A Descriptive Review of Occupational Therapy Education

Introduction

In an August 2002 Commission on Education (COE) meeting, COE members decided to design and write a Guide to Occupational Therapy Education. With the advent and passing of Resolution J—which became Resolution 670-99 at the 1999 Representative Assembly meeting of the American Occupational Therapy Association (Accreditation Council for Occupational Therapy Education [ACOTE], 1999b)—and new degree structures within the profession (i.e., professional/clinical doctorate), a guide to occupational therapy education is warranted. This guide, retitled A Descriptive Review of Occupational Therapy Education, is intended for practitioners, academicians, and potential occupational therapy program applicants to augment their understanding of occupational therapy education.

Organization of Review

The review is organized into eight sections. The first, the introductory section, describes the process of the development of the Descriptive Review. The second section distinguishes between professional and graduate education. This information provides the background and foundational groundwork for the Review. The next section includes the underpinning information that describes the levels of education in the United States as used by most colleges and universities. It is the common language used in all degree majors and programs and should be the guide for occupational therapy education language so that degrees in occupational therapy can be recognized and understood by fields other than occupational therapy.

The fourth section delineates the levels of education in occupational therapy in the United States from the technical level of education to the doctoral level, using the previous foundational information as the basis of the descriptions. The Review then lists suggested factors that should be considered when choosing an occupational therapy program.

The Review was written to describe the present state of occupational therapy education within the American educational system and is limited to this perspective only. It is purposely written in a factual format and does not intend to promote one occupational therapy degree over any other, nor is it intended to resolve the multiple issues regarding the various degree levels or entry-level competencies. Those issues need to be addressed by a broad-based consensus group or other professional bodies.

Professional and Graduate Education

The terms professional education and graduate education are often used synonymously. Educational institutions have the prerogative to house degree programs in any appropriate organizational structure. For example, some master’s-degree programs award the degree under the auspices of the graduate school, whereas others offer the degree from a professional school. However, a distinction between graduate and professional education is needed to understand the nature of the organizational context of occupational therapy educational programs within colleges and universities. Although there is a paucity of literature distinguishing the two types of education, Mayhew and Ford’s (1974) Reform in Graduate and Professional Education was a welcomed resource to higher educational planners. Mayhew and Ford eloquently articulated the purposes and problems of both graduate and professional education.

Professional Education

Professional education is a term used to describe educational programs in which students are enrolled to study service delivery of a particular profession (e.g., dentistry, medicine, nursing, pharmacy, veterinary science). Studying a profession is different from studying a discipline (e.g., physics, theology, mathematics, biology, sociology) (Mayhew & Ford, 1971). A discipline has its own “unique epistemology” that serves as its foundation for autonomy (Knowles, 1977, p. 2209). Professional programs are highly influenced by the professions they serve. The professional standards are at a minimally acceptable level, and governance from the institution often requires higher and different standards (e.g., requirement of thesis, capstone project, electives, additional coursework, interdisciplinary classes).

The purpose of professional education is to admit and educate a sufficient number of students who meet minimum theoretical knowledge and practice skill competencies to practice a profession (Mayhew & Ford, 1974). “Professional education should be directed toward significant objectives, including professional competence, understanding of society, ethical behavior, and scholarly concern” (Mayhew & Ford, 1974, p. 3).

Graduate Education

Graduate education comprises the master’s (e.g., MA, MS) degree and doctor of philosophy (PhD) degree (Carmichael, 1961). The graduate school is the organizational authority within colleges and universities that houses graduate educational programs. Traditionally, graduate education focused on advanced study and scholarship within a discipline; however, more recently, some graduate programs in professional fields have emerged (e.g., master’s degree in nursing, PhD in rehabilitation).

Historically, graduate education was intended for four purposes (Mayhew & Ford, 1974). The first purpose of graduate education was character formation—to produce broadly learned graduates. The second purpose, preparation of college teachers, was traditionally the primary purpose of PhD programs. The paradox of this
intent was that traditional PhD graduate education focused primarily on producing independent researchers and rarely addressed preparation for college teaching. A third purpose of graduate education was “to prepare people for research and scholarship in a specialized field” (Mayhew & Ford, 1974, p. 94). The fourth purpose of graduate education was to have graduates enter the work force and apply their research competencies in professional fields.

Levels of Education in the United States

One of the hallmarks