders; those individuals or groups with a vested interest in or who will be affected by the project or

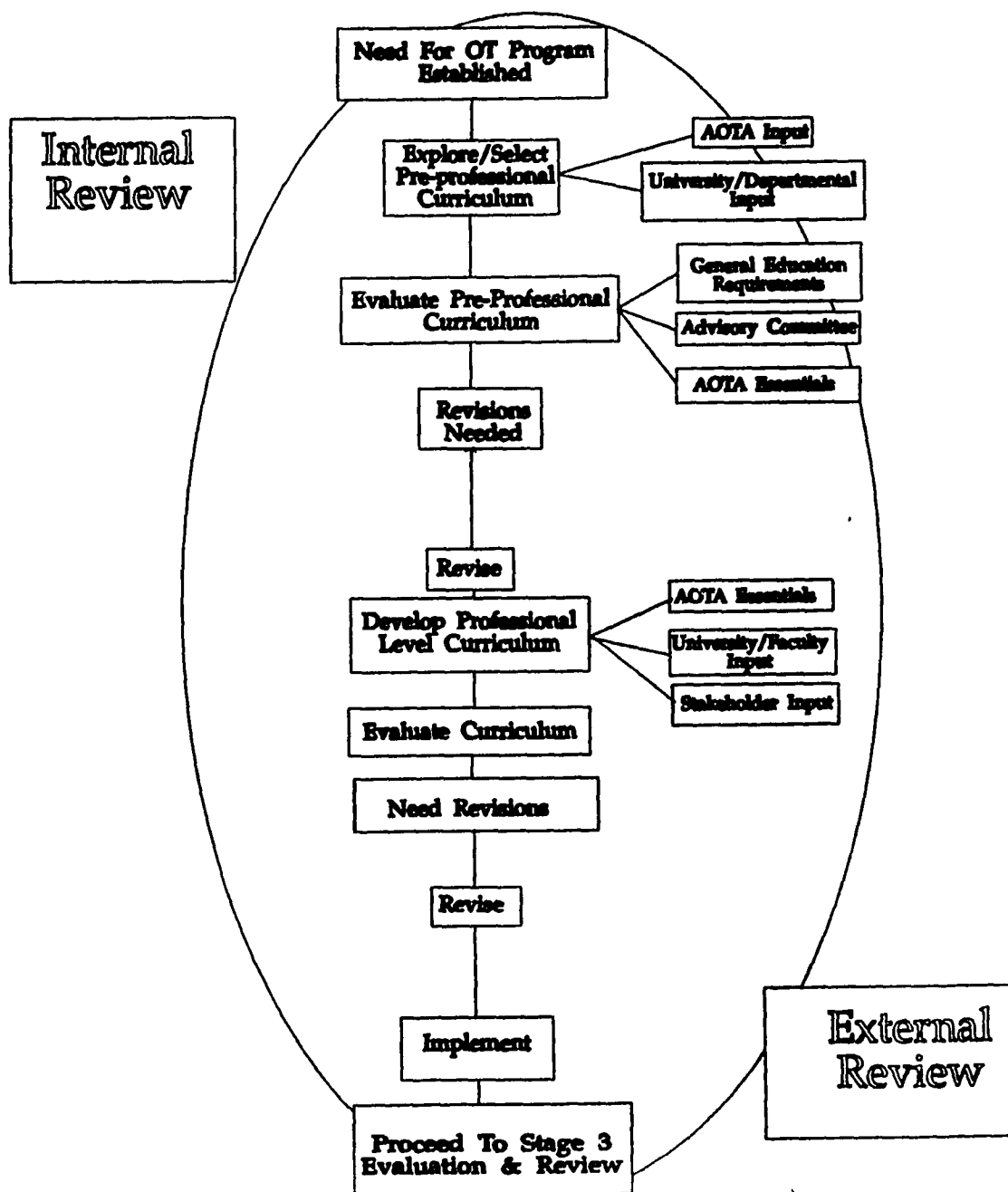


Figure 5. Sequence of Steps in Curriculum Development Component.

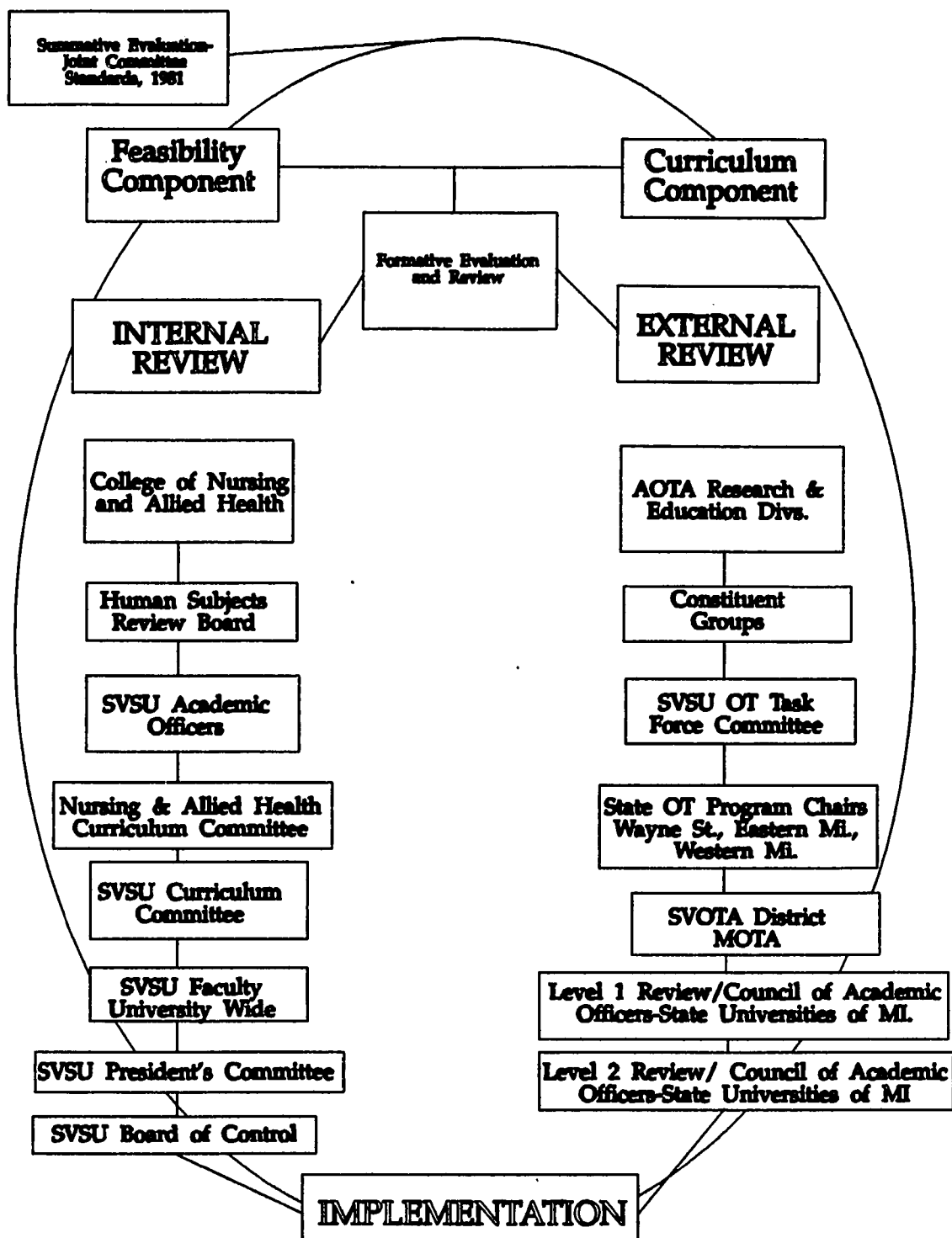


Figure 6. Sequence of Steps in Evaluation and Review Process.



program (Brinkerhoff et al., 1983).

Internal review of the feasibility component and subsequent findings were accomplished through review and analysis by the SVSU Occupational Therapy Task Force Committee, Saginaw Valley Occupational Therapy Association (SVOTA), members of the College of Nursing and Allied Health, AOTA Division of Education and Research Division, and the state of Michigan Academic Officers Committee.

The summary review of the project is achieved through the use of the Joint Committee (1981) Standards to insure accountability and accuracy. Summary review of the curriculum development process using an operational matrix of the Joint Committee Standards developed by the Primary author and stakeholders was undertaken. The Joint Committee report was reviewed and revised with input provided by the SVSU Occupational Therapy Task Force Committee, Saginaw Valley Occupational Therapy Association, the SVSU College of Nursing and Allied Health, and by the AOTA Division of Research and Evaluation.

Further summary review occurred through procedural adherence to state requirements and analysis by the Council of Academic Officers. This professional review body in Michigan consists of the presidents of each state funded university in Michigan and is responsible for review and determination of approval for any changes in curriculum, funding, or building projects at any of the state supported universities. This aspect of the curriculum development process will vary dependent upon the setting and internal and external requirements of the host institution where the curriculum development process is

occurring.

The final component of the curriculum development model is the implementation of the program based on the findings and criteria established at the outset of the undertaking. As the curriculum development model is viewed as a sequential course of events regulated by a systematic method of formative and summary review both internally and externally, criteria for implementation of the program were either met or not met. Progression through the stages of the curriculum development model facilitates accountability to the development and establishment of new educational programs in occupational therapy preventing unnecessary duplicity and controlled, viable growth for the profession.

In summary, the curriculum development model, as envisioned for SVSU consisted of five basic components: (1) perception of local or regional need for occupational therapists; (2) feasibility component--the determination and validation of the need for occupational therapists/graduates in a defined catchment area; (3) curriculum design and development--based on the findings of the feasibility component, outlining preprofessional and professional level coursework, admission requirements, progression and retention policies, and policies and procedures; (4) evaluation and validation--formative and summary review of each of the components of the curriculum development process, with summary review achieved through the use of the Joint Committee (1981) Standards; evaluation and review are considered all encompassing activities and occur during each step of the process; and (5) implementation--based on the findings and

criteria set by the involved constituent groups and primary investigators.

The curriculum development model is viewed in a sequential and hierarchical fashion with each component building on the earlier level and girded by the evaluative components, both internal and external review of the data and information which has been gathered and developed.

The following two sections of this chapter contain further discussion of how SVSU implemented the curriculum development model and the basis and design of the curriculum development portion of the model as implemented by SVSU. The evaluation of the process using the Joint Committee (1981) Standards is revisited in Chapter IV.

#### Purpose of the SVSU Feasibility Study

In the Fall Semester of 1989 and the Winter Semester of 1990, the College of Nursing and Allied Health Sciences undertook the development and implementation of a feasibility study to further clarify the demand and need for an occupational therapy program at SVSU. The purpose of this study was to conduct a comprehensive feasibility analysis that would provide decision makers with accurate information and data relevant to the development of a bachelor of science degree in occupational therapy (BSOT) program at Saginaw Valley State University. The study was designed to assess the interest and demands of potential students for the program and to evaluate the needs and resources of the university, regional health

care providers, and the community. The feasibility study was undertaken with the assistance and guidance of the Research Information and Evaluation Division of the American Occupational Therapy Association.

#### Population of the SVSU Occupational Therapy Feasibility Study

The population of the SVSU study included the identified constituent groups located within an area encompassing approximately the northern two thirds of the Lower Peninsula, and the eastern half of the Upper Peninsula of Michigan (see Figure 7). An imaginary line was drawn from Port Huron in the east, across to Flint, and proceeding north to Traverse City, then directly across the Upper Peninsula. This geographic region constituted the general service area for SVSU as well as encompassing the two Michigan Occupational Therapy Association (MOTA) Districts not currently contiguous to the existing occupational therapy educational programs in Michigan, the Saginaw Valley Region, and the Northern Michigan Region of MOTA.

For the purpose of the study, three constituent groups were identified. The first two groups consisted of potential students. The student population was identified as high school students attending a health professions or child development course at a regional career center, or college students currently attending SVSU or Delta College, University Center, Michigan. The third group consisted of employers encompassing health care providers from area hospitals, community mental health agencies, intermediate school districts, and regional mental health facilities.

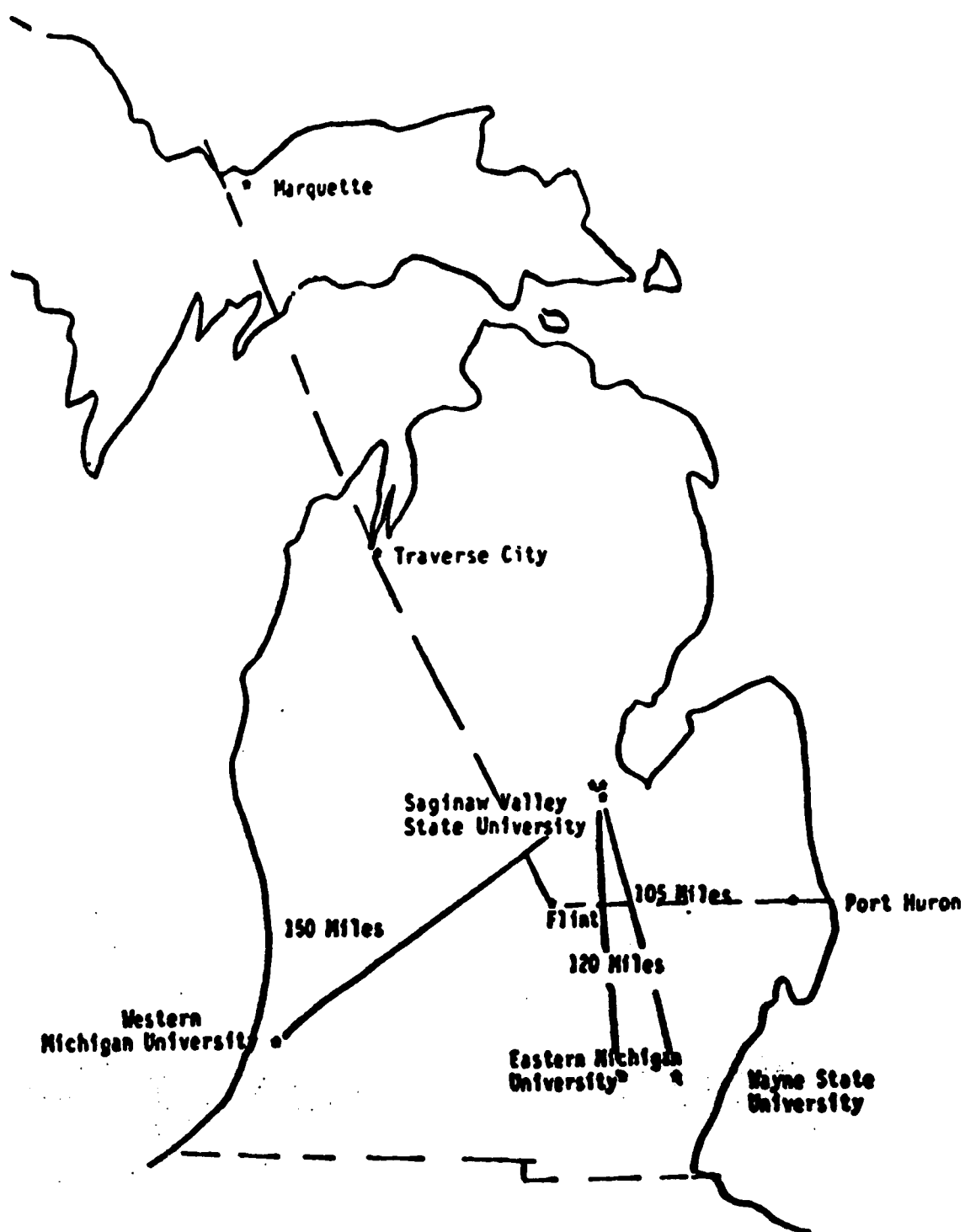


Figure 7. Distance Between Programs Offering Bachelor Degrees in Occupational Therapy

## Data Collection

Three methods of data collection were used to assess the needs of area health care providers and to determine the interest of area students in attending the proposed program. These methods included: the task force group method, the survey method, and a review of demographic and health related statistical data and literature.

The task force group method of data collection involved identifying and forming a resource base of individuals from the area encompassed by the geographical boundaries of the study. The task force consisted of eight members selected from the major constituent employer groups: mental health, school districts, hospitals, and regional medical centers. The purpose of the task force group was to identify needs, resources, and concerns relative to the proposed BSOT program. An additional responsibility of the task force was to provide the investigator with input and feedback regarding curriculum design, development, content, and evaluation.

The survey method of data collection involved the formulation of three survey instruments to assess the needs and interests of employers ( $N = 128$ ), high school students ( $N = 360$ ), and college students ( $N = 325$ ). Each survey instrument was developed in conjunction with the American Occupational Therapy Association's Research and Evaluation Division and was administered separately (see Appendix A). The surveys consisting of a 7- to 15-item questionnaire were distributed to the respective populations over approximately a 6-week period beginning in February 1990 (see Appendix B).

The return rate varied from 67% for the high school students, 84% for the college students, and 57% for employers.

The third method for collection of data involved review of demographic information, vacancy rate data, manpower statistics, and health statistics related to the profession of occupational therapy. National, state, and local statistics and data were reviewed to assist in determining trends relative to occupational therapy manpower and projections and to determine if they were consistent with the findings of the feasibility studies.

#### Establishment of the SVSU Occupational Therapy Task Force

To obtain information and to provide feedback regarding the proposed BSOT program, a task force consisting of eight key representatives from community agencies was identified. The members of the task force group were selected from each of the constituent employer groups surveyed, mental health, hospital or health care providers, school districts, and the university. These members were able to provide information regarding the role of their respective agencies or facilities, the manpower needs of their facilities, and resources available. The task force met formally on two occasions, and informally either collectively or individually over the course of the 1990-91 academic year.

The following is a list of the membership and affiliation of the task force members:

Janet Nagayda, MOT, Lapeer Intermediate School District.

John DeFord, MSW, Huron County Mental Health.

Polly Dodick, OTR, St. Mary's Medical Center.

Jackie Roe, OTR, Caro Regional Center.

Tamara Doescher, MSA, OTR, Sanilac Intermediate School District.

Roy Wedge, MOT, Midland Regional Medical Center.

Cindi Batts, OTR, Mercy Hospital.

Dr. Jennifer Bridges, Saginaw Valley State University.

The designated members of the task force group were contacted by phone, in person, and by letter to request their participation. A formal letter was sent to each individual by the dean of the College of Nursing and Allied Health Sciences confirming the appointment to the task force (see Appendix C). Scheduled meetings were kept informal to facilitate member input regarding a number of issues related to the completed survey results and proposed curriculum. The stated purpose of the task force was to obtain feedback regarding development of a proposed occupational therapy educational program. Members were also questioned as to the specific needs of their respective facilities in regard to the provision of occupational therapy service, regional and local manpower needs, and potential resources for the development of field placement sites. Other topics discussed during the initial meeting included start-up funding, space and equipment requirements, availability of potential faculty, student recruitment, and cooperative interagency training.



### Survey Method

The surveys conducted for the purpose of the feasibility study (Stage 1) consisted of three target audiences: health care providers, prospective students currently enrolled at a college level, and prospective students from high schools currently attending a health careers class or similar program. The following section describes the procedures used for each of the three surveys. Procedures were followed to protect the subjects according to the criteria set by Saginaw Valley State University and Western Michigan University's Human Subject Institutional Review Boards (see Appendix D). Subjects were informed of the voluntary nature of their participation and the assurance of anonymity and confidentiality through inclusion of a letter of transmittal with each survey (see Appendix B).

### Selection of Subjects

Saginaw Valley State University (SVSU) is located within the Saginaw Valley District of the Michigan Occupational Therapy Association (MOTA). SVSU serves the educational needs of the surrounding nine counties which are contained within the Saginaw Valley District of the MOTA and are contiguous to the Northern District of the MOTA. Though the Northern District and Saginaw Valley District encompass the largest geographical area within the Michigan Occupational Therapy Association, they do not contain a program for the education or training of either occupational therapy assistants or registered occupational therapists. As the area services by SVSU encompassed

areas of both the northern and central regions of the MOTA, a determination was made to survey individuals located in the geographical region bounded by Port Huron to the east, Flint to the south, Traverse City to the west, and encompassing the eastern half of the Upper Peninsula (see Figure 8).

#### Survey of High School Students

A survey was conducted of high school students as potential candidates of the proposed occupational therapy program. Because of the large number of potential high school students located in the geographical region of the study, a cluster sampling of area career center based students was used. Students were selected from area career or vocational training centers who were currently attending classes in either health careers or child care service programs. Students taking either course would most likely have had exposure to or a rudimentary awareness of the profession of occupational therapy as well as potentially having an interest in a health or human services profession as indicated by their selection of the career center program.

The survey instrument was developed in association with the Research Division of the American Occupational Therapy Association (AOTA) and was pretested on five high school seniors and reviewed by the Education Division of the AOTA. The pilot respondents' suggestions and comments to the survey were incorporated in the revisions and additions to the final questionnaire (see questionnaire in Appendix B).

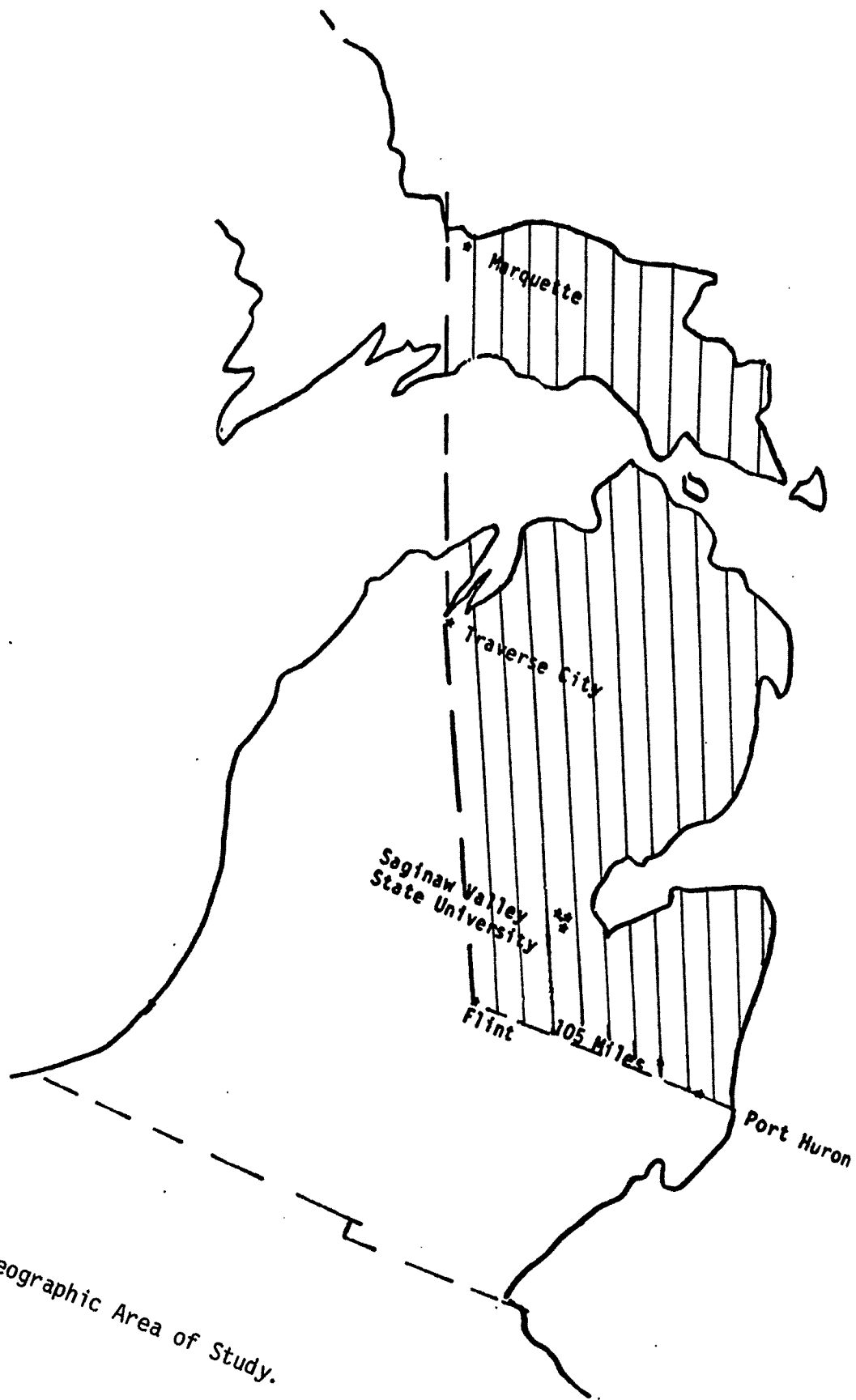


Figure 8. Geographic Area of Study.

Procedure: Questionnaires, accompanied by a letter of transmittal, were mailed to the teachers of each of the selected classes during the first weeks of the Winter Semester 1990. Participating instructors were asked to administer the questionnaire during the course of their class time. The questionnaires were collected immediately by the respective instructors. The voluntary nature of the students' participation in the survey was explained by the instructor. Anonymity was also maintained by informing the students not to identify their questionnaires by name or by any other identifiable form. Students were provided with a prestamped postcard requesting further information regarding the profession of occupational therapy if desired.

#### Survey of College Students

The population for the college student survey was those students who were attending Saginaw Valley State University in the health education, introductory psychology, or introductory sociology classes or were classified as being in a premedicine curriculum. Students in the introductory anatomy and physiology courses at Delta College were also selected for inclusion in the survey as this course is used as a prerequisite course for other health occupation programs at Delta College. Delta College is a community college located approximately 5 miles from the campus of Saginaw Valley State University. The college offers a number of two-year health related programs such as nursing, dental assistant, physical therapy assistant, and operating room assistant. Delta College was chosen

to participate in the survey because of the college's health and human resource related programs. The college is also a "feeder" for Saginaw Valley State University students who continue on for higher level education and preparation.

The survey instrument was reviewed by members of the Education Division of AOTA and was developed and revised in conjunction with the Research Division of the American Occupational Therapy Association (see questionnaire in Appendix B).

Procedure. Prior to the distribution of the survey instruments, telephone contacts were made to the five department chairmen of the respective programs explaining the survey content and intent and to request approval for the distribution of the questionnaires by appropriate faculty. A total of 325 questionnaires, accompanied by a letter of transmittal, were distributed to the students in class during the first two weeks in February 1990. The course instructors were asked to administer the questionnaire during the first 10 minutes of their class time. The voluntary nature of the questionnaire and the anonymity of the respondents were maintained by asking the students not to identify their questionnaires by name or by any other identifiable form. Students were provided with a prestamped postcard requesting further information if desired. Instructors were asked to collect the questionnaires immediately after the students had completed filling them out. The completed surveys were then returned to the investigator by prestamped envelope.

### Survey of Potential Employers

The health care or educational agencies located within the defined catchment area of the study were identified as potential employers of the graduates of the proposed occupational therapy program. All agencies that employed occupational therapists and were listed in the Facilities Directory of the Michigan Hospital Association, the Michigan Department of Mental Health, or the Directory of Intermediate School Districts were included in this survey. A total of 128 different agencies and facilities were identified. The types of agencies included hospitals, intermediate school districts, community health agencies, nursing homes, industry, and mental health facilities.

Instruments. The questionnaire for the potential employers was formulated on the local, regional, and national trends for occupational therapists, along with the issues and concerns raised by members of the MOTA and Saginaw Valley District and the Northern District of MOTA. The questionnaire was developed and revised in conjunction with the Research Division of the American Occupational Therapy Association and the Education Division of the AOTA.

Questions addressed in the survey included: (a) job status of occupational therapists, (b) future employment plans of occupational therapists, (c) projected expansion of programs and employment opportunities, and (d) types of resources the agency can provide for the proposed program (see questionnaire in Appendix B).

Procedure. A total of 128 questionnaires, along with a letter of transmittal, was mailed to each director of occupational therapy or respective facility administration in the identified agencies. A business return envelope was enclosed for returning the completed questionnaire. Questionnaires were mailed the last week of January 1990. The agencies were asked to return the questionnaires within 3 weeks.

### Findings of the SVSU Occupational Therapy Feasibility Study

As the basis for further development of the curriculum was dependent upon the findings of the SVSU feasibility study for occupational therapy, the findings of the needs assessment of the three constituent groups--college students, high school students, and employers--were a vital component of the curriculum development process. (See Appendix E for questionnaire results.) The results and input of the task force group are reviewed in a subsequent section as is the curriculum design process.

#### High School Students

Determination of high school student interest in the profession of occupational therapy is crucial to assist in identifying potential students interested in enrolling in a proposed educational curriculum at an institution of higher education.

High school instructors who taught either child care services programs or health career programs at 16 area school districts were sent surveys to distribute to their respective students (N = 360).

High school students attending the above educational programs were selected for their perceived interest in a health care profession due to their enrollment in the health career courses. A total of 360 surveys were distributed to the 16 facilities with 240 individuals responding, a 67% response rate.

Of the survey respondents ( $\underline{n} = 240$ ), 86% ( $\underline{n} = 207$ ) indicated enrollment in a health career course. The survey population was almost evenly divided among high school juniors and seniors, 43% each. Of the students responding, 83% of the high school students reported an interest in a health professions career ( $\underline{n} = 198$ ) (see Table 4). Of the respondents, 75% ( $\underline{n} = 180$ ) of the students indicated knowledge of the personnel shortage in the allied health professions.

Table 4  
High School Student Interest in  
Health Professions Career  
( $\underline{N} = 240$ )

Response	$\underline{n}$	%
Yes	198	83
No	41	17
No response	1	0

Of those students who returned the survey, 88% of them indicated that they would be attending college within the next 4 years. Of that number, 55% reported that they were planning to commute to a



campus, with 22% intending to live on campus. Fifty-three percent of the students planned to attend college full time, with 43% planning part-time attendance. When asked whether students would be interested in enrolling in a proposed occupational therapy program at Saginaw Valley State University, 21% ( $n = 50$ ) indicated they would, while 60% ( $n = 145$ ) were undecided (see Table 5). The number of undecided individuals would provide an important base for further potential students for recruitment purposes.

Table 5  
High School Student Interest in Enrolling in  
an Occupational Therapy Program at SVSU  
( $N = 240$ )

Response	$n$	%
Yes	50	21
No	45	19
Undecided	145	60

Of the undecided students (high school and college combined) it should be noted that there were 191 individuals who requested further information on the profession of occupational therapy. The majority of these individuals responded that they would consider enrolling in the proposed program in the future. These undecided individuals would be an important base of potential students to whom the university could market the program. This untapped pool of interested individuals constitutes an additional source of students

that are unaccounted for in the survey results. It is anticipated that a portion of those reporting an interest would pursue a program of studies in occupational therapy if the program were offered.

Of the undecided high school students responding to the survey, many may have been in the process of establishing career goals and were uncertain of the scope and practice of occupational therapy. It should be noted that 21% ( $n = 50$ ) of the respondents indicated that they would be interested in enrolling in an occupational therapy program at SVSU if offered. Those students who responded affirmatively would have had to attend one of the three programs offered downstate, a difficulty, if not impossibility, for those respondents who planned to commute (55%).

Another potential source of occupational therapy students that was not surveyed were those high school students planning to attend one of the existing universities offering an occupational therapy curriculum. Discussions in the Spring Semester 1990 with department chairs and faculty student advisors of the respective programs indicated that all three universities--Western Michigan University in Kalamazoo, Wayne State University in Detroit, and Eastern Michigan University in Ypsilanti--had more applicants than available spaces. It is anticipated that there would be a number of students planning on attending an occupational therapy program at one of the facilities offering the curriculum, who would, instead, attend SVSU due to the benefits of the campus location, size, and other positive attributes SVSU offers.

### College Students

College students who attended Saginaw Valley State University during the 1990 Winter Semester were included in the student interest survey. Students were selected from university departments which could provide prerequisite classes for an occupational therapy curriculum as well as potential students. These departments included sociology, psychology, physical and health education, and premedicine. Surveys were also distributed to two sections of anatomy and physiology students at Delta College. A total of 325 surveys were distributed with 272 returned, a response rate of 84% ( $n = 272$ ).

College freshmen composed the largest segment of the sample at 39%. Approximately 80% of the respondents indicated a specified major with 80% attending classes full time and 80% of the respondents commuting to the college. Of the students surveyed, 53% stated an awareness of the personnel shortage in the allied health professions, with 53% of the students also indicating an interest in a health professions career. When asked whether they would be interested in enrolling at SVSU if a program in occupational therapy were offered, 36% ( $n = 108$ ) were undecided and 25% ( $n = 67$ ) indicated in the affirmative (see Table 6).

Of the undecided students (high school and college combined), there were 191 individuals requesting further information on the profession. Inadequate knowledge of the field of occupational therapy as well as lack of an accessible program to the commuting

Table 6  
College Student Interest in Enrolling in an  
Occupational Therapy Program at SVSU  
(N = 278)

Response	<u>n</u>	%
Yes	67	24
No	111	40
Undecided	100	36

students may have influenced the undecided population of students. A large segment of students surveyed, however, 25% (n = 67), indicated that they would be interested in enrolling in the proposed program of occupational therapy leading to a bachelor of science degree if offered by SVSU.

### Employers

In order to adequately assess the demands of the community and the potential employability of the job market for occupational therapists in the catchment area, potential employers of occupational therapists were identified for inclusion in the survey. Occupational therapists are employed and practice in a variety of clinical and nonclinical settings. Occupational therapists may be employed in the traditional acute care hospital, but may also be employed at home health care agencies, school districts, mental health settings, and rehabilitation facilities. Area hospitals, medical care facilities, community mental health agencies, and intermediate school

districts located within the survey region were identified as potential employers of occupational therapists. A total of 128 surveys were mailed to facilities located within the catchment area. Seventy-five surveys were returned for a response of 57% ( $\underline{n} = 75$ ) (see Table 7).

Table 7  
Categories of Agencies Responding  
( $\underline{N} = 77$ )

Category	$\underline{n}$	%
Industry	1	1
Long-term care facility	14	16
Home care agency	4	5
Visiting nurse association or community health agency	2	2
Acute care hospital (bed capacity >150)	14	16
Acute care hospital (bed capacity <150)	16	19
Rehabilitation hospital	4	5
Community mental health facility	24	28
School district	17	20
Other	7	8

Of the facilities responding, 67% currently employed an occupational therapist with the average number of therapists at each facility being 2.9. Of the respondents, 38% contracted for

occupational therapy services with 0.5 full-time equivalents. Seventy percent of the respondents indicated that if sufficient occupational therapy personnel were available, they would employ occupational therapists; 50% responding would contract for the services.

For those facilities providing occupational therapy services, 59% ( $\underline{n} = 51$ ) planned to expand the service within the next 3 years, while 29% were going to maintain the present level of service (see Table 8). When questioned regarding the hiring of additional therapists, 47% ( $\underline{n} = 40$ ) of those surveyed anticipated hiring additional occupational therapists in the next 3 years, with 17% undecided. Twenty-nine percent ( $\underline{n} = 25$ ) anticipated contracting for additional therapy services, with 28% undecided.

