Responding to the Call for Curriculum Reform: A Case Study

Susan A. McGhee East Carolina University

Diane G. Groff East Carolina University

Thomas K. Skalko East Carolina University

Bob Riley Green Mountain College

Carmen V. Russoniello East Carolina University

Abstract

Despite the vital role that curriculum plays in professional development, guidelines delineating comprehensive curricular self-study procedures are not available in the literature. This article presents a case study that addresses the influence of various factors on the development of an undergraduate therapeutic recreation (TR) curriculum. A systems approach model was operationalized and applied to the evaluation of one existing TR curriculum. Various data sources including a survey of recent graduates and intern supervisors, criterion-based analysis of standards and guidelines, and expert panel review were used to implement a data-driven analysis. Findings revealed that course work related to the treatment process, treatment modalities, interactive processes, administrative and management principles, and practical skill development required expansion, while a course devoted to leisure education could be eliminated. Discussion and implications for the profession as a result of this systematic, data-driven curricular review are offered.

Keywords: curriculum design, therapeutic recreation curriculum, entry-level competencies, systems model, accreditation, certification

Biographical Information

Susan McGhee is an Assistant Professor in the Department of Recreation and Leisure Studies at East Carolina University, 174 Minges Coliseum, Greenville, NC 278584353. Diane Groff is an Assistant Professor and Recreational Therapy Degree Director in the Department of Recreation and Leisure Studies at East Carolina University. Thomas Skalko is a Professor and Chair of the Department of Recreation and Leisure Studies at East Carolina University. Bob Riley is a Professor in the Department of Recreation and Leisure Studies at Green Mountain College, Poultney, VT 05764. Carmen Russoniello is an Assistant Professor in the Department of Recreation and Leisure Studies at East Carolina University.

Introduction

Undergraduate curriculum lies at the heart of professional growth and development. Within the field of therapeutic recreation (TR), discussion regarding curriculum reform has been evident since the 1960s and consistently surfaces as a critical issue worthy of debate. Despite continued discussion about curriculum reform, there is no comprehensive curriculum model to help guide change. The profession's inability to develop a model curriculum for uniform implementation across the discipline is the result of several factors:

- Professional standards of practice that impact the outcomes of pre-professional development have continued to evolve due to the rapidly changing nature of health care as an industry, as well as the transforming nature of the recreation and human services delivery systems.
- The "minimum" entry-level competencies for quality service delivery continue to be refined and often vary based on specific clientele, diagnostic categories, settings, or services provided.
- Finally, curriculum accreditation standards have changed and evolved in an effort to reflect changes in service delivery.

Consequently, individual faculty are challenged with the responsibility of conducting systematic evaluation of their existing programs of study based on a myriad of evolving professional development outcome targets.

Although models regarding curriculum reform are present in the literature, few offer practical guidelines for conducting comprehensive curricular self-study. This article addresses the influences of accreditation and professional credentialing on the development of undergraduate therapeutic recreation curricula and offers a practical application of the systems approach to curricular self-study. Through a case study approach, the critical steps that one university employed to systematically and thoroughly review its undergraduate therapeutic recreation curriculum are discussed and subsequent changes that occurred as a result of the data evaluation process are presented. Finally, implications derived from this experience, as well as suggestions for future faculty involvement in curriculum reform, are offered.

Related Literature

Curriculum accreditation and professional credentialing requirements are two major factors directly influencing the design of the educational process. The evolution of the scope of practice is a third factor that also influences the content and process of preprofessional preparation. Professional associations and credentialing organizations have developed entry-level therapeutic recreation practice competencies and self-assessment competency guides to provide form and substance to curriculum structure. As a dynamic process, curriculum reform must evolve, even as the myriad of influences change. Hence, as the profession strives to refine professional competencies and its scope of practice, educators work to determine effective pre-professional preparation practices and curricula designs that respond to the contemporary parameters of the therapeutic recreation field and the changing health care and human service environments.

Accreditation

According to Stumbo and Carter (1999), the first national discussion on therapeutic recreation curriculum development occurred in 1937 at a University of Minnesota conference concerning the college training of recreation leaders. The prevailing model at that time emphasized undergraduate preparation in activity leadership skills with preparation in a specialization or in supervisory and administrative skills emphasized at the graduate level. Although the conference focused on curriculum development for employment in recreation services, recreational therapy was addressed as the specific role of the recreation leader within specialized therapeutic environments (Sessoms, 1995). This strong recreation-based model continued to influence the hospital recreation degree programs of the 1940s-50s and recreation conferences and institutes during the 1950s-60s (O'Morrow & Reynolds, 1989). Therapeutic recreation preparation remained a component of the recreation programming specialization in the 1963 Federation of Professional Recreation Organizations' standards for accrediting park and recreation curricula (Sessoms, 1995).

During the 1960s, the insurgence of federal funding to prepare recreation specialists to work with individuals with disabilities resulted in an increase in the number of therapeutic recreation curricula. The therapeutic recreation specialization was recognized as being different from the recreation profession (Sessoms, 1995). As a result, the 1960s were marked with concrete efforts to define therapeutic recreation degree requirements and related educational methods (Carter, Van Andel, & Robb, 1995). Consequently, the Recreation Education Accreditation Project (Ball, 1968) established criteria for undergraduate and graduate curriculum emphases in therapeutic recreation. These early criteria were subsequently revised by the National Recreation and Park Association/ American Association for Leisure and Recreation (NRPA/AALR) Council on Accreditation during the 1970s and incorporated into the evaluation of recreation curricula, including the therapeutic recreation specialization. Revision of the therapeutic recreation accreditation standards continued during the early 1970s. By the mid-1970s, researchers, incorporating a review of the literature, a survey of existing academic programs, and input from educators and practitioners, established a list of competencies that were utilized in identifying educational outcomes for entry-level practice (Peterson, Newmyer, & Connolly, 1978). In 1978, the National Therapeutic Recreation Society adopted this list of 89 competency criteria as the official competency list for entry-level therapeutic recreation practice. Multiple subsequent revisions (Newmyer & Peterson, 1979; Stumbo, 1986; Stumbo & Carter, 1999) resulted in a composite of entry-level content areas for TR practice that were incorporated by the Council on Accreditation. The most recent standards were adopted by the Council on Accreditation in 2000 and serve as one guideline for therapeutic recreation curriculum development.

Professional Credentialing

The influence of professional credentialing on curriculum development cannot be denied. As the profession moved from a voluntary registration to a certification process in the early 1980s, an emphasis was placed on defining current TR practice. Existing competencies were refined through a job analysis study supported by the National Certification Board of NRPA (Kelly, Brandenburg, & Henkel, 1982). The resulting competencies were accepted by the National Council for Therapeutic Recreation Certification (NCTRC) to denote entry-level knowledge, skills, and abilities for the practice of therapeutic recreation. In 1988, Educational Testing Service (ETS), on behalf of NCTRC, undertook a national job analysis of certified therapeutic recreation specialists (Oltman, Norback, & Rosenfeld, 1989). The outcome of the job analysis was a list of 57 job responsibilities organized into 9 job skill categories and 97 knowledge areas organized within 9 categories that defined current entry-level practice in therapeutic recreation. While this information was intended to serve as the blueprint for development of the national certification exam, it secondarily, influenced curriculum design as well by identifying knowledge areas and practice skills.

More recently, Connolly and Riley (1995/96) examined the amount of time spent by the entry-level certified therapeutic recreation specialist in each of the nine job skill categories identified by the job analysis. Results of this study confirmed that entry-level practitioners were performing the job skills identified by the 1990 job analysis. The results of a second job analysis by ETS and NCTRC in 1996 placed increased emphasis on intervention planning, implementation, documentation and evaluation as identified TR knowledge areas (NCTRC, 1997).

While the voluntary national certification standards do not mandate a response from university curricula, educators inevitably incorporate certification requirements into curriculum design. Stumbo and Carter (1999) noted that an average of 80 to 90 percent of therapeutic recreation graduates from the curricula surveyed received NCTRC certification, indicating that curricula are structured to comply with the certification standards. Within this same study, NCTRC certification standards were identified as the top reason for curricular revisions (Stumbo & Carter, 1999). Clearly, educators are concerned with assuring that their TR graduates are eligible to sit for the certification examination in pursuit of the professional credential and use the certification standards as a guide to reconfigure therapeutic recreation curricula. Thus, in addition to remaining informed of current certification standards, it would be prudent for educators to critique existing standards and participate in efforts to revise them as needed.

Additional Curriculum Guidelines

In addition to the accreditation and certification initiatives, a number of professionals have undertaken the task of developing recommendations for professional preparation content. These initiatives were aimed at responding to the knowledge and skill areas needed for practice and the role of professional preparation at specific educational levels.

Odum (1973) identified critical competencies related to various job level designations that became the basis for a curriculum matrix for development of undergraduate core therapeutic recreation curricula. Several other inquiries further refined the list of competencies that should be possessed by graduates for each degree level, associate through doctoral (Kelly, Robb, Park, & Halberg, 1976; Kelly, Robb, Park, Halberg, & Edwards, 1978; Kennedy, 1978; Jordan, Dayton and Brill, 1978). The outcomes of these studies resulted in recommendations for professional competencies and the best setting to acquire specified knowledge and skills. Jordan et al. utilized their findings as the foundation for a competency-based masters degree curriculum.

The subsequent studies by Kelly (1982) and McGhee (1987) focused on identifying the educational experiences most appropriate for acquiring specific competencies and the role of internship/practicum in pre-professional preparation. Kelly (1982) found that many of the competencies required for therapeutic recreation professionals were acquired through internship/on the job experience rather than in the traditional classroom setting. McGhee (1987) reported an emphasis on formal education, primarily the bachelors curriculum, for acquisition of knowledge based competencies, and an emphasis on internship and job experience/in-service training for application based competencies. In addition, Brasile (1992) indicated that undergraduate degree programs should focus on preparation of entry-level practitioners while graduate programs concentrate on management and research content. Brasile concluded that the profession should develop more definitive guidelines to standardize undergraduate TR curriculum.