Table 8  
Employers' Plans for Occupational Therapy  
Services for the Next 3 Years  
( $\underline{N} = 77$ )

Future plans	$\underline{n}$	%
Expand the service	51	59
Maintain the present level of service	25	29
Discontinue the service	1	1

When queried as to the number of occupational therapists agencies anticipated hiring within the next 3 years, the average was 1.8 full-time equivalents. The anticipated number of positions which will need to be replaced in the next 3 years due to attrition,

retirement, etc., was also estimated by the facilities to average 1.8 therapists (see Table 9).

Table 9  
Employer Anticipation of Hiring Additional  
Occupational Therapists Within 3 Years  
(N = 82)

Response	<u>n</u>	%
Yes	40	47
No	27	31
Undecided	15	17

Note. Average number of full-time equivalents anticipated to be hired within 3 years = 1.8.

It is important to note that over the past 3 years, 43% (n = 37) of those facilities responding to the survey indicated that they had budgeted positions for occupational therapists unfilled due to lack of occupational therapists. The respondents indicated an average of 1.4 unfilled budgeted positions available over the past 3 years. Of the employers responding, 30% (n = 26) also reported that they currently had unfilled budgeted positions available for occupational therapists (see Table 10).

Respondents to the survey indicated that if Saginaw Valley State University were to offer an occupational therapy program, there would be on the average 2.7 individuals at each agency who may be interested in enrolling in the curriculum. Based on the number of agencies responding to the survey, this provides an additional

Table 10  
Unfilled Budgeted Positions for Occupational Therapy  
(N = 82)

Response	<u>n</u>	%
Past 3 years		
Yes	37	43
No	45	52
At time of study		
Yes	26	30
No	56	65

Note. Average unfilled budgeted positions over past 3 years = 1.4 full-time equivalents. Average unfilled budgeted positions at time of the study = 1.8 full-time equivalents.

200 potential occupational therapy students. These individuals were not surveyed in the study and constitute an additional untapped pool of potential students.

When questioned regarding potential resources for a proposed occupational therapy program at SVSU, 70% (n = 60) identified their facilities as potential clinical sites for student internships and affiliations. Sixty-five percent (n = 56) indicated that their agency would provide future employment opportunities and 33% (n = 28) would have potential students. Sixteen percent (n = 14) of the facilities indicated that they would provide financial assistance for students and 2% of the agencies would provide start-up program funds for the university (see Table 11).

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Table 11  
Employer Resources to Support SVSU  
Occupational Therapist Program  
(N = 77)

Employer resources	<u>n</u>	%
Clinical sites for internships and affiliations	60	70
Potential students	28	33
Future employment opportunities	56	65
Provide financial assistance for students	14	16
Arena for research activities	22	26
Provide start-up program funds	2	2
Other	4	5

In terms of personnel resources, 10% of the respondents (n = 9) indicated a willingness to teach either full or part time at an occupational therapy program located at SVSU; 19% indicated a willingness to guest lecture (n = 16), with 23% responding an interest in supervising student interns (n = 20).

### Task Force Results

A task force group consisting of eight key representatives from various community agencies and health care facilities was formed to provide SVSU with information and input regarding the manpower needs of their facilities. An additional component of the task force meeting was to provide a forum for participants to share their

perspectives regarding the benefits and difficulties that may be encountered in establishing a BSOT program at SVSU. Later responsibilities of the task force would be to review and critique the curriculum proposed for the occupational therapy educational program and to review the evaluation methods used by the author to validate the curriculum and the curriculum development process.

The task force group met in the spring of 1990 for an initial meeting which provided members with information and data regarding the survey results, background, and historical perspective of the study. Task force members met in an informal, comfortable setting in the administration building of SVSU. The initial session was used to provide the task force members a forum to elicit their opinions, concerns, and issues related to the development of a BSOT program.

Input provided by the task force members indicated that they were experiencing shortages in occupational therapy personnel which they believed was due to lack of adequate educational opportunities for prospective students in the area. This lack of educational programming exacerbated the current manpower shortage and geographic maldistribution of occupational therapists. Members of the task force group stated that due to the difficulties encountered in hiring occupational therapists, many of their respective facilities were unable to adequately provide comprehensive occupational therapy services to specific populations or areas.

Task force members also reported that many therapists, in addition to their primary or full-time positions, were working as

independent contractors, or private practitioners, contracting with other facilities or agencies. The task force members indicated that occupational therapy is often under-utilized at many of the rural hospitals or facilities due to the shortage of therapists. Positions which should be staffed by registered occupational therapists are frequently filled by untrained aides or other unqualified personnel. Members also reported that many facilities, when unable to fill vacant occupational therapy positions, either fail to offer the service or shift the burden of responsibility for delivery of the service to an existing department. This trend is frequently noted in home health agencies, nursing homes, and skilled nursing facilities. The consensus of the group was that utilization and employment of occupational therapy personnel would increase if a program were developed at SVSU to provide the manpower needed by the region.

The task force members agreed that there would be adequate training sites available for student interns and clinical affiliations in the region. The members also indicated that though many of the facilities currently had contracts with one or more of the existing occupational therapy educational programs in Michigan, students rarely interned at the facilities, since the majority of the students are from the lower third of Michigan. Students from "down-state" face the added difficulties of housing costs, travel, and living expenses when interning at local institutions and agencies.

### Discussion of the SVSU Feasibility Study Findings

Results of the three methods of data collection used in the study indicated that there was a substantial need for the development and implementation of an occupational therapy program leading to the degree of BSOT at Saginaw Valley State University.

Following the results and interpretation of the data obtained by the feasibility study, it was determined by the administration that Saginaw Valley State University was in a unique position to be able to provide area and regional health care and human service providers with a profession that has been undergoing dramatic growth due to a number of societal changes and needs. Because of SVSU's location in north central Michigan, it was shown that Saginaw Valley State University could prepare students in occupational therapy to meet the demand not only in the rural and northern regions of Michigan, but throughout the state.

The survey results and input from the task force group indicated that there were sufficient numbers of both high school and college level students for enrollment in an occupational therapy curriculum, as well as community and agency support and resources to support the program in occupational therapy. Employers also indicated a strong demand and need for trained occupational therapy personnel and indicated continued future employment opportunities for graduates. Correspondence and dialogue with the American Occupational Therapy Association also indicated their support for an additional occupational therapy program at SVSU to meet the unique

requirements of the area. The results of the SVSU Occupational Therapy Feasibility Study indicated that there was a substantial need and interest for a BSOT program in this region offered by Saginaw Valley State University.

Following review and evaluation of the results of the feasibility study, the administration of SVSU gave approval for the second phase of the curriculum development process, design and validation of an occupational therapy curriculum.

### Curriculum Development

#### Introduction

With the findings of the SVSU Feasibility Study for Occupational Therapy reviewed and the initial premise of the need for an occupational therapy educational program validated, development of a core curriculum for the education of the prospective students was undertaken. The College of Nursing and Allied Health Sciences approved the second phase of the curriculum development process, curriculum design (see Figure 5).

The basic components underlying curriculum development models consist of four fundamental factors: (1) the formulation or identification of educational objectives, (2) selecting the means for attaining these objectives (curriculum), (3) organizing these means or methods, and (4) evaluating the outcomes.

Educational programs in occupational therapy must adhere to and be accredited by national standards developed by the American

Occupational Therapy Association. Though the profession and practice of occupational therapy is diverse and adheres to the underlying model and concept of the phenomenon of occupation and how it affects human function, there is no articulated body of knowledge regarding occupation (Heater, 1991). The AOTA (1991a) has established the Essentials and Guidelines of an Accredited Educational Program for the Occupational Therapist (Essentials) to provide a guide in accrediting occupational therapy educational programs.

The AOTA (1991a) Essentials provide the curriculumist with a basic outline for developing coursework relevant to and applicable for entry level educational components for occupational therapists. These guidelines, however, provide the minimum standards of quality used in accrediting programs by the AOTA.

There has been a continuing controversy over the relevance of the Essentials to the profession and whether the Essentials are indicative of a base of knowledge of occupational therapy. Many theorists have called for a revision and development of the Essentials that would allow for increased flexibility in the curriculum, and some theorists have stated that the Essentials are so nonspecific that they are of little help in curriculum design (Nelson et al., 1990; Teske & Spelbring, 1983; Yerxa & Sharrott, 1986). It was with just such controversy and lack of specific guidelines that the development of the curriculum at SVSU was undertaken.

### Curriculum Design

Initial conversations with the AOTA Division of Education revealed that there were no set standards of specific coursework or classes which had to be used in designing an occupational therapy curriculum. In fact, there is a great deal of latitude that developing educational programs have in terms of course outline, offerings, descriptions, progression and retention policies, requirements, and admission criteria.

With lack of specific coursework to provide an outline, Harsh (1991) from the Education Division of AOTA recommended review of the following curricula: Texas Woman's University, Denton; University of Wisconsin-Madison; Medical College of Virginia, Richmond; Virginia Commonwealth University, Richmond; Medical College of Georgia, Augusta; Eastern Michigan University, Ypsilanti; Western Michigan University, Kalamazoo; University of Iowa, Iowa City; Wayne State University, Detroit; College Misericordia, Dallas, Pennsylvania; Tufts University-Boston; and the program at the University of Illinois, Urbana.

Meetings with the SVSU Occupational Therapy Task Force indicated that an educational program should provide graduates with a strong background and theoretical base in pediatrics, orthopedics, community based and nontraditional settings, an emphasis in development and developmental disabilities, mental health, and the clinical reasoning skills necessary for decision making and problem solving that would facilitate development of new occupational therapy

programs in underserved and nontraditional areas. With these basic prerequisites and objectives, review and development of the curriculum began.

### Review of the AOTA Essentials

According to the Essentials (AOTA, 1991a), the objective of the AOTA and the AMA guidelines are to: "establish, maintain, and promote appropriate standards of quality for educational programs in occupational therapy and to provide recognition for educational programs that meet or exceed the minimum standards outlined" (p. 1). The AOTA standards as outlined in the Essentials are to be "used for the development, evaluation, and self-analysis of baccalaureate and postbaccalaureate occupational therapy entry-level professional programs" (p. 1).

The accreditation procedure for occupational therapy educational programs serves two basic purposes: (1) to assure the quality of the program and (2) to assist in the improvement of the program. The Self-Study Report is designed to assist program officials in complying with the accreditation process by using a matrix of the Essentials to aid in systematic examination within the institutional setting. The Essentials provide the university developing an occupational therapy program with broad guidelines which present the minimum accreditation standards to achieve entry-level competencies and requirements for certification. The Essentials provide the curricularist with broad categories of competencies and general curriculum content.



As there is no agreed upon body of knowledge for occupational therapists, the Essentials provide the curricularist with a general outline for course development. This author, following the suggestion of the AOTA, reviewed and analyzed the earlier listed curricula as an additional resource to provide direction to curriculum design in conjunction with the suggestions set forth by the SVSU Task Force.

The curriculum design was envisioned as a 2 plus 2 program consisting of 2 years of preprofessional coursework and requirements followed by 2 years of professional level classes. The curriculum was developed to provide students with two major component areas, physical dysfunction and mental health/psychiatry. This decision was made, in part, due to the needs of the employers and constituent groups responding to the feasibility study survey. Employers and respondents to the survey indicated a need for occupational therapists who could practice in community mental health settings, as well as having a foundation in medical conditions and treatment. Six months of structured internship requirements as outlined by the AOTA (1991a) Essentials provide the student with a capstone to the program.

### Preprofessional Courses

The Essentials (AOTA, 1991a) state that the length of the educational program shall be sufficient to meet the intrinsic requirements of the sponsoring institution at the baccalaureate level. The Essentials state that program content should be based on a broad

foundation of liberal arts, sciences, and professional education and should include coursework in the following general areas:

1. Liberal arts content that is prerequisite to, or concurrent with, professional education and shall facilitate the development of oral and written communication skills . . . knowledge and appreciation of multicultural factors. . . .

2. Biological, behavioral, and health sciences content that encompasses normal and abnormal conditions across the life span; structure and function of the human body including anatomy, kinesiology, physiology, and neuroscience; human development throughout the life span including the interaction of environmental factors with sensorimotor, cognitive, psychosocial, and physiological components, human behavior, the etiology, clinical course, management and prognosis of congenital, developmental, acute and chronic disease processes and traumatic injuries and their effect on human functioning throughout the life span. . . .

3. Occupational therapy theory and practice, foundations, history and philosophical base of the profession; theoretical base and models of practice including theories underlying the use of purposeful activity (occupation), analysis of the theories of human adaptation, meaning and dynamics of purposeful activity, importance of a balance of the areas of occupation, age-appropriate roles, life tasks, and developmental issues; fundamental of activity, analysis of activities of daily living, work, and play/leisure, performance and teaching of selected life task and activities; occupational therapy process based on frames of reference or theoretical perspectives including: screening and assessment, formulation of intervention plans, implementation and provision of therapeutic intervention related to occupational performance areas and their components, termination of occupational therapy services including determination of discharge, summary of occupational therapy outcome, and recommendations, documentation. . . .

4. Management of occupational therapy services; application of principles of management in the provision of occupational therapy services to individuals and organizations including: planning, organizing, staffing, coordinating, controlling, use of technology in service provision and analysis of data, knowledge of applicable national and state requirements for credentialing. . . .

5. Research; essential components of a research protocol, interpretation of studies related to occupational therapy, application of research results to occupational therapy services. . . .

6. Professional ethics; AOTA standards and ethics policies and their effect on the therapist's conduct and patient treatment, recognition of the necessity to participate in the promotion of occupational therapy through educating other professionals, consumers, third-party payers, and the public. . . .

7. Fieldwork education, Level I fieldwork designed to enrich didactic coursework through directed observation and participation in selected aspects of the occupational therapy process; Level II fieldwork consisting of a minimum of six months shall be required. (pp. 1-4)

### Preprofessional Course Selection

In addition to the general requirements outlined in the Essentials (AOTA, 1991a), SVSU adheres to a policy of general education requirements. The general education requirements at SVSU are designed to provide students with a broad academic experience and to encourage them to study in areas outside of their major concentration (SVSU, 1991). The general education requirements at SVSU total 39 credit hours in 9 content areas including: literature, arts, numerical understanding, natural sciences, historical and philosophical ideas, social science methodologies, social institutions, communication, and international perspectives.

Identifying and prioritizing the major objectives and components necessary to provide students with a strong foundation in the liberal arts, which the professional level curriculum would build on, was the first step in designing the curriculum. Coursework in the basic sciences and chemistry was deemed necessary due to the

emphasis in the professional level classes on clinical medical conditions with the associated physiological changes seen in patient populations treated by occupational therapists.

As the curriculum was developed to provide students with coursework in the two broad areas of physical dysfunction and mental health, preprofessional level coursework in psychology was a necessary component in order to provide students with the information and skills necessary to refine their clinical reasoning abilities. Inclusion of the psychology courses in the preprofessional level also prevented duplication of coursework and fulfilled the recommendation of the Essentials (AOTA, 1991a) for coursework in development and human adaptation.

With the underlying principles identified, selection of the preprofessional level coursework was undertaken. By cross-referencing the SVSU general education requirements with the broad categories of study listed in the Essentials, the preprofessional classes were selected. The initial preprofessional coursework was also cross checked with the curricula outlined earlier in this chapter to insure a degree of standardization with national trends.

A total of 124 credit hours of coursework is required by SVSU for graduation leading to a baccalaureate degree. The initial coursework for the preprofessional program was reviewed by the AOTA Education Division, dean of College of Nursing and Allied Health Sciences, the chair of the Nursing and Allied Health Curriculum Committee, and the SVSU Task Force. Revisions and adaptations were made to the initial selection of classes with the final

preprofessional content being ratified (see Appendix F).

Following successful completion of the prerequisite classes with a grade point average (GPA) of no less than 2.5, students may apply for admission to the professional program in occupational therapy. The final preprofessional courses selected recognize the importance of the profession's theoretical base in both the liberal arts and the sciences. The final curriculum of preprofessional classes totaled 51 credit hours of prerequisites in the areas of biology, psychology, sociology, art, mathematics, English, philosophy, chemistry, occupational therapy, and general education electives.

Final selection of the schedule of courses had to be cross-referenced to earlier class schedules to determine appropriate semester scheduling and to insure that the preprofessional classes followed a logical and developmental progression of knowledge. With the preprofessional schedule of courses and requirements finalized, development of the professional level classwork ensued.

### Professional Coursework

Meetings with the SVSU Task Force Committee and the Saginaw Valley District of the Michigan Occupational Therapy Association (MOTA) instilled the importance of providing students with education and training in the area of clinical reasoning skills. The task force emphasized the importance of a therapist's ability to analyze and synthesize salient patient information and data in the clinical setting, relate to the client holistically and empathetically, and

select and integrate the treatment methods and skills necessary to assist the patient. These skills and abilities were considered crucial for new graduates practicing in a rural area.

The members of the committee also reiterated their concern that a professional program should include not only the traditional coursework in physical disabilities and mental health, but also should include coursework in pediatric treatment, orthopedics, and technology. The committee's emphasis on these areas is based in part on the recognition of these areas by AOTA and other professional and accrediting organizations such as the American Society of Hand Therapists, which certify occupational therapists specializing in these areas. An additional reason for inclusion of these areas of practice was due to the emphasis and growth documented in these specialties by the AOTA (1989b), which has found that pediatric practice is now the second largest area of practice for occupational therapists in the United States.

#### Relation of the Essentials to the Professional Coursework

The Essentials (AOTA, 1991a) articulate four major headings which educational programs should address. These headings include: occupational therapy theory and practice; research, values, and attitudes congruent with the profession's standards and ethics; and fieldwork education. The Essentials suggest areas of study which may include: the promotion of health and prevention of disease; the etiology, clinical course, management, and prognosis of congenital, developmental, acute, and chronic disease processes and traumatic

injuries; analysis of activities to include their sensorimotor, cognitive, and psychosocial components as well as their relevance to patient/clients; professional terminology, recording and reporting methods; roles and functions of various levels of occupational therapy personnel; Level I and Level II fieldwork designed for the purpose of directed observation and participation in selected field settings.

Due to the recommendation by the Essentials that the curriculum include course content in anatomy, kinesiology, neuroanatomy, physiology, and neurophysiology, meetings were scheduled with the respective departments and faculty responsible for teaching these existing courses at SVSU. These meetings were scheduled to determine whether the course content currently being taught at SVSU would be applicable and adaptable to the occupational therapy curriculum. During these meetings, a review of texts, course outlines, and class syllabi was completed in order to determine cognates.

As with the preprofessional coursework, the professional courses were cross-referenced to the existing schedule of classes for SVSU in order to schedule the cognate coursework at the appropriate time. In addition, the coursework had to be designed to provide a logical progression of knowledge which the students would build on leading to the capstone of the clinical internships. Due to the emphasis on clinical reasoning skills, the treatment section of the classes were developed to include classroom and didactic work, with the additional component of clinical affiliation. The clinical affiliation segment of the curriculum would also serve to

fulfill the AOTA requirements of Level I fieldwork education.

Initial drafts of the professional level coursework were reviewed by the AOTA Division of Education, the chair of the Nursing and Allied Health Curriculum Committee, the College of Nursing and Allied Health Sciences, the SVSU Task Force Committee, and the Saginaw Valley District of the MOTA. Revisions and additions were made to the initial draft with the following coursework and program of study being approved for further external review (see Appendix G).

### Summary

As originally envisioned, the curriculum development process which was undertaken at SVSU consisted of four major components: (1) review of the literature and social indices regarding national manpower data; (2) evaluation of local and regional need for occupational therapists in association with determination of student interest in attending a proposed program and the feasibility of the program; (3) development of the curriculum of study for the education of occupational therapists, the preprofessional and professional coursework developed in conjunction with AOTA guidelines; and (4) validation of each of the components of the development process through both internal and external means.

A review of the literature indicated a national shortage of occupational therapy personnel coupled with a geographical maldistribution. To determine local and regional need for occupational therapists, a comprehensive feasibility study was undertaken. An additional component of the feasibility study was the assessment of



both high school and college student interest in attending a proposed program of study at SVSU. The study was conducted contiguous to and within the geographical region encompassed by the Saginaw Valley District and the Northern District of the Michigan Occupational Therapy Association.

The feasibility study employed three methods of data collection. These methods included the survey (employers, high school students, and college students), review of demographic and manpower data, and the group task force. The data collected by these methods were then analyzed and reviewed to determine the feasibility of establishing an occupational therapy program.

The survey method of data collection consisted of the development of separate surveys for three constituent groups: the high school students ( $N = 360$ ), the college students ( $N = 325$ ), and the employers ( $N = 128$ ). Each survey was administered separately. The surveys consisted of a self-administered, 7- to 15-item questionnaire which were distributed to each population sample. The survey instruments were developed and pretested in association with the Research Division of the AOTA. The response rate for each sample was 57% for the employers, 67% for the high school students, and 84% for the college students.

Analysis of the survey results indicated that 21% of the high school students surveyed ( $n = 50$ ) would be interested in enrolling in an occupational therapy program at SVSU; 60% ( $n = 145$ ) were undecided. Of the college students surveyed, 25% of the respondents ( $n = 67$ ) indicated an interest in enrolling in a proposed

occupational therapy program at SVSU; 36% ( $n = 108$ ) were undecided. Of the undecided individuals, 191 respondents requested further information regarding occupational therapy and educational requirements.

Review of the employer survey indicated that 59% ( $n = 51$ ) of the agencies responding planned to expand the service in the next 3 years. Forty-seven percent ( $n = 40$ ) of the employers responding indicated that they planned to hire additional occupational therapists in the next 3 years with the average number of additional staff being 1.8. At the time of the survey, 30% of the facilities ( $n = 26$ ) reported that they currently had unfilled budgeted positions available for occupational therapists. In the past 3 years, 43% of the facilities ( $n = 37$ ) had budgeted positions for occupational therapists unfilled due to a lack of therapists.

With findings of the feasibility study indicating need and interest in an occupational therapy program, the development of the curriculum was undertaken. The coursework leading to a bachelor's degree was envisioned as consisting of a 2 plus 2 program: 2 years of preprofessional coursework followed by 2 years of professional classes. Existing occupational therapy educational programs and courses were reviewed and analyzed to aid in defining the preprofessional and professional level coursework. An additional component in the design of the curriculum was the input and feedback forwarded by the SVSU Task Force on Occupational Therapy.

Review and cross-referencing of the curriculum component with the AOTA (1991a) Essentials was necessary to facilitate adherence to

the minimum standards and criterion set by the AOTA to meet future program accreditation. Cross-referencing of the curriculum and coursework with internal university requirements for general education standards was also necessary. Identification and review of cognate coursework was accomplished through scheduled meetings with liaisons from appropriate departments. The internal and external review process for curriculum design included analysis of the proposed program of study by the AOTA Division of Education; AOTA Research Division; SVSU Task Force on Occupational Therapy; Nursing and Allied Health Curriculum Committee; chairs of Occupational Therapy Departments of Wayne State University, Western Michigan University, and Eastern Michigan University; academic officers of SVSU; and the President's Council of State Colleges and Universities Academic Program Review.

With the drafts of the curriculum, preprofessional coursework, professional coursework, and policies and procedures finalized, evaluation and validation of the proposed documents became the final step in the curriculum development process.

#### Validation of the Curriculum Process

To insure feedback and review by appropriate constituent groups, the feasibility study and supporting documents were forwarded to the chairs of the occupational therapy educational programs at Wayne State University, Eastern Michigan University and Western Michigan University. Their responses and recommendations were incorporated into a revised text of the document. To obtain external

validity of the procedure and program, the text was also forwarded to the American Occupational Therapy Association for their review and input (see Appendix I). Dialogue with the AOTA and discussion provided further revisions of the curriculum and coursework in order to assure content clarification and matriculation.

With each of the components of the curriculum development process identified, reviewed, and revised, final evaluation of the study was necessary to lead to eventual implementation of the program of study. This stage of the process consisted of obtaining internal and external review and approval of the program.

The initial step of the internal review process consisted of developing a document outlining and describing the steps taken in the curriculum development process, the results of the feasibility study, the subsequent design and development of the occupational therapy curriculum, the development of the text for inclusion in the SVSU student catalog, and a description of course content. This document, which was developed and written by this investigator in conjunction with the dean of the College of Nursing and Allied Health Sciences, the Feasibility Study in Occupational Therapy, was then distributed to appropriate program chairs as was an abstract of the text for their review and comment (see Appendix J).

The initial component necessary for program approval consisted of review by the academic officers of SVSU and obtaining approval from the president of SVSU, Dr. Gilbertson. With the affirmation by the academic officers, administration, and president of SVSU, the approval stage of the occupational therapy program progressed to

review by the curriculum committee of the College of Nursing and Allied Health Sciences. This step was followed in the Fall Semester of 1991, by review by the SVSU Curriculum Committee. It should be noted that appropriate revisions and alterations in program content were made throughout the approval process based in part on input and clarifications forwarded by the involved constituent groups. Validation of the proposed program of study during each stage in the approval process was necessary for further progression along the approval continuum.

Having obtained approval without revision by the curriculum review committee, the final stage in the process was a university-wide vote by the faculty of SVSU. This step was accomplished in December of 1991, with overwhelming support for the program. At the same time the occupational therapy program proposal was undergoing internal university approval, the external approval process and external review by the Council of Academic Officers of State Universities was also proceeding.

The external review and approval process necessary for program development and implementation will vary from state to state and investigators are recommended to determine and outline what the approval process will be prior to initiation of any curriculum development process. In Michigan, any changes or additions in educational programs at state funded universities must undergo a process of review by the Council of Academic Officers, which consists of the president of each of the universities in Michigan or his or her designee.

Proposed programs and changes in curriculum or funding undergo an initial Level I preliminary review during which time questions and clarifications of program intent, content, etc. may be requested (see Appendix K). Following this initial review, any changes must then undergo closer scrutiny through a Level II review.

During the Level II review, the curriculum itself is evaluated, along with data and information regarding the need and implications of the program being scrutinized. Other areas reviewed include: cost factors, student numbers, faculty resumes and staffing, and any other factors and issues impacting higher education within the state of Michigan. Supporting documents for any proposed program must be included for review during this stage of the approval process. The Academic Officers Council in Michigan serves as the final stage of external review for developing programs.

The SVSU program for occupational therapy underwent Level I review during the Spring Semester of 1991. Clarifications and revisions to the SVSU Feasibility Study and Proposal were made during the Summer and Fall Semesters of 1991.

On January 29, 1991, the final review and Level II evaluation of SVSU Feasibility Study and Proposal for Occupational Therapy was undertaken. Following a presentation of the steps undertaken describing the curriculum development process undertaken by SVSU, the Council of Academic Officers voted unanimously to support the development and implementation of the occupational therapy educational program at SVSU.

The final stage of the internal approval process reached its culmination on February 17, 1992, when the SVSU Board of Control approved the establishment and implementation of the occupational therapy program at SVSU.

### Summary

The curriculum development process has been described as consisting of five components as undertaken at SVSU: (1) problem identification with review of literature and supporting data, (2) design and implementation of the feasibility study to determine local and regional need and interest in occupational therapy, (3) curriculum design and development based on internal and external guidelines, (4) process and research validation, and (5) implementation.

Program and curriculum evaluation and validation consisted of review of the Joint Committee (1981) Standards, which were used as guiding principles assisting in the design, monitoring and revision of all phases of the curriculum development process undertaken at SVSU. The Joint Committee Standards facilitated the logical transition of program development and provided an external method of insuring the validity of the curriculum development process.

Internal and external review of the curriculum development process occurred in a sequential and hierarchical fashion. Initial review was accomplished internally through review by the presidents' committee, by the departmental chairs, followed with review by the curriculum committee of the College of Nursing and Allied Health, the SVSU Curriculum Committee, and culminating in a university-wide

vote by the entire faculty of SVSU.

Concurrently with the internal review, the curriculum development process was undergoing external review on a state level. The initial phase of the external process involved a preliminary Level I review by the Council of Academic Officers of State Universities in Michigan. This was followed by an intensive Level II review again by the Council of Academic Officers. With approval achieved at each stage of development, the culmination of the approval process was the affirmation and implementation of the program by the SVSU Board of Control.

Though the review and approval process may vary dependent on the host institution and established policies inherent in each unique setting, the curriculum development process of problem identification, determination of feasibility, curriculum design, and evaluation and validation of each of the components (the process) should be consistent in developing and validating the need for new occupational therapy educational programs. Use of this process will prevent unnecessary duplication of programs and facilitate appropriate and viable development of new programs.

In Chapter IV of this study, the procedures used to develop and evaluate the effectiveness of the curriculum development process are addressed.



## CHAPTER IV

### EVALUATION OF THE CURRICULUM DEVELOPMENT PROCESS

#### Introduction

The purpose of this descriptive study was to document and validate the development of a model from the curriculum development process for occupational therapy as formulated and undertaken at Saginaw Valley State University (SVSU), University Center, Michigan. This study will present a process which can be utilized by other individuals to determine: (a) the need for a program in occupational therapy, (b) the design of an occupational therapy curriculum consisting of the technical aspects of development, and (c) an evaluation method for program and curriculum development which can be used to guide and validate the curriculum development process.

The curriculum development process has been described as being developmental in nature and as a dynamic and cyclical process rather than a lateral progression. Components of the curriculum development process have included: (a) identification of needs and purposes, (b) selection and organization of participants, (c) development of a master program management plan, (d) development of components of data intrinsic to specific settings, (e) pilot test/evaluation and analysis/reorganization, (f) dissemination of data and information coupled with implementation, and (g) evaluation and revision (see Figure 9).

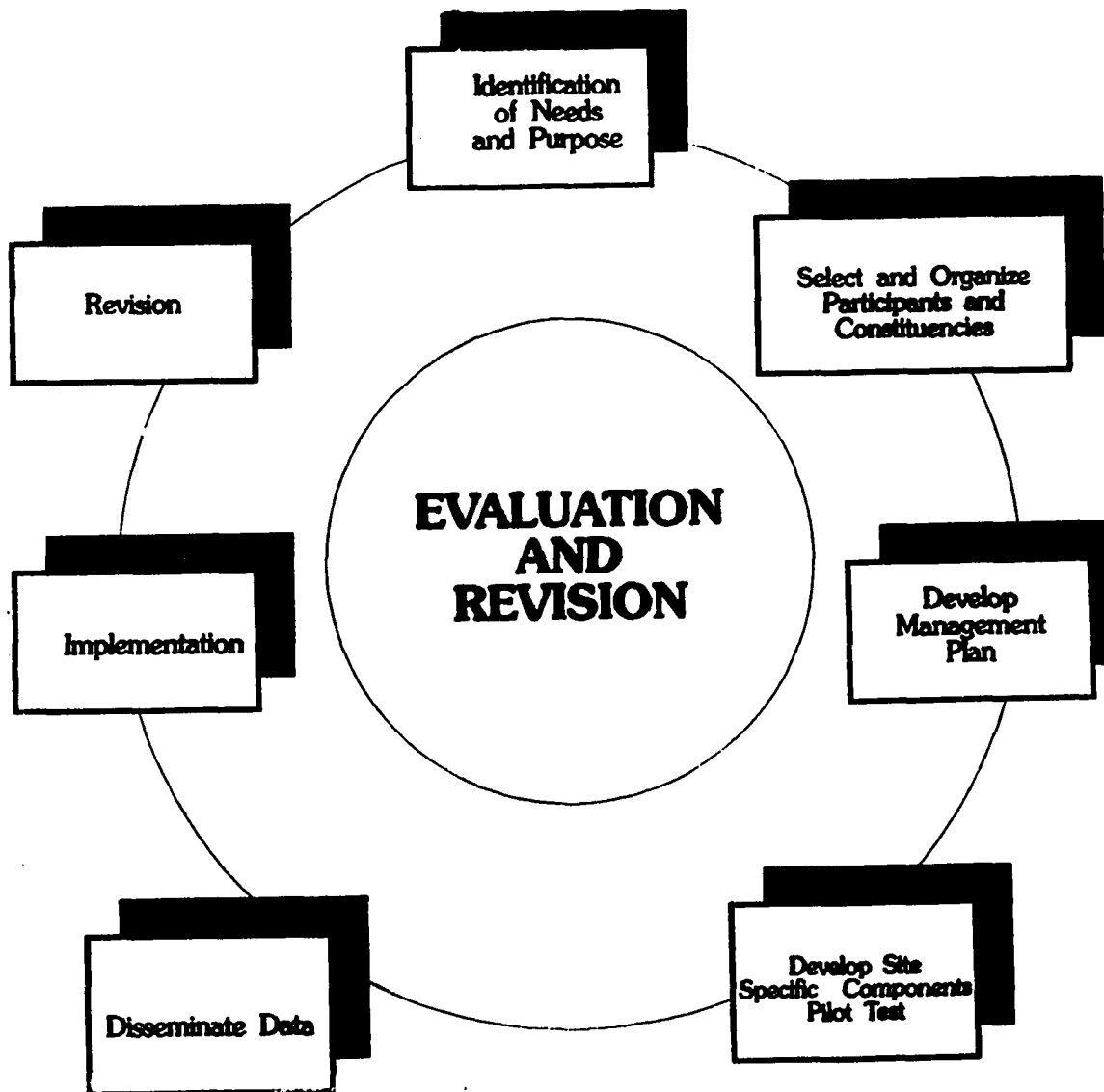


Figure 9. The Curriculum Development Process at Saginaw Valley State University

The importance of the evaluation process in the curriculum development process cannot be overemphasized as a means to provide feedback and direction toward the attainment of goals and objectives. *Formative and summary reviews are encompassing tasks which are undertaken throughout the course of program development*

and provide a unifying format for the curriculum development process.

Evaluation of the curriculum development process provides the curricularist with a guideline and validation for revision and dissemination of data and information to the host institution. Evaluation and validation criteria will vary dependent on the needs and policies and procedures of the constituent group or host setting. Internal and external review of the data and information acquired will depend on the needs and demands intrinsic to the setting. However, use of an external method of evaluation can provide the curricularist with a guide for review and analysis of the procedure and program.

The use of the Joint Committee (1981) Standards for Evaluations of Educational Programs, Projects, and Materials was used as a component of the summary review and analysis of the curriculum development process undertaken by SVSU and is advocated as a model which can be used by other institutions developing programs to insure consistency and validity of the programs.

#### Evaluation of the Components of the Curriculum Development Process

Evaluation as a decision-making process serves many purposes, including: clarification and definition of program goals and objectives; improvement in program inputs, operations, and outcomes; development of a relevant, reliable, and valid means for communicating the results to other constituent groups; and determination of

the overall program value/validity.

Though the curriculum development process may vary between settings, major aspects of the evaluative process should be considered and operationalized during the curriculum development process. These components include: (a) Who is to be involved, (b) why the evaluation is being conducted, (c) what is to be the subject of the evaluation, (d) how the evaluation is to proceed, (e) and when evaluation is to occur. Stufflebeam and Shinkfield (1985) viewed evaluation in a broad sense and believed that the evaluator should become involved at the initial planning stage of program development, even before an instructional program is implemented.

As designed for SVSU, the curriculum development process consisted of four basic components which were evaluated both internally and externally (see Figure 6): (1) problem identification with a review of the literature, (2) the feasibility study which was operationalized as a set of meta-processes to determine the local and regional need for occupational therapists, (3) the curriculum design process, and (4) the validation and evaluation of the program and process. The application of the management-oriented evaluation approach using Stufflebeam's (cited in Phi Delta Kappa, Inc., 1971) Context, Input, Process, and Product (CIPP) model provides the researcher with a format to assist in directing the course of the program. Stufflebeam and Shinkfield (1985) identified the benefits of using the CIPP model for formative evaluation to: "(1) Context--guidance for choice of objectives and assignment of priorities. (2) Input--guidance for choice of program strategy. Input

for specification of procedural design. (3) Process--guidance for implementation. (4) Product--guidance for termination, continuation, modification, or installation/implementation" (p. 164).

#### Review of the Curriculum Development Process at SVSU

The feasibility component of the curriculum development process (CDP) consisted of two constituent groups: consumers/employers and students consisting of both high school and college students. This stage of the curriculum development process underwent a series of internal and external review procedures. Internal and external review distinguishes between evaluations conducted by program employees or constituents and those conducted by outsiders. The feasibility survey instruments were designed in association with the American Occupational Therapy Association (AOTA) Division of Research and Evaluation and were further refined through review of the SVSU Human Subjects Institutional Review Board, the administration of the College of Nursing and Allied Health Science, and the SVSU Occupational Therapy Task Force Committee.

The second phase of the curriculum development process involved development and refinement of the curriculum. The curriculum, as outlined earlier, was designed in conjunction with the AOTA (1991a) Essentials and with the assistance of the AOTA Division of Education. The curriculum also underwent both internal and external review processes. Internal review was undertaken through a review of the curriculum by the SVSU nursing faculty, SVSU Nursing and Allied Health Curriculum Committee, SVSU Curriculum Committee,

administrative review by SVSU, and finally, review by the entire SVSU faculty. External review of the curriculum was achieved through review and analysis by the AOTA Division of Education, chairs of the existing occupational therapy educational programs in Michigan (Wayne State University, Western Michigan University, and Eastern Michigan University), SVSU Occupational Therapy Task Force Committee, SVSU College of Education, Saginaw Valley Occupational Therapy Association, and by review of the Presidents' Council of State Colleges and Universities, Michigan. Three primary questions were forwarded to those evaluating the curriculum during the internal and external review process: Does the curriculum reflect current areas of practice? Does the curriculum meet the basic essentials for an accredited program? Does the prerequisite coursework provide a base of knowledge which is further developed by the professional classes? These underlying questions assisted in focusing and directing stakeholders' comments which led to revisions of the initial draft document.

The final phase of the curriculum development process involved the validation of the study findings and the process of curriculum development as undertaken at SVSU. This phase of the process was accomplished on two levels, summary review internally and externally of the results of the curriculum development model undertaken at SVSU and by summary review using the Joint Committee (1981) Standards as interpreted by the involved constituent groups. Final approval and validity of the results of the curriculum development process were accomplished internally by approval of: the SVSU

administration, university-wide vote by the faculty, and approval by the SVSU Board of Control, which led to implementation of the proposed program of study.

As the curriculum development process was viewed as cyclical in nature, the internal and external review process provides the researcher with a method of review and analysis which facilitates revision and validation of data, information, and procedures.

Each developing program in occupational therapy will adhere to differing standards of review specific to the host setting or institution. Internal review is conceptualized as the process of evaluation which occurs by employees or individuals working for or with the host facility. Evaluation is, simply stated, a judgmental process (Scriven, 1967). Judgments and evaluations are value laden and the same determinants do not necessarily lead to the same conclusions. To provide a framework for other curricularists developing educational programs for occupational therapists, use of both internal review procedures and external review procedures, formative and summative are advocated. Utilization of internal and external review procedures provides a method of checks and balances while facilitating input from involved constituent groups.

#### Feasibility Study Evaluation

The feasibility study undertaken by SVSU underwent initial evaluation and review by the dean of the College of Nursing and Allied Health Sciences. Initial meetings outlining the steps necessary to identify objectives, develop timelines, and articulate goals

and ideas provided a method of internal review and revision. This process of review, continued on a structured, consistent weekly basis during the development, implementation, and analysis of the feasibility data.

To insure validity of the survey instruments and the feasibility design, the feasibility study was developed in association with the AOTA Research Division (see Appendix A). Through the use of the AOTA input and direction, the survey instruments were developed and pretested with final revisions being made during the Fall Semester of 1989.

External review of the survey instruments and feasibility design was accomplished through submission of the survey design to the SVSU Human Subjects Review Board (see Appendix D). The survey design was also forwarded to and approved by the Human Subjects Institutional Review Board of Western Michigan University.

An additional method of review and analysis of the study and design was through the development of the SVSU Occupational Therapy Task Force Committee. The task force committee proved to be invaluable in providing an additional external body which reviewed the data and information and forwarded a number of suggestions and recommendations. The task force met on a number of scheduled sessions and was aided in its task of review by the Saginaw Valley District of the Michigan Occupational Therapy Association.

The culmination of the feasibility component of the curriculum development process was the review and analysis by the administration of SVSU with the determination to proceed with the



second phase of the project--the design and development of the curriculum.

### Curriculum Review

The design and development of the curriculum for occupational therapy at SVSU underwent extensive review both internally and externally. Throughout this period of development, the suggestions and recommendations of the constituent groups provided direction and focus to the design.

Because of the need for adherence to the AOTA (1991a) Essentials, the curriculum was developed in conjunction with an external agency, the AOTA's Division of Education. The AOTA's external guidelines, the Essentials, provided a framework for design of the curriculum (see Appendix H). Internal guidelines of SVSU, including the general education requirements, became a component of the curriculum design. Consistent internal review by the Department of Nursing and Allied Health Sciences facilitated revision in the initial drafts. The preliminary drafts were then reviewed by the SVSU Task Force Committee and the Saginaw Valley Occupational Therapy Association.

Final drafts of the occupational therapy curriculum were reviewed and critiqued by the AOTA; the SVSU Task Force Committee; the Saginaw Valley Occupational Therapy Association; chairs of the Occupational Therapy Departments at Wayne State University, Western Michigan University, and Eastern Michigan University; the Curriculum Committee of the College of Nursing and Allied Health Sciences; the

administration and academic officers of SVSU; and the SVSU Curriculum Committee. With each review and evaluation, revisions were made when appropriate to clarify content, language, or meaning and to insure a logical sequence of course progression.

### Process Evaluation

The curriculum development process undertaken at SVSU was evaluated through the use of the Joint Committee (1981) Standards for Evaluations of Educational Programs. In 1975, a Joint Committee on Standards for Educational Evaluation was created which now includes representatives from a majority of professional educational associations in the United States. This Joint Committee developed an organized statement of principles for comprehensive educational evaluation in 1981, the Standards for Evaluations of Educational Programs, Projects, and Materials.

The Joint Committee Standards provide the evaluator with a set of 30 standards, including an overview providing definitions and a rationale for the standard, a list of guidelines, potential difficulties that may be encountered, and an illustrative case describing and analyzing the specific standard. The basic components of a quality evaluation study as outlined in the Standards revolve around the four areas of (1) utility, (2) feasibility, (3) propriety, and (4) accuracy (Worthen & Sanders, 1987). The purpose of the Standards is not to specify criteria with which to judge educational programs or projects but instead, the Standards can be used by the evaluator to gather relevant information and data posed by the host

institution or setting which is sufficient for "assessing an object's effectiveness, costs, responses to societal needs, feasibility, and worth" (Joint Committee, 1981, p. 7).

Brinkerhoff et al. (1983) have called for meta-evaluators, or experts, to conduct meta-evaluations using instruments as the Joint Committee (1981) Standards. Worthen and Sanders (1987) coined the term "super-evaluator" (p. 376) to describe this specialized individual able to evaluate and judge the evaluators. However, due to time, fiscal constraints, and the limitations of the setting, an evaluation may be conducted by the original evaluator, inherent in which is the risk of evaluator bias of the evaluator and the confounding variables associated with it.

For the purpose of this study, the Joint Committee (1981) Standards were applied by this investigator and the SVSU Occupational Therapy Task Force Committee to the curriculum development process undertaken at SVSU. The preliminary and final drafts of the results of the Joint Committee Standards were reviewed for their accuracy and appropriateness by an external evaluator from Western Michigan University's Evaluation Center. The final evaluative report using the Joint Committee Standards was also forwarded to the administration of SVSU for review and to the Presidents' Council of State Colleges and Universities (Michigan) for the Level II review (see Table 12).

The application of the Joint Committee (1981) Standards for program evaluation were used as the third stage of the curriculum development process. The Joint Committee Standards were applied as

Table 12  
Results: SVSU Evaluation Using the Standards

Standard	Standard met	Concerns	Recommendations
A1 Audience identification	Yes	None	See Appendix L
A2 Evaluator credibility	Yes	None	See Appendix L
A3 Information scope	Yes	None	None
A4 Valuational interpret	Yes	None	None
A5 Report clarity	Yes	None	None
A6 Report Dissemination	Yes	None	None
A7 Report timeliness	Yes	None	None
A8 Evaluation impact	Yes	None	None
B1 Practical procedures	Yes	None	See Appendix L
B2 Political viability	Yes	None	See Appendix L
B3 Cost effectiveness	Yes	None	See Appendix L
C1 Formal obligation	Yes	None	None
C2 Conflict of interest	Yes	None	None
C3 Full and frank disclosure	Yes	None	None
C4 Public's right to know	Yes	None	None
C5 Rights of human subjects	Yes	None	None
C6 Human interactions	Yes	None	None
C7 Balanced reporting	Yes	None	None
C8 Fiscal responsibility	Yes	None	None
D1 Object identification	Yes	None	Met
D2 Context analysis	Yes	None	Met

Table 12--Continued

Standard	Standard met	Concerns	Recommendations
D3 Described purposes	Yes	None	Met
D4 Defensible information	Yes	None	See Appendix L
D5 Valid measurement	Yes	None	Met
D6 Reliable measurement	Yes	None	See Appendix L
D7 Systematic data control	Yes	None	None
D8 Analysis of quantitative	Yes	None	None
D9 Analysis of qualitative	Yes	None	None
D10 Justified conclusions	Yes	None	None

the final step in a summary review to insure that the curriculum development model undertaken at SVSU adhered to a logical comprehensive and accountable process. Effective use and application of the Joint Committee Standards provided a structured method and framework from which decision making was facilitated and information including processes, outcomes, and their interrelationships were reviewed and shared with the various stakeholders.

Application of the Joint Committee (1981) Standards insured that the data, information, and results of the first two steps in the curriculum development process were analyzed and reviewed by stakeholders, and were credible, accountable, and valid.

### Summary of the Joint Committee Standards

Application of the standards to the product and results of the first two stages of the curriculum development process at SVSU were based on three areas of concern: (1) Was the standard met, (2) were there any concerns with regard to the standard, and (3) were there any recommendations that should be addressed?

The first section of the Joint Committee (1981) Standards, "Section A: Utility Standards," is used to insure that an evaluation serves the practical information and needs of the audience and constituent groups. There were two areas in which recommendations were suggested: "A1 Audience Identification" and "A2 Evaluator Credibility." In both instances, the recommendations centered around increasing the number of members on the Occupational Therapy Task Force Committee in order to insure stakeholder input in a timely fashion and to increase the number of scheduled meetings with the SVSU Task Force in order to facilitate communication (see Appendix L).

"Section B: Feasibility Standards," refers to those procedures intended to facilitate an evaluation which is realistic, prudent, and diplomatic. Areas of concern with recommendations were made in "B1 Practical Procedures," "B2 Political Viability," and "B3 Cost Effectiveness." Recommendations for B1 concerned sending a second mailing to those facilities and individuals who did not respond in order to increase the number of respondents. Recommendations for "B2 Political Viability" included increasing the number of

committees for program development and increasing the number of task force members in order to insure stakeholder input and review. Suggestions for "B3 Cost Effectiveness" included procuring external funding for the data collection section of the curriculum development process which may facilitate quicker program development through increased commitment of resources (see Appendix L).

"Section D: Accuracy Standards," is intended to insure that an evaluation conveys technically adequate information about the features of the object being studied that determine its worth. Areas of concern with recommendations in this section of the Standards (Joint Committee, 1981) occurred in the "Section D4 Defensible Information Sources." A variety of sources of information and data were evaluated and reviewed to the extent that consistent review of the information and data presented to appropriate constituent groups frequently impeded the transition of the project from one phase to the next. The political realities and expediencies of each setting will be situational with a realistic appraisal of timelines carefully reviewed. Recommendations for "Section D6 Reliable Measurement" centered on the fact that continued use of the survey instruments formulated and developed for the curriculum development process at SVSU be used by other institutions and agencies developing occupational therapy curricula in order to further the reliability and validity of the procedures (see Appendix L).

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The purpose of this descriptive study was to document and validate the development of a model from the curriculum development process for occupational therapy as formulated and undertaken at Saginaw Valley State University (SVSU). This study presented a process which can be utilized by other individuals to determine: (a) the need for a program in occupational therapy, (b) the design of an occupational therapy curriculum consisting of the technical aspects of development, and (c) an evaluation method for program and curriculum development which can be used to guide and validate the curriculum development process.

The curriculum development process consisted of five major stages. These are: (1) problem identification, with review of literature and indices for supporting data; (2) the feasibility component consisting of determination of local and regional need and interest in an occupational therapy program; (3) design of the curriculum based on national accrediting standards and local need and input; (4) evaluation of the curriculum development process and validation of the program and process through the use of formative and summative internal and external methods, Joint Committee (1981) Standards, and internal and external review by identified personnel



and organizations; and (5) implementation.

The curriculum development process is viewed as a cyclical phenomenon with knowledge and insights derived from the evaluation and analysis at each stage of development causing further revision and refinement. The process undertaken at SVSU presents a prescriptive model for the profession which is hypothesized to proceed in a sequential and hierarchical fashion, strengthened by the evaluative components. The curriculum development model, implemented at SVSU consisted of the following major components: problem identification, feasibility, curriculum design, evaluation, and validation. These components are summarized further in this chapter.

#### Problem Addressed

The profession of occupational therapy is undergoing a period of tremendous growth and development brought on, in part, by the dramatic changes in the health care delivery system in the United States coupled with demographic changes of the population of the United States, frequently referred to as the "aging of America."

The demand and growth of health care personnel in the United States is not intrinsic to the profession of occupational therapy and is characterized by demand for services from consumers in almost all areas of health care delivery. Demand and need for occupational therapy personnel, however, has outstripped the ability of the existing educational programs in the United States and Michigan to prepare and educate sufficient numbers of graduates to fill existing positions. Indeed, the American Occupational Therapy Association

(AOTA) has been detailing manpower shortages and geographic maldistribution of occupational therapists for the past decade. Projections by both professional organizations such as the AOTA and the United States Bureau of Labor and Statistics indicate continued growth and demand for occupational therapists through the year 2000.

In recognition of the manpower shortage and continued growth and demand for occupational therapists, the American Occupational Therapy Association called for development of new educational programs nationally to increase the number of graduates of occupational therapy educational programs. In 1989, there were 68 accredited educational programs for the occupational therapist with three existing programs in the state of Michigan (AOTA, 1989a). Though the AOTA has forwarded the call for new educational programs to be developed, there has not been a new occupational therapy educational program at the baccalaureate level developed in Michigan for over 43 years.

Though the AOTA has continued to call for the development of occupational therapy educational programs, there was no defined outline or document outlining the stages or steps of the curriculum development process. A review of the literature did not provide the investigator with any definitive data or information relative to the curriculum development process nor were there any specific recommendations outlined by the AOTA during initial correspondence.

Perceiving a need for an additional occupational therapy educational program to serve the need and demand for occupational therapy personnel in the northern two thirds of Michigan, with the

assistance and support of the administration of the College of Nursing and Allied Health Sciences, this investigator began the process of curriculum development at Saginaw Valley State University.

### Feasibility Component

Following identification of the need for an additional occupational therapy educational program in Michigan coupled with the lack of an outlined curriculum development process (CDP) for occupational therapy, the second step of the CDP, determining the feasibility of a program, was implemented.

The feasibility study component of the curriculum development process was formulated to obtain data and information regarding the employability of occupational therapy, the regional and local personnel needs, high school student interest in attending a proposed program of study, and college level student interest in an occupational therapy program. Survey instruments were developed and pre-tested along with the establishment of a task force committee to provide input and analysis of data and information.

Results of the feasibility component of the curriculum development process at SVSU indicated a strong need and interest in an occupational therapy educational program located at SVSU.

### Curriculum Design

With the results indicating affirmation of the need for an occupational therapy program, the second step of the curriculum development process was undertaken, curriculum design.

The curriculum design stage of the CDP consisted of determining specific preprofessional and professional level coursework, requirements, policies, and procedures. With any proposed program of study in occupational therapy, the coursework must be based in part on the AOTA (1991a) Essentials to ensure future viability during the accrediting process. The curriculum as developed for SVSU included review and analysis of a number of existing occupational therapy curricula recommended by the AOTA. In addition, local and regional needs and input was solicited to insure specific regional needs were met.

#### Evaluation and Validation

Assessment of each component of the curriculum development process with revisions and adaptations as necessary was a continuing and dynamic activity. Validation of the feasibility and curriculum components of the curriculum development process occurred both internally within the university setting and externally by outside organizations and accrediting bodies. Internal and external review requirements will vary from institution to institution but must be planned for in order to insure appropriate utilization of funds and determination of need and content. Formative evaluation and summary review were undertaken as part of the curriculum development model.

In Chapter II, page 32, formative and summative evaluation were discussed. Formative evaluation occurred throughout each stage of the curriculum development process with necessary revisions and adaptations as needed. Summary review of the curriculum development

process was accomplished through the use of the Joint Committee (1981) Standards. The Joint Committee Standards were used to ascertain adherence to the ethical and high quality standards established to provide accountability to the evaluative results and to determine the utility, feasibility, propriety, and accuracy of the SVSU undertaking. The Joint Committee Standards are advocated by this investigator as a method for guiding other universities and institutions interested in developing an occupational therapy program for use as a meta or summary review. Addition of an evaluative component in the curriculum development process will prevent duplicity and facilitate program validation and viability.

As described, the curriculum development process undertaken at SVSU consisted of four basic components: (1) the development of a feasibility study determining consumer/employer needs coupled with student interest in attending the proposed program, (2) design and review of the curriculum content based in part on AOTA (1991a) Essentials and regional and local needs, and (3) process and program evaluation accomplished through the use of internal and external review methods along with summary review based on the Joint Committee Standards for Program Evaluation. The final approval process consisted of internal and external review and approval to determine implementation of the proposed program of study.

This study has described the curriculum development process which was undertaken and validated at SVSU. The culmination of the curriculum development process led to the approval of the addition of an occupational therapy educational program during the Winter

Semester of 1992. The occupational therapy program at SVSU will come under the auspices of the College of Nursing and Allied Health Sciences with the initiation of the professional level coursework in the Fall Semester, 1993. It will be only the fourth program of study for the education of occupational therapists in Michigan at the baccalaureate level and the first program developed in over 43 years. Initial funding of the program was also approved during the Winter Semester of 1992.

### Conclusions

The curriculum development process as outlined in this text provides a model which can be used by other investigators developing or considering establishing occupational therapy educational programs. During the initial phase of identification of the need for an additional program in Michigan, correspondence and communication with the AOTA indicated that there was no clear method articulating the stages or steps necessary to design, develop, validate, and implement an occupational therapy educational program. This paper provides the initial step in identifying the curriculum development process which can be used nationally by other institutions interested in developing an occupational therapy program.

Application of the proposed model at SVSU did not always go as planned. A major difficulty encountered early on was the political environment inherent in any large organization with the associated limitations, fears, and "protectionism" which may or may not be evident among departments and faculty members. Political "in-fighting"

may negatively affect the sequential flow of the curriculum development model and may adversely affect the results of carefully thought out procedures, findings, and recommendations. Open communication and realistic expectations and management plans are necessary to circumvent potential "saboteurs" of developers. Formal and informal review and input by stakeholders allow some degree of control over this potential problem.

Perhaps the greatest limitation facing individuals developing educational programs in occupational therapy is securing adequate funding for the program. Though not unique to Michigan, funding for higher education has been effectively frozen or cut due to government budget deficits. Because of the lack of funding, implementation of the approved program of study at SVSU has been prolonged as external sources of funding for the program are secured through local, regional, private and federal grants, and contributions. Beginning the development process with adequate funding would facilitate the implementation of the program.

The most overlooked component of the curriculum development method and one of the strengths of the SVSU model is the intense scrutiny and evaluation both internally and externally. Though external review and evaluation of the curriculum development process lengthens and complicates the potential outcome of the method, it provides developing programs and the profession with a method of accountability and validation. The curriculum development model as implemented at SVSU took approximately 2 years to progress through the various stages of review and development.

Ironically, as the program at SVSU was seeking funding for the developing program and assuming a seat on the Michigan Council on Education of the Michigan Occupational Therapy Association (MOTA), a private, for profit, college was placing advertisements for a program director for implementation of a proposed program of study for a bachelor's degree in occupational therapy at an institution within 45 miles of Wayne State University, Eastern Michigan University, and Saginaw Valley State University. When the dean of this developing program was contacted and inquiries were made regarding the establishment of this program, she mentioned that the college's board of directors had decided to offer a program of study, had hired an outside "consultant" approximately 12 weeks earlier, had already developed an outline for a program of study, and had established an "open door" admissions policy and projected accepting 150 students annually into the program.

Communication with AOTA's Division of Education and Accreditation found that they had not had any contact with this private college, nor had the Michigan Occupational Therapy Association, nor the MOTA Council on Education. The decision to implement a program of study at this private facility had been made unilaterally without any input or communication with potential stakeholders. In addition, because the college is "private," they are able to circumvent any type of review on a state level which state funded universities must face.

The ramifications of such indiscriminate and undocumented program expansions will have on the profession is obvious and



potentially devastating. The consequences of uncontrolled and unvalidated growth is potentially harmful to the profession and to the public. According to the AOTA Division of Education, it is, however, not a unique occurrence. In fact, many small private colleges, seeing the potential financial benefits from developing an educational program for such a high demand profession, have indiscriminately expanded in areas where need has not been documented.

It is for just such a reason that this investigator has advocated the development of and adherence to the model of curriculum development as used by SVSU. The additional evaluative component and application of the Joint Committee (1981) Standards as one of the foundations of the model would provide direction and accountability to the profession and to individuals developing new programs.

#### Limitations of the Study

Though the needs and requirements of the development process will be unique to each setting or host institution developing an occupational therapy program, the four basic components of the curriculum development process can be extrapolated to other settings and institutions.

The approval process for the final implementation of a course of study for occupational therapy will, of course, be dependent upon the internal and external requirements of each setting. Local, regional, and national standards and guidelines will need to be identified and factored into any curriculum development process and

is, therefore, difficult to extrapolate the approval process undertaken for this study to other institutions of higher education. It does, however, provide the reader with a guide to approach the approval process detailing items and procedures which should be taken into consideration.

The ramifications of the development of an additional occupational therapy educational program are difficult to determine. There is always the fear that an additional program will provide more graduates than the market can bear which would adversely affect the employment prospects of future occupational therapists.

Changes in the health care delivery system or changes in the reimbursement for occupational therapy could also impact the profession either negatively or positively. Further expansion of occupational therapy coverage by third party insurers or federal government programs would potentially lead to additional shortages of personnel due to increased demand. As with any developing profession or program of study, continued monitoring and evaluation of program objectives will be necessary to provide accurate and reliable information to decision makers.

### Recommendations

This paper has identified and outlined the curriculum development model which was undertaken at an institution of higher education. The curriculum development process was used to direct and focus the necessary steps to establish and implement an occupational therapy educational program. Utilization of the curriculum

development process by other institutions similar to Saginaw Valley State University would provide for a structured method for the determination of and evaluation for the need for additional occupational therapy programs.

Though the requirements for curriculum development will vary dependent upon the internal and external requirements intrinsic to the setting or host institution, the evaluation and subsequent validation of the program and design process can be used and refined by other investigators to standardize and further operationalize the curriculum development model. Further use of the curriculum development process by other investigators will provide a means for monitoring the growth and development of occupational therapy educational programs and provide a method of accountability and validation of program need and interest.

#### Recommendations for Future Study

There is a need for continued work and research in the curriculum development model as undertaken at SVSU. Continued research should focus on the AOTA's work in curriculum development with an emphasis on the curriculum development components of validation and evaluation when the model is applied to institutions within Michigan and externally to other states and sister institutions.

It is recommended that continued use of the curriculum development process by other investigators and institutions of higher education may facilitate revisions in the process and procedures. The

curriculum development model should be revised and adapted according to the situational and contextual limitations imposed or influenced by respective state guidelines and mandates intrinsic to the host institution. Though components of the model may require adaptation, it is suggested that the basic design of the curriculum development model be adhered to by the AOTA. In addition, continued use and evaluation of the validation component of the curriculum development process within specific states and regions may facilitate generalizability of the model.

Further research by SVSU of the curriculum development model in order to further validate the process undertaken, with an emphasis on the application and implementation of the curriculum itself, would be warranted. Further study and application of the model by other departments and colleges within the university would provide input, revisions, and discussion of the process, as well as provide a means for determining further generalizability of the model within the context of SVSU.

It is strongly advocated that the AOTA review and consider the curriculum development process as undertaken at SVSU and further develop and validate components of the model for use across the country. Adoption of some method of review for proposed programs in occupational therapy is a necessity to prevent duplication of programs, oversupply of occupational therapists, and to contain costs and expenses.

Dialogue and discussion within the profession of occupational therapy is needed to facilitate continued growth and viability of

the profession in areas of need. The AOTA needs to adopt a structured and controlled method of review and development for proposed occupational therapy programs at institutions of higher education which provides some method of accountability and stakeholder input into the process of curriculum development. Continued indiscriminate growth of new programs nationally and regionally will weaken the creditability of the profession's education, as well as diminish the value of the educational process through unrestricted and unsubstantiated programs.

As demand for occupational therapists and student interest in occupational therapy remains high, the financial benefits of developing an occupational therapy curriculum may take precedence over the actual need of a region or state with the concomitant limitations imposed by affiliation and clinical internship sites, qualified faculty, and reimbursement issues. Application of the curriculum development model as developed at SVSU would provide the first stage toward fostering review, accountability, and decision making. Failure to address these issues may adversely affect the profession in the future and negatively impact the educational preparation of the occupational therapists.

## **APPENDICES**

**Appendix A**  
**American Occupational Therapy Association**  
**Review of Survey Instruments**



January 25, 1990

Al Bracciano, MSA, OTR  
Occupational Therapy Department  
Saginaw Valley State University  
2250 Pierce Road  
University Center, MI 48710

Dear Al:

Thank you for the opportunity to review your three "Needs Assessment" surveys developed for Saginaw Valley State University.

I believe the three-pronged focus of the project will result in important information on the targeted populations. The few revisions I have of the survey instruments are noted on the enclosed surveys. Copies of the materials have been forwarded to our Director of Education, Carolyn Harsh, to be used by other programs interested in establishing new curricula.

Best of luck on the project.

Sincerely,

Ira T. Silvergleit  
Director  
Research Information & Evaluation Division

70th Annual Conference and Exposition  
New Orleans, April 28 - May 2, 1990

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2250 Pierce Road • University Center, MI 48710

January 18, 1990

Ira Silvergleit  
Research Information and Evaluation  
American Occupational Therapy Association  
1383 Piccard Drive  
P.O. Box 1725  
Rockville, MD 20850

Dear Ira,

Thank you for your response regarding the Needs Assessment Survey which we are developing for Saginaw Valley State University. Your comments and input on the content of the questions was helpful and incorporated into the final draft. I am enclosing copies of the survey instruments and the cover letters which we have formulated to send with the surveys describing our intent and protecting confidentiality.

We have narrowed our target population to include the Saginaw Valley State University service area, and also the Saginaw Valley District of the Michigan Occupational Therapy Association; and the Northern District of the Michigan Occupational Therapy Association. It should be noted that Saginaw Valley State University's service area encompasses counties located in both of the MOTA Districts. Presently, neither the Saginaw Valley or Northern Districts of MOTA are contiguous to an occupational therapy program located within Michigan, although geographically they consist of a larger region than the other Districts of MOTA. As we had discussed earlier, we will be sending out surveys to potential employers, high school students attending either health occupation or child development courses, and college students attending SVSU who have not identified a course of study.

I would appreciate if you could review the enclosed information and drop me a short note acknowledging your support of the instruments and study design. I have talked with Carolyn Marsh from AOTA's Educational Division and would like to forward the material to her in order to facilitate data collection for other University Programs that may be attempting to establish a new curriculum.

Again, thank you for your input and quick response to my inquiries. Your assistance has been invaluable. I look forward to hearing from you soon.

Sincerely,

  
Al Bracciano MSA, OTR.

**Appendix B**  
**Survey Instruments**

**Survey  
Occupational Therapy**

1. In which of the following categories would your agency be classified? (Check as many as apply)
  - ☐ a. Industry
  - ☐ b. long term care facility
  - ☐ c. home care agency
  - ☐ d. VNA or community health agency
  - ☐ e. acute care hospital (bed capacity over 150)
  - ☐ f. acute care hospital (bed capacity less than 150)
  - ☐ g. rehabilitation hospital
  - ☐ h. community mental health facility
  - ☐ i. school district
  - ☐ j. private practice
  - ☐ k. other (please specify) \_\_\_\_\_
2. Do you presently employ an occupational therapist?
  - ☐ a. yes (please specify number) \_\_\_\_\_
  - ☐ b. no
3. Do you presently contract for occupational therapy services?
  - ☐ a. yes (please specify amount) \_\_\_\_\_
  - ☐ b. no
4. If sufficient occupational therapy personnel were available, would you employ occupational therapists?
  - ☐ a. yes
  - ☐ b. no
5. If sufficient occupational therapy personnel were available, would you contract for occupational therapy services?
  - ☐ a. yes
  - ☐ b. no
6. If you presently provide occupational therapy services, within the next three years do you plan to:
  - ☐ a. expand the service
  - ☐ b. discontinue the service
  - ☐ c. maintain the present level of service

7. In the next three years, do you anticipate hiring additional occupational therapists?
- ☐ a. yes  
☐ b. no  
☐ c. undecided
8. In the next three years, do you anticipate contracting for additional occupational therapy services?
- ☐ a. yes  
☐ b. no  
☐ c. undecided
9. If you plan to hire occupational therapists in the next three years, how many therapists do you anticipate hiring? (Not including replacements.)
- a. please specify \_\_\_\_\_
10. In the next three years, how many positions will you be replacing due to attrition, retirement, etc.?
- a. please specify \_\_\_\_\_
11. Over the last three years, have you had budgeted positions unfilled due to lack of qualified occupational therapists?
- ☐ a. yes (please specify number) \_\_\_\_\_  
☐ b. no
12. Do you presently have unfilled budgeted positions for occupational therapists?
- ☐ a. yes  
☐ b. no
13. If Saginaw Valley State University offered an occupational therapy program, how many of your employees or students would you project would enroll?
- a. please specify number: \_\_\_\_\_

14. If Saginaw Valley State University establishes an occupational therapy program, which of the following resources could be available in your agency to help support such a program? (Check as many as apply)

- ☐ a. clinical sites for internships and affiliations
- ☐ b. potential students
- ☐ c. future employment opportunities
- ☐ d. provide financial assistance for students  
(i.e. stipends for clinical internships)
- ☐ e. arena for research activities
- ☐ f. provide start-up program funds
- ☐ g. other \_\_\_\_\_

15. If Saginaw Valley State University establishes an occupational therapy program and you are an occupational therapist, would you consider:

- ☐ a. teaching full time
- ☐ b. teaching part time
- ☐ c. supervising student interns
- ☐ d. guest lecturing
- ☐ e. other \_\_\_\_\_

**Survey  
Occupational Therapy  
High School Students**

1. Which of the following categories would describe your present educational level?  
(check one only)  
  
☐ a. high school junior  
☐ b. high school senior  
☐ c. other (please identify) \_\_\_\_\_
2. Do you plan on attending college within the next four years?  
  
☐ a. yes  
☐ b. no
3. Are you enrolled in a health occupations or similar health career course at your school, i.e. nurses aide and orderly?  
  
☐ a. yes  
☐ b. no
4. As you interested in a health professions career?  
  
☐ a. yes  
☐ b. no
5. If you plan to go to college, will you:  
  
☐ a. commute to a local University  
☐ b. live "on campus"  
☐ c. enroll in a University outside of the immediate area
6. If you plan to go to college, will you attend:  
  
☐ a. full time  
☐ b. part time
7. Are you aware of the personnel shortage in the Allied Health professions?  
(nursing, speech therapy, x-ray technician, physical therapy, occupational therapy, etc.)  
  
☐ a. yes  
☐ b. no
8. If Saginaw Valley State University were to offer a Bachelor of Science degree in Occupational Therapy, would you be interested in enrolling in the program?  
  
☐ a. yes  
☐ b. no  
☐ c. undecided

**Survey  
Occupational Therapy  
College Students**

1. Which of the following categories would describe your present educational level?  
(check only one)
  - ☐ a. college freshman
  - ☐ b. college sophomore
  - ☐ c. bachelors degree
  - ☐ d. other (please identify) \_\_\_\_\_
  
2. Do you have a specified major?
  - ☐ a. yes
  - ☐ b. no
  
3. Are you attending:
  - ☐ a. full time
  - ☐ b. part time
  
4. Are you interested in a health professions career?
  - ☐ a. yes
  - ☐ b. no
  
5. If you attend college, do you:
  - ☐ a. commute to the college
  - ☐ b. live "on campus"
  
6. Are you aware of the personnel shortage in the Allied Health professions?  
(nursing, speech therapy, x-ray technician, physical therapy, occupational  
therapy, etc.)
  - ☐ a. yes
  - ☐ b. no
  
7. If Saginaw Valley State University were to offer a Bachelor of Science degree in  
Occupational Therapy, would you be interested in enrolling in the program?
  - ☐ a. yes
  - ☐ b. no
  - ☐ c. undecided

**Appendix C**  
**Letters of Transmittal**





(517) 790-4000 • From Midland: (517) 695-5325

2250 Pierce Road • University Center, MI 48710

**Dear Professor/Instructor:**

The College of Nursing and Allied Health Sciences at Saginaw Valley State University is completing a feasibility study exploring the potential need for occupational therapists and student interest in the profession. Occupational therapy is an allied health profession which aids in rehabilitating individuals whose lives have been impacted due to physical, psychological or developmental disabilities. This study will explore the long range need for occupational therapy, supply, and demographic demands for the profession.

As part of this study, Saginaw Valley State University would like to survey potential students for their input and interest. Could you please hand out the enclosed surveys to your students prior to your class, have them fill out the survey and return them to you in the enclosed envelopes. Please mail the completed surveys to the address below by February 27, 1990. The surveys and student responses will be kept confidential and will not affect the students relationship with the University in any way.

Your participation and assistance in this survey is greatly appreciated. If you would like further information on the survey or the survey results, please write your name and address on the separate card enclosed with the questionnaires.

Thank you for your time and interest.

Sincerely yours,

A handwritten signature in cursive script that reads 'Crystal M. Lange'.