During the mid-1990s, the Task Force on Higher Education was established by the American Therapeutic Recreation Association (ATRA) to consider competency guidelines for therapeutic recreation curricula which surpassed minimum qualifications and could serve as "targets of excellence" (Kinney & Witman, 1997). Incorporating input from practitioners and educators, *Guidelines for Competency Assessment and Curriculum Planning in Therapeutic Recreation: A Tool for Self Evaluation* was developed. In an effort that often paralleled the ATRA Task Force on Higher Education, the North Carolina Therapeutic Recreation Practice Competencies Task Force created an extensive document that identified 217 practice competencies for entry-level practice. This document was established for the purpose of making recommendations for curricular reform to improve the consistency and quality of academic preparation of therapeutic recreation professionals (McGhee, 1997). Despite the fact that there are numerous documents (e.g. TR job analysis, accreditation standards, practice competencies, and curriculum guidelines) designed to help educators structure pre-professional preparation, the field has yet to integrate these resources into a definitive set of curricular offerings and professional practice competencies.

Employment Requirements

While accreditation standards, professional credentialing standards, practice competencies, and curriculum planning guidelines must be integrated into pre-professional preparation, the expectations of employers must also be incorporated into curricular decisions. The health care industry is the major employer of therapeutic recreation specialists and has established minimum expectations for the competencies needed for effective service delivery. As reported by the Pew Health Professions Commission (1995), concerns for effective, competent care, cost reduction, and increased patient satisfaction must be reflected within pre-professional preparation. The Pew Commission further suggested that practitioners must possess a strong foundation in the sciences, increased critical thinking and problem-solving skills, as well as excellent communication skills. Thus, the incorporation of interdisciplinary core health care skills is one aspect of a professional preparation program capable of producing multi-skilled professionals. Since health care includes preventative services, as well as acute through long-term care, programs must also prepare students to work effectively in a variety of settings (e.g. hospitals, day treatment, long-term care, home health, schools, community parks and recreation agencies, and social service programs).

A Curriculum Design Model

There is no comprehensive model to guide TR curriculum design despite continued examination of the elements essential to curricular design. This lack of consensus is perhaps the result of a poor understanding of the evolving multi-factional influences on therapeutic recreation curriculum design. For instance, by the time research to determine internal and/or external influences are completed and the results are reported, the factors have again changed. Stumbo and Carter (1999) note that "there is more consensus on the definition of entry-level knowledge than there is in the 'package' (curricula) to deliver it" (p.49). Recent mandates in health care reform, revisions of curriculum accreditation standards, and continued development of professional preparation guidelines provide incentive for curricular reform within therapeutic recreation. Concerns for curricular accountability, efficiency, and effectiveness are paramount in the re-design of therapeutic recreation curricula. The challenge is to employ a curriculum design model that is proactive and directed towards balancing the many and varied concerns that influence the profession.

A systems approach to undergraduate therapeutic recreation curriculum design was presented by Monroe and Connolly (1997/98) that identified three elements of the broader supra-system in which the curriculum operates: the therapeutic recreation profession, the health care and human services market, and the academic institution of the curriculum. The input of the model includes the specific curricular content, accreditation and certification requirements, and the student preparation to meet the needs of the consumer. Involvement in instructional experiences that develop the student's skills is the process component of the model. The professional skills and knowledge that enables students to deliver effective and efficient therapeutic recreation services are considered the outcome component of the model. Applying the systems approach to curriculum design necessitates examining the relationships and interaction among the components as well as determining how to utilize each component for optimal results. In this case, the optimal result is a therapeutic recreation curriculum that incorporates professional philosophy, knowledge, and skills; responds to the demands of the health care marketplace, the academic institution, and professional credentialing; and prepares students to deliver effective outcome-based therapeutic recreation services across a variety of settings.

A Case Study: Bachelor of Science in Recreational Therapy – East Carolina University

Founded in 1907, East Carolina University (ECU) is a public doctoral institution committed to serving the community through education, research and creative activity, and leadership and partnership. The curriculum in parks and recreation was established in 1972 and initially accredited by the NRPA/AALR Council on Accreditation in 1980. At the time of the curriculum evaluation reported here, students received degrees in Recreation and Leisure Studies (RCLS) with an option in either Therapeutic Recreation (TR) or Leisure Services Management (LSM). The Council on Accreditation accredited both the professional core and the TR Option.