**Crystal M. Lange, R.N., Ph.D., F.A.A.N.**  
Dean, College of Nursing and Allied Health Sciences

**Dear Students:**

The School of Nursing and Allied Health Sciences at Saginaw Valley State University is completing a feasibility study exploring the potential need for occupational therapists. Occupational therapy is an allied health profession which aids in rehabilitating individuals whose lives have been impacted due to physical, psychological or developmental disabilities. Occupational therapists are employed in a wide variety of settings, including: school systems, hospitals, rehabilitation centers, industry, and mental health facilities and agencies. This study will explore the long range need, supply and demographic demands for the profession of occupational therapy.

As part of this study, Saginaw Valley State University would like to survey potential high school, and college students for their input. Your participation in the survey is crucial to assist in long range planning and to determine student interest.

Please answer the attached questionnaire, enclose it in the attached envelope, and return it to your instructor. Please write your name and address on a separate card found with this questionnaire, if you would like to receive further information on the profession of occupational therapy, or if you would like information on the results of the survey.

Please be assured that your participation in this survey will be kept confidential and your participation or non-participation will not affect your relationship with the University.

Thank you for your time and interest.

Sincerely yours,

**Crystal M. Lange, R.N., Ph.D., F.A.A.N.**  
Dean, College of Nursing and Allied Health Sciences

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**25<sup>th</sup> Anniversary** 

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(517) 790-4000 • From Midland: (517) 695-5325  
2250 Pierce Road • University Center, MI 48710

Dear Director:

The College of Nursing and Allied Health Sciences at Saginaw Valley State University is completing a feasibility study exploring the potential need for occupational therapists and student interest in the profession. Occupational therapy is an allied health profession which aids in rehabilitating individuals whose lives have been impacted due to physical, psychological or developmental disabilities. This study will explore the long range need for occupational therapy, supply and demographic demands for the profession.

As part of this study, Saginaw Valley State University would like to survey potential employers for their input. Your participation in the survey is crucial to assist in long range planning and program development.

Please answer the attached questionnaire and return it in the enclosed envelope. Please write your name and address on a separate card found with this questionnaire if you would like to receive further information of the profession of occupational therapy, or, if you would like information on the results of the survey.

Please be assured that your response and participation in this survey will be kept confidential. Your participation or non-participation will not affect your relationship with the University.

Thank you for your time and interest.

Sincerely yours,

Crystal M. Lange, R.N., Ph.D., F.A.A.N.  
Dean, College of Nursing and Allied Health Sciences

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*25<sup>TH</sup> Anniversary* 

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**Appendix D**

**Approval Letters From Human Subject  
Institutional Review Boards**



(517) 790-4000 • From Midland: (517) 695-5325  
2250 Pierce Road • University Center, MI 48710

TO: Dr. Crystal Lange  
Al Bracciano

• FROM: Dr. Lou Cohen *LC*  
Institutional Review Board for the  
Protection of Human and Animal Subjects

DATE: December 13, 1989

RE: Human Subject Review/Survey Instrument

An expedited review has been completed on the Occupational Therapy Survey. This research proposal appears to present no potential hazards to participating subjects and is therefore approved for use.

LEC/bg

SAGINAW VALLEY STATE COLLEGE  
INSTITUTIONAL REVIEW BOARD - PROTECTION OF HUMAN SUBJECTS  
REQUEST FOR PROJECT APPROVAL

Request Number (to be assigned by the committee): \_\_\_\_\_

Project Title:  
Occupational Therapy Survey

Investigators:

Crystal Lange, Ph.D.  
Al Bracciano MSA, OTR

Inclusive Dates of Project:

January 1, 1990 (begin study)--Nov. 5, 1990

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COMMITTEE ACTION (Note: Approval by the Committee does not constitute any acceptance of responsibility for the conduct of the investigation. Responsibility for the conduct of the investigation must remain with the investigator(s). The Committee reserves the option of reviewing its approval at any time.) All approvals incorporate the general "Approval Conditions" cited in the policies.

<input type="checkbox"/> Approved as submitted	DATE: _____
<input type="checkbox"/> Approved with Conditions	SIGNATURE: _____
<input type="checkbox"/> Not approved	APPROVAL EXPIRES: _____

Comments:

## Institutional Review Board, Protection of Human Subjects, Page 2

1. State the purpose of this study, and describe the data collection procedure. Attach a copy of ALL instruments. If the instrument is not available at the time of submission, please so advise.

The purpose of this study is to conduct a survey of potential employers and students in order to assist in determining the need for an Occupational Therapy Program at Saginaw Valley State University. Please see attached document "Occupational Therapy Survey" (employers) and "Occupational Therapy Survey" (students).

2. From what source(s) will subjects be obtained?

Subjects will be obtained from:

Potential Employers: Health care facilities, community mental health agencies, school districts.

Potential Students: Public high school students, students currently attending SVSU and transfer students

3. List the criteria for selection of subjects for this study.

A. The criteria for selection of potential employers:

Area health care agencies which employ occupational therapists or may contract for occupational therapy services, as listed by the Michigan Department of Public Health. Community Mental Health Agencies which may provide occupational therapy services as listed by the Michigan Department of Mental Health. Public school systems, (Intermediate School Districts), which may provide occupational therapy services as listed with the Michigan Department of Special Education.

B. The criteria for selection of potential students:

Area Career Centers offering courses in health occupations. Random sample of students attending SVSU or Delta College and transfer students.

4. What are the approximate age ranges for your subjects?

Approximate age range 16 to 65 years old.

## Institutional Review Board, Protection of Human Subjects, Page 3

5. **Informed Consent - Describe how and where consent will be obtained and attach consent form. (See special instructions.)**

Informed consent of the subjects will be obtained at the time questionnaires are distributed. A cover letter will accompany each survey explaining the purpose of the study. The subjects will be told that their participation in the survey is voluntary and their decision will not affect their relationship with the University.

6. **Describe the specific setting for data collection (e.g., classroom, laboratory, conference room, homes, etc.)**

Survey questionnaires will be mailed to the respective agencies or facilities of potential employers. Students will be mailed the survey questionnaire to their home address as identified by University or College records. Student surveys will also be mailed to identified Career Centers as listed with Intermediate School Districts.

7. **Describe provision for the confidentiality of records and anonymity of the subjects.**

Participants will be asked to complete the questionnaires anonymously.

8. **Describe the nature and degree possible risks to the subject in participating in the investigation. Risk refers to all risks--physical, psychological, social, legal, etc. Include an assessment of the likelihood and seriousness of such risks.**

No risks are anticipated due to the survey nature of the study. The agencies and participants in the study will be assured that their participation or non-participation will not affect their relationship with the University.



## Institutional Review Board, Protection of Human Subjects, Page 4

9. What precautions are planned to minimize risks in order to protect the rights and welfare of the individuals?

The procedures used to maintain subject or facility anonymity in addition to the voluntary nature of the survey will present minimal risk to the participants.

10. What are the potential benefits of this investigation? Benefits refer to those gained by the individual subject as well as those which may accrue to society in general as a result of the project.

This needs assessment study will provide the University Administration with topical and realistic information to assist in decision making and determination of the feasibility of establishing an Occupational Therapy Program. The successful establishment of an Occupational Therapy Program at SVSU would provide area health care facilities with adequate and trained personnel. Establishment of an Occupational Therapy Program at SVSU would also provide students with a viable career choice.

11. Briefly outline the qualifications of the responsible investigator(s).

Crystal M Lange BSN, MSN, PhD., has conducted numerous research projects involving nursing, education and health care delivery.

Alfred G. Bracciano MSA, OTR, received a Master Of Science degree in Health and Hospital Administration from Central Michigan University, Bachelor of Science from Wayne State University; Registration with the American Occupational Therapy Association. Recently completed all course work at the doctoral level in Educational Leadership through Western Michigan University. This study is part of his doctoral dissertation.

Name and Signature of Investigator(s) With Date Signed  
(Students must have advisor's signature)

Crystal M. Lange [Signature] \_\_\_\_\_  
DATE: 12-1-89 DATE: 12/1/89 DATE: \_\_\_\_\_

Attachments (Please List):



(517) 790-4000 • From Midland: (517) 695-5125  
2250 Pierce Road • University Center, MI 48710

College of Nursing & Allied Health Sciences  
(517) 790-4145

November 19, 1990

- Human Subjects Institutional Review Board  
Western Michigan University  
Kalamazoo, Michigan 49008

To Whom It May Concern:

This is to notify the Human Subjects Institutional Review Board of Western Michigan University, that Al Bracciano MSA, OTR, has approval to use data collected by Saginaw Valley State University for use in his project for the development and validation of an occupational therapy curriculum. The data was collected during the Winter Semester of 1990 by the Department of Nursing and Allied Health Sciences. The survey instruments used for the research were approved by the Saginaw Valley State University Institutional Review Board. The data will be released to Mr. Bracciano without the names of the subjects being identified.

Thank you for your cooperation in this matter.

Sincerely yours,

A handwritten signature in cursive script that reads 'Crystal M. Lange'.

Crystal M. Lange, R.N., Ph.D., F.A.A.N.  
Dean, College of Nursing and  
Allied Health Sciences

CML:ab

Human Subjects Institutional Review Board



Kalamazoo, Michigan 49008-3899

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**WESTERN MICHIGAN UNIVERSITY**

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**Date:** December 6, 1990

**To:** Alfred G. Bracciano

**From:** Mary Anne Bunde, Chair

**Re:** HSIRB Project Number: 90-12-02

*Mary Anne Bunde*

This letter will serve as confirmation that your research protocol, "Development and Validation of an Occupational Therapy Curriculum for a Higher Education Institution," has been approved under the exempt category of review by the HSIRB. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the approval application.

You must seek reapproval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date.

The Board wishes you success in the pursuit of your research goals.

**cc:** Edgar Kelley, Educational Leadership

**Approval Termination:** December 6, 1991

**Appendix E**  
**Questionnaire Results**

**Survey Results  
Occupational Therapy  
High School Students**

1. Which of the following categories would describe your present educational level?
 

104	43%	a.	High school junior
102	43%	b.	High school senior
32	13%	c.	Other
2	1%		No response
  
2. Do you plan on attending college within the next four years?
 

212	88%	a.	Yes
26	11%	b.	No
2	1%		No response
  
3. Are you enrolled in a health occupations or similar health career course at your school, i.e. nurses aide and orderly?
 

207	86%	a.	Yes
30	13%	b.	No
3	1%		No response
  
4. Are you interested in a health professions career?
 

198	83%	a.	Yes
41	17%	b.	No
1	0%		No response
  
5. If you plan to go to college, will you:
 

133	55%	a.	Commute to a local university
52	22%	b.	Live "on campus"
38	16%	c.	Enroll in a university outside of the immediate area
17	7%		No response
  
6. If you plan to go to college, will you attend:
 

128	53%	a.	Full time
102	43%	b.	Part time
10	4%		No response
  
7. Are you aware of the personnel shortage in the Allied Health professions? (nursing, speech therapy, x-ray technician, physical therapy, occupational therapy, etc.)
 

180	75%	a.	Yes
59	25%	b.	No
1	0%		No response
  
8. If Saginaw Valley State University were to offer a Bachelor of Science degree in Occupational Therapy, would you be interested in enrolling in the program?
 

50	21%	a.	Yes
45	19%	b.	No
145	60%	c.	Undecided
0	0%		No response

**Survey Results  
Occupational Therapy  
College Students**

1. Which of the following categories would describe your present educational level?

109	39%	a.	College freshman
55	20%	b.	College sophomore
26	9%	c.	Bachelors degree
88	32%	d.	Other (please specify)

2. Do you have a specified major?

234	84%	a.	Yes
44	16%	b.	No

3. Are you attending:

223	80%	a.	Full time
51	18%	b.	Part time

4. Are you interested in a health professions career?

145	52%	a.	Yes
128	46%	b.	No

5. If you attend college, do you:

222	80%	a.	Commute to the college
55	20%	b.	Live "on campus"

6. Are you aware of the personnel shortage in the Allied Health professions?

146	53%	a.	Yes
132	47%	b.	No

7. If Saginaw Valley State University were to offer a Bachelor of Science degree in Occupational Therapy, would you be interested in enrolling in the program?

67	24%	a.	Yes
111	40%	b.	No
100	36%	c.	Undecided

# **Survey Results** **Occupational Therapy**

1. In which of the following categories would your agency be classified?

1	1%	a.	Industry
14	16%	b.	Long term care facility
4	5%	c.	Home care agency
2	2%	d.	VNA or community health agency
14	16%	e.	Acute care hospital (bed capacity >150)
16	19%	f.	Acute care hospital (bed capacity <150)
4	5%	g.	Rehabilitation hospital
24	28%	h.	Community mental health facility
17	20%	i.	School district
0	0%	j.	Private practice
7	8%	k.	Other

2. Do you presently employ an occupational therapist?

58	67%	a.	Yes	Average:	2.9
27	31%	b.	No		

3. Do you presently contract for occupational therapy services?

33	38%	a.	Yes	Average:	0.5
52	60%	b.	No		

4. If sufficient occupational therapy personnel were available, would you employ occupational therapists?

60	70%	a.	Yes
16	19%	b.	No

5. If sufficient occupational therapy personnel were available, would you contract for occupational therapy services?

43	50%	a.	Yes
30	35%	b.	No

6. If you presently provide occupational therapy services, within the next three years do you plan to:

51	59%	a.	Expand the service
1	1%	b.	Discontinue the service
25	29%	c.	Maintain the present level of service

7. In the next three years, do you anticipate hiring additional occupational therapists?

40	47%	a.	Yes
27	31%	b.	No
15	17%	c.	Undecided

8. In the next three years, do you anticipate contracting for additional occupational therapy services?

25 29% a. Yes  
34 40% b. No  
24 28% c. Undecided

9. If you plan to hire occupational therapists in the next three years, how many therapists do you anticipate hiring?

Average: 1.8

10. In the next three years, how many positions will you be replacing due to attrition, retirement, etc.?

Average: 1.8

11. Over the last three years, have you had budgeted positions unfilled due to lack of qualified occupational therapists?

37 43% a. Yes                      Average: 1.4  
45 52% b. No

12. Do you presently have unfilled budgeted positions for occupational therapists?

26 30% a. Yes  
56 65% b. No

13. If Saginaw Valley State University offered an occupational therapy program, how many of your employees or students would you project would enroll?

Average: 2.7

14. If Saginaw Valley State University establishes an occupational therapy program, which of the following resources could be available in your agency to help support such a program?

60 70% a. Clinical sites for internships and affiliations  
28 33% b. Potential students  
56 65% c. Future employment opportunities  
14 16% d. Provide financial assistance for students  
22 26% e. Arena for research activities  
2 2% f. Provide start-up program funds  
4 5% g. Other

15. If Saginaw Valley State University establishes an occupational therapy program and you are an occupational therapist, would you consider:

2 2% a. Teaching full time  
7 8% b. Teaching part time  
20 23% c. Supervising student interns  
16 19% d. Guest lecturing  
4 5% e. Other



**Appendix F**  
**Preprofessional Occupational Therapy Curriculum**

## SEQUENCE OF CLASSES PRE-PROFESSIONAL PROGRAM

A course marked with an \*, denotes a prerequisite class required for admission to the professional occupational therapy curriculum.

### Freshman Year:

#### FALL SEMESTER

*Math 130	Biostatistics	4 cr.
*English 111	Elements of Composition I	3 cr.
Biology 220	Principles of Biology	4 cr.
Psychology 100	General Psychology	4 cr.

Total: 15 cr.

#### WINTER SEMESTER

*English 112	Elements of Composition II	3 cr.
*Psychology 210	Applications in Human Development	4 cr.
*Philosophy 260	Ethics in Health Professions	3 cr.
*Chemistry 111	General Chemistry Lecture	4 cr.
*Chemistry 111L	General Chemistry Laboratory	1 cr.

Total: 15 cr.

#### SPRING/SUMMER SEMESTER

To satisfy the SVSU requirements in general education, students must select electives in the areas of: Literature, 3 cr.; Communication, 3 cr.; and International Perspectives, 4 credits.

Total: 10 cr.

**Sophomore Year:****FALL SEMESTER**

<b>*Art 210</b>	<b>Introduction to Crafts</b>	<b>3 cr.</b>
<b>Sociology 211</b>	<b>Principles of Sociology</b>	<b>3 cr.</b>
<b>Psychology 370</b>	<b>Theories of Personality</b>	<b>3 cr.</b>

**Total: 9 cr.****WINTER SEMESTER**

<b>*Occupational Therapy 200</b>	<b>Orientation to Occupational Therapy</b>	<b>1 cr.</b>
<b>*Biology 231</b>	<b>Physiological Anatomy</b>	<b>4 cr.</b>
<b>*Psychology 372</b>	<b>Abnormal Psychology</b>	<b>3 cr.</b>
<b>*Psychology 346</b>	<b>Neuropsychology</b>	<b>4 cr.</b>

**Total: 12 cr.****TOTAL CREDIT HOURS PREREQUISITES: 51**

Following successful completion of the prerequisite classes with a GPA of no less than 2.5, students may apply for admission to the professional program in occupational therapy.

**Appendix G**  
**Professional Occupational Therapy Curriculum**

## OCCUPATIONAL THERAPY PROFESSIONAL CURRICULUM SEQUENCE OF CLASSES

Interdisciplinary major, no minor is required. Courses must be taken in sequence as specified below unless approved by the faculty.

### Junior Year:

#### FALL SEMESTER

PHE 375	Kinesiology	3 cr.
PHE 375L	Kinesiology Lab	1 cr.
PHE 376	Physiology of Exercise	3 cr.
PHE 376L	Physiology of Exercise Lab	1 cr.
OT 302	Occupational Performance and Clinical Reasoning	3 cr.
OT 308	Therapeutic Use of Activities	3 cr.

Total Credit Hours 14

#### WINTER SEMESTER

OT 320	Pediatric Occupational Therapy	3 cr.
OT 326	Occupational Therapy in Orthopedics	2 cr.
OT 328	Clinical Conditions	3 cr.
OT 350	Occupational Therapy Treatment of Physical Disabilities	5 cr.

Total Credit Hours 13

### Senior Year:

#### FALL SEMESTER

PHE 445	Motor Learning	3 cr.
OT 420	Occupational Therapy in Psychiatry	3 cr.
OT 400	Foundations of Occupational Therapy Practice	3 cr.
OT 422	Therapeutic Adaptations and Technology for the Handicapped	3 cr.

Total Credit Hours 12

**WINTER SEMESTER**

<b>OT 440</b>	<b>Occupational Therapy Treatment in Psychiatry</b>	<b>5 cr.</b>
<b>OT 430</b>	<b>Clinical Research</b>	<b>3 cr.</b>
<b>MGT 321</b>	<b>Organization and Administration</b>	<b>4 cr.</b>

**Total Credit Hours 12**

**SPRING SEMESTER**

<b>OT 450</b>	<b>Internship I--Mental Health</b>	<b>6 cr.</b>
---------------	------------------------------------	--------------

**SUMMER SEMESTER**

<b>OT 460</b>	<b>Internship II--Physical Disabilities</b>	<b>6 cr.</b>
---------------	---	--------------

**CREDIT HOURS:**

**12 Credits Internship**  
**51 Professional Curriculum Credits**  
**37 Pre-Occupational Therapy Prerequisites**  
**14 Required Course Prerequisites**  
**10 Electives**

---

**Total Credit Hours 124**

The following courses are proposed for the professional curriculum: (Interdisciplinary major, no minor is required. Courses must be taken in sequence as specified below unless approved by the faculty.)

(PHE 375,375L; PHE 376,376L; PHE 445; and MGT 321 are currently listed in the SVSU Catalog)

### REQUIRED COGNATES

**PHE 375- Kinesiology 3 Cr.**

This course is designed to acquaint the student with the structure and mechanical functions of the musculoskeletal system. Prerequisite: Biology 231.

**PHE 375L- Kinesiology Laboratory 1 Cr.**

Experiments related to topics covered in PHE 375. Corequisite: PHE 375.

**PHE 376- Physiology of Exercise 3 Cr.**

An examination of the scientific basis of physical performance, including physiological responses and adaptations of the organs and systems of the body during the stress of muscular activity. Prerequisite: BIOL 231.

**PHE 376L- Physiology of Exercise Laboratory 1 Cr.**

Experiments related to topics covered in PHE 376. Corequisite PHE 376.

**PHE 445- Motor Learning 3 Cr.**

Neuropsychological approach to motor behavior that involves the study of the perceptual components as well as the motor components of human movement. Specific areas of study will be learning and memory, learning and behavior, acquisition of motor skills, conditions affecting motor skills, acquisition such as practice, feedback, transfer or learning. Prerequisite PHE 375 and PHE 376.

**MGT 321 Organization and Administration 4 Cr.**

The study of formal organizations and administration processes necessary for organizational effectiveness. The emphasis is upon understanding the effects of management principles; executives' roles and organizational structure; management information systems; and social, political, economic and international influences. Prerequisite: Junior standing.





**OT 326- Occupational Therapy in Orthopedics 2 Cr.**

A study of the orthopedic conditions encountered by occupational therapists. Etiology, assessment, management and treatment of orthopedic conditions will be reviewed. Clinical experience presenting functional treatment approaches to orthopedic condition, emphasis on hand evaluation, treatment and splinting will be scheduled.

**OT 328- Clinical Conditions in Occupational Therapy Treatment 3 Cr.**

Study of the musculo-skeletal, neurological and neuro muscular systems, and selected physical pathological conditions including etiology, symptomatology and sequelae of neurological conditions and functional deficits resulting from disease or injury treated in occupational therapy practice. Emphasis placed on normal and abnormal function as they relate to occupational performance over the lifespan.

**OT 350- Occupational Therapy Treatment of Physical Disabilities 5 Cr.**

Evaluation and basic treatment principles for neurology, orthopedic, traumatic and degenerative conditions. Analysis, evaluation, theories and concepts of occupational therapy treatment as they relate to the current problems of the physically disabled. Current therapeutic approaches to treatment planning, documentation and reporting. Development of skills in evaluation and formulation of treatment planning and implementation. Development of skills in joint range of motion, muscle testing, sensory evaluation, assessment tools and applications of occupational therapy treatment. Preceptorship in hospitals or other health care facilities for clinical education in evaluation and treatment of individuals with a physical disability. (3-2; 6 hours of clinical affiliation weekly).

**OT 400- Foundations of Occupational Therapy Practice 3 Cr.**

Overview of the frames of reference, models and theories used to integrate the practice of occupational therapy. Review of biomechanical/neurodevelopmental/rehabilitative approach, Model of Human Occupation, and occupational performance will be presented and discussed. Examination of the theoretical constructs used in the various models of practice, concepts integral to the understanding and use of human occupation as a basis for occupational therapy practice will be emphasized. Current practice issues will be examined.

**OT 420- Occupational Therapy in Psychiatry 3 Cr.**

Review of the etiology, symptomatology and functional sequelae of major psychiatric disorders treated in occupational therapy practice. Review of psychopathology, theoretical frames of reference, evaluation, treatment and management of psychiatric and developmentally disabling conditions.

**OT 422- Therapeutic Adaptations and Technology for the Handicapped 3 Cr.**

This course will consist of the analysis, design and construction of adapted equipment to facilitate daily living skills in the disabled individual. Adaptations and alternatives, use of adapted and augmentive technology, computers and environmental controls. Environmental planning and clinical reasoning to restructure the physical environment to assist with self care, work, play and leisure activities will be emphasized.

**OT 430- Clinical Research 3 Cr.**

A review and examination of methods of scientific inquiry and empirical techniques and research with the emphasis on occupational therapy. Review of the research process: problem definition, literature review, research design and data collection, analysis and interpretation and research reporting. Research, evaluation and development of research proposal. Emphasis of coursework on understanding and interpreting findings and their implications for occupational therapy clinical practice.

**OT 440- Occupational Therapy Treatment in Psychiatry 5 Cr.**

Principles of psychiatric occupational therapy practice in the evaluation and treatment of individuals with developmental disabilities or psycho-social dysfunction. Review of psychopathology and theoretical frames of reference in occupational therapy intervention and treatment. Emphasis on assessment, treatment planning and task analysis, implementation, use of self and groups, community resources and use of activity as therapeutic tools. Clinical reasoning and experiential learning emphasizing individual client assessment, treatment planning, professional communication and documentation. A preceptorship in occupational therapy mental health treatment programs to gain clinical experience in assessment, evaluation, conditions and treatment of individuals with developmental disabilities or psychiatric conditions. (3-2; 6 hours of clinical affiliation weekly).

**OT 450- Internship I-Mental Health 6 Cr.**

Three month full time clinical experience in an approved occupational therapy community mental health treatment program. Fieldwork done under the clinical supervision of an occupational therapist provides an opportunity for the student to assume progressive responsibilities in the treatment and management of patients. Three months of clinical internship must be completed on a full time basis.

**OT 460- Internship II-Physical Disabilities 6 Cr.**

A three month full time clinical experience in an approved occupational therapy center emphasizing treatment of individuals with physical disabilities. Students will conduct evaluation and treatment, management of assigned caseload of clients of varying ages and disabilities under clinical supervision.

**OT 470-      Advanced Internship Elective                      1-6      Cr.**

**Two or three months of supervised practice in an area of occupational therapy supervision. Requires successful completion of OT 450 and OT 460.**

**OT 499-      Selected Topics in Occupational Therapy   1-6 Cr.**

**Selected topics related to occupational therapy and the profession of occupational therapy.**

**Upon successful completion of the two required internship experiences and all coursework, the student is awarded the bachelor of science degree in occupational therapy. The student is then eligible to take the American Occupational Therapy Association Certification Board's certification examination. Passing of the certification examination qualifies the student to become registered as an occupational therapist and to use the title O.T.R., (Occupational Therapist Registered).**

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## Appendix H

### American Occupational Therapy Association Essentials

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Source: Draft: Essentials and Guidelines of an Accredited Educational Program for the Occupational Therapist by American Occupational Therapy Association, 1990, Rockville, MD: Author.

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# **Essentials and Guidelines of an Accredited Educational Program for the Occupational Therapist**

## **PREAMBLE**

### **OBJECTIVE**

The American Occupational Therapy Association, Inc. and the American Medical Association cooperate to establish, maintain, and promote appropriate standards of quality for educational programs in occupational therapy and to provide recognition for educational programs that meet or exceed the minimum standards outlined in these Essentials. Lists of accredited programs are published for the information of students, employers, educational institutions and agencies, and the public.

These standards are to be used for the development, evaluation, and self-analysis of baccalaureate and post-baccalaureate occupational therapy entry-level professional programs. On-site review teams assist in the evaluation of a program's relative compliance with the Essentials.

Accreditation is granted by the Committee on Allied Health Education and Accreditation (CAHEA) upon the recommendation of the Accreditation Committee of the American Occupational Therapy Association.

## **SECTION I: GENERAL REQUIREMENTS FOR ACCREDITATION**

### **A. SPONSORSHIP**

1. An occupational therapy professional education program shall be located in a college or university authorized to grant the baccalaureate or higher degree.
2. The sponsoring university or college shall be accredited by a Council on Post-Secondary Education (COPA) and/or United States Department of Education (USDE) recognized accrediting body.
3. In programs where the academic and fieldwork phases are provided in two or more institutions, accreditation will be granted to the sponsoring institution that grants the degree or certificate documenting completion of the program. The sponsoring institution shall be responsible for ensuring that the activities assigned to the students in fieldwork are appropriate to the educational program.

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4. Responsibilities of the sponsoring institution and each fieldwork education center shall be clearly described in written documents. The time schedule for periodic review shall be documented.

**B. PROGRAMMATIC RESOURCES****1. Personnel****a. Administrative personnel**

The program must have a Program Director and faculty who possess the necessary qualifications to perform the functions identified in documented descriptions of roles and responsibilities.

**(1) Responsibilities**

The director of the educational program shall be responsible for the management and administration of the program including planning, evaluating, budgeting, selecting faculty and staff, and maintaining accreditation.

**(2) Qualifications**

The director of the educational program shall be a certified occupational therapist who has occupational therapy experience in administration, teaching, and practice. The director shall hold a minimum of a master's degree.

**b. Faculty****(1) Responsibilities**

Faculty responsibilities shall be consistent with the mission of the institution.

**(2) Qualifications**

(a) The faculty shall include certified occupational therapists.

(b) Faculty members shall have documented expertise in the area(s) of teaching responsibility and shall demonstrate effectiveness in teaching their assigned subjects.

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- (c) The academic faculty must collectively have academic and experiential qualifications and background appropriate to meet program goals.

- (3) Faculty/student ratio

The faculty/student ratio shall:

- (a) permit the achievement of the purpose and stated objectives of the program,
- (b) be compatible with accepted practices of the institution,
- (c) ensure student and/or consumer safety and quality education in laboratory and clinical experiences, by adjustment of faculty/student ratios when required.

- c. Clerical and support staff

Clerical and program support staff shall be provided to meet program and administrative requirements.

- d. Professional development

- (1) The program shall have a documented plan for continued professional growth to ensure that program faculty can fulfill their assigned responsibilities.
- (2) Each faculty member shall have a written plan for continuing professional development.

- 2. Financial Resources

A budget of regular institutional funds allocated to the program shall be sufficient to develop and maintain the stated objectives of the program and to fulfill its obligations to matriculating and enrolled students.

- 3. Physical Resources

- a. Facilities

- (1) Classrooms and laboratories shall be provided consistent with program's educational objectives, teaching methods, number of students, safety standards of the institution, and shall allow for efficient operation of the program.

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- (2) Laboratory space shall be assigned to the occupational therapy program on a priority basis.
- (3) Space shall be provided to store and secure equipment and supplies.
- (4) Program director and faculty shall have office space.
- (5) Space shall be provided for the private advising of students.
- b. Equipment and supplies
  - (1) Appropriate and sufficient equipment and supplies shall be provided for student use and for teaching the didactic and supervised clinical practice components of the curriculum.
  - (2) Students shall be given access to the evaluative and treatment technologies that reflect current practice.
- c. Learning resources
  - (1) Library  
Students shall have ready access in time and location to an adequate supply of current books, journals, periodicals, computer, and other reference materials related to the curriculum.
  - (2) Instructional aids and resources shall be available in sufficient number and quality to be consistent with the program objectives and teaching methods.

**C. STUDENTS****1. Admission Policies and Procedures**

- a. Admission of students shall be made in accordance with clearly defined and published practices of the institution.
- b. Policies regarding standards for admission, advanced placement, transfer of credit, credit for experiential learning (if applicable), and requirements for previous education or work experience shall be provided and readily accessible to prospective students and the public.

**2. Evaluation of Students**

- a. Criteria for successful completion of each segment of the education program and for graduation shall be given in advance to each student.



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- b. Evaluation content and methods shall be consistent with the objectives and competencies described for the education program in both didactic and supervised clinical education components. Evaluation shall be employed frequently enough to provide students and program officials with timely indications of the students' progress and academic standing.

**3. Advisement**

- a. Advising related to professional coursework and fieldwork education shall be the responsibility of the occupational therapy faculty.
- b. Advising during and pertaining to fieldwork experience shall be a collaborative process between the faculty and fieldwork educators.
- c. Referral by program faculty to other institutional or community resources shall be provided for students with problems that may interfere with the students' progress through the program.

**D. OPERATIONAL POLICIES****1. Fair Practices**

- a. Program description, publications, announcements, and advertising must accurately reflect the program offered.
- b. There shall be a published policy and procedure that ensures that student and faculty recruitment and student admission and faculty employment practices are nondiscriminatory with respect to race, creed, sex, age, disabling conditions, and national origin.
- c. Graduation requirements and tuition/fees shall be accurately stated, published, and made known to all applicants.
- d. There shall be a published policy and procedure for processing student and faculty grievances.
- e. Policies and processes for student withdrawal and for refunds of tuition and fees shall be published and made known to all applicants.
- f. Policies and procedures regarding student probation, suspension, and dismissal shall be published and made known.
- g. Provision shall be made for the health and safety of patients, students, and faculty associated with educational activities.

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- h. Documentation of all graduation and credentialing requirements, to include certification/licensure, shall be published and made known to applicants.

- 2. Student Records

- a. Records shall be maintained regarding student admission, enrollment, and achievement.
- b. Grades and credits for courses shall be recorded on students' transcripts and permanently maintained by the sponsoring institution.

**É. PROGRAM EVALUATION**

There shall be documentation of continuing and systematic evaluation of the effectiveness of the educational program.

- a. The plan for evaluation shall address: program outcomes, on-going evaluation of student progress and achievement, and procedures for use of the information obtained to evaluate program effectiveness.
- b. Systematic application of the information obtained to enhance program effectiveness shall be documented.

**SECTION II: PROGRAM - SPECIFIC REQUIREMENTS****PREAMBLE: DESCRIPTION OF THE PROFESSION**

Occupational therapy is the art and science of directing an individual's participation in selected tasks to restore, reinforce, and enhance performance; facilitate learning of those skills and functions essential for adaptation and productivity; diminish or correct pathology; and promote and maintain health. Reference to occupation in the title is in the context of individuals' goal-directed use of time, energy, interest, and attention. Its fundamental concern is the development and maintenance of the capacity throughout the life span to perform with satisfaction to self and others those tasks and roles essential to productive living and to the mastery of self and the environment.

Since the primary focus of occupational therapy is the development of adaptive skills and performance capacity, its concern is with factors that promote, influence or enhance performance as well as those that serve as barriers or impediments to the individual's ability to function.

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Occupational therapy provides service to those individuals whose abilities to cope with tasks of living are threatened or impaired by developmental deficits, the aging process, poverty and cultural differences, physical injury or illness, or psychological and social disability.

Occupational therapy serves a diverse population in a variety of settings such as hospitals and clinics, rehabilitation facilities, long-term care facilities, extended care facilities, sheltered workshops, schools and camps, private homes, and community agencies. Occupational therapists both receive from and make referrals to appropriate health, educational, or medical specialists. Delivery of occupational therapy services involves several levels of personnel including the certified occupational therapist, the certified occupational therapy assistant, and aides.

Entry-level occupational therapy professional education programs prepare the individual to:

1. Evaluate and assess performance areas and their components.
2. Provide occupational therapy services to maintain or improve function and to prevent deficits in activities of daily living, work, play/leisure, and in the underlying performance components, e.g., sensorimotor, cognitive, and psychosocial, including cultural performance components.
3. Manage occupational therapy service.
4. Incorporate values and attitudes congruent with the profession's standards and ethics.
5. Demonstrate an attitude of inquiry and nurture the capacity for creative analysis and problem-solving.

Entry-level professional education lays a foundation for other roles of the experienced therapist, e.g., administrator, consultant, educator, researcher, and health planner. The American Occupational Therapy Association maintains an entry-level role delineation.

**A. CURRICULUM**

1. Mission, Philosophy, and Design
  - a. The statement of the mission of the occupational therapy program shall be consistent with that of the sponsoring institution.

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- b. The statement of philosophy of the program shall reflect:
  - (1) the current published philosophy of the profession,
  - (2) a view of humanity, and
  - (3) an approach to learning/instruction.
- c. The curriculum design shall provide the basis for program planning, implementation, and evaluation; documentation of the design must:
  - (1) Reflect the mission of the occupational therapy program and of the institution.
  - (2) Identify educational goals of the program that are consistent with its mission and philosophy statements.
  - (3) Describe the set of organizing ideas that explains the selection of the content, scope, and sequencing of coursework.

**2. Content Requirements**

Program content shall be based on a broad foundation of liberal arts, sciences, and professional education and shall include:

- a. Liberal arts content that will be prerequisite to, or concurrent with, professional education and shall facilitate the development of:
  - (1) Oral and written communication skills.
  - (2) Logical thinking, critical analysis, problem-solving, and creativity.
  - (3) Knowledge and appreciation of multicultural factors.
  - (4) Ability to make judgments in the context of historical, social, economic, scientific, and political information.
- b. Biological, behavioral, and health sciences content that will be prerequisite to, or concurrent with, professional education and that encompasses normal and abnormal conditions across the life span (infants, children, adolescents, adults, and older adults).
  - (1) Structure and function of the human body including anatomy, kinesiology, physiology, and neurosciences.

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- (2) Human development throughout the life span including the interaction of environmental factors with sensorimotor, cognitive, and psychosocial, and physiological components.
  - (3) Human behavior in the context of sociocultural systems to include beliefs, ethics, and values.
  - (4) The etiology, clinical course, management, and prognosis of congenital, developmental, acute, and chronic disease processes and traumatic injuries; and the effect of such conditions on human functioning throughout the life span.
  - (5) Effects of health and disability on individual, family, and society including the promotion of health and prevention of disease.
- c. Occupational therapy theory and practice:
- (1) Foundations, history, and philosophical base of the profession and its personnel.
  - (2) Theoretical base and models of practice to include, but not limited to:
    - (a) Theories underlying the use of purposeful activity (occupation).
    - (b) Analysis of the theories of human adaptation and life satisfaction across the life span, including a multicultural perspective.
    - (c) Meaning and dynamics of purposeful activity, including activities of daily living, work, and play/leisure, to enhance role function.
    - (d) Importance of a balance of the areas of occupation (activities of daily living, work, play/leisure) to the achievement of physical and mental health.
    - (e) Age appropriate roles, life tasks, developmental issues, and activities across the life span.
  - (3) Fundamentals of activity
    - (a) Analysis of activities of daily living, work, and play/leisure.
    - (b) Performance and teaching of selected life tasks and activities.
    - (c) Grading and adapting purposeful activity (occupation) for therapeutic intervention.

**DRAFT****(4) Occupational therapy process**

The occupational therapy process shall be based on frames of reference or theoretical perspectives and shall include:

**(a) Screening and assessment**

- (i) Assessment of the need for occupational therapy intervention based on skilled observation, histories, and interviews of patient, family, and other professionals.**
- (ii) Selection, administration, and interpretation of representative standardized and nonstandardized tests and evaluations.**
- (iii) Interpretation of assessment in relation to performance areas and performance components, activities, and age-appropriate theoretical frameworks.**
- (iv) Appropriate use of the certified occupational therapy assistant (COTA) in the screening and assessment process.**

**(b) Formulation of intervention plans**

- (i) Identification of appropriate models of practice, treatment approaches, and underlying principles of treatment to use for problems identified.**
- (ii) Specification for purposeful activities that incorporate treatment goals and principles and that are specific to the patient.**
- (iii) Collaboration with patients, caregivers, COTAs, and other professionals.**

**(c) Implementation**

- (i) Provision of therapeutic intervention related to occupational performance areas and their components.**
- (ii) Use of self, dyadic, and group interaction.**
- (iii) Collaboration with the COTA on treatment implementation.**
- (iv) Fostering of prevention, health maintenance, and safety programs that are age-appropriate for daily living activities, work, and play/leisure.**

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- (v) **Demonstration of effective written, oral, and nonverbal communication with patients and their families, colleagues, other health providers, and the public.**
    - (vi) **Application of therapeutic adaptation for accomplishment of purposeful activities (occupation): family/caretaker training, environmental adjustments, orthotics, prosthetics, assistive devices, equipment, and other technologies.**
  - (d) **Reassessment for effect of occupational therapy intervention and need for continued and/or changed treatment.**
  - (e) **Termination of occupational therapy services including determination of discharge, summary of occupational therapy outcome, and appropriate recommendations and referrals to maximize treatment gains.**
- (5) **Documentation of occupational therapy services that addresses principles of record keeping to ensure accountability in occupational therapy service provision and adequate documentation for the reimbursement of services.**
- d. **Management of occupational therapy services. Application of principles of management in the provision of occupational therapy services to individuals and organizations, including:**
- (1) **Planning.**
  - (2) **Organizing.**
  - (3) **Staffing.**
  - (4) **Coordinating or directing.**
  - (5) **Controlling.**
  - (6) **Understanding of environmental and policy issues which impact provision of occupational therapy services.**
  - (7) **Use of technology in service delivery and analysis of data when indicated.**
  - (8) **Use of a variety of service models to include, but not limited to, medical, community, and school system.**
  - (9) **Knowledge of social, economic, political, and demographic factors that influence the delivery of health care in the U.S.**

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- (10) Knowledge of applicable national and state requirements for credentialing.

- e. Research

- (1) Necessity for and value of research for clinical practice and professional development.
  - (2) Essential components of a research protocol.
  - (3) Interpretation of studies related to occupational therapy.
  - (4) Application of research results to occupational therapy services.

- f. Professional ethics

- (1) AOTA Standards and Ethics policies and their effect on the therapist's conduct and patient treatment.
  - (2) Functions of national, state, and local occupational therapy associations, and other professional associations and human service organizations.
  - (3) Recognition of the necessity to participate in the promotion of occupational therapy through educating other professionals, consumers, third party payers, and the public.
  - (4) Individual responsibility for planning for future professional development in order to maintain a level of practice consistent with accepted standards.

- g. Fieldwork education

- (1) Fieldwork experience is crucial to the preparation of an occupational therapist. The experience should provide the students with the opportunity for carrying out professional responsibilities under appropriate supervision and professional role modeling.

- (a) Objectives for each phase of fieldwork shall be:

- (i) collaboratively developed by the academic and fieldwork program representatives to prepare students for practice.
      - (ii) documented.
      - (iii) known to the student.



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- (b) The ratio of fieldwork educators to students shall be such as to ensure proper supervision and frequent assessment in achieving fieldwork objectives.
  - (c) Fieldwork shall be conducted in settings equipped to provide clinical application of principles learned in the academic program and appropriate to the learning needs of the student.
  - (d) Evidence will be provided that communication has occurred between academic and fieldwork educators in planning for this dimension of the program.
- (2) Level I Fieldwork shall be required and includes those experiences designed to enrich didactic coursework through directed observation and participation in selected aspects of the occupational therapy process. These experiences are not intended to emphasize independent performance.
- (a) Level I Fieldwork shall be supervised by qualified personnel including, but not limited to, certified occupational therapists, certified occupational therapy assistants, teachers, social workers, nurses, physical therapists, etc.
  - (b) Level I Fieldwork shall not substitute for any part of Level II Fieldwork.
- (3) Level II Fieldwork shall be required and designed to promote clinical reasoning and reflective practice, to transmit the values and beliefs that enable the application of ethics related to the profession, to communicate and model professionalism as a developmental process and a career responsibility, and to develop and expand a repertoire of occupational therapy assessments and treatment interventions related to human performance.
- (a) ~~Six~~ months (or a minimum of 940 hours) of full-time Level II Fieldwork shall be required.
  - (b) Fieldwork experience shall be provided with various groups across the life span, persons with various psychosocial and physical performance deficits, and various service delivery models reflective of current practice in the profession.
  - (c) Learning objectives will support development of entry-level competency.

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- (d) Supervision shall be provided by a certified occupational therapist with a minimum of 1 year experience in a practice setting.
- (e) International fieldwork experience may be provided when:
  - (i) Approved by the academic program.
  - (ii) Direct supervision is provided by an AOTCB certified occupational therapist.
  - (iii) There is no language barrier between student, supervisor, and client population.
  - (iv) Student's safety and rights are reasonably assured.
- (f) To ensure continuity of application of academic concepts, all fieldwork shall be completed within 24 months following completion of academic preparation.

**3. Student Evaluation**

- a. There shall be frequent, periodic documented evaluation of students to assess their acquisition of knowledge, problem-identification and problem-solving skills, psychomotor and practice competencies.
- b. Evaluation will reflect learning goals and objectives set out by the academic program and individual course syllabi.

**4. Program Length**

The length of the educational program shall be adequate to meet:

- a. the requirements for entry-level credentialing;
- b. the academic requirements of the sponsoring institution.

**SECTION III: MAINTAINING AND ADMINISTERING ACCREDITATION****A. PROGRAM AND SPONSORING INSTITUTION RESPONSIBILITIES****1. Applying for Accreditation**

- a. The accreditation review process conducted by the Committee on Allied Health Education and Accreditation (CAHEA) and the Accreditation Committee, American Occupational Therapy Association, can be initiated only at the written request of the chief executive officer or an officially designated

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representative of the sponsoring institution and the occupational therapy program director.

- b. This process is initiated by submitting a letter of intent to seek accreditation to the:

Accreditation Division  
American Occupational Therapy Association  
1383 Piccard Drive  
P.O. Box 1725  
Rockville, MD 20850-0822

- c. At any time before the final accreditation action is made by CAHEA, a program or sponsoring institution may withdraw its request for initial or continuing accreditation.

## **2. Administrative Requirements for Maintaining Accreditation**

To maintain accreditation, the following actions are required:

- a. The program must submit a Self-Study Report and other required reports within a period of time determined by the Accreditation Committee and provided to the programs.
- b. The program must agree to a reasonable site visit date before the end of the period for which accreditation was previously awarded.
- c. The program must inform the Accreditation Committee within a reasonable period of time of a change in program director.
- d. The sponsoring institution must inform CAHEA and the Accreditation Committee of the transfer of program sponsorship, in accord with CAHEA policy.
- e. The program and the sponsoring institution must pay accreditation fees within a reasonable period of time, as determined by the Accreditation Committee.
- f. The program must complete and return by the established deadline the Annual Report provided by CAHEA, to ensure an accurate listing of the program and its sponsoring institution in the annual publication of the Directory of Allied Health Education.

*Failure to meet these administrative requirements for maintaining accreditation may lead to being placed on Administrative Probation and ultimately to having accreditation withdrawn.*

**DRAFT****B. CAHEA AND REVIEW COMMITTEE RESPONSIBILITIES****1. Administering the Accreditation Review Process**

- a. At the written request of the chief executive officer or other official, designated representative, CAHEA and the Accreditation Committee assess an applicant program's relative compliance with the Essentials.
- b. The accreditation review process includes an on-site evaluation of the program. If the performance of a site visit team is unacceptable, the institution may request a second site visit.
- c. Before the Accreditation Committee formulates its accreditation recommendation to CAHEA, the sponsoring institution is given an opportunity to comment in writing on the report of the site visit team and to correct factual errors.
- d. Before recommending Probationary Accreditation to CAHEA, the Accreditation Committee provides the sponsoring institution with an opportunity to respond in writing to the cited deficiencies in the program's relative compliance with the Essentials. The Accreditation Committee reconsideration of a recommendation for Probationary Accreditation is made on the basis of conditions existing when the Accreditation Committee arrived at its recommendation to CAHEA and on subsequent documented evidence of corrected deficiencies provided by the applicant.
- e. An accredited program not on probation may be moved to probationary status upon verification of a written complaint deemed sufficient to warrant this action, or to administrative probation should administrative requirements not be fulfilled.
- f. CAHEA assignments of Probationary Accreditation, including those following Accreditation Committee reconsideration, are final and are not eligible for further appeal.

**2. Withholding or Withdrawing Accreditation**

- a. Before recommending Accreditation Withheld or Accreditation Withdrawn to CAHEA, the Accreditation Committee provides the sponsoring institution opportunity to request reconsideration. Decisions to withhold or withdraw accreditation may be appealed. A copy of the CAHEA appeals procedures for Accreditation Withheld or Withdrawn accompanies the letter notifying the sponsoring institution of one of these actions. When accreditation is withdrawn, the institutional sponsor's chief executive officer is provided with a clear statement of each deficiency in the program's relative compliance with the Essentials and is informed that application for accreditation as a new

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applicant may be made whenever the program considers itself to be in compliance with the Essentials.

- b. All students successfully completing a program that holds accreditation at any point during their enrollment are regarded as graduates of a CAHEA-accredited program.

**3. Inactive Programs**

- a. The sponsoring institution may request inactive status for a program that does not enroll students for up to 2 years. Such program and sponsoring institution must continue to pay required annual fees.
- b. Should a program be inactive for 2 years, and determine not to reactivate, it will be considered discontinued and accreditation will be withdrawn.

**December 6, 1990**

cahean/accred@u.wa

**Appendix I**  
**Letters of Review**



(517) 790-4000 • From Midland: (517) 695-5325  
2250 Pierce Road • University Center, MI 48710

College of Nursing & Allied Health Sciences  
(517) 790-4145

January 9, 1991

Carolyn Harsh  
Education Division  
American Occupational Therapy Assoc.  
1383 Piccard Dr.  
P.O. Box 1725  
Rockville, MD. 20850

Dear Carolyn,

I am enclosing for your review, a draft of the results of the feasibility study Saginaw Valley State University's College of Nursing and Allied Health Sciences undertook with regard to developing an occupational therapy educational program. As you will see, there is a distinct need for an educational program to service the rural areas of central and northern Michigan.

As part of the study, I have included a proposed schedule of classes, both pre-requisite coursework and professional coursework. As we had discussed earlier, I developed the curriculum based on the Essentials as well as other occupational therapy educational programs from throughout the United States. A brief description of the professional coursework is included within the text of the paper.

We would appreciate your review of the proposed curriculum, requirements, and coursework. Your comments would be greatly appreciated and assist us in validating the proposed curriculum and program. I realize that your remarks are recommendations only, and that full approval of a curriculum only comes with Accreditation. We are currently at the stage of presenting the curriculum to the appropriate University committees, and your input and advice would be most beneficial.

Please feel free to share the information with the other departments within AOTA if you so desire. Perhaps other developing programs may find the survey or format of the study useful in validating the need for a program.

I look forward to hearing from you. Please feel free to contact me at (517) 790-4153 if you have any questions.

Sincerely,

Al Bracciano MSA,OTR

25<sup>th</sup> Anniversary 1966-1991



February 7, 1991

A1 Bracciano, MS, OTR  
Saginaw Valley State University  
Zahnow Hall, Room 134  
2250 Pierce Road  
University Center, MI 48710

Dear A1:

- It was a pleasure to review the proposed plan for the Saginaw Valley State University's curriculum, as you obviously put a great deal of thoughtful work into its design. Overall, your product is very good with a clear strength in biomechanical and rehabilitative approach to practice in the area of physical disabilities. Since you instructed me to look for areas that might require strengthening to meet the Essentials, I have made that the nature of my comments. Keep in mind that I have only short course descriptions to examine, and some of what I see missing may, in fact, be included in your curriculum and I am not seeing it. These are my opinions:
1. The Essentials require normal human development from conception to senescence. Your curriculum covers normal development from birth to 18 years, and then skips to abnormal conditions of adulthood. I suggest that some coverage of normal issues of adulthood and aging be included. This might include the major sensory, biological, motor, and cognitive changes that occur with aging; attitudinal barriers in society regarding aging, issues of terminal and life threatening illness, and environmental modifications that can be made to accommodate the typical deficits associated with aging.
  2. The curriculum seems to deal with the skills involved in learning to do activities but is less detailed about the theories concerning the meanings of activities and their relation to the occupational therapist's role. OT is often described as being concerned with the ability of people to perform purposeful activities in a manner satisfying to themselves and their significant others, within their environment and social roles. In order to use this concept in practice, it is important for students to explore theory regarding the meaning of activities. This might include, for example, the generic qualities of activities in various levels, including their real and symbolic meanings; the influence of the non-human environment (architecture, utilization of space, etc.) on the activities of an individual within the environment; the relation between occupational performance and the social, cultural, and physical environmental demands placed on an individual, and therapeutic use of self. Also, I did not see in your curriculum content on the principles of the teaching-learning process and the application of these principles through engagement in the teaching-learning process with colleagues. Modules of activity classes often have students teach an activity to classmates, keep an activity log, perform an object history, and/or a play history.

71st Annual Conference and Exposition  
Cincinnati, June 1-5, 1991

1383 Piccard Drive  
P.O. Box 1725

Rockville, MD 20850  
(301) 948-9626  
(301) 948-5517 FAX



Letter to Al Bracciano, MS, OTR  
February 7, 1991  
Page 2

3. The new Essentials will be looking for curriculum threads that emphasize multi-cultural perspective. Any courses that can describe ways in which culture is a factor in influencing the outcomes of occupational therapy should be included. Cultural factors unique to Michigan's demographics should be included, especially if you are training therapists to work in rural areas.
4. Another area of growing importance in the field is the area of health promotion and disease prevention. Understanding the role of occupational therapy in various settings, such as community mental health, school settings, homecare, etc., might be added as a part of a management class.

Please remember these are simply suggestions. I felt overall your curriculum was well designed and comprehensive. I thank you for your fine representation of our profession to the administrators at Saginaw Valley State University.

Sincerely,



Carolyn Harsh, ScD, OTR/L  
Director, Education Division

CH/bl



May 31, 1990

Alfred Bracciano, OTR  
College of Nursing  
Saginaw Valley State University  
2250 Pierce Road  
University Center, MI 48710

Dear Mr. Bracciano:

The American Occupational Therapy Association strongly supports your efforts to develop a new entry-level occupational therapy educational program in Michigan.

As you are aware, there is a severe shortage of occupational therapists nationwide, particularly in rural areas such as yours. Our own estimate of the nation's shortage of occupational therapists is about 25%. Furthermore, each state occupational therapy association operates a job placement service, and nearly all report "more jobs than personnel" in their states.

The U.S. Bureau of Labor Statistics has determined the occupational therapy profession to be among the top twenty growth professions for the 1990s. The Bureau predicts a 52% increase in occupational therapy practitioners through the year 2000. In fact, health services industries will account for 18% of the nation's total job growth by the year 2000.

Demand for occupational therapists has been far outstripping supply for a long time. New therapist graduates are receiving an average of four job offers each, and two thirds of these graduates secure employment before they are certified. On average, they find their first job within one month of graduation. A recent survey of allied health education program directors found that 98% of them saw OT as offering "attractive employment opportunities."

In recognition of this problem and similar situations in other professions, the U.S. Congress commissioned a special study by the National Academy of Science's Institute of Medicine. That study found the shortage situation will probably worsen as the population ages, more patients survive with disabilities, and the career options for women expand.

Our data indicate that the presence of an occupational therapy education program in a state helps alleviate the shortage in that state. For example, in states with occupational therapy educational programs, the ratio of occupational therapists to 100,000 population is 37% higher than the ratio for states without programs.

31st Annual Conference and Exposition  
New Orleans, April 28 - May 2, 1990

1383 Piccard Drive  
P.O. Box 1725

Rockville, MD 20850-0822  
(301) 948-9626  
(301) 948-5512 FAX

Al Bracciano  
May 31, 1990  
Page Two

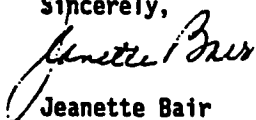
In Michigan, the ratio of occupational therapists to 100,000 population is somewhat above the national average. Nevertheless, our data show almost 90 percent employment in the state; a rate above the figure for the nation.

OTA is engaging in a number of activities designed to help reduce the shortage. They include an extensive national recruitment campaign targeting both high school graduates, older students, and second career seekers. Additionally, state occupational therapy associations, including Michigan, have adopted recruitment as their number one priority, and are engaging in a variety of activities to attract students to our educational programs.

Finally AOTA has engaged the services of a public relations agency to produce and distribute products, brochures and posters to inform our publics about the excellent career opportunities in the field.

Again, we support your effort to develop a new educational program in rural Michigan and wish you much success in your endeavors.

Sincerely,



Jeanette Bair  
Executive Director

cc: F. Acquaviva  
I. Silvergleit  
S. Hertfelder  
C. Harsh

Occupational Therapy Department

Kalamazoo, Michigan 49008-5051  
616 387-3850

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**WESTERN MICHIGAN UNIVERSITY**

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February 19, 1991

. Dr. Crystal M. Lange, Dean  
College of Nursing and  
Allied Health Sciences  
Saginaw Valley State University  
2250 Pierce Road  
University Center, MI 48710

Dear Dean Lange,

In your letter of January 31 you asked that I review the proposal to implement a Baccalaureate program in occupational therapy. I have reviewed the materials and am providing my impressions.

The proposal is built upon an extensive needs study which addressed each of the consumer groups. The study does support the need for the program. Additionally, the program will draw students from outside the service area of SVSU. Graduates of the program will be eligible for employment across the country. The national need for therapists is well documented and the argument that no new occupational therapy programs have been established in Michigan for 40 years is compelling. I feel the need for the program has been established.

The curricular design is well rounded and intensive. The courses reflect current areas of practice and should meet the essentials for an accredited program. The prerequisite courses in mathematics, chemistry, anatomy and physiology will provide a strong basic science. The sciences should provide the base of scientific method and problem solving which is critical to the development of clinical reasoning skills.

The preceptorship model for level I fieldwork will provide opportunities for the students to build clinical skills in a real-world environment. This model should instill a level of commitment between the program, community and healthcare providers.

I believe that the proposal has addressed the appropriate concerns for implementation of an academic program and should be supported.

I do have several personal concerns that I ask the planning committee to consider as the work toward implementation continues. One concern is the perception that the academic program (including prerequisites) is a four year program for students of SVSU. My concern here is the potential exclusion of transfer students from the community college system and other four year schools. The program will receive applications for across the state and across the country. The materials I received did not address this issue and I ask that the committee consider the movement of transfer students into the program.

There are two 1 hour courses and several 2 hour courses listed in the program. My concern here is for faculty and workload. Our experience with such courses is that the content and work expectations may grow beyond normal bounds. In addition, the scheduling of one faculty member to several course preparations can produce major stress. My preference is for 3 hour courses.

Another concern relates to staffing. The proposal did not provide detail into the level of staffing for classes, academic advising or fieldwork supervision. The initial admission of 40 students during the construction of an academic program will be challenging for any faculty. My hope is that more the adequate fiscal support for faculty will be provided to assure success. My last concern can be addressed as a tenure question. Can incoming faculty expect to initiate a new curriculum while meeting the tenure expectations of the University? My hope is that the University and College will consider this question when making faculty appointments.

In summary, I believe that the need for the program has been established and that the proposed academic program will provide students with strong professional training. The program should be supported for implementation. In the implementation planning the issues of transfer students, 1-2 hour courses, and faculty expectations should be addressed to assure success.

Sincerely,



Richard G. Cooper, Ed.D., OTR, FAOTA  
Interim Chair



Wayne State University  
College of Pharmacy  
and Allied Health  
Professions

Department of Occupational Therapy  
Detroit, Michigan 48202  
(313) 577-1436

February 27, 1991

Crystal M. Lange, RN, PhD, FAAN  
Dean, College of Nursing and Allied Health Sciences  
Saginaw Valley State University  
2250 Pierce Road  
University Center, MI 48710

Dear Dean Lange:

This letter is in support of the establishment of a baccalaureate occupational therapy program at Saginaw Valley State University. The geographical area identified as being served by Saginaw Valley is underserved by occupational therapy educational programs in this state.

At the present time there is a considerable need for occupational therapists throughout Michigan and the United States. It is expected that the need will continue for some time.

If I can be of assistance to you in the development of the program, I should be happy to do so.

Sincerely,

A handwritten signature in cursive script, reading "Miriam C. Freeling".

Miriam C. Freeling, OTR, FAOTA  
Chairperson



(517) 790-4000 • From Midland: (517) 695-5325  
2250 Pierce Road • University Center, MI 48710

Department of Physical and Health Education  
(517) 790-4113 or 4114

Dr. Crystal Lange  
Dean, College of Nursing  
& Allied Health Sciences  
Saginaw Valley State University  
University Center, MI 48710

• January 22, 1990

Dear Dr. Lange:

I have recently met and spoken with Al Bracciano regarding the possibility of implementing an Occupational Therapy program here at Saginaw Valley State University. I am very excited about this possibility! As coordinator of the Human Performance Laboratory, I would be happy to support cooperative teaching/laboratory time arrangements. In addition, I have the necessary credentials and experience to teach in some aspects of an occupational therapy program.

We also would encourage the enrollment of some of our Physical & Health Education students in a major/minor in Occupational Therapy. Our Fitness Management concentration and National Athletic Trainer Association certification seeking majors would be ideal candidates for cooperative programming. We can see the potential benefit of an Occupational Therapy program on campus to the Physical & Health Education department, Physical & Health Education students/major, and Ryder Center (especially the Human Performance Laboratory rehabilitation and athletic training areas). Also there is a strong need for such a program in the Saginaw Valley community.

If we can be of further support or assistance please don't hesitate to call (791-7324).

Sincerely,

A handwritten signature in cursive script, appearing to read 'D. J. Bridges'.

Dr. Jennifer Bridges  
Coordinator, Human Performance Laboratory  
Assistant Professor, Physical & Health Education

A handwritten signature in cursive script, appearing to read 'Douglas E. Hansen'.

Dr. Douglas E. Hansen  
Physical & Health Education  
Department Chair

ml

c Dr. David Nelson



# BOARD REPORT

A REPORT OF THE SAGINAW VALLEY STATE UNIVERSITY BOARD OF CONTROL

February 17, 1992

## Occupational Therapy Degree Gets Control Board Okay

The Board of Control, on Monday, gave its approval for the creation of a baccalaureate degree program in Occupational Therapy. Following a presentation by Dean Crystal Lange, the Board voted to authorize the College of Nursing and Allied Health Sciences to begin raising about \$100,000 to hire faculty next fall and to admit students for the winter semester of 1993.

The Board's action follows a two-year feasibility study conducted by the College of Nursing and Allied Health Sciences. The study measured the interest of high school and college students, as well as health care providers who would eventually employ the program's graduates. Dr. Lange said employers who responded to the survey reported about 50 to 60 vacancies currently exist for occupational therapists throughout the Tri-County and Thumb region.

Dr. Lange said she has received about 35 letters of support for creation of the new curriculum. She said the College of Nursing and Allied Health Sciences expects to admit about 40 students per semester and to train about 80 students a year once the program is fully operational. SVSU joins Wayne State, Eastern Michigan and Western Michigan Universities in offering the degree.

Students must complete 51 credit hours prior to admission and achieve an overall 2.5 GPA. "The program will prepare professionally qualified occupational therapists who can treat clients who are limited in their ability to perform developmentally appropriate tasks and roles," Dr. Lange said.

Graduates will be qualified to assist the growth and development of premature babies, aid the learning process of physically

challenged school children, help build self-esteem in teens recovering from effects of substance abuse and assist in the rehabilitation of stroke victims and injured workers, Dr. Lange said.

The Board also heard registrar Paul Saft report that SVSU's winter semester enrollment passed the 6,000 mark, increasing by 5.1 percent over last year to 6,223 students. Credit hours for the same period increased to 59,473, about 5.5 percent over last year. Female students (3,707) continued to outnumber males (2,516), showing an increase of 194 females to 109 male registrations. Ethnic minorities accounted for 63 of the 303 additional students enrolled during the 1992 winter semester.

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**This is an unofficial report of Board activities.  
Official minutes are on file in the library.**

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**Appendix J**

**Proposal Submitted to Saginaw Valley State  
University Faculty for Review**

TO THE FACULTY  
AT  
SVSU  
A  
PROPOSED PROGRAM  
FOR  
OCCUPATIONAL THERAPY  
REGISTERED (O.T.R.)

**College of Nursing  
and  
Allied Health Sciences**

(Catalog Copy)

## **ALLIED HEALTH SCIENCES**

### **OCCUPATIONAL THERAPY PROGRAM**

**Crystal M. Lange**

The program in occupational therapy is designed to prepare professionally qualified occupational therapists who can effectively assume positions in occupational therapy to treat clients who are limited in their ability to perform developmentally appropriate tasks and roles. Occupational therapy is a health and rehabilitation profession that provides services to individuals of all ages whose abilities to cope with tasks of living are impaired by physical injury or illness, psychological and social disability, or developmental disabilities. The occupational therapist designs the rehabilitation process individually for each client and through evaluation and treatment, seeks to achieve restoration or improvement of impaired functions. The goal of occupational therapy is to assist clients in achieving a maximum level of independent living by developing and enhancing the capacities that remain after disease, accident, deformity or disability.

The program in occupational therapy provides students with the knowledge, techniques and clinical reasoning skills necessary to assume entry level positions as registered occupational therapists. The program also prepares students to be able to critically and creatively function in a variety of health-related settings and to adapt to changes in health care and to adapt to and assume nontraditional roles in the health care field.

In order to practice as an occupational therapist and to use the title of O.T.R., (Occupational Therapist Registered), the student must complete the program and be awarded the bachelor of science degree in occupational therapy. Graduates of the program are then eligible to sit for the National Certification Examination for the Occupational Therapist, Registered (OTR), administered by the American Occupational Therapy Certification Board (AOTCB). After successful completion of this examination, the individual will be an Occupational Therapist, Registered (OTR). Many states require licensure in order to practice; however, state licenses usually are based on the results of the AOTCB Certification Examination. Persons convicted of felonies may be unable to sit for the certification exam.

### **REQUIREMENTS AND POLICIES FOR THE OCCUPATIONAL THERAPIST MAJOR**

#### **Degree Requirements:**

The Department of Occupational Therapy offers an interdisciplinary major with a minimum of 49 credits in occupational therapy for the registered occupational therapy student. The program in occupational therapy recognizes the importance of the profession's theoretical base in both the liberal arts and the sciences through the selection of the preprofessional courses. The credits contribute to the 124 credits required for graduation. The remaining credits are fulfilled by courses from general education, natural and behavioral sciences and electives.

### **Transfer Students:**

Transfer students needs are considered on an individual basis by the Occupational Therapy Selection Committee.

### **REQUIREMENTS FOR ADMISSION TO THE OCCUPATIONAL THERAPY PROGRAM**

Students admitted to Occupational Therapy will be chosen by a selection committee based upon current selection criteria. Students should apply to the Department of Occupational Therapy during the semester in which they are completing the prerequisite courses and basic skills requirements. Upon meeting these prerequisite requirements, students should submit an application for admission to the professional program (junior, senior, and fieldwork years). The admission process is done once a year and actual admission occurs at the beginning of the fall semester.

### **SELECTION CRITERIA FOR THE OCCUPATIONAL THERAPY PROGRAM**

Ordinarily, the entering class is admitted to the professional curriculum in Fall. Admission to SVSU is required for, but does not guarantee, acceptance into the occupational therapy program. The program is planned to accommodate approximately forty students each year, but this number may vary depending on available resources. Prospective students must submit an application for admission to the professional program by February 15 preceding the Fall admission. Preference will be given to those applicants who have:

1. Completed a minimum of 51 credits prior to admission to the program.
2. Achieved a minimum cumulative honor point average of 2.5 (A=4.0) for all pre-professional coursework (based on all college-level work computed both at SVSU and at other schools and colleges).
3. Achieved a minimum combined honor point average of 2.5 for the following courses: Biology 231, Chemistry 111, Psychology 372, Occupational Therapy 200.
4. Completed all prerequisite courses listed for the freshman and sophomore years.
5. Had work and/or volunteer experience with ill, handicapped or disadvantaged people with a minimum of two references regarding the work/volunteer experiences.

## **TRANSFER CREDIT AND/OR CREDIT BY EXAMINATION POLICIES**

The transfer student from another baccalaureate program in occupational therapy may be allowed to transfer up to 15 occupational therapy credits following a review process and approval by the faculty. Students transferring into the occupational therapy program with fifteen hours of coursework must demonstrate a grade point average of 2.6 or better during the first semester in the occupational therapy degree program. Transfer students who do not meet the grade point average conditions as indicated will be placed on probation for the next semester. In the event the 2.6 GPA is not achieved by the end of the probation semester, the student will not be permitted to enroll in further occupational therapy courses.

## **GENERAL INFORMATION**

### **Progression and Retention Policies**

The professional program in occupational therapy requires four semesters of full time academic coursework in addition to internships. Pending approval of the faculty for clinical affiliations or internships, students may take electives during the spring and summer terms. The internship component of the occupational therapy program is an integral part of the student's education and a minimum of approximately six months of supervised practice is required. Placements are subject to faculty approval and assignment to a specific facility or location can not be assured.

To continue in the professional occupational therapy curriculum, students are expected to maintain a cumulative grade point average (GPA) of 2.0 calculated on courses following enrollment and to demonstrate a level of competence in the subject material. Progression into any occupational therapy course at any level cannot take place if a student has a grade of "I" in any prerequisite course. Students who fail to maintain a cumulative GPA of 2.0 at the end of the first period of enrollment and each subsequent semester, or earn a "D" grade in their occupational therapy curriculum (regardless of the cumulative GPA) will be placed automatically on probation and notified by the Department of Occupational Therapy. Students who are on probation due to "D" grades must retake the course as designated by the department, achieving a grade of "C" or better while also meeting all other academic standards. A student may repeat an occupational therapy course once.

Only one semester of academic probation is permitted. Students who fail to meet academic standards during the semester of probation or do not successfully complete a deficient course will be considered dismissed from the program. Since courses in occupational therapy are ordinarily offered only once during each academic year, and since the coursework follows a sequential design, probationary students will have to continue under an adjusted curriculum plan. This will result in extending the students time to achieve all program requirements.

**Withdrawal and Readmission:**

Students enrolled in the junior and senior years of the professional curriculum may be granted a leave of absence from the SVSU program for a maximum of two consecutive semesters (excluding spring/summer sessions) and re-enter on a space-available basis without applying for readmission to the professional program. Those absent from the program for more than two consecutive semesters (excluding summer session) may re-enter the program only with the permission of the selection committee.

Professional students requesting a leave of absence from their studies must send written notification in advance to the program director. Lack of available spaces in classes may preclude readmission for any given semester.

**Suspension and Dismissal for Other Than Academic Reasons:**

All students are expected to maintain and demonstrate professional and ethical behavior while enrolled in the Department of Occupational Therapy. The faculty reserves the right to dismiss students from clinical areas on a daily basis when the students are too ill or unprepared to benefit from the experience. Students may be suspended due to repeated physical and or psychological difficulty exhibited over an extended period. Medical problems or emotional instability may delay or prevent students from attending internship placements.

Students may be required to seek the care of a qualified physician if demonstrating continued physical and psychological difficulties. Students may be placed on probation until an appropriate health professional affirms that the student's health is stable for continued progression in the occupational therapy program.

**Transportation:**

The student is responsible for providing transportation to and from all courses and /or clinical learning experiences. Clinical education may include observation and practice in clinical or community setting under the supervision of a registered occupational therapist or other health professional. Students are also required to enroll for 12 credits of internship coursework and should be prepared to meet their own living expenses, transportation costs, and tuition throughout the internship period.

**Eligibility for Certification:**

Upon successful completion of the program, including the 12 credit hours of Internship, students are eligible to take the national certification examination administered by the American Occupational Therapy Certification Board. Certification is required by most employers as proof of professional competence.