At the time of this case study the focus of the TR curriculum was closely aligned with the Leisure Ability Model (Peterson & Gunn, 1984), incorporating general recreation and leisure courses with more specialized TR courses. The primary goal was to prepare students to deliver treatment and leisure education programs capable of fostering the independent leisure functioning of service recipients. The content of the eight recreation and leisure classes in the RCLS Core focused on an introduction to the field, programming, administration, philosophy, research, and the internship experience. The six TR Option classes addressed content specific to foundations of the TR profession, disabling conditions, processes and techniques in the design and delivery of TR programs, leisure education, and professional issues. However, by 1998, the changing nature of health care, the on-going debate over the appropriateness and effectiveness of the Leisure Ability Model, and feedback from new TR faculty indicated the need to conduct a formal evaluation of the curriculum. The comprehensive evaluation of the ECU undergraduate TR curriculum was undertaken in part to prepare for a pending curriculum accreditation review by the NRPA/ AALR Council on Accreditation. However, the primary catalyst for implementing the curriculum review was driven by a true sense of professionalism and a keen desire to provide students with the highest quality professional preparation. Furthermore, the faculty felt a need to modify the curriculum so that it reflected changes in the health care and human service delivery systems. The faculty sought, via data driven analyses, to identify areas of change that could position the program at the forefront of undergraduate education. The evaluation process was an ambitious and thorough enterprise. It involved a multi-faceted methodological design utilizing a variety of data sources. The process began in September of 1998 and was completed by June of 1999.

Method

A systems approach similar to that presented by Monroe and Connolly (1997/98) was used as the basis for evaluating the existing TR curriculum. The evaluation was designed with consideration of the *supra-system*, various sources of *input*, consideration of *process*, and a specific focus on desired *outcomes*. Each of these elements is considered in detail below.

The *supra-system* emphasizes the importance of responding to the current social and political climate influencing curriculum issues. At the time of the study, the health care and human services community was moving toward defining health based on the World Health Organization's Model of Disablement (World Health Organization, 2000). It was the premise of the TR faculty that students would need to acquire skills relevant to the improvement of the individual's functional level (i.e. pathophysiology, impairment, functional limitation, and disability), as well as a comprehensive understanding of societal limitations influencing their independent community functioning. Independent community functioning encompasses an array of areas including work, parenting, recreation, social life, community participation, and relationships (DeJong, 1997).

Input was sought from a variety of sources (TR practitioners, program graduates, and faculty) through three separate phases of data collection. Additionally, separate methods were used in each phase of the study including: a) survey of recent graduates and internship supervisors, b) criterion-based analysis of standards and guidelines, and c) expert panel review. The sources of *input* used in this study are described in more detail below.

The remaining two steps in the systems design to curriculum development proposed by Monroe and Connolly (1997/98) pertain to *process* and *outcome*. The *process* considerations included the depth and sequencing of material presented, co-requisite material taught, learning experiences used, and course assignments utilized to teach specific areas. *Process* questions were addressed after all the *input* was obtained and curriculum content was established. Using recommendations from the Expert Panel, the TR faculty re-organized existing classes and created new classes, in an attempt to achieve the desired outcomes in the most efficient manner.

Lastly, the professional behaviors and skills desired of graduates continually served as the primary focus and motivation to conduct the self-study. These *outcomes*, however, were yet to be fully identified in the design phase of the curriculum study given that data was not collected. The ultimate *outcomes* targeted for students would not be realized until data collection and analysis were complete. The following section describes each of the phases of data collection more thoroughly. The use of these multiple data sources and data collection strategies allowed for the triangulation of data.

Survey of Recent Graduates and Internship Supervisors

Survey data collection was conducted with recent graduates and internship supervisors. The TR Curriculum Review Committee developed both survey instruments that consisted of Likert-type scaled questions and open-ended subjective questions. The Review Committee consisted of three full-time, TR faculty members, all of whom were nationally certified. A graduate assistant collected data via telephone interviews.

The Recent Graduate Survey contained five categories: respondent profile, rating of RCLS Core courses, rating of TR courses, self-rating of professional competence upon graduation, and perceived strengths and weaknesses of the TR curriculum. The sample of subjects was selected from all of the TR graduates (N = 122) who had completed their bachelors degree in the last three years (i.e., 1996, 1997 or 1998). It was believed that the most recent graduates would provide the most accurate reflection of the existing curriculum. Telephone calls were placed to all eligible graduates during a three-week period.

The Internship Supervisor Survey was designed to address the following areas: respondent profile, general rating of interns' academic preparation, strengths and weaknesses of ECU-TR interns, recommendations of proven learning experiences, and additional suggestions to facilitate curriculum evaluation. A TR faculty member placed telephone calls to the identified internship supervisors during a three-week period. To assure the relevance of information, only TR internship supervisors who had supervised at least three ECU-TR interns during the past five years (1993-98) were selected from a roster of TR internship supervisors. Although many of these individuals also supervised TR interns from other universities, the internship supervisors surveyed represented facilities with long-standing affiliation with ECU's RCLS Department.

Criterion-Based Analysis

The TR Curriculum Review Committee conducted a self-study to determine the program's levels of compliance with established TR curriculum and practice guidelines. The Committee identified and reviewed the following five sets of guidelines: a) Certification Standards of both the NCTRC and the State of North Carolina Therapeutic Recre-

ation Certification Board (NC-TRCB) in effect in 1998, b) NCTRC Job Analysis and Knowledge Content Areas (1998), c) NRPA/AALR Council on Accreditation TR Option Accreditation Standards (1998), d) ATRA *Guidelines for Competency Assessment and Curriculum Planning in TR* (1997), and e) North Carolina Task Force Practice Competencies for Entry-level Practice as a TR Specialist (1997).

Initially, each committee member independently reviewed the TR course syllabi and each of the curriculum and practice guidelines. Each committee member determined whether each competency was addressed in the curriculum, noting which course addressed the competency, and to what degree the competency was met. The Committee then discussed their independent results and reached consensus regarding the degree to which the competency was addressed and in which classes the competency was met.

Expert Panel Review

The focus of the third phase of data collection was to obtain evaluative information from certified therapists representing practitioner, supervisor, and manager perspectives. Certified North Carolina TR practitioners with at least 10 years experience, who had held leadership roles in state or national professional organizations, and had some familiarity with the ECU-TR Program were considered for the Expert Panel. The fivemember panel represented a variety of practice settings and populations, and was familiar with state and national practice competencies.

The TR Curriculum Review Committee prepared a Curriculum Self-Study Report containing the results and findings of the Recent Graduate and Internship Supervisor surveys and criterion-based analysis. The report was mailed to the Expert Panel with a request to review the existing TR syllabi and the TR Curriculum Self-Study. Several weeks later, a meeting of the panel members and the TR faculty convened on campus to discuss the findings. The TR Curriculum Review Committee presented an overview of the self-study and solicited Expert Panel feedback. The Expert Panel Review concluded with a strategy session designed to offer specific suggestions on how the TR curriculum could better prepare graduates for entry-level practice.

Results

Results of the curriculum evaluation are organized into three sections: Survey of Recent Graduates and Internship Supervisors, Criterion-Based Analysis, and Expert Panel Review. Within each section, the sample is identified and results are provided. Following the summary of findings, the proposed revisions to the curriculum are presented.

Survey of Recent Graduates and Internship Supervisors

Recent graduates. Of the 122 TR students graduating between 1996 and 1998, 29% agreed to participate in the study. The respondents (n = 36) were TR graduates who

completed their degree program in one of the following years: 1996 (n = 9), 1997 (n = 10), or 1998 (n = 17). Using a five point Likert scale (1 = not helpful; 5 = very helpful), respondents reported that most RCLS Core courses were helpful (M = 3.7) to their entrylevel professional work. However, the range of these mean values suggests that not all Core courses were viewed the same. For example, the Leisure Programming (M = 4.6, SD = .69), Programming Lab (M = 4.5, SD = .78), and Internship Pre-Placement Seminar (M = 4.3, SD = .98) courses were rated as more helpful than the Administration of Leisure Services (M = 3.5, SD = .89), Philosophical and Current Issues in Leisure (M = 3.3, SD = 1.26), Research Methods (M = 3.1, SD = .91), and Introduction to Leisure Services (M = 2.7, SD = 1.30) courses.

As a group, TR courses were rated higher with respect to helpfulness than the RCLS Core courses. All TR courses were rated above the midpoint but specific course mean values varied considerably: *Processes and Techniques in TR* (M = 4.5, SD = .88), *TR Program Design* (M = 4.3, SD = .53), *Disability Survey for TR Services* (M = 4.2, SD = .127), *Leisure Education in TR* (M = 4.0, SD = .83), *Professional Issues in TR* (M = 3.7, SD = .91), and *Foundations of Therapeutic Recreation* (M = 3.6, SD = .87). Notably, *Processes and Techniques in TR* was ranked as the most helpful while *Foundations of Therapeutic Recreation* was ranked as least helpful.

When specifically asked about the scope and value of the *Internship* course, 94% of the respondents rated the internship experience as "very helpful." An overwhelming majority of respondents (86%) supported the current length of the internship of 480 hours completed over a minimum of 12 weeks. More than two-thirds of the respondents (67%) agreed that the internship should occur during the last semester of course work.

In measuring the level of perceived competence that graduates reported upon entering the employment environment, 12 distinct areas of TR skills were assessed using a five point Likert scale (1 = poor; 5 = very good). All 12 skill areas received mean ratings of 3.5 or higher with most respondents rating themselves as average or good with respect to these TR skills. The skill area with the top competency rating was *professionalism* (M= 4.5). Program leadership, selection and use of activities, and individual and group facilitation techniques were all rated high (M = 4.3) as was program planning (M = 4.2). In contrast, evaluation (M = 3.8), documentation (M = 3.7), and management principles (M = 3.5) received the lowest competency ratings (see Table 1).

TABLE 1

Competence Area	N	M*	SD	
Professionalism	36	4.5000	.8106	
Program Leadership	36	4.3056	.7491	
Selection and Use of Activities	36	4.2778	.5662	
Individual & Group Facilitation Techniques	36	4.2778	.7787	
Program Planning Process	36	4.2222	.4847	
Knowledge of TR Concepts	36	4.0556	.5828	
Treatment Planning Process	36	4.0278	.7741	
Characteristics and Needs of Clients	36	3.9444	.7538	
Assessment Process	36	3.8889	.9495	
Evaluation	36	3.7778	.7968	
Documentation Process	36	3.6667	.9562	
Management Principles	36	3.5000	.9103	
* Response Choices: 1(poor) to 5 (very good)				

Recent Graduate Survey of Perceived Competence in Entry-level Practice Areas

The last section of the Recent Graduate Survey consisted of open-ended questions requesting subjective input regarding strengths and weaknesses of the TR curriculum. Data were examined for the frequency with which graduates identified perceived strengths and weaknesses of the TR curriculum. Strengths were noted in the areas of relevant skills, practicums, hands-on experiences, courses, and the ability of individual instructors to teach and convey materials. Frequently reported weaknesses were the perceived lack of course work specifically addressing assessment, documentation and evaluation processes. Additional weaknesses identified included the frequent turnover of faculty, concern over a lack of understanding of TR and its relationship to other allied health professions, and being ill prepared to advocate for the profession. Comments regarding internships were primarily positive although some respondents remarked on less than favorable faculty and agency internship supervision.