**PROPOSED CLASSES  
PRE-PROFESSIONAL PROGRAM**

**COURSE LISTING****Credit Hours:**

Math 130	Biostatistics	(4)
English 111	Elements of Composition I	(3)
English 112	Elements of Composition II	(3)
Psychology 210	Applications in Human Development	(4)
Philosophy 260	Ethics in Health Professions	(3)
Chemistry 111	General Chemistry Lecture	(4)
Chemistry 111L	General Chemistry Laboratory	(1)
Art 210	Introduction to Crafts	(3)
Biology 231	Physiological Anatomy	(4)
Psychology 346	Neuropsychology	(4)
Psychology 372	Abnormal Psychology	(3)

**Total Credits: 36**

**PROPOSED  
SEQUENCE OF CLASSES  
PRE-PROFESSIONAL PROGRAM**

A course marked with an \*, denotes a prerequisite class required for admission to the professional occupational therapy curriculum. In addition, students must meet the SVSU requirements for basic skills and general education.

**Freshman Year:**

**FALL SEMESTER**

*Math 130	Biostatistics	4 cr.
*English 111	Elements of Composition I	3 cr.
Biology 220	Principles of Biology	4 cr.
Psychology 100	General Psychology	4 cr.

**Total: 15 cr.**

**WINTER SEMESTER**

*English 112	Elements of Composition II	3 cr.
*Psychology 210	Applications in Human Development	4 cr.
*Philosophy 260	Ethics in Health Professions	3 cr.
*Chemistry 111	General Chemistry Lecture	4 cr.
*Chemistry 111L	General Chemistry Laboratory	1 cr.

**Total: 15 cr.**



Sophomore Year:**FALL SEMESTER**

*Art 210	Introduction to Crafts	3 cr.
Sociology 211	Principles of Sociology	3 cr.
Psychology 370	Theories of Personality	3 cr.
General Education Courses		3-6 cr.

Total: 12-15 cr.

**WINTER SEMESTER**

*Occupational Therapy 200	Orientation to Occupational Therapy	1 cr.
*Biology 231	Physiological Anatomy	4 cr.
*Psychology 372	Abnormal Psychology	3 cr.
*Psychology 346	Neuropsychology	4 cr.
General Education Courses		2-4 cr.

Total: 14-16 cr.

**TOTAL CREDIT HOURS PREREQUISITES: 51**

Following successful completion of the prerequisite classes with a GPA of no less than 2.5, students may apply for admission to the professional program in occupational therapy.

**PROPOSED  
OCCUPATIONAL THERAPY PROFESSIONAL CURRICULUM  
SEQUENCE OF CLASSES**

Interdisciplinary major, no minor is required. Courses must be taken in sequence as specified below unless approved by the faculty.

Junior Year:

**FALL SEMESTER**

PHE 375	Kinesiology	3 cr.
PHE 375L	Kinesiology Lab	1 cr.
PHE 376	Physiology of Exercise	3 cr.
PHE 376L	Physiology of Exercise Lab	1 cr.
OT 302	Occupational Performance and Clinical Reasoning	3 cr.
OT 308	Therapeutic Use of Activities	3 cr.

Total Credit Hours: 14

**WINTER SEMESTER**

OT 320	Pediatric Occupational Therapy	3 cr.
OT 326	Occupational Therapy in Orthopedics	2 cr.
OT 328	Clinical Conditions	3 cr.
OT 350	Occupational Therapy Treatment of Physical Disabilities	5 cr.

Total Credit Hours: 13

**SPRING/SUMMER SEMESTER**

OT 450	Internship I--Mental Health	6 cr.
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Senior Year:**FALL SEMESTER**

PHE 445	Motor Learning	3 cr.
OT 400	Foundations of Occupational Therapy Practice	3 cr.
OT 420	Occupational Therapy in Psychiatry	3 cr.
OT 422	Therapeutic Adaptations and Technology for the Handicapped	3 cr.

Total Credit Hours: 12

**WINTER SEMESTER**

OT 430	Clinical Research	3 cr.
OT 440	Occupational Therapy Treatment in Psychiatry	5 cr.
MGT 321	Organization and Administration	4 cr.

Total Credit Hours: 12

**SPRING/SUMMER SEMESTER**

OT 460	Internship II--Physical Disabilities	6 cr.
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**CREDIT HOURS:**

12 Credits Internship

37 Professional Curriculum Credits

36 Pre-Occupational Therapy Prerequisites (includes selected general education courses)

15 Cognates

24 General Education and Electives

**124 Total Credit Hours**

**(Course Descriptions)**

The following courses are proposed for the professional curriculum: (Interdisciplinary major, no minor is required. Courses must be taken in sequence as specified below unless approved by the faculty.)

(PHE 375,375L; PHE 376,376L; PHE 445; and MGT 321 are currently listed in the SVSU Catalog)

### REQUIRED COGNATES

**PHE 375 Kinesiology**

**This course is designed to acquaint the student with the structure and mechanical functions of the musculoskeletal system. Prerequisite: Biology 231.**

**PHE 375L    Kinesiology Laboratory**

**Experiments related to topics covered in PHE 375. Corequisite: PHE 375.**

**PHE 376     Physiology of Exercise    3 Cr.**

**An examination of the scientific basis of physical performance, including physiological responses and adaptations of the organs and systems of the body during the stress of muscular activity. Prerequisite: BIOL 231.**

**PHE 376L Physiology of Exercise Laboratory 1 Cr.**

**Experiments related to topics covered in PHE 376. Corequisite PHE 376.**

**PHE 445 Motor Learning 3 Cr.**

**Neuropsychological approach to motor behavior that involves the study of the perceptual components as well as the motor components of human movement. Specific areas of study will be learning and memory, learning and behavior, acquisition of motor skills, conditions affecting motor skills, acquisition such as practice, feedback, transfer or learning. Prerequisite PHE 375 and PHE 376.**

**MGT 321    Organization and Administration                      4 Cr.**

**The study of formal organizations and administration processes necessary for organizational effectiveness. The emphasis is upon understanding the effects of management principles; executives' roles and organizational structure; management information systems; and social, political, economic and international influences. Prerequisite: Junior standing.**

(Catalog Copy)

## PROFESSIONAL COURSES

**OT 200      Orientation to Occupational Therapy Practice      1 Cr.**

An introduction to occupational therapy practice, the history of the profession, current professional roles, issues and trends, the referral process, treatment sequence, ethics, liability, standards of practice. Emphasis on interviewing skills and therapeutic relationships. Clinical experience will be scheduled to offer observations and development of therapeutic skills.

**OT 299      Selected Topics in Occupational Therapy      1-6 Cr.**

Selected topics related to occupational therapy and the profession of occupational therapy. Prerequisite: Approval of faculty.

**OT 302      Occupational Performance and Clinical Reasoning  
for Occupational Therapists      3 Cr.**

This course will integrate the concept of occupational performance, with the influence of the social cultural and environmental demands within an organizing framework of inquiry that occurs within the context of occupational therapy evaluation and treatment. This course will address learning theories, developmental transitions, supervision theories, performance evaluation and behavioral objectives. Emphasis will be placed on the multi-cultural and societal factors influencing the delivery of occupational therapy in rural areas and their influence on clinical reasoning. Prerequisite: Admission to the program.

**OT 308      Therapeutic Use of Activities      3 Cr.**

This course will explore the role of activity in influencing change in human performance. Task analysis and use of activities as treatment modalities will be utilized as will studies in analyzing specific activities with practical application. This course will also present the the use of activity by normal individuals; with the emphasis on the balance of work, play, and self-maintenance necessary for wellness across the lifespan. Prerequisite ART 210.

**OT 320      Pediatric Occupational Therapy      3 Cr.**

Theories and principles of therapeutic intervention for clients from birth to age 18. Child growth and development (normal and abnormal), congenital and acquired condition and diseases of childhood. Evaluation techniques for the areas of perceptual motor, psycho-social, cognitive, fine and gross motor development, language and adaptive skills. Review of legislation and guidelines mandating provision of related services in the public schools. Educational terminology, roles and functions of the occupational therapist in the educational setting. Prerequisite: OT 308 or permission of faculty.

## (Catalog Copy)

**OT 326      Occupational Therapy in Orthopedics      2 Cr.**

A study of the orthopedic conditions encountered by occupational therapists. Etiology, assessment, management and treatment of orthopedic conditions will be reviewed. Clinical experience presenting functional treatment approaches to orthopedic condition, emphasis on hand evaluation, treatment and splinting will be scheduled. Prerequisite: OT 308 or permission of faculty.

**OT 328      Clinical Conditions in Occupational Therapy Treatment      3 Cr.**

Study of the musculo-skeletal, neurological and neuro muscular systems, and selected physical pathological conditions including etiology, symptomatology and sequelae of neurological conditions and functional deficits resulting from disease or injury treated in occupational therapy practice. Emphasis placed on normal and abnormal function as they relate to occupational performance over the lifespan. Prerequisite: OT 308 or permission of faculty.

**OT 350      Occupational Therapy Treatment of Physical Disabilities      5 Cr.**

Evaluation and basic treatment principles for neurology, orthopedic, traumatic and degenerative conditions. Analysis, evaluation, theories and concepts of occupational therapy treatment as they relate to the current problems of the physically disabled. Current therapeutic approaches to treatment planning, documentation and reporting. Development of skills in evaluation and formulation of treatment planning and implementation. Development of skills in joint range of motion, muscle testing, sensory evaluation, assessment tools and applications of occupational therapy treatment. Experiential learning will be scheduled in hospitals or other health care facilities for clinical education in evaluation and treatment of individuals with a physical disability. (3-2; 6 hours of clinical affiliation weekly). Prerequisite: OT 308 or permission of faculty.

**OT 400      Foundations of Occupational Therapy Practice      3 Cr.**

Overview of the frames of reference, models and theories used to integrate the practice of occupational therapy. Review of biomechanical/neurodevelopmental/rehabilitative approach, Model of Human Occupation, and occupational performance will be presented and discussed. Examination of the theoretical constructs used in the various models of practice, concepts integral to the understanding and use of human occupation as a basis for occupational therapy practice will be emphasized. Current practice issues will be examined. Prerequisite: OT 350 or permission of faculty.

## (Catalog Copy)

**OT 420      Occupational Therapy in Psychiatry      3 Cr.**

Review of the etiology, symptomatology and functional sequelae of major psychiatric disorders treated in occupational therapy practice. Review of psychopathology, theoretical frames of reference, evaluation, treatment and management of psychiatric and developmentally disabling conditions. Prerequisite: OT 350 or permission of faculty.

**OT 422      Therapeutic Adaptations and Technology for  
the Handicapped      3 Cr.**

This course will consist of the analysis, design and construction of adapted equipment to facilitate daily living skills in the disabled individual. Adaptations and alternatives, use of adapted and augmentive technology, computers and environmental controls. Environmental planning and clinical reasoning to restructure the physical environment to assist with self care, work, play and leisure activities will be emphasized. Prerequisite: OT 350 or permission of faculty.

**OT 430      Clinical Research      3 Cr.**

A review and examination of methods of scientific inquiry and empirical techniques and research with the emphasis on occupational therapy. Review of the research process: problem definition, literature review, research design and data collection, analysis and interpretation and research reporting. Research, evaluation and development of research proposal. Emphasis of coursework on understanding and interpreting findings and their implications for occupational therapy clinical practice. Prerequisite: OT 422 or permission of faculty.

**OT 440      Occupational Therapy Treatment in Psychiatry      5 Cr.**

Principles of psychiatric occupational therapy practice in the evaluation and treatment of individuals with developmental disabilities or psycho-social dysfunction. Review of psychopathology and theoretical frames of reference in occupational therapy intervention and treatment. Emphasis on assessment, treatment planning and task analysis, implementation, use of self and groups, community resources and use of activity as therapeutic tools. Clinical reasoning and experiential learning emphasizing individual client assessment, treatment planning, professional communication and documentation. Experiential learning will be scheduled in occupational therapy mental health treatment programs to gain clinical experience in assessment, evaluation, conditions and treatment of individuals with developmental disabilities or psychiatric conditions. (3-2; 6 hours of clinical affiliation weekly). Prerequisite: OT 422 or permission of faculty.

**OT 450      Internship I--Mental Health      6 Cr.**

## (Catalog Copy)

**OT 460      Internship II--Physical Disabilities      6 Cr.**

Full time clinical experience in an approved occupational therapy center emphasizing treatment of individuals with physical disabilities. Students will conduct evaluation and treatment, management of assigned caseload of clients of varying ages and disabilities under clinical supervision. Prerequisite: Approval of faculty.

**OT 470      Advanced Internship Elective      1-6 Cr.**

Two or three months of supervised practice in an area of occupational therapy supervision. Requires successful completion of OT 450 and OT 460.

**OT 499      Selected Topics in Occupational Therapy      1-6 Cr.**

Selected topics related to occupational therapy and the profession of occupational therapy. Prerequisite: Approval of faculty.

Upon successful completion of the two required internship experiences and all coursework, the student is awarded the bachelor of science degree in occupational therapy. The student is then eligible to take the American Occupational Therapy Association Certification Board's certification examination. Passing of the certification examination qualifies the student to become registered as an occupational therapist and to use the title O.T.R. (Occupational Therapist Registered).



**A FEASIBILITY STUDY FOR THE ESTABLISHMENT  
OF AN OCCUPATIONAL THERAPY  
CURRICULUM AT SAGINAW VALLEY STATE UNIVERSITY**

**Alfred G. Bracciano, M.S.A., O.T.R.  
Crystal M. Lange, R.N., Ph.D.**

**Saginaw Valley State University  
College of Nursing and Allied Health Sciences  
University Center, Michigan 48710**

**December, 1990**

## ABSTRACT

### FEASIBILITY STUDY FOR SAGINAW VALLEY STATE UNIVERSITY OCCUPATIONAL THERAPY PROGRAM

The College of Nursing and Allied Health Sciences at Saginaw Valley State University has undertaken a feasibility study to determine the need for an occupational therapy program leading to a Bachelor of Science degree (BSOT). The purpose of this study was to conduct a comprehensive feasibility study in order to assess both the demand for occupational therapists in the region, and to determine student interest in attending the proposed program. The study was conducted contiguous to and within the geographical region encompassed by the Saginaw Valley District and the Northern District of the Michigan Occupational Therapy Association. The catchment area for the study included the area north and east of an imaginary line drawn from Port Huron to Flint, and angling to Traverse City and included approximately the eastern half of the upper peninsula.

In conjunction with the Education Division of the American Occupational Therapy Association (AOTA), it was determined that a comprehensive feasibility study for the development of a program should assess the interest and demands of potential students, as well as those of employers. In addition the study should address the factors and demands related to the other constituent groups involved such as consumers and the university.

The study employed three methods of data collection in order to gather appropriate information from the involved constituent groups. These methods included the survey, review of demographic and manpower data, and the group task force. The data collected by these methods were then analyzed and reviewed to determine the feasibility of establishing an occupational therapy program.

The survey method of data collection consisted of the development of separate surveys for three constituent groups: the High School Student (N=360), the College Student (N=325) and the potential Employer (N=128). Each survey was administered separately. The surveys consisted of a self administered, seven to fifteen item questionnaire which was distributed to each population sample. The response rate for each sample was 57% for the employers, 67% for the high school students, and 84% for the college students. Analysis of the survey results indicated that twenty one percent of the high school students surveyed (n=50) would be interested in enrolling in an occupational therapy program at SVSU. Twenty five percent, (n=67), of the college students indicated an interest in attending the proposed program. There were an additional 191 respondents requesting further information on the profession and program.

Review of the employer survey indicated that fifty nine percent, (n=51), of the agencies responding planned to expand their service of occupational therapy in the next three years; forty seven percent, (n=40), of the employers planned to hire additional therapists

in the next three years with the average number of positions being 1.8 per facility. Thirty percent of the facilities, (n=26), current had unfilled budgeted positions available with forty three percent of the respondents, (n=37), reporting an average of 1.4 unfilled budgeted positions available over the past three years.

Analysis and review of the literature included the identification of demographic, health related statistics and manpower data relative to the profession of occupational therapy. National, state and local data related to occupational therapy were analyzed. Results of the data collection methods indicated that there is a strong demand for occupational therapists with a continued shortage projected through the decade. AOTA estimates the current shortage to stand at twenty five percent nationally. Regional and practice areas indicate a shortage varying between fifteen and forty one percent.

Analysis of the results of the data collection methods indicated that there is a strong demand for occupational therapists with a continued shortage projected through the decade. Review of the literature also indicates a geographic maldistribution of occupational therapists. Locally, there are a number of facilities with budgeted positions available which they are unable to fill due to the regional shortage of occupational therapists. Review of the student surveys reveals a large pool of interested high school and college students who would be interested in attending the proposed program. Resources and support available within the university, surrounding region, and the American Occupational Therapy Association were also identified.

The results of the feasibility study undertaken by SVSU's College of Nursing and Allied Health Sciences, indicate that there is a substantial need and interest in an occupational therapy educational program offered at the university.

## **Feasibility Study For The Establishment Of An Occupational Therapy Curriculum At Saginaw Valley State University.**

### **Introduction**

**Saginaw Valley State University (SVSU) was founded in 1963 to meet the higher education needs of the residents in east-central Michigan. SVSU has five primary colleges: the College of Business and Management, the College of Education, the College of Arts and Behavioral Sciences, the College of Science, Engineering and Technology, and the College of Nursing and Allied Health Sciences. The university offers a variety of baccalaureate degrees and selected masters degrees in fields which demonstrate a strong regional demand. The College of Nursing and Allied Health Sciences provides programs leading to baccalaureate degrees in nursing,(BSN), and medical technology; along with a masters degree in nursing,(MSN).**

**Saginaw Valley State University has a current enrollment of approximately 6000 students. Nearly one-half of the students attending SVSU are in the traditional age range with the other half being the older student preparing for occupational advancement or obtaining new skills in preparation for leadership roles in their community or workplace. Ninety percent of the students attending SVSU commute to the University with the majority of SVSU's students coming from the surrounding area.**

**In accordance with priorities established by the Office of Institutional Research and Planning, SVSU has demonstrated a commitment to develop and provide programs to meet the demands and needs of the surrounding communities and region. The Office of Institutional Research and Planning identifies the university service area as consisting of the sixteen counties of Alcona, Alpena, Arenac, Bay, Gladwin, Huron, Iosco, Lapeer, Midland, Montmorency, Ogemaw, Oscoda, Saginaw, St. Clair, Sanilac, and Tuscola.**

**In 1989, communication between the Michigan Occupational Therapy Association and the College of Nursing and Allied Health Science was established. This dialogue provided the College with initial information regarding the national shortage of occupational therapists, demographic data, educational requirements, and the perceived local and regional shortage of occupational therapists. To further determine the local and regional demand for occupational therapy personnel, the College of Nursing and Allied Health Sciences, undertook a comprehensive feasibility study. The purpose of this study was: to clarify and document the current and future demand for registered occupational therapists within the University's service area; to assess potential student interest in attending an occupational therapy program; and to determine the need for establishing an occupational therapy educational program at Saginaw Valley State University at the baccalaureate level. This report describes the process and findings of the feasibility study conducted for the proposed Bachelor of Science Degree in Occupational Therapy (hereafter the program will be addressed as "BSOT program").**

### Purpose Of The Study

The purpose of this study was to conduct a comprehensive feasibility analysis that would provide decision makers with accurate information and data relevant to the development of a BSOT program at Saginaw Valley State University. The study was designed to assess the interest and demands of potential students for the program, and to evaluate the needs and resources of the University, regional health care providers and the community.

The population of this study included the identified constituent groups located within an area encompassing approximately the northern two thirds of the lower peninsula, and the eastern half of the upper peninsula of Michigan (see Figure 7). An imaginary line was drawn from Port Huron in the east, across to Flint and proceeding north to Traverse City, then directly across the upper peninsula. For the purpose of the study, three constituent groups were identified. The first two groups consisted of potential students. The student population was identified as high school students attending a health professions course at a regional Career Center; or college students currently attending SVSU or Delta College. The third group consisted of employers encompassing health care providers from area hospitals, community mental health agencies, intermediate school districts, and regional mental health facilities.

### Methods Of Data Collection

Three methods of data collection were used to assess the needs of area health care providers and to determine the interest of area students in attending the proposed program. These methods included: the group method, the survey method, and a review of demographic and health related statistical data and literature.

The task force group method of data collection, involved identifying and forming a resource base of individuals from the area encompassed by the geographical boundaries of the study. The task force consisted of eight members selected from the major constituent groups: mental health, school districts, hospitals, regional medical centers. The purpose of the task force group was to identify needs, resources and concerns relative to the proposed BSOT program.

The survey method of data collection involved the formulation of three survey instruments to assess the needs and interests of Employers (N=128), High School Students (N=360), and College Students (N=325). Each survey instrument was administered separately. The surveys consisting of a seven to fifteen item questionnaire, were distributed to the respective populations over approximately a six week period beginning in February 1990. The return rate varied from 67% for the high school students, 84% for the college students, and 57 % for employers.

The third method for collection of data involved review of demographic information, vacancy rate data, manpower statistics and health statistics related to the profession of occupational therapy. National, state and local statistics and data were reviewed to assist in determining trends relative to occupational therapy manpower and projections.

#### The Group Method:

To obtain information and to provide feedback regarding the proposed BSOT program, a task force consisting of eight key representatives from community agencies was identified. The members of the task force group were selected from each of the constituent groups surveyed, mental health, hospital or health care providers, school districts, and the university. These members were able to provide information regarding the role of their respective agencies or facilities, the manpower needs of their facilities, and resources available.

The following is a list of the membership and affiliation of the task force members:

Janet Nagayda, M.O.T., Lapeer Intermediate School District.  
 John DeFord, M.S.W., Huron Country Mental Health.  
 Polly Dodick, O.T.R., St. Mary's Medical Center.  
 Jackie Roe, O.T.R., Caro Regional Center.  
 Tamara Doescher, M.S.A., O.T.R., Sanilac Intermediate School District.  
 Roy Wedge, M.O.T., Midland Regional Medical Center.  
 Cindi Batts, O.T.R., Mercy Hospital.  
 Dr. Jennifer Bridges, Saginaw Valley State University.

The designated members of the task force group were contacted by phone, in person, and by letter to request their participation. A formal letter was sent to each individual by the Dean of the College of Nursing and Allied Health Sciences confirming the appointment for the meeting. The meeting was kept informal to facilitate member input regarding a number of issues related to the completed survey results. The stated purpose of the meeting was to obtain feedback regarding development of a proposed occupational therapy educational program. Members were also questioned as to the specific needs of their respective facilities in regard to the provision of occupational therapy service, regional and local manpower needs, and potential resources for the development of field placement sites. Other topics discussed during the initial meeting included start-up funding, space and equipment requirements, availability of potential faculty, student recruitment and cooperative inter-agency training.

#### The Survey Method:

The three surveys conducted for the purpose of this study included three groups: health care providers, prospective students currently enrolled at a college level, and prospective students from high schools currently attending a health careers or similar program. The

following section will describe the procedures used for each of the three surveys. Procedures were followed to protect the subjects according to the criteria set by Saginaw Valley State University, and Western Michigan University's Human Subject Institutional Review Boards. Subjects were informed of the voluntary nature of their participation and the assurance of anonymity and confidentiality through inclusion of a letter of transmittal with each survey.

### Selection of Subjects.

Saginaw Valley State University is located within the Saginaw Valley District of the Michigan Occupational Therapy Association. SVSU serves the educational needs of the surrounding 9 counties which are contained within the Saginaw Valley District of the MOTA and are contiguous to the Northern District of the MOTA. Though the Northern District and Saginaw Valley District encompass the largest geographical area within the Michigan Occupational Therapy Association, they do not contain a program for the education or training of either occupational therapy assistants or registered occupational therapists. As the area serviced by SVSU encompassed areas of both the northern and central regions of the MOTA, a determination was made to survey individuals located in the geographical region bounded by Port Huron to the east; Flint to the south; Traverse City to the west; and encompassing the eastern half of the upper peninsula. (See Map)

#### 1. Survey of High School Students.

**Sampling Design:** A survey was conducted of high school students as potential candidates of the proposed occupational therapy program. Because of the large number of potential high school students located in the geographical region of the study, a cluster sampling of area career center based students was used. Students were selected from area career or vocational training centers who were currently attending courses in either Health Careers or Child Care Service programs.

The survey instrument was developed in association with the Research Division of the American Occupational Therapy Association (AOTA), and was pretested on five high school seniors and by four members of the Education Division of the AOTA. The pilot respondents suggestions and comments to the survey were incorporated in the revisions and additions to the final questionnaire.

**Procedure:** Questionnaires, accompanied by a letter of transmittal, were mailed to the teachers of each of the selected classes during the first weeks of the winter semester (January 1990). The course instructors were asked to administer the questionnaire during the course of their class time. The questionnaires were collected immediately by the respective instructors. The voluntary nature of the students participation in the survey was explained by the instructor. Anonymity was also maintained by informing the students not to identify their questionnaires, by name, or by any other identifiable form. Students were provided with a prestamped postcard requesting further information

regarding the profession of occupational therapy if desired.

## 2. Survey of College Students.

The population for the college student survey were those students who were attending Saginaw Valley State University in the health education, introductory psychology, introductory sociology classes or were classified as being in a pre-medicine curriculum. Students in the introductory anatomy and physiology courses at Delta College were also selected for inclusion in the survey. Delta College is a community college located approximately five miles from the campus of Saginaw Valley State University. The college offers a number of two year health related programs such as nursing, dental assistant, physical therapy assistant, and operating room assistant. Delta College was chosen to participate in the survey because of the colleges health and human resource related programs. The college is also a "feeder" for SVSU for students who continue on for higher level education and preparation.

The survey instrument was reviewed by members of the Education Division of the AOTA and was developed and revised in conjunction with the Research Division of the American Occupational Therapy Association.

**Procedure:** Prior to the distribution of the survey instruments, telephone contacts were made to the five Department Chairmen of the respective programs explaining the survey content and intent, and to request approval for the distribution of the questionnaires by appropriate faculty. A total of 325 questionnaires, accompanied by a letter of transmittal, were distributed to the students in class during the first two weeks in February 1990. The course instructors were asked to administer the questionnaire during the first ten minutes of their class time. The voluntary nature of the questionnaire and the anonymity of the respondents was maintained by asking the students not to identify their questionnaires by name, or by any other identifiable form. Students were provided with a prestamped postcard requesting further information if desired. Instructors were asked to collect the questionnaires immediately after the students had completed filling them out. The completed surveys were then returned to the investigator by prestamped envelope.

## 3. Survey of Potential Employers

The health care or educational agencies located within the defined catchment area of the study were identified as potential employers of the graduates of the proposed occupational therapy program. All agencies which employ occupational therapists and are listed in the Facilities Directory of the Michigan Hospital Association, the Michigan Department of Mental Health, or the Directory of Intermediate School Districts were included in this survey. A total of 128 different agencies and facilities were identified. The types of agencies included hospitals, intermediate school districts, community health agencies, nursing homes, industry and mental health facilities.



**Instruments:** The questionnaire for the potential employers was formulated on the local, regional and national trends for occupational therapists, along with the issues and concerns raised by members of the MOTA and Saginaw Valley District. The questionnaire was developed and revised in conjunction with the Research Division of the American Occupational Therapy Association and the Education Division of the AOTA.

**Questions addressed in the survey included:**

1. Job status of occupational therapists.
2. Future employment plans of occupational therapists.
3. Projected expansion of programs and employment opportunities.
4. Types of resources the agency can provide for the proposed program.

**Procedure:** A total of 128 questionnaires, along with a letter of transmittal were mailed to each Director of Occupational Therapy or respective facility Administration in the identified agencies. A business return envelope was enclosed for returning the completed questionnaire. Questionnaires were mailed the last week of January 1990. The agencies were asked to return the questionnaires within three weeks.

The findings of the needs assessment of the three constituent groups, college students, high school students, and employers, will be discussed in the next section. The results and input of the Task Force Group will be reviewed in a subsequent section.

### **Study Findings and Discussions:**

#### **High School Students.**

Determination of high school student interest in the profession of occupational therapy is important in order to assist in identifying potential students who may enroll in the curriculum if it is offered.

High school instructors who taught either child care services programs or health career programs at sixteen area school districts were sent surveys to distribute to their respective students (N=360). High school students attending the above educational programs were selected for their perceived interest in a health care profession due to their enrollment in the health career courses. A total of 360 surveys were distributed to the sixteen facilities with 240 individuals responding, a sixty seven percent, 67%, response rate.

Of the survey respondents, (n=240), eighty six percent, (n=207), indicated enrollment in a health career course. The survey population was almost evenly divided among high school juniors and seniors, forty three percent each. Of the students responding, eighty three percent of the high school students reported an interest in a health professions career, (n=207). Of the respondents, seventy five percent, (n=180), of the students

indicated knowledge of the personnel shortage in the Allied Health professions. Of those students who returned the survey, eighty eight percent of them indicated that they would be attending college within the next four years. Of that number, fifty five percent reported that they were planning to commute to a campus, with twenty two percent intending to live "on campus". Fifty three percent of the students planned to attend college full time, with forty three percent planning part time attendance. When asked whether students would be interested in enrolling in a proposed occupational therapy program at Saginaw Valley State University, twenty one percent, (n=50), indicated they would; while sixty percent, (n=145), were undecided. The number of undecided individuals would provide an important base for further potential students for recruitment purposes.

Of the undecided students it should be noted that there were 191 individuals who requested further information on the profession of occupational therapy. The majority of these individuals responded that they would consider enrolling in the proposed program in the future. These undecided individuals would be an important base of potential students to whom the university could market the program. This untapped pool of interested individuals constitutes an additional source of students that are unaccounted for in the survey results. It is anticipated that a portion of those reporting an interest would pursue a program of studies in occupational therapy if the program were offered.

The undecided high school students responding to the survey, may be in the process of establishing their career goals and may be uncertain of the scope and practice of occupational therapy. It should be noted that twenty one percent (n=50) of the respondents indicated that they would be interested in enrolling in an occupational therapy program at SVSU if offered. Those students who responded affirmatively, currently would have to attend one of the three programs offered downstate, a difficulty, if not impossibility, for those respondents who plan to commute, (55%).

Another potential source of occupational therapy students that was not surveyed, are those high school students who are planning to attend one of the existing Universities offering an occupational therapy curriculum. Discussions in the Spring semester of 1990 with Department Chairs and faculty student advisors of the respective programs, indicated that all three Universities: Western Michigan, Wayne State, and Eastern Michigan University, had more applicants than available spaces. It can be anticipated that there would be a number of students who may be planning on attending an occupational therapy program at one of the facilities offering the curriculum, who would, instead, attend SVSU due to the benefits of the campus location, size and other positive attributes SVSU offers.

### College Students.

College students who attended Saginaw Valley State University during the 1990 Winter Semester, were included in the student interest survey. Students were selected from

University departments which could provide prerequisite classes for an occupational therapy curriculum as well as potential students. These departments included: sociology, psychology, physical and health education and pre-medicine. Surveys were also distributed to two sections of anatomy and physiology students at Delta College. A total of 325 surveys were distributed with 272 returned, a response rate of eighty four percent (n=272).

College freshman composed the largest segment of the sample at thirty nine percent. Approximately eighty percent of the respondents indicated a specified major with eighty percent attending classes full time and eighty percent of the respondents commuting to the college. Of the students surveyed, fifty three percent stated an awareness of the personnel shortage in the Allied Health professions, with fifty three percent of the students also indicating an interest in a health professions career. When asked whether they would be interested in enrolling at SVSU if a program in occupational therapy were offered, thirty six percent (n=108) were undecided and twenty five percent indicated in the affirmative (n=67).

Of the undecided students, there were 191 individuals requesting further information on the profession. Inadequate knowledge of the field of occupational therapy as well as lack of an accessible program to the commuting students may be influencing the undecided population of students. A large segment of students surveyed, however, twenty five percent (n=67), indicated that they would be interested in enrolling in the proposed program of occupational therapy leading to a Bachelor of Science degree if offered by SVSU.

### Employers.

In order to adequately assess the demands of the community and the potential employability of the job market for occupational therapists in the catchment area, potential employers of occupational therapists were identified for inclusion in the survey. Occupational therapists are employed and practice in a variety of clinical and non clinical settings. Occupational therapists may be employed in the traditional acute care hospital, but may be also employed at home health care agencies, school districts, mental health settings, and rehabilitation facilities. Area hospitals, medical care facilities, community mental health agencies, and intermediate school districts located within the survey region were identified as potential employers of occupational therapists. A total of 128 surveys were mailed to facilities located within the catchment area. Seventy five surveys were returned for a response rate of fifty seven percent, (n=75).

Of the facilities responding sixty seven percent currently employed an occupational therapist with the average number of therapists at each facility being 2.9. Of the respondents, thirty eight percent contracted for occupational therapy services with 0.5 full time equivalents. Seventy percent of the respondents indicated that if sufficient occupational therapy personnel were available, they would employ occupational

therapists; fifty percent responding would contract for the services. For those facilities providing occupational therapy services, fifty nine percent (n=51) planned to expand the service within the next three years, while twenty nine percent were going to maintain the present level of service (see Figure 12). When questioned regarding the hiring of additional therapists, forty seven percent (n=40) of those surveyed anticipated hiring additional occupational therapists in the next three years with seventeen percent undecided. Twenty nine percent (n=25) anticipated contracting for additional therapy services with twenty eight percent undecided.

When queried as to the number of occupational therapists agencies anticipated hiring within the next three years, the average was 1.8 full time equivalents. The anticipated number of positions which will need to be replaced in the next three years due to attrition, retirement, etc., was also estimated by the facilities to average 1.8 therapists.

It is important to note, that over the past three years, forty three percent (n=37) of those facilities responding to the survey indicated that they had budgeted positions for occupational therapist unfilled due to lack of occupational therapists. The respondents indicated an average of 1.4 unfilled budgeted positions available over the past three years. Of the employers responding, thirty percent (n=26) also reported that they currently had unfilled budgeted positions available for occupational therapists.

Respondents to the survey indicated that if Saginaw Valley State University were to offer an occupational therapy program, there would be on the average 2.7 individuals at each agency who may be interested in enrolling in the curriculum. Based on the number of agencies responding to the survey, this provides an additional two hundred potential occupational therapy students. These individuals were not surveyed in the study and provide an additional untapped pool of potential students.

When questioned regarding potential resources for a proposed occupational therapy program at SVSU; seventy percent (n=60) identified their facilities as potential clinical sites for student internships and affiliations. Sixty five percent (n=56) indicated that their agency would provide future employment opportunities and thirty three percent (n=28) would have potential students. Sixteen percent (n=14) of the facilities indicated that they would provide financial assistance for students and two percent of the agencies would provide start-up program funds for the University.

In terms of personnel resources, ten percent of the respondents (n=9) would be willing to teach either full or part time at an occupational therapy program located at SVSU; nineteen percent indicated a willingness to guest lecture (n=16) with twenty three percent responding an interest in supervising student interns (n=20).

## TASK FORCE RESULTS

A task force group consisting of nine key representatives from various community agencies and health care facilities was formed to provide SVSU with information and input regarding the manpower needs of their facilities. An additional component of the task force meeting was to provide a forum for participants to share their perspectives regarding the benefits and difficulties that may be encountered in establishing a BSOT program at SVSU.