Internship supervisors. Nineteen certified TR specialists representing 14 different agencies completed the Internship Supervisor Survey that focused on the general preparation of ECU-TR interns. Internship supervisors were employed in clinical hospitals (n = 9), outpatient/day treatment facilities (n = 6), long-term care facilities (n = 2), and state institutions (n = 2). Respondents used a five point Likert scale (1 = poor; 5 = very good) to rate the students' level of preparation in 12 internship competency areas. With an aggregate mean rating of 3.4 across all items, professionalism (M = 4.4) and knowledge of TR concepts (M = 3.8) were the highest rated items. Documentation skills (M = 3.2), assessment skills (M = 3.2), management principles (M = 3.0), and evaluation skills (M = 2.9) were the lowest rated items (see Table 2).

TABLE 2

Supervisor Survey of Perceived Preparation of Students in Entry-level Practice Areas

Preparation Area	N	М*	SD
Professionalism	18	4.3889	.6978
Knowledge of TR Concepts	19	3.8421	.6882
Program Leadership	19	3.7368	.8057
Individual & Group Facilitation Techniques	18	3.5556	.9218
Program Planning Process	19	3.4211	.8377
Treatment Planning Process	19	3.3158	.9459
Selection and Use of Activities	19	3.2632	.9912
Characteristics and Needs of Clients	19	3.2105	.8550
Documentation Process	17	3.1765	1.0146
Assessment Process	19	3.1579	.8342
Management Principles	16	3.0000	1.0328
Evaluation	19	2.9474	.9703
* Response Choices: 1 (poor) to 5 (very good))		

Open-ended responses were examined for the frequency with which supervisors identified TR students' strengths and weaknesses. The most commonly identified strengths included sense of professionalism, organization skills and sense of purpose, general leadership and motivation, and depth of prior learning/practical experiences. Areas of weakness included assessment and documentation skills, treatment leadership skills, treatment processing skills, and selection and therapeutic use of activities.

Criterion-Based Analysis

All three members of the TR Curriculum Review Committee completed criterionbased analysis of TR syllabi with five sets of guidelines specifically established for the practice of therapeutic recreation: a) NCTRC and NC-TRCB Certification Standards, b) NCTRC Job Analysis and Knowledge Content Areas, c) NRPA/AALR Council on Accreditation TR Option Accreditation Standards, d) ATRA *Guidelines for Competency Assessment and Curriculum Planning in Therapeutic Recreation*, and e) North Carolina Task Force Practice Competencies for Entry-level Practice as a TR Specialist. Compliance to standards was established if the syllabus course objectives or content outline addressed the criterion.

NCTRC and NC-TRCB certification standards. It was determined that the ECU-TR curriculum either met or exceeded the criteria for both sets of standards for number of classes in recreation, TR, and support areas as well as the length of the field placement/internship experience. This is most notable in the area of TR content course work in which both credentialing plans require a minimum of three courses and nine semester hours. The curriculum exceeded this requirement by requiring six specific TR content courses (18 semester hours). The curriculum required 12 weeks and 480 hours of supervised field placement, which surpassed the existing national standard of 10 weeks and 360 hours.

NCTRC job analysis and knowledge content areas. A compliance rate of 95% between the ECU-TR curriculum and the NCTRC Job Analysis content areas was determined. Areas of non-compliance were related to the components of documentation and administrative functions. It is important to note that the high compliance rate was achieved via heavy reliance upon two specific courses: Foundations of TR, and TR Program Design. The content areas were also met with moderate input from three other TR courses: Disability Survey, Processes and Techniques, and Professional Issues in TR. The Leisure Education course contributed minimally to addressing the content areas.

NRPA/AALR TR option accreditation standards. The curriculum was found to have a 96% compliance rate with the NRPA/AALR TR Option Standards. Non-compliance was found with the standards related to administrative issues and legal tools in the practice of TR. Once again, very few courses were used to satisfy the majority of the standards. Foundations of TR, TR Program Design, and Professional Issues in TR combined to satisfy 19 of the 25 standards. Disability Survey met three standards as a primary source, while Processes and Techniques and Leisure Education met one standard each. ATRA Guidelines for Competency Assessment and Curriculum Planning in TR. Results from the analysis using the ATRA competency assessment document revealed a 70% compliance rating. Similar to previous findings, a strong reliance upon four specific TR courses was found (i.e., Foundations of TR, TR Program Design, Processes and Techniques, and Professional Issues in TR). The ATRA guidelines emphasize the treatment/intervention process, however, the curriculum devoted only two courses to this subject matter (i.e., TR Program Design and Processes and Techniques). Findings also underscored the need for increased knowledge and skill development related to TR specific administrative and management tasks. The TR curriculum addressed some of these designated areas within the Professional Issues in TR course and the general RCLS course Administration of Leisure Services.

North Carolina Task Force competencies for entry-level practice as a TR specialist. Analysis of the curriculum determined a 60% compliance rating with the criteria listed within the TR content portion of the document. Review of the NC competency document mirrored previous reported results indicting that the curriculum relied heavily upon Foundations of TR, TR Program Design, and Processes and Techniques, to satisfy the vast majority of standards. Some criteria were also met through Disability Survey, Professional Issues in TR, and Internship. Again, it was found that the Leisure Education course contributed very little to the overall compliance rate.

Expert Panel Evaluative Review

The Expert Panel consisted of five certified professionals who served in a variety of TR positions including practitioner, supervisor, and manager. Each individual possessed a substantial amount of practitioner experience (average 18 years) with diverse settings and populations. Panel members were employed within North Carolina state institutions, long-term care facilities and general hospitals. Upon review of the Curriculum Self-Study Report, the Expert Panel concurred with the findings as presented by the TR Curriculum Review Committee. In addition, the panel members offered insightful comments and suggestions with respect to the curriculum reform.

With regard to the overall curriculum design, the Expert Panel suggested that specific TR courses be offered in each of the following areas in order to reinforce the treatment/intervention process: a) Foundations of RT Services, b) Assessment and Documentation, c) Treatment Planning and Implementation, d) Facilitation of Processes and Techniques, e) Evaluation/Research, and f) Management and Supervision. In addition, the course addressing the scope and nature of disability should also be maintained within the curriculum. It was suggested that all of the above courses emphasize the basic tenets of the treatment process (goal selection and measurable outcomes) within the context of shortened lengths of stay and settings across the health care and human services continuum.

Overall Summary of Findings

Results from all three phases of data collection indicated that while the TR curriculum at ECU was successful in assisting students in acquiring minimum competency for entry-level practice, modifications to the existing curriculum might help to improve the competence of students. The triangulation of the various data sources indicated that the following changes be implemented: 1) expand course work related to the treatment process (assessment, documentation, and evaluation), 2) expand course work addressing RT interactive processes and treatment modalities, 3) address RT administrative and management principles more comprehensively, 4) eliminate the specific course in leisure education, and 5) expand opportunities within the curriculum for practical skill development and practice. The perceived strengths of the curriculum in instilling professional qualities in graduates supported the need to maintain a high degree of preparation in the areas of theoretical knowledge and professionalism.

Discussion and Implications

Faculty are charged with planning a program of study that effectively and efficiently prepares students to carry out the duties of entry-level practice. In doing so, a variety of factors influence the design of the curriculum. Applying the systems model (*supra-system, input, process, and outcome*) to curriculum reform offers a way of organizing and filtering these various influences. This case study demonstrates that application of the systems approach can facilitate a comprehensive understanding of existing course work and, more importantly, results in the collection of objective data that leads to curriculum reform.

Curriculum Revisions

In responding to the curriculum evaluation, the TR faculty worked to reconfigure a curriculum (*input*) that responded to the overall review and the recommendations presented by the Expert Panel and was functional within the *supra-system*. The term recreational therapy (RT) was adopted for the new degree title and replaced the term therapeutic recreation in all course titles. Faculty felt that this terminology was more consistent with the WHO (2000) theoretical model emphasized in the new curriculum. The term also reflects the changing nature of service delivery from strictly a medical model to a continuum of services that transcends settings and includes acute care through preventative services and social inclusion. Additionally, the *process* of competency development evolved by systematic incorporation of formal practical experiences into the curriculum with the *outcomes* of curriculum reform continually being evaluated to ensure qualified professionals. Finally, the faculty implemented changes in four areas: General Education, RCLS Core, RT Content Courses, and RT Concentration.

Several changes were implemented within General Education. The Introduction to Gerontology course was removed as a General Education requirement in Social Science and included among several choices in RT restricted electives, thus allowing flexibility for students seeking careers with non-geriatric clientele. Secondly, the *Anatomy and Physiology* course and lab was removed as a specific RT Concentration course and included as a General Education Science requirement, thereby allowing for additional new RT and support courses.

With regard to the RCLS Core curriculum, only one change was implemented. The existing Administration of Leisure Services course was replaced with a new RT Content course, Organization and Management of RT Services. The change allowed for the elimination of the Issues in TR course and for the inclusion of greater content specific to the administration of RT services across settings and populations.