The Task Force Group met in the Spring of 1990 for an initial meeting which provided the members with information and data regarding the survey results, background, and history of the study. Task force members met in an informal, comfortable setting in the administration building of SVSU. This session was used to provide the task force members a forum to elicit their opinions, concerns and issues related to the development of a BSOT program.

Input provided by the task force members indicated that they were experiencing shortages in occupational therapy personnel which they believed was due to lack of adequate educational opportunities for prospective students in the area. This lack of educational programming exacerbated the current manpower shortage and geographical maldistribution of occupational therapists. Members of the task force group stated that due to the difficulties encountered in hiring occupational therapists, many of their respective facilities were unable to adequately provide comprehensive occupational therapy services to specific populations or areas.

Members also reported that many therapists, in addition to their primary or full time positions, were also working as independent contractors, or private practitioners, contracting with other facilities or agencies. The task force members indicated that occupational therapy is often under-utilized at many of the rural hospitals or facilities due to the shortage of therapists. Positions which should be staffed by registered occupational therapists are frequently filled by untrained aides or other unqualified personnel. Members also reported that many facilities when unable to fill vacant occupational therapy positions, either fail to offer the service or shift the burden of responsibility for delivery of the service to an existing department. This trend is frequently noted in home health agencies, nursing homes, and skilled nursing facilities. The consensus of the group was that utilization and employment of occupational therapy personnel would increase if a program were developed at SVSU to provide the manpower needed by the region.

The task force members agreed that there would be adequate training sites available for student interns and clinical affiliations in the region. The members also indicated that though many of the facilities currently had contracts with one or more of the existing occupational therapy educational programs in Michigan, students rarely interned at the

facilities since the majority of the students are from the lower third of Michigan. Students from "downstate" face the added difficulties of cost for housing, travel, and living expenses when interning at local institutions and agencies.

## **DISCUSSION**

Results of the three methods of data collection used in the study indicate that there is a substantial need for the development and implementation of an occupational therapy program leading to the degree of BSOT at Saginaw Valley State University.

Saginaw Valley State University is in a unique position to be able to provide area and regional health care and human service providers with a profession that has been undergoing dramatic growth due to a number of societal changes and needs. Because of the University's location in north central Michigan, Saginaw Valley State University can prepare students in occupational therapy to meet the demand for occupational therapists not only in the rural and northern regions of Michigan, but throughout the State.

The survey results and input from the task force group indicate that there are sufficient numbers of both high school and college level students for enrollment, as well as community and agency support and resources to support the program in occupational therapy. Employers have also indicated a strong demand and need for trained occupational therapy personnel, and indicate continued future employment opportunities for graduates. Correspondence and dialogue with the American Occupational Therapy Association also indicate their support for an additional occupational therapy program at SVSU to meet the special needs of the area. The results of this study indicate that there is a substantial need and interest for a BSOT program in this region offered by Saginaw Valley State University.

**To: SVSU FACULTY**

**From: Crystal Lange**

**Date: September 26, 1991**

**Re: PROPOSED OCCUPATIONAL THERAPY PROGRAM**

Given that the proposed program achieves faculty ratification and approval at the state level, the plan for implementation of the program includes the following phases:

1. Seek federal and foundation funding to support the first three years of start-up activities which includes course development for the O.T. courses of 51 credit hours. Based on 12 credit hours per semester load, this should be accomplished by the two proposed faculty.
2. Recruit sufficient numbers of students to assure that the 40 students per fall class will be available. The projected numbers of students entering SVSU as pre-OT and OT students could be expected to follow a pattern similar to the pre-nursing students. The numbers in pre-nursing and nursing are indicated below:

1977-78	245	1983-84	502
1978-79	309	1984-85	589
1979-80	291	1985-86	516
1980-81	356	1986-87	457
1981-82	356	1987-88	396
1982-83	465	1988-89	380
		1989-90	363
		1990-91	409

3. Recruit qualified faculty to staff the courses: Mr. Bracciano will complete the Ph.D. degree (within the current fall semester) there are 3-5 qualified individuals in the area who are interested in full time or part time teaching activities.

#### **SPECIAL NOTATION**

The occupational therapy program includes an internship and participant observation experiences; however, these experiences are on a preceptorship arrangement and do not include faculty presence in the clinical setting as the nursing program requires. Consequently, this program does not carry the low faculty:student ratio and high cost.

## OCCUPATIONAL THERPAY PROGRAM

## PROJECTED INCOME

Freshman Year 30 credit hours per student x 40 students x \$70	\$84,000
Sophomore Year 30 credit hours per student x 40 students x \$70	84,000
Junior Year 30 credit hours per student x 40 students x \$70	84,000
Senior Year 30 credit hours per student x 40 students x \$70	84,000
Total	\$336,000

$$124 \text{ SCH} \times \$70 = \$8,680 \times 40 = \$347,200$$

## INCOME DOLLARS BY YEAR OF PROGRAM

	Yr. 1	Yr. 2	Yr. 3	Yr. 4
Fresh. 1992	84,000	84,000	84,000	84,000
Soph. 1993		84,000	84,000	84,000
Jr. 1994			84,000	84,000
Sr. 1995				84,000
Totals	84,000	168,000	252,000	347,200



SAGINAW VALLEY STATE UNIVERSITY  
 LINE ITEM BUDGET  
 Period: September 1, 1992 to August 30, 1993  
 (OR FIRST YEAR OF IMPLEMENTATION)

BUDGET FOR YEAR ONE

Position	Base Salary	%Time
<b>I. PERSONNEL</b>		
1. Lange, Crystal Program Director		10 %
2. Bracciano, Alfred Program Coordinator and faculty member	45,000	100%
3. Fringe Benefits 27% of base salary	12,150	
5. Secretarial	3,938	25%
Sub-total	61,088	
<b>II. OFFICE OPERATIONS</b>		
1. Supplies	1,000	
2. Printing	2,000	
3. Telephone	1,200	
4. Postage	1,000	
<b>III. STAFF TRAVEL</b>	1,000	
<hr/>		
<b>V. TOTAL DIRECT COSTS</b>	<b>67,288</b>	

**Appendix K**  
**Level I Review of the Presidents' Council**

PCSCU Ref. No. \_\_\_\_\_  
OFFICE USE ONLY

Presidents Council  
State Colleges and Universities

ACADEMIC PROGRAM REVIEW

Program Information

New<sup>e</sup>

SAGINAW VALLEY STATE UNIVERSITY      OCCUPATIONAL THERAPY  
(Institution)      (Program Title)

FALL 1992      BSOT      \_\_\_\_\_  
(Effective Term & Year)      (Degree)      (HEGIS Code)

PROGRAM REVIEW STATUS:

☒ Submitted for initial review

☒ Stage I

\_\_\_\_\_ Stage II

\_\_\_\_\_ Resubmitted for follow-up review

\_\_\_\_\_ Previously reviewed (Ref. No. \_\_\_\_\_);  
resubmitted—change in curricu-  
lar approach

\_\_\_\_\_ Other

SUBMITTED FOR:

☒ Action<sup>e</sup>  
Information

LOCATIONS:

☒ Main Campus

\_\_\_\_\_ Existing outreach/extension  
sites

\_\_\_\_\_ New locations \_\_\_\_\_

\_\_\_\_\_ Principal clinical sites  
will be: \_\_\_\_\_

RESOURCES:

☒ Reallocation of existing resources

\_\_\_\_\_ New resources required

Source: \_\_\_\_\_ "Special Grant Funding"  
from the State

☒ Other (explain)  
FEDERAL PROJECTS

AUTHORIZATION OF NEW DEGREE LEVEL  
REQUIRED:

☒ within the institution

\_\_\_\_\_ within the discipline or  
field

STUDENTS:

☒ New target population

\_\_\_\_\_ Current enrollment shift

\_\_\_\_\_ Local Community demand

\_\_\_\_\_ Other (list) \_\_\_\_\_

AUTHORIZATION OF NEW DEGREE  
REQUIRED:

☒ within the institution

\_\_\_\_\_ within the discipline or  
field

ATTACH ADDITIONAL INFORMATION IN ACCORDANCE WITH THE GUIDELINES ON THE BACK.

From: DR. ROBERT P. VIEN      S.V.S.U.      3-1-91  
(Name/Title)      (Institution)      (Date)

<sup>e</sup> All New programs should be submitted for Action.

Guidelines for Submitting Additional Information/Data for A New Academic ProgramSTAGE I

A 1- or 2- page description of the proposed new program is needed. The description should indicate the purpose and character of the program and the ability of the institution to initiate it. Related programs within the institution and at other institutions should be identified and discussed.

STAGE II

1. RELATED PROGRAMS: Own/Other.
2. RATIONALE.
3. CURRICULUM DESIGN.
4. NEW COURSE DESCRIPTIONS.
5. PROJECTED ENROLLMENT.
6. SCHEDULING PLANS (Extension, Evening, Regular).
7. PROGRAM COSTS (Years 1, 2, and 3).
8. DESCRIPTION OF AVAILABLE/NEEDED EQUIPMENT.
9. FACULTY RESUMES (new master's and doctorate programs only)
10. PRR (if planned).
11. INTERNAL STATUS OF PROPOSAL.
12. PLANNED IMPLEMENTATION DATE.
13. LIBRARY AND OTHER LEARNING RESOURCES.
14. SPACE.
15. ACCREDITATION REQUIREMENTS.

Form Color Code: yellow.  
Revised 8/24/84  
(All Others are Obsolete)  
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**SAGINAW VALLEY STATE UNIVERSITY**  
**OCCUPATIONAL THERAPY PROGRAM**  
**INITIAL REVIEW STAGE I**

The proposed professional curriculum in occupational therapy is designed to prepare students for positions in occupational therapy at the entry level. The curriculum is designed to meet the American Occupational Therapy Association (AOTA) Essentials for the accreditation of educational programs. The proposed curriculum will provide a solid theoretical and clinical foundation to prepare graduates with the clinical skills necessary to be capable of assuming nontraditional roles in the health care delivery system. Pre-professional education will stress a broadening of the student's intellectual abilities and interests as well as general education and an exploration of attitudes and values. Courses in the biological, behavioral, and health sciences will emphasize structure and function of the human body along with the recognition of normal and abnormal conditions.

Students must successfully complete approximately fifty-one hours of pre-requisite classes prior to applying for admittance to the professional occupational therapy program. The professional courses will include scientific, theoretical and clinical dimensions with approximately 51 credit hours of course work.

Related programs within the institution include nursing, medical technology and physical and health education. A fully equipped

exercise physiology laboratory is available in the Ryder Center as well as the simulated clinical settings of the nursing program. Qualified faculty in these related programs will be a resource to the proposed program in occupational therapy.

Michigan has three universities offering entry level programs at the bachelors degree for occupational therapy: Wayne State University, Eastern Michigan University and Western Michigan University. Although demand for occupational therapists has increased dramatically over the past few years, there have been no new baccalaureate level programs in Michigan for over 41 years. Western Michigan first received accreditation in 1939, Eastern Michigan University was accredited in 1943, and Wayne State University obtained accreditation in 1948. Each of the three Occupational Therapy Programs in Michigan usually accept a maximum number of students annually into the respective curriculums. Two ach of the programs have reported that they have more applicants than positions available for the entry level program. Western Michigan accepts approximately forty students in the Fall Semester as undergraduates and an additional 24 students in Winter Semester. Western has approximately seventy to ninety students apply for the Fall Semester positions, and thirty five to forty five students apply for the Winter Semester class. Wayne Sate University accepts between thirty eight and forty students annually for the Fall Semester: however, recently they have had fewer qualified qualified candidates than positions, in spite of many applicants. Eastern Michigan University accepts

approximately forty two students annually for the Fall Semester, and an additional twenty five students for the Winter Semester. Eastern reports that they have between twenty five to fifty percent more applicants than positions available.

The AOTA has persistently called for the establishment of new and creative entry level educational programs to respond to the shortage of occupational therapists. To date there has been little action by higher education in Michigan in response to this identified need.

A recent feasibility study has demonstrated a need for such a program at Saginaw Valley State University.

The pages that follow present a summary of the feasibility study, the proposed curriculum design, projected faculty, and letters of support.



SUMMARY  
OF  
FEASIBILITY STUDY RELATED  
TO  
OCCUPATIONAL THERAPY  
AT  
SAGINAW VALLEY STATE UNIVERSITY

## **Feasibility Study For The Establishment Of An Occupational Therapy Curriculum At Saginaw Valley State University.**

### **Introduction**

Saginaw Valley State University (SVSU) was founded in 1963 to meet the higher education needs of the residents in east-central Michigan. SVSU has five primary colleges: the College of Business and Management, the College of Education, the College of Arts and Behavioral Sciences, the College of Science, Engineering and Technology, and the College of Nursing and Allied Health Sciences. The university offers a variety of baccalaureate degrees and selected masters degrees in fields which demonstrate a strong regional demand. The College of Nursing and Allied Health Sciences provides programs leading to baccalaureate degrees in nursing,(BSN), and medical technology; along with a masters degree in nursing,(MSN).

Saginaw Valley State University has a current enrollment of approximately 6000 students. Nearly one-half of the students attending SVSU are in the traditional age range with the other half being the older student preparing for occupational advancement or obtaining new skills in preparation for leadership roles in their community or workplace. Ninety percent of the students attending SVSU commute to the University with the majority of SVSU's students coming from the surrounding area.

In accordance with priorities established by the Office of Institutional Research and Planning, SVSU has demonstrated a commitment to develop and provide programs to meet the demands and needs of the surrounding communities and region. The Office of Institutional Research and Planning identifies the university service area as consisting of the sixteen counties of Alcona, Alpena, Arenac, Bay, Gladwin, Huron, Iosco, Lapeer, Midland, Montmorency, Ogemaw, Oscoda, Saginaw, St. Clair, Sanilac, and Tuscola.

In 1989, communication between the Michigan Occupational Therapy Association and the College of Nursing and Allied Health Science was established. This dialogue provided the College with initial information regarding the national shortage of occupational therapists, demographic data, educational requirements, and the perceived local and regional shortage of occupational therapists. To further determine the local and regional demand for occupational therapy personnel, the College of Nursing and Allied Health Sciences, undertook a comprehensive feasibility study. The purpose of this study was: to clarify and document the current and future demand for registered occupational therapists within the University's service area; to assess potential student interest in attending an occupational therapy program; and to determine the need for establishing an occupational therapy educational program at Saginaw Valley State University at the baccalaureate level. This report describes the process and findings of the feasibility study conducted for the proposed Bachelor of Science Degree in Occupational Therapy (hereafter the program will be addressed as "BSOT program").

### Purpose Of The Study

The purpose of this study was to conduct a comprehensive feasibility analysis that would provide decision makers with accurate information and data relevant to the development of a BSOT program at Saginaw Valley State University. The study was designed to assess the interest and demands of potential students for the program, and to evaluate the needs and resources of the University, regional health care providers and the community.

The population of this study included the identified constituent groups located within an area encompassing approximately the northern two thirds of the lower peninsula, and the eastern half of the upper peninsula of Michigan (see Figure 7). An imaginary line was drawn from Port Huron in the east, across to Flint and proceeding north to Traverse City, then directly across the upper peninsula. For the purpose of the study, three constituent groups were identified. The first two groups consisted of potential students. The student population was identified as high school students attending a health professions course at a regional Career Center; or college students currently attending SVSU or Delta College. The third group consisted of employers encompassing health care providers from area hospitals, community mental health agencies, intermediate school districts, and regional mental health facilities.

### Methods Of Data Collection

Three methods of data collection were used to assess the needs of area health care providers and to determine the interest of area students in attending the proposed program. These methods included: the group method, the survey method, and a review of demographic and health related statistical data and literature.

The task force group method of data collection, involved identifying and forming a resource base of individuals from the area encompassed by the geographical boundaries of the study. The task force consisted of eight members selected from the major constituent groups: mental health, school districts, hospitals, regional medical centers. The purpose of the task force group was to identify needs, resources and concerns relative to the proposed BSOT program.

The survey method of data collection involved the formulation of three survey instruments to assess the needs and interests of Employers (N=128), High School Students (N=360), and College Students (N=325). Each survey instrument was administered separately. The surveys consisting of a seven to fifteen item questionnaire, were distributed to the respective populations over approximately a six week period beginning in February 1990

The return rate varied from 67% for the high school students, 84% for the college students, and 57 % for employers.

The third method for collection of data involved review of demographic information, vacancy rate data, manpower statistics and health statistics related to the profession of occupational therapy. National, state and local statistics and data were reviewed to assist in determining trends relative to occupational therapy manpower and projections.

#### The Group Method:

To obtain information and to provide feedback regarding the proposed BSOT program, a task force consisting of eight key representatives from community agencies was identified. The members of the task force group were selected from each of the constituent groups surveyed, mental health, hospital or health care providers, school districts, and the university. These members were able to provide information regarding the role of their respective agencies or facilities, the manpower needs of their facilities, and resources available.

The following is a list of the membership and affiliation of the task force members:

Janet Nagayda, M.O.T., Lapeer Intermediate School District.  
 John DeFord, M.S.W., Huron County Mental Health.  
 Polly Dodick, O.T.R., St. Mary's Medical Center.  
 Jackie Roe, O.T.R., Caro Regional Center.  
 Tamara Doescher, M.S.A., O.T.R., Sanilac Intermediate School District.  
 Roy Wedge, M.O.T., Midland Regional Medical Center.  
 Cindi Batts, O.T.R., Mercy Hospital.  
 Dr. Jennifer Bridges, Saginaw Valley State University.

The designated members of the task force group were contacted by phone, in person, and by letter to request their participation. A formal letter was sent to each individual by the Dean of the College of Nursing and Allied Health Sciences confirming the appointment for the meeting. The meeting was kept informal to facilitate member input regarding a number of issues related to the completed survey results. The stated purpose of the meeting was to obtain feedback regarding development of a proposed occupational therapy educational program. Members were also questioned as to the specific needs of their respective facilities in regard to the provision of occupational therapy service, regional and local manpower needs, and potential resources for the development of field placement sites. Other topics discussed during the initial meeting included start-up funding, space and equipment requirements, availability of potential faculty, student recruitment and cooperative inter-agency training.

### The Survey Method:

The three surveys conducted for the purpose of this study included three groups: health care providers, prospective students currently enrolled at a college level, and prospective students from high schools currently attending a health careers or similar program. The following section will describe the procedures used for each of the three surveys. Procedures were followed to protect the subjects according to the criteria set by Saginaw Valley State University, and Western Michigan University's Human Subject Institutional Review Boards. Subjects were informed of the voluntary nature of their participation and the assurance of anonymity and confidentiality through inclusion of a letter of transmittal with each survey.

### Selection of Subjects.

Saginaw Valley State University is located within the Saginaw Valley District of the Michigan Occupational Therapy Association. SVSU serves the educational needs of the surrounding 9 counties which are contained within the Saginaw Valley District of the MOTA and are contiguous to the Northern District of the MOTA. Though the Northern District and Saginaw Valley District encompass the largest geographical area within the Michigan Occupational Therapy Association, they do not contain a program for the education or training of either occupational therapy assistants or registered occupational therapists. As the area serviced by SVSU encompassed areas of both the northern and central regions of the MOTA, a determination was made to survey individuals located in the geographical region bounded by Port Huron to the east; Flint to the south; Traverse City to the west; and encompassing the eastern half of the upper peninsula. (See Map)

#### 1. Survey of High School Students.

**Sampling Design:** A survey was conducted of high school students as potential candidates of the proposed occupational therapy program. Because of the large number of potential high school students located in the geographical region of the study, a cluster sampling of area career center based students was used. Students were selected from area career or vocational training centers who were currently attending courses in either Health Careers or Child Care Service programs.

The survey instrument was developed in association with the Research Division of the American Occupational Therapy Association (AOTA), and was pretested on five high school seniors and by four members of the Education Division of the AOTA. The pilot respondents suggestions and comments to the survey were incorporated in the revisions and additions to the final questionnaire.

**Procedure:** Questionnaires, accompanied by a letter of transmittal, were mailed to the teachers of each of the selected classes during the first weeks of the winter semester (January 1990). The course instructors were asked to administer the questionnaire during the course of their class time. The questionnaires were collected immediately by

the respective instructors. The voluntary nature of the students participation in the survey was explained by the instructor. Anonymity was also maintained by informing the students not to identify their questionnaires, by name, or by any other identifiable form. Students were provided with a prestamped postcard requesting further information regarding the profession of occupational therapy if desired.

## **2. Survey of College Students.**

The population for the college student survey were those students who were attending Saginaw Valley State University in the health education, introductory psychology, introductory sociology classes or were classified as being in a pre-medicine curriculum. Students in the introductory anatomy and physiology courses at Delta College were also selected for inclusion in the survey. Delta College is a community college located approximately five miles from the campus of Saginaw Valley State University. The college offers a number of two year health related programs such as nursing, dental assistant, physical therapy assistant, and operating room assistant. Delta College was chosen to participate in the survey because of the colleges health and human resource related programs. The college is also a "feeder" for SVSU for students who continue on for higher level education and preparation.

The survey instrument was reviewed by members of the Education Division of the AOTA and was developed and revised in conjunction with the Research Division of the American Occupational Therapy Association.

**Procedure:** Prior to the distribution of the survey instruments, telephone contacts were made to the five Department Chairmen of the respective programs explaining the survey content and intent, and to request approval for the distribution of the questionnaires by appropriate faculty. A total of 325 questionnaires, accompanied by a letter of transmittal, were distributed to the students in class during the first two weeks in February 1990. The course instructors were asked to administer the questionnaire during the first ten minutes of their class time. The voluntary nature of the questionnaire and the anonymity of the respondents was maintained by asking the students not to identify their questionnaires by name, or by any other identifiable form. Students were provided with a prestamped postcard requesting further information if desired. Instructors were asked to collect the questionnaires immediately after the students had completed filling them out. The completed surveys were then returned to the investigator by prestamped envelope.

## **3. Survey of Potential Employers**

The health care or educational agencies located within the defined catchment area of the study were identified as potential employers of the graduates of the proposed occupational therapy program. All agencies which employ occupational therapists and are listed in the Facilities Directory of the Michigan Hospital Association, the Michigan Department of Mental Health, or the Directory of Intermediate School Districts were included in this survey. A total of 128 different agencies and facilities were identified. The

types of agencies included hospitals, intermediate school districts, community health agencies, nursing homes, industry and mental health facilities.

**Instruments:** The questionnaire for the potential employers was formulated on the local, regional and national trends for occupational therapists, along with the issues and concerns raised by members of the MOTA and Saginaw Valley District. The questionnaire was developed and revised in conjunction with the Research Division of the American Occupational Therapy Association and the Education Division of the AOTA.

Questions addressed in the survey included:

1. Job status of occupational therapists.
2. Future employment plans of occupational therapists.
3. Projected expansion of programs and employment opportunities.
4. Types of resources the agency can provide for the proposed program.

**Procedure:** A total of 128 questionnaires, along with a letter of transmittal were mailed to each Director of Occupational Therapy or respective facility Administration in the identified agencies. A business return envelope was enclosed for returning the completed questionnaire. Questionnaires were mailed the last week of January 1990. The agencies were asked to return the questionnaires within three weeks.

The findings of the needs assessment of the three constituent groups, college students, high school students, and employers, will be discussed in the next section. The results and input of the Task Force Group will be reviewed in a subsequent section.

### Study Findings and Discussions:

#### High School Students.

Determination of high school student interest in the profession of occupational therapy is important in order to assist in identifying potential students who may enroll in the curriculum if it is offered.

High school instructors who taught either child care services programs or health career programs at sixteen area school districts were sent surveys to distribute to their respective students (N=360). High school students attending the above educational programs were selected for their perceived interest in a health care profession due to their enrollment in the health career courses. A total of 360 surveys were distributed to the sixteen facilities with 240 individuals responding, a sixty seven percent, 67%, response rate.

Of the survey respondents, (n=240), eighty six percent, (n=207), indicated enrollment in a health career course. The survey population was almost evenly divided among high

school juniors and seniors, forty three percent each. Of the students responding, eighty three percent of the high school students reported an interest in a health professions career, (n=207). Of the respondents, seventy five percent, (n=180), of the students indicated knowledge of the personnel shortage in the Allied Health professions.

Of those students who returned the survey, eighty eight percent of them indicated that they would be attending college within the next four years. Of that number, fifty five percent reported that they were planning to commute to a campus, with twenty two percent intending to live "on campus". Fifty three percent of the students planned to attend college full time, with forty three percent planning part time attendance. When asked whether students would be interested in enrolling in a proposed occupational therapy program at Saginaw Valley State University, twenty one percent, (n=50), indicated they would; while sixty percent, (n=145), were undecided. The number of undecided individuals would provide an important base for further potential students for recruitment purposes.

Of the undecided students it should be noted that there were 191 individuals who requested further information on the profession of occupational therapy. The majority of these individuals responded that they would consider enrolling in the proposed program in the future. These undecided individuals would be an important base of potential students to whom the university could market the program. This untapped pool of interested individuals constitutes an additional source of students that are unaccounted for in the survey results. It is anticipated that a portion of those reporting an interest would pursue a program of studies in occupational therapy if the program were offered.

The undecided high school students responding to the survey, may be in the process of establishing their career goals and may be uncertain of the scope and practice of occupational therapy. It should be noted that twenty one percent (n=50) of the respondents indicated that they would be interested in enrolling in an occupational therapy program at SVSU if offered. Those students who responded affirmatively, currently would have to attend one of the three programs offered downstate, a difficulty, if not impossibility, for those respondents who plan to commute, (55%).

Another potential source of occupational therapy students that was not surveyed, are those high school students who are planning to attend one of the existing Universities offering an occupational therapy curriculum. Discussions in the Spring semester of 1990 with Department Chairs and faculty student advisors of the respective programs, indicated that all three Universities: Western Michigan, Wayne State, and Eastern Michigan University, had more applicants than available spaces. It can be anticipated that there would be a number of students who may be planning on attending an occupational therapy program at one of the facilities offering the curriculum, who would, instead, attend SVSU due to the benefits of the campus location, size and other positive attributes SVSU offers.

### College Students.

College students who attended Saginaw Valley State University during the 1990 Winter



Semester, were included in the student interest survey. Students were selected from University departments which could provide prerequisite classes for an occupational therapy curriculum as well as potential students. These departments included: sociology, psychology, physical and health education and pre-medicine. Surveys were also distributed to two sections of anatomy and physiology students at Delta College. A total of 325 surveys were distributed with 272 returned, a response rate of eighty four percent (n=272).

College freshman composed the largest segment of the sample at thirty nine percent. Approximately eighty percent of the respondents indicated a specified major with eighty percent attending classes full time and eighty percent of the respondents commuting to the college. Of the students surveyed, fifty three percent stated an awareness of the personnel shortage in the Allied Health professions, with fifty three percent of the students also indicating an interest in a health professions career. When asked whether they would be interested in enrolling at SVSU if a program in occupational therapy were offered, thirty six percent (n=108) were undecided and twenty five percent indicated in the affirmative (n=67).

Of the undecided students, there were 191 individuals requesting further information on the profession. Inadequate knowledge of the field of occupational therapy as well as lack of an accessible program to the commuting students may be influencing the undecided population of students. A large segment of students surveyed, however, twenty five percent (n=67), indicated that they would be interested in enrolling in the proposed program of occupational therapy leading to a Bachelor of Science degree if offered by SVSU.

### Employers.

In order to adequately assess the demands of the community and the potential employability of the job market for occupational therapists in the catchment area, potential employers of occupational therapists were identified for inclusion in the survey. Occupational therapists are employed and practice in a variety of clinical and non clinical settings. Occupational therapists may be employed in the traditional acute care hospital, but may be also employed at home health care agencies, school districts, mental health settings, and rehabilitation facilities. Area hospitals, medical care facilities, community mental health agencies, and intermediate school districts located within the survey region were identified as potential employers of occupational therapists. A total of 128 surveys were mailed to facilities located within the catchment area. Seventy five surveys were returned for a response rate of fifty seven percent, (n=75).

Of the facilities responding sixty seven percent currently employed an occupational therapist with the average number of therapists at each facility being 2.9. Of the respondents, thirty eight percent contracted for occupational therapy services with 0.5 full time equivalents. Seventy percent of the respondents indicated that if sufficient occupational therapy personnel were available, they would employ occupational therapists; fifty percent responding would contract for the services. For those facilities

providing occupational therapy services, fifty nine percent (n=51) planned to expand the service within the next three years, while twenty nine percent were going to maintain the present level of service (see Figure 12). When questioned regarding the hiring of additional therapists, forty seven percent (n=40) of those surveyed anticipated hiring additional occupational therapists in the next three years with seventeen percent undecided. Twenty nine percent (n=25) anticipated contracting for additional therapy services with twenty eight percent undecided.

When queried as to the number of occupational therapists agencies anticipated hiring within the next three years, the average was 1.8 full time equivalents. The anticipated number of positions which will need to be replaced in the next three years due to attrition, retirement, etc., was also estimated by the facilities to average 1.8 therapists.

It is important to note, that over the past three years, forty three percent (n=37) of those facilities responding to the survey indicated that they had budgeted positions for occupational therapist unfilled due to lack of occupational therapists. The respondents indicated an average of 1.4 unfilled budgeted positions available over the past three years. Of the employers responding, thirty percent (n=26) also reported that they currently had unfilled budgeted positions available for occupational therapists.

Respondents to the survey indicated that if Saginaw Valley State University were to offer an occupational therapy program, there would be on the average 2.7 individuals at each agency who may be interested in enrolling in the curriculum. Based on the number of agencies responding to the survey, this provides an additional two hundred potential occupational therapy students. These individuals were not surveyed in the study and provide an additional untapped pool of potential students.

When questioned regarding potential resources for a proposed occupational therapy program at SVSU; seventy percent (n=60) identified their facilities as potential clinical sites for student internships and affiliations. Sixty five percent (n=56) indicated that their agency would provide future employment opportunities and thirty three percent (n=28) would have potential students. Sixteen percent (n=14) of the facilities indicated that they would provide financial assistance for students and two percent of the agencies would provide start-up program funds for the University.

In terms of personnel resources, ten percent of the respondents (n=9) would be willing to teach either full or part time at an occupational therapy program located at SVSU; nineteen percent indicated a willingness to guest lecture (n=16) with twenty three percent responding an interest in supervising student interns (n=20).

### **TASK FORCE RESULTS**

A task force group consisting of nine key representatives from various community agencies and health care facilities was formed to provide SVSU with information and input regarding the manpower needs of their facilities. An additional component of the task

force meeting was to provide a forum for participants to share their perspectives regarding the benefits and difficulties that may be encountered in establishing a BSOT program at SVSU.

The Task Force Group met in the Spring of 1990 for an initial meeting which provided the members with information and data regarding the survey results, background, and history of the study. Task force members met in an informal, comfortable setting in the administration building of SVSU. This session was used to provide the task force members a forum to elicit their opinions, concerns and issues related to the development of a BSOT program.

Input provided by the task force members indicated that they were experiencing shortages in occupational therapy personnel which they believed was due to lack of adequate educational opportunities for prospective students in the area. This lack of educational programming exacerbated the current manpower shortage and geographical maldistribution of occupational therapists. Members of the task force group stated that due to the difficulties encountered in hiring occupational therapists, many of their respective facilities were unable to adequately provide comprehensive occupational therapy services to specific populations or areas.

Members also reported that many therapists, in addition to their primary or full time positions, were also working as independent contractors, or private practitioners, contracting with other facilities or agencies. The task force members indicated that occupational therapy is often under-utilized at many of the rural hospitals or facilities due to the shortage of therapists. Positions which should be staffed by registered occupational therapists are frequently filled by untrained aides or other unqualified personnel. Members also reported that many facilities when unable to fill vacant occupational therapy positions, either fail to offer the service or shift the burden of responsibility for delivery of the service to an existing department. This trend is frequently noted in home health agencies, nursing homes, and skilled nursing facilities. The consensus of the group was that utilization and employment of occupational therapy personnel would increase if a program were developed at SVSU to provide the manpower needed by the region.

The task force members agreed that there would be adequate training sites available for student interns and clinical affiliations in the region. The members also indicated that though many of the facilities currently had contracts with one or more of the existing occupational therapy educational programs in Michigan, students rarely interned at the facilities since the majority of the students are from the lower third of Michigan. Students from "downstate" face the added difficulties of cost for housing, travel, and living expenses when interning at local institutions and agencies.

## **DISCUSSION**

Results of the three methods of data collection used in the study indicate that there is a

substantial need for the development and implementation of an occupational therapy program leading to the degree of BSOT at Saginaw Valley State University.

Saginaw Valley State University is in a unique position to be able to provide area and regional health care and human service providers with a profession that has been undergoing dramatic growth due to a number of societal changes and needs. Because of the University's location in north central Michigan, Saginaw Valley State University can prepare students in occupational therapy to meet the demand for occupational therapists not only in the rural and northern regions of Michigan, but throughout the State.

The survey results and input from the task force group indicate that there are sufficient numbers of both high school and college level students for enrollment, as well as community and agency support and resources to support the program in occupational therapy. Employers have also indicated a strong demand and need for trained occupational therapy personnel, and indicate continued future employment opportunities for graduates. Correspondence and dialogue with the American Occupational Therapy Association also indicate their support for an additional occupational therapy program at SVSU to meet the special needs of the area. The results of this study indicate that there is a substantial need and interest for a BSOT program in this region offered by Saginaw Valley State University.

### SUMMARY AND CONCLUSIONS:

The College of Nursing and Allied Health Sciences at Saginaw Valley State University undertook a feasibility study in January 1990, to determine the need for an occupational therapy program leading to a Bachelor of Science degree (BSOT). The purpose of the study was to conduct a comprehensive feasibility analysis in order to assess both the demand for occupational therapists in the region, and to determine student interest in attending the proposed program. The study was conducted contiguous to and within the geographical region encompassed by the Saginaw Valley District and the Northern District of the Michigan Occupational Therapy Association. The geographical boundaries for the study included the area north and east of a line drawn from Port Huron to Flint, angling to Traverse City and included approximately the eastern half of the Upper Peninsula.

In conjunction with the Education Division of the American Occupational Therapy Association and the Research Division, it was determined that a comprehensive study for the development of a program should assess the interest and demands of potential students, as well as those of employers. In addition, the study addressed the factors and demands related to the other constituent groups involved such as consumers and the university.

The study employed three methods of data collection. These methods included the survey, review of demographic and manpower data, and the group task force. The data collected by these methods were then analyzed and reviewed to determine the feasibility of establishing an occupational therapy program.

The Survey Method of data collection consisted of the development of separate surveys for three constituent groups: the High School Student (N=360), the College Student (N=325) and the Employers (N=128). Each survey was administered separately. The surveys consisted of a self administered, seven to fifteen item questionnaire which were distributed to each population sample. The survey instruments were developed and pretested in association with the Research Division of the American Occupational Therapy Association. The response rate for each sample was fifty seven percent for the employers, sixty seven percent for the high school students and eighty four percent for the college students.

Analysis of the survey results indicated that twenty one percent of the high school students surveyed (n=50) would be interested in enrolling in an occupational therapy program at SVSU; sixty percent, (n=145), were undecided. Of the college students surveyed, twenty five percent of the respondents (n=67) indicated an interest in enrolling in a proposed occupational therapy program at SVSU; thirty six percent (n=108) were undecided. Of the undecided individuals, 191 respondents requested further information regarding occupational therapy and educational requirements.

Review of the employer survey indicated that fifty nine percent (n=51) of the agencies responding planned to expand the service in the next three years. Forty seven percent (n=40) of the employers responding indicated that they planned to hire additional occupational therapists in the next three years with the average number of additional staff being 1.8. An additional twenty nine percent (n=25) anticipated contracting for additional occupational therapy personnel. At the time of the survey thirty percent of the facilities (n=26), reported that they currently had unfilled budgeted positions available for occupational therapists. In the past three years, forty three percent of the facilities responding, (n=37), had budgeted positions for occupational therapists unfilled due to a lack of therapists. Respondents indicated an average of 1.4 unfilled budgeted positions available over the past three years.

Review of the task force group results, consisting of key representatives from various community agencies and health care facilities, indicated strong support for the development of an occupational therapy program at SVSU. Committee members described local and regional shortages of qualified occupational therapy personnel exacerbated by the geographical maldistribution of occupational therapy students and present educational programs. The task force concluded that utilization and employment of occupational therapy personnel would increase if a program of study were developed at SVSU to provide the manpower needed by the region.

Analysis and review of the literature included the identification of demographic, health related statistics and manpower data relative to the profession of occupational therapy. Results of the data collection methods indicated that there is a strong demand for occupational therapists with a continued shortage projected through the decade. AOTA estimates the current shortage to stand at twenty five percent nationally. Regional and practice areas indicate a shortage varying between fifteen and forty one percent. Using the twenty five percent figure as the national average makes the current shortfall of therapists to be at approximately 9,400.

Review of current educational programs for occupational therapy reveal three Universities offering entry level baccalaureate education, Wayne State University, Eastern Michigan University and Western Michigan University. There has not been a new baccalaureate level program accredited by the AOTA in Michigan in over 41 years. Dialogue with area health care facilities and the existing educational therapy programs indicate that students attending the programs are from the geographical regions served by the existing universities, and tend to intern and practice in the same geographical region.

#### **SUMMARY:**

Review and analysis of the feasibility study conducted by the College of Nursing and Allied Health Science, indicate that there is a substantial need and interest for the development and implementation of an occupational therapy program leading to the degree of BSOT at Saginaw Valley State University. Survey results and input from community members demonstrate strong regional support for the proposed program.

There is a large pool of high school and college students who would be interested in attending the proposed program. In addition there are resources and support available for the program within the health care community and the surrounding region. The American Occupational Therapy Association has also indicated their support and assistance in developing and implementing an educational program at SVSU to meet the regional manpower demands for the profession.

The results of the feasibility study undertaken by SVSU's College of Nursing and Allied Health Science, indicate that there is a substantial need and interest in an occupational therapy educational program offered at the university.

•

**OCCUPATIONAL THERAPY  
PROPOSED  
CURRICULUM DESIGN**



## SUGGESTED SEQUENCE OF CLASSES PRE-PROFESSIONAL PROGRAM

A course marked with an \*, denotes a prerequisite class required for admission to the professional occupational therapy curriculum.

### Freshman Year:

#### FALL SEMESTER

*Math 130	Biostatistics	4 cr.
*English 111	Elements of Composition I	3 cr.
Biology 220	Principles of Biology	4 cr.
Psychology 100	General Psychology	4 cr.

Total: 15 cr.

#### WINTER SEMESTER

*English 112	Elements of Composition II	3 cr.
*Psychology 210	Applications in Human Development	4 cr.
*Philosophy 260	Ethics in Health Professions	3 cr.
*Chemistry 111	General Chemistry Lecture	4 cr.
*Chemistry 111L	General Chemistry Laboratory	1 cr.

Total: 15 cr.

#### SPRING/SUMMER SEMESTER

To satisfy the SVSU requirements in general education, students must select electives in the areas of: Literature, 3 cr.; Communication, 3 cr.; and International Perspectives, 4 credits.

Total: 10 cr.

Sophomore Year:**FALL SEMESTER**

*Art 210	Introduction to Crafts	3 cr.
Sociology 211	Principles of Sociology	3 cr.
Psychology 370	Theories of Personality	3 cr.

Total: 9 cr.

**WINTER SEMESTER**

*Occupational Therapy 200	Orientation to Occupational Therapy	1 cr.
*Biology 231	Physiological Anatomy	4 cr.
*Psychology 372	Abnormal Psychology	3 cr.
*Psychology 346	Neuropsychology	4 cr.

Total: 12 cr.

**TOTAL CREDIT HOURS PREREQUISITES: 51**

Following successful completion of the prerequisite classes with a GPA of no less than 2.5, students may apply for admission to the professional program in occupational therapy.

# **OCCUPATIONAL THERAPY PROFESSIONAL CURRICULUM SUGGESTED SEQUENCE OF CLASSES**

## Junior Year:

### **FALL SEMESTER**

PHE 375	Kinesiology	3 cr.
PHE 375L	Kinesiology Lab	1 cr.
PHE 376	Physiology of Exercise	3 cr.
PHE 376L	Physiology of Exercise Lab	1 cr.
OT 308	Medical Terminology & Documentation	2 cr.
OT 302	Therapeutic Use of Activities	3 cr.

**Total Credit Hours 13**

### **WINTER SEMESTER**

OT 320	Pediatric Occupational Therapy	3 cr.
OT 322	Neurological Conditions	1 cr.
OT 326	Occupational Therapy in Orthopedics	2 cr.
OT 328	Clinical Conditions	3 cr.
OT 350	Occupational Therapy Treatment of Physical Disabilities	5 cr.

**Total Credit Hours 14**

## Senior Year:

### **FALL SEMESTER**

PHE 445	Motor Learning	3 cr.
OT 420	Occupational Therapy in Psychiatry	3 cr.
OT 400	Foundations of Occupational Therapy Practice	3 cr.
OT 422	Therapeutic Adaptations and Technology for the Handicapped	3 cr.

**Total Credit Hours 12**

**WINTER SEMESTER**

<b>OT 450</b>	<b>Occupational Therapy Treatment in Psychiatry</b>	<b>5 cr.</b>
<b>OT 430</b>	<b>Clinical Research</b>	<b>3 cr.</b>
<b>MGT 321</b>	<b>Organization and Administration</b>	<b>4 cr.</b>

**Total Credit Hours 12**

**SPRING SEMESTER**

<b>QT 450</b>	<b>Internship I--Mental Health</b>	<b>6 cr.</b>
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**SUMMER SEMESTER**

<b>OT 460</b>	<b>Internship II--Physical Disabilities</b>	<b>6 cr.</b>
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**CREDIT HOURS:**

**12 Credits Internship**  
**51 Professional Curriculum Credits**  
**37 Pre-Occupational Therapy Prerequisites**  
**14 Required Course Prerequisites**  
**10 Electives**

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**Total Credit Hours 124**

The following courses are proposed for the professional curriculum:

(PHE 375,375L; PHE 376,376L; PHE 445; and MGT 321 are currently listed in the SVSU Catalog)

### PROFESSIONAL COURSES

**PHE 375- Kinesiology 3 Cr.**

This course is designed to acquaint the student with the structure and mechanical functions of the musculoskeletal system. Prerequisite: Biology 231.

**PHE 375L- Kinesiology Laboratory 1 Cr.**

Experiments related to topics covered in PHE 375. Corequisite: PHE 375.

**PHE 376- Physiology of Exercise 3 Cr.**

An examination of the scientific basis of physical performance, including physiological responses and adaptations of the organs and systems of the body during the stress of muscular activity. Prerequisite: BIOL 231.

**PHE 376L- Physiology of Exercise Laboratory 1 Cr.**

Experiments related to topics covered in PHE 376. Corequisite PHE 376.

**PHE 445- Motor Learning 3 Cr.**

Neuropsychological approach to motor behavior that involves the study of the perceptual components as well as the motor components of human movement. Specific areas of study will be learning and memory, learning and behavior, acquisition of motor skills, conditions affecting motor skills, acquisition such as practice, feedback, transfer or learning. Prerequisite PHE 375 and PHE 376.

**OT 302- Medical Terminology and Documentation 2 Cr.**

This course will introduce the OT student to the use of medical terminology, elements of effective communication in interpersonal relationships, problem solving techniques, information gathering techniques (observation, documentary search, interview, questionnaires), professional documentation, and learning-teaching approaches. The interaction and use of these techniques for appropriate professional communication is emphasized.

**OT 308- Therapeutic Use of Activities 3 Cr.**

This course will explore the role of activity in influencing change in human performance. Task analysis and use of activities as treatment modalities will be utilized as will studies in analyzing specific activities with practical application. Prerequisite ART 210.

**OT 200- Orientation to Occupational Therapy Practice 1 Cr.**

An introduction to occupational therapy practice, the history of the profession, current professional roles, issues and trends, the referral process, treatment sequence, ethics, liability, standards of practice. Emphasis on interviewing skills and therapeutic relationships. Clinical experience will be scheduled to offer observations and development of therapeutic skills.

**OT 422- Therapeutic Adaptations and Technology for the Handicapped 3 Cr.**

This course will consist of the analysis, design and construction of adapted equipment to facilitate daily living skills in the disabled individual. Adaptations and alternatives, use of adapted and augmentive technology, computers and environmental controls. Environmental planning and clinical reasoning to restructure the physical environment to assist with self care, work, play and leisure activities will be emphasized.

**OT 320- Pediatric Occupational Therapy 3 Cr.**

Theories and principals of therapeutic intervention for clients from birth to age 18. Child growth and development (normal and abnormal), congenital and acquired condition and diseases of childhood. Evaluation techniques for the areas of perceptual motor, psycho-social, cognitive, fine and gross motor development, language and adaptive skills. Review of legislation and guidelines mandating provision of related services in the public schools. Educational terminology, roles and functions of the occupational therapist in the educational setting.

**OT 322-      Neurological Conditions      1 Cr.**

A study of functional neurology and the conditions seen in occupational therapy practice. Etiology, symptomatology and sequelae of neurological conditions and functional deficits resulting from disease or injury are studied.

**OT 326-      Occupational Therapy in Orthopedics      2 Cr.**

A study of the orthopedic conditions encountered by occupational therapists. Etiology, assessment, management and treatment of orthopedic conditions will be reviewed. Clinical experience presenting functional treatment approaches to orthopedic condition, emphasis on hand evaluation, treatment and splinting will be scheduled.

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**OT 328-      Clinical Conditions in Occupational Therapy Treatment      3 Cr.**

Study of the musculo-skeletal, neurological and neuro muscular systems, and selected physical pathological conditions of adulthood and the aged treated in occupational therapy practice. Emphasis placed on normal and abnormal function as they relate to occupational performance over the lifespan.

**OT 420-      Occupational Therapy in Psychiatry      3 Cr.**

Review of the etiology, symptomatology and functional sequelae of major psychiatric disorders treated in occupational therapy practice. Review of psychopathology, theoretical frames of reference, evaluation, treatment and management of psychiatric and developmentally disabling conditions.

**OT 350-      Occupational Therapy Treatment of Physical Disabilities      5 Cr.**

Evaluation and basic treatment principles for neurology, orthopedic, traumatic and degenerative conditions. Analysis, evaluation, theories and concepts of occupational therapy treatment as they relate to the current problems of the physically disabled. Current therapeutic approaches to treatment planning, documentation and reporting. Development of skills in evaluation and formulation of treatment planning and implementation. Development of skills in joint range of motion, muscle testing, sensory evaluation, assessment tools and applications of occupational therapy treatment. Preceptorship in hospitals or other health care facilities for clinical education in evaluation and treatment of individuals with a physical disability.

**OT 450- Occupational Therapy Treatment in Psychiatry 5 Cr.**

Principles of psychiatric occupational therapy practice in the evaluation and treatment of individuals with developmental disabilities or psycho-social dysfunction. Review of psychopathology and theoretical frames of reference in occupational therapy intervention and treatment. Emphasis on assessment, treatment planning and task analysis, implementation, use of self and groups, community resources and use of activity as therapeutic tools. Clinical reasoning and experiential learning emphasizing individual client assessment, treatment planning, professional communication and documentation. A preceptorship in occupational therapy mental health treatment programs to gain clinical experience in assessment, evaluation, conditions and treatment of individuals with developmental disabilities or psychiatric conditions.

**OT 400- Foundations of Occupational Therapy Practice 3 Cr.**

Overview of the frames of reference, models and theories used to integrate the practice of occupational therapy. Review of biomechanical/neurodevelopmental/rehabilitative approach, Model of Human Occupation, and occupational performance will be presented and discussed. Examination of the theoretical constructs used in the various models of practice, concepts integral to the understanding and use of human occupation as a basis for occupational therapy practice will be emphasized. Current practice issues will be examined.

**OT 430- Clinical Research 3 Cr.**

A review and examination of methods of scientific inquiry and empirical techniques and research with the emphasis on occupational therapy. Review of the research process: problem definition, literature review, research design and data collection, analysis and interpretation and research reporting. Research, evaluation and development of research proposal. Emphasis of coursework on understanding and interpreting findings and their implications for occupational therapy clinical practice.

**MGT 321 Organization and Administration 4 Cr.**

The study of formal organizations and administration processes necessary for organizational effectiveness. The emphasis is upon understanding the effects of management principles; executives' roles and organizational structure; management information systems; and social, political, economic and international influences. Prerequisite: Junior standing.



**OT 450- Internship I--Mental Health 6 Cr.**

Three month full time clinical experience in an approved occupational therapy community mental health treatment program. Fieldwork done under the clinical supervision of an occupational therapist provides an opportunity for the student to assume progressive responsibilities in the treatment and management of patients. Three months of clinical internship must be completed on a full time basis.

**OT 460- Internship II--Physical Disabilities 6 Cr.**

A three month full time clinical experience in an approved occupational therapy center emphasizing treatment of individuals with physical disabilities. Students will conduct evaluation and treatment, management of assigned caseload of clients of varying ages and disabilities under clinical supervision.

**OT 470- Advanced Internship Elective 1-6 Cr.**

Two or three months of supervised practice in an area of occupational therapy supervision. Requires successful completion of OT 450 and OT 460.

**OT 499- Selected Topics in Occupational Therapy 1-6 Cr.**

Selected topics related to occupational therapy and the profession of occupational therapy.

Upon successful completion of the two required internship experiences and all coursework, the student is awarded the bachelor of science degree in occupational therapy. The student is then eligible to take the American Occupational Therapy Association Certification Board's certification examination. Passing of the certification examination qualifies the student to become registered as an occupational therapist and to use the title O.T.R., (Occupational Therapist Registered).

**PROJECTED FACULTY  
FOR  
OCCUPATIONAL THERAPY**

(Letters of intent to apply and resumes have been submitted)

- 1) Alfred Bracciano, OTR, M.A., Ph.D. Candidate
- 2) Roy Wedge, M.S., OTR
- 3) Tamara Doescher, OTR, MSA
- 4) Naomi M. Jack, OTR, MBA
- 5) Janet Nagayda, OTR, MS.

Appendix L

Joint Committee Standards as Applied at  
Saginaw Valley State University

The Joint Committee on Standards for Educational Evaluation  
Standards for Evaluations of Educational Programs,  
Projects, and Materials

The Standards for Evaluations of Educational Programs,  
Projects, and Materials guided the development of this:  
design

To interpret the information provided on this form, the reader  
needs to refer to the full text of the standards as they appear in  
Joint Committee on Standards for Educational Evaluation, Standards  
for Evaluations of Educational Programs, Projects, and Materials.  
New York: McGraw-Hill, 1981.

Operational Matrix for Occupational  
Therapy Program Development

A: Utility Standards

The utility standards are intended to ensure that an evaluation  
will serve the practical information needs of given audiences.

Standard

A1--Audience Identification. Audiences involved in or affected  
by the evaluation should be identified, so that their needs can be  
addressed.

How the standard was met:

Individuals and constituent groups likely to be impacted by  
the proposed study were identified within the service area of the  
university. Input and recommendations were obtained from the  
American Occupational Therapy Association regarding survey popula-  
tions and survey format. A Saginaw Valley State University (SVSU)

Task Force Committee was convened, consisting of key representatives from area health care agencies, service delivery facilities, and educators. Meetings were scheduled on a consistent basis with the Dean of the College of Nursing and Allied Health Sciences to insure continued and appropriate input, design, and implementation of the data collection relative to the tenants of the study. Input and recommendations were obtained from additional audiences and departments as needed during the course of the study to respond to their needs and concerns regarding the proposal and curriculum.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: Additional members from other university departments could have been involved on the SVSU Task Force Committee to insure their respective input and concerns in a more timely fashion. However, increasing the size of the SVSU Task Force may have made the effectiveness of the committee more difficult due to the limitations inherent in obtaining consensus within large groups.

A2--Evaluator Credibility. The persons conducting the evaluation should be both trustworthy and competent to perform the evaluation, so that their findings achieve maximum credibility and acceptance.

How the standard was met:

A review of social indicators and a thorough review of the literature were completed prior to the design and implementation of the study. Supporting data and input were obtained from appropriate federal, state, and local institutions in order to ensure the credibility of the study.

Appropriate constituent groups were involved in the design and refinement of the survey instruments and curriculum with consistent meetings and contacts with the group and key individuals.

The evaluation plan and results were reviewed by the director and staff of the Research Division of the American Occupational Therapy Association (AOTA) as well as by the Education Division of the AOTA. In addition, the SVSU Occupational Therapy Task Force Committee reviewed the study during various stages of the program's development.

Alternative evaluation procedures were considered during the initial planning of the evaluation but were not deemed to be as effective in obtaining the required information.

Consistent input and feedback were obtained from appropriate key individuals and constituent groups throughout the formulation of the program with necessary revisions made as needed.

Meetings, communications, and feedback were provided on a structured and unstructured basis throughout the course of the program through the use of letters, phone contacts, meetings, memorandums, and other methods.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: Additional meetings could possibly have been scheduled with the SVSU Task Force Committee, thereby reducing the number of phone contacts, correspondence, and other time consuming methods of communication. However, the difficulties inherent in the travel and associated costs in terms of lost working hours, etc., were considered prohibitive in this regard.

A3--Information Scope and Selection. Information collected should be of such scope and selected in such ways as to address pertinent questions about the object of the evaluation and be responsive to the needs and interests of specified audiences.

How the standard was met:

Audience identification was clarified prior to initiation of the study. Survey questions were designed in association with the Research and Evaluation Division of the American Occupational Therapy Association as well as with the Education Division of the AOTA. Questions, population, and survey format were designed to assess the interests and demand for potential students and employers. Appropriate data collection, analysis, interpretation, and reporting were finalized with the Department of Nursing and Allied Health Sciences from SVSU.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

A4--Valuational Interpretation. The perspectives, procedures, and rationale used to interpret the findings should be carefully described, so that the bases for value judgment are clear.

How the standard was met:

Interpretation of study findings were reviewed and interpreted by the examiners as well as the SVSU Task Force Committee, and the American Occupational Therapy Association. Employer results and manpower data were compared to existing national data to determine significance and meaning. Curriculum was reviewed by the SVSU Task Force, Nursing Curriculum Committee, and faculty, as well as the

American Occupational Therapy Association.

Review and valuation of the project were achieved through the use of input and support of various constituent groups including regional, state, and national bodies.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

- A5--Report Clarity. The evaluation report should describe the object being evaluated and its context and the purposes, procedures, and findings of the evaluation, so that the audiences will readily understand what was done, why it was done, what information was obtained, what conclusions were drawn, and what recommendations were made.

How the standard was met:

Formal written reports were supplemented by scheduled meetings and sessions with involved constituent groups and participants to ensure continued feedback and input throughout the process. Oral presentations with various constituent groups were also scheduled. Presentations and reports included clear and appropriate graphs and handouts. An executive summary and abstract were included along with appendices.

Clarification of technical terms, focus of the evaluation, and contextual information were provided in appropriate description to meet the technical sophistication of the audience. The report was reviewed by the College of Nursing and Allied Health, SVSU; President's Committee, SVSU, American Occupational Therapy Association, Research and Education Divisions; and the SVSU Task Force.



Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

A6--Report Dissemination. Evaluation findings should be disseminated to clients and other right-to-know audiences so that they can assess and use the findings.

How the standard was met:

• Appropriate audiences were identified and involved from the outset of the study. Constituent groups' input and review were achieved through consistently scheduled meetings and forums during which time appropriate information was disseminated. Draft reports were reviewed on a consistent basis with SVSU's College of Nursing and Allied Health to ensure appropriate and clear objectives, terminology, data, and analysis relevant to their needs and goals.

Results of the study, survey data, and information were disseminated to involved parties through scheduled meetings, forums, and oral presentations. In addition to the final text, the report included a summary of the data and recommendations, as well as an abstract of the study. These additional methods were used in various meetings and forums to disseminate relevant data.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

A7--Report Timeliness. Release of reports should be timely, so that audiences can best use the reported information.

How the standard was met:

Prior to the initiation of the study, a timetable was established providing an outline for the researchers to organize the body of the work. Examination and review of the audience's needs with revision of the timetable as appropriate was routinely done throughout the study.

Abstracts of the study were used to provide decision makers with data and information the university required prior to completion of the formal document.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

A8--Evaluation Impact. Evaluations should be planned and conducted in ways that encourage follow-through by members of the audiences.

How the standard was met:

Prior to the initiation and implementation of the study, data and information demonstrating the need for a program of study at SVSU were provided to key decision makers. Follow-up contacts and meetings were scheduled to disseminate this information in a structured and consistent fashion. Throughout the course of the study, feedback and input of appropriate key individuals and constituent groups were actively sought and facilitated through meetings, forums, and correspondence.

Study results, suggestions, and recommendations were provided to key administrative groups from SVSU as well as key constituent groups on a local, state, and national level. Formal hearings on the study and proposals were scheduled at SVSU and at the state

level. Complete study results and recommendations were forwarded to existing occupational therapy educational programs at Wayne State University, Eastern Michigan University, and Western Michigan University to obtain their input. A final draft of the completed report was also forwarded to the Education Division and Research and Evaluation Division of the American Occupational Therapy Association. Recommendations and clarification of information and data were incorporated into revised drafts of the final document.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

#### B: Feasibility Standards

The feasibility standards are intended to ensure that an evaluation will be realistic, prudent, diplomatic, and frugal.

##### Standard

B1--Practical Procedures. The evaluation procedures should be practical, so that disruption is kept to a minimum, and that needed information can be obtained.

How the standard was met:

Data were collected from the geographic catchment area encompassed by the service area of SVSU and the region covered by the Saginaw Valley District and the Northern District of the Michigan Occupational Therapy Association. Design of the data collection instruments, design and practicability of the data collection schedule, and techniques were reviewed by appropriate representatives

from within SVSU and externally by the AOTA Research and Evaluation Division and the SVSU Occupational Therapy Task Force.

Alternative procedures and contingencies were developed in anticipation of potential limitations of the evaluation procedures.

Judgment regarding the standard: Met.

Concerns regarding the standard: A second mailing to those facilities and individuals who did not respond could have been used to increase the number of respondents. However, cost and time factors limited the possibility of a second mailing.

Recommendations: None.

B2--Political Viability. The evaluation should be planned and conducted with anticipation of different positions of various interest groups so that their cooperation may be obtained, and so that possible attempts by any of these groups to curtail evaluation operations or to bias or misapply the results can be averted or counteracted.

How the standard was met:

Special interest groups and individuals with a vested interest in the program results were contacted prior to the development and initiation of the study. A task force of key individuals was identified and met to provide a forum for feedback and recommendations. Meetings and contacts were scheduled on a consistent basis to allow for input and dissemination of data and progress regarding the program. Constituent groups were informed through the dissemination of appropriate graphs, charts, summaries, abstracts, and draft reports.

Potential political conflicts and special interest groups were identified. Special methods of addressing their respective concerns

were delineated and implemented throughout the course of the program development.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: Additional committees and task force members could have been involved in the program development. However, the cost benefit ratio would have become increasingly prohibitive.

• B3--Cost Effectiveness. The evaluation should produce information of sufficient value to justify the resources extended.

How the standard was met:

Cost of materials and services were identified along with budget projections and future costs and trends. Benefits of the program development were outlined both internally, at the university level, as well as, externally, to the constituent groups.

The evaluation and program development costs were kept at an economically appropriate level within the guidelines of the university. External funding of the program development and evaluation process was considered and implemented.

Judgment regarding the standard: Met

Concerns regarding the standard: None.

Recommendations: Procurement of external funding for the initial data collection portion of the program might have facilitated quicker program development through increased commitment of resources.

## C: Propriety Standards

The propriety standards are intended to ensure that an evaluation will be conducted legally, ethically, and with due regard for the welfare of those involved in the evaluation as well as those affected by its results.

### Standard

- C1--Formal Obligation. Obligations of the formal parties to an evaluation (what is to be done, how, by whom, and when) should be agreed to in writing, so that these parties are obligated to adhere to all conditions of the agreement or formally to renegotiate it.

How the standard was met:

Prior to implementation of the project, an agreement between the Department of Nursing and Allied Health Sciences of Saginaw Valley State University and the primary investigator was developed. The agreement outlined roles, responsibilities, evaluation objectives, and questions to be investigated. This contract was reviewed and revised in association with Western Michigan University's Department of Educational Leadership. Timelines, reporting plans, and data collection and analysis procedures were identified and articulated prior to initiation of the program.

External review of the responsibilities and role of the researcher was achieved by consulting with the American Occupational Therapy Association, Division of Research and Evaluation.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

C2--Conflict of Interest. Conflict of interest, frequently unavoidable, should be dealt with openly and honestly, so that it does not compromise the evaluation processes and results.

How the standard was met:

Prior to development or implementation of the evaluation procedures, potential sources of conflict of interest were identified and discussed between involved parties. Methods of limiting sources of conflict were delineated and addressed throughout the evaluation.

Data results and recommendations were released publicly for review and input of independent evaluators. Program development and reports were disseminated to the American Occupational Therapy Association, Education Division and the Research Division for their input and suggestions. Drafts of the final report and abstracts of the data were forwarded to the Occupational Therapy Departments of Eastern Michigan University and Western Michigan University, as well as Wayne State University. Constituent groups and university departments were asked to provide feedback and input in regard to the program development.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

C3--Full and Frank Disclosure. Oral and written evaluation reports should be open, direct, and honest in their disclosure of pertinent findings, including the limitations of the evaluation.

How the standard was met:

Reporting of evaluation results and program development was public, with a full disclosure of all data. Pertinent findings and

results were made without omissions or alterations. Information and findings were made public locally, at a regional or state level, and nationally by review of evaluation and program data and results by external agencies and evaluators. These external sources included: the American Occupational Therapy Association, Wayne State University, Eastern Michigan University, Western Michigan University, SVSU Occupational Therapy Task Force, SVSU Nursing faculty, SVSU Nursing and Allied Health Science Curriculum Committee, and the Committee of State University Presidents.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

C4--Public's Right to Know. The formal parties to an evaluation should respect and assure the public's right to know, within the limits of other related principles and statutes, such as those dealing with public safety and the right to privacy.

How the standard was met:

An initial agreement with SVSU prior to the initiation and implementation of the evaluation regarding roles and functions of the researcher and university, identification of appropriate audiences for interim and final reports, authority and methods of editing reports, and timelines for report results and information was outlined and discussed.

Reports, drafts, and summaries were provided to constituent groups internally and externally. Full disclosure of the objectives, data, and information was provided throughout the course of the project.



Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

C5--Rights of Human Subjects. Evaluations should be designed and conducted so that the rights and welfare of the human subjects are respected and protected.

How the standard was met:

• Data collection instruments and techniques were reviewed internally by involved SVSU departments and externally by the American Occupational Therapy Association. The study and program development were reviewed and approved by the SVSU Human Subjects Institutional Review Board and also the Western Michigan University (WMU) Human Subjects Institutional Review Board. A formalized written agreement was developed prior to the implementation of the study that outlined the procedures that were to be followed by SVSU and the evaluator in order to ensure the protection of the rights of the human subjects.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

C6--Human Interactions. Evaluators should respect human dignity and worth in their interactions with other persons associated with an evaluation.

How the standard was met:

Open and clear communication was maintained throughout the program development with the involved constituent groups. A balanced attempt was made to understand the cultural and social values

of the participants, and their concerns about the study procedures were actively sought and addressed.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

C7--Balanced Reporting. The evaluation should be complete and fair in its presentation of strengths and weaknesses of the object under investigation, so that strengths can be built upon and problem areas addressed.

How the standard was met:

The report summary provided a balanced view of the study including the strengths and weaknesses of the program. Critical review of the program and study were actively solicited from knowledgeable and credible parties representing diverse perspectives. Such groups included: the SVSU Task Force Committee, the American Occupational Therapy Association, the Michigan Hospital Association, the SVSU Nursing and Allied Health Curriculum Committee, representatives from the SVSU Department of Education, Wayne State University, Eastern Michigan University, Western Michigan University, and the Committee of State University Presidents.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

C8--Fiscal Responsibility. The evaluator's allocation and expenditure of resources should reflect sound accountability procedures and otherwise be prudent and ethically responsible.

How the standard was met:

Major costs of the project were outlined by the SVSU Department of Nursing and Allied Health Sciences. Budget requests, costs, and personnel were routinely reviewed by the appropriate department individuals. A summary of expenditures was available upon request to the department.

Judgment regarding the standard: Met.

. Concerns regarding the standard: None.

Recommendations: None.

#### D: Accuracy Standards

The accuracy standards are intended to ensure that an evaluation will reveal and convey technically adequate information about the features of the object being studied that determine its worth or merit.

##### Standard

D1--Object Identification. The object of the evaluation (program, project, and material) should be sufficiently examined, so that the form(s) of the object being considered in the evaluation can be clearly identified.

How the standard was met:

The project and program development were clearly described both orally and in writing throughout the development of the study. Independent observers were used to assist in the formulation and identification of the study and program development. Consistent revisions and additions were achieved through an ongoing process of

communication and meetings with constituent groups. Reports and summaries were reviewed for their accuracy and detail in clearly identifying and reporting the objectives of the study. External agencies and groups were used throughout the development of the program and project to insure accuracy and validity of the results.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

D2--Context Analysis. The context in which the program, project, or material exists should be examined in enough detail, so that its likely influences on the object can be identified.

How the standard was met:

The contextual factors influencing the study were examined in detail and taken into account when designing and conducting the study. Factors influencing the study were described and analyzed in regard to the study outcomes and justification.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

D3--Described Purposes and Procedures. The purposes and procedures of the evaluation should be monitored and described in enough detail, so that they can be identified and assessed.

How the standard was met:

Objectives and procedures throughout the study were articulated and delineated by involved parties and the researchers. Independent evaluators were used as a system of checks and balances to insure

objectivity and accuracy of program design and interpretation. Review, analysis, and revision of collected data and information was accomplished through consistently structured and unstructured meetings, correspondence, and communication. Summaries, abstracts, and information were provided to constituent groups to maintain consistent and topical input with revisions of appropriate segments of the study undertaken as needed.

- Judgment regarding the standard: Met.  
Concerns regarding the standard: None.  
Recommendations: None.

D4--Defensible Information Sources. The sources of information should be described in enough detail so that the adequacy of the information can be assessed.

How the standard was met:

A variety of sources of information were evaluated and used in the study. Different methods of data collection used included surveys, interviews, review of social indices, with the sources of information identified and the procedures used described. Independent analysis and review of the data and information collected was also described and undertaken during the study. Review of the data by constituent groups was achieved with input used to clarify variables.

- Judgment regarding the standard: Met.  
Concerns regarding the standard: None.

Recommendations: Consistent review of the information and data presented to appropriate constituent groups at times hampered the transition of the project from one phase to the next. The political

realities of each setting along with a realistic appraisal of timelines should be carefully reviewed.

D5--Valid Measurement. The information-gathering instruments and procedures should be chosen or developed and then implemented in ways that will assure that the information obtained is sufficiently reliable for the intended use.

How the standard was met:

- A detailed description of the study content and constructs was identified prior to the development and design of the survey instruments. Instruments and procedures were reviewed and revised in conjunction with independent evaluators and were pretested. Results and data were interpreted within the contextual limits defined by the study. Multiple measures of data collection were used throughout the study with rationale for their use reported in the context of the technical report.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

D6--Reliable Measurement. The information-gathering instruments and procedures should be chosen or developed and then implemented in ways that will assure that the information obtained is sufficiently reliable for the intended use.

How the standard was met:

Survey instruments and information-gathering procedures were developed in conjunction with the Research Division of the American Occupational Therapy Association. Implementation of data collection

and interpretation of acquired information were reviewed at periodic intervals by external sources to insure consistency and reliability of the data and procedures.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: Survey instruments have been developed in conjunction with the American Occupational Therapy Association Research Division. Continued use of the instruments will provide further research into the reliability of the procedures.

D7--Systematic Data Control. The data collected, processed, and reported in an evaluation should be reviewed and corrected, so that the results of the evaluation will not be flawed.

How the standard was met:

Consistent procedures were developed and used to ensure that data were collected in a structured format. Acquired data and information were referenced and cross checked by the researchers and by an external party. Control of all data and information was maintained by the researchers.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

D8--Analysis of Quantitative Information. Quantitative information in an evaluation should be appropriately and systematically analyzed to ensure supportable interpretations.

How the standard was met:

Quantitative analysis of the information gathered was achieved

through systematic review and cross-referencing of the data by the researchers and by independent evaluators, including the American Occupational Therapy Association, the Occupational Therapy Task Force Committee, and by a structured review by the SVSU faculty and Curriculum Committee.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

• Recommendations: None.

D9--Analysis of Qualitative Information. Qualitative information in an evaluation should be appropriately and systematically analyzed to ensure supportable interpretations.

How the standard was met:

Qualitative information was consistently reviewed and presented by the researchers on a structured basis to a variety of constituent groups and independent evaluators. Continuous review and revision of the methods, procedures, and information was factored in as part of the research study to insure adequate and appropriate conclusions and recommendations.

Judgment regarding the standard: Met.

Concerns regarding the standard: None.

Recommendations: None.

D10--Justified Conclusions. The conclusions reached in an evaluation should be explicitly justified, so that the audience can assess them.

How the standard was met:

Conclusions were based on multiple measures of data and infor-



mation collected. Procedures, assumptions, and alternative explanations of the results were clearly outlined in the documents used to clarify and justify the conclusions to constituent groups. Review and support of the program conclusions were obtained from independent sources, including Wayne State University, Western Michigan University, the American Occupational Therapy Association, and the University President's Council.

- . Judgment regarding the standard: Met.  
Concerns regarding the standard: None.  
Recommendations: None.

D11--Objective Reporting. The evaluation procedures should provide safeguards to protect the evaluation findings and reports against distortion by the personal feelings and biases of any party to the evaluation.

How the standard was met:

Objectivity of the program results was attempted throughout the study. Review and interpretation of the accumulated data and information was shared with constituent groups on a structured and consistent basis. Conflicting viewpoints were actively sought to ensure continued objectivity of the report and program.

- Judgment regarding the standard: Met.  
Concerns regarding the standard: None.  
Recommendations: None.

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