The most significant changes occurred within the RT Content Courses. The Foundations of TR course was revised into Foundations of RT and reclassified as a 2000 level class to permit students to take the course prior to admission to the degree while investigating various career options. The Professional Issues in TR and Leisure Education courses were eliminated with appropriate content absorbed into new RT Content courses. Material from Leisure Education and the original Processes and Techniques in TR was incorporated into the new Processes and Techniques in RT course to emphasize knowledge in a variety of intervention techniques with opportunities for specific skill development. The RT Assessment, Documentation, and Evaluation course and the RT Leadership and Group Dynamics course were developed to reinforce treatment planning and therapeutic processing techniques. A separate and distinct RT Practicum course was established to reinforce skill efficacy prior to internship placement. Finally, a renewed focus on enhancing practical skill development in assessment, treatment planning, and documentation was accomplished by modifying existing practicum experiences throughout the RT curriculum.

Within the RT Concentration requirements, the restrictive elective requirement was increased to nine hours with six of those hours focusing on the development of skills specific to RT interventions. Additionally, a computer science course was removed as a RT Concentration requirement. Subsequent alteration of the curriculum resulted in the incorporation of specific tasks to enhance computer literacy across the curriculum.

Overall, the curriculum revisions take into consideration the numerous factors influencing curriculum design. Not only was the *input* modified but the *process* for delivery was also enhanced. While RT courses were expanded, the net result was a reduction in required hours for degree completion. In addition, RCLS Core courses were better utilized and core competencies in areas such as administrative aspects of services were better tailored to meet student needs in practice. The inclusion of leisure education content into the *Processes and Techniques in RT* course, as well as the incorporation of practical skills within both the *Processes and Techniques in RT* and the *RT Leadership and Group Dynamics* courses resulted in a productive modification in not only the *input* but the *process* in competency development and pre-professional education. Furthermore, the inclusion of a formal practicum course reinforces the application of pre-professional competency development prior to the capstone internship experience.

The triangulation of data sources and data collection strategies accommodated issues in accreditation, professional credentialing, curriculum design, and the health care and human service industries. The application of the systems approach (*supra-system*, *input*, *process*, *and outcome*) in the revised curriculum represents the faculties' concerted effort to synthesize these influences into a comprehensive curriculum which best prepares students for entry-level practice.

Pragmatic Reflections

One common criticism of comprehensive theoretical frameworks that consider multiple influencing factors (such as the systems approach) is the time commitment involved. Developing the methodological strategies and survey instruments, implementation of the study, and data analysis required a substantial time commitment from all faculty. This time commitment detracted from other forms of productivity. One factor that added a layer of difficulty to this study was the use of the systems approach in curriculum review that was not clearly operationalized elsewhere in the literature. The language used in describing the systems model did not translate easily into the curriculum reform process. Therefore, faculty were required to develop a methodological strategy that was comprehensive, yet, practical in scope. Additionally, having five sets of standards and guidelines outlining entry-level practice competencies for therapeutic recreation presented a considerable challenge. Giving equitable review to all existing guidelines, and dealing with the inconsistency of the standards, required faculty to consider extensive material without demonstrating bias toward any one set of guidelines.

In addition to the considerable time commitment required of faculty, the methodological instruments and techniques do possess limitations with regard to reliability and validity. The instruments used to collect data from graduates and internship supervisors were not tested for reliability and validity. Given that only 29% of recent graduates were surveyed, it is not known if they differ significantly from the views of non-respondents and therefore findings must be interpreted with caution. Lastly, by surveying graduates from a three-year time span, up to two years after completion of the program, it is unclear to what extent their responses were influenced by experiences since graduation. However, the faculty made a conscious effort to reduce threats to reliability and validity by designing a study that relied upon the triangulation of multiple types of data from a variety of sources.

The results of gathering multiple sources of data provided the TR Curriculum Review Committee with extensive information to make objective decisions regarding course work. Utilizing information from students, internship supervisors, a panel of experts, and the faculty evaluation of criterion guidelines allowed for triangulation of data and provided an immediate way to look for data trends or results that challenged faculty biases. These multiple sources of data were particularly useful in allowing faculty to reach consensus on matters that involved conflicting information. For example, there were instances where results from the graduates' evaluation would lead toward one decision while input from the Expert Panel suggested just the opposite. The multiple sources of data collected, and the application of the systems model, facilitated development of faculty consensus and served as a unifying process for the theoretical underpinnings of the RT degree at the university.

Conclusions

Responsive curriculum evaluation and development based on the systems model is clearly a critical and timely issue for the profession. Academic programs need to be proactive and develop a system of continuous quality review of the curriculum, implement change when indicated, and forgo waiting for the perfect methodology or timing before initiating curriculum reform. More so than ever, health care requires the development of a high level of theoretical knowledge and skill through undergraduate studies. This case study has operationalized the systems model through a clear delineation of the *supra-system, input, process,* and *outcome* strategies. Through the curriculum reform techniques utilized by this university, one can expect to attain a thorough and comprehensive self-study leading to informed and precise curriculum directives.

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Author Note

Correspondence concerning this article should be addressed to Susan McGhee, Department of Recreation and Leisure Studies, East Carolina University, 174 Minges Coliseum, Greenville, NC 27858-4353. The revised RT curriculum is available by downloading the RT checksheet from the Department of Recreation and Leisure Studies' web site (http://www.ecu.edu/rcls/) or by contacting Susan McGhee (mcghees@mail.ecu.edu).

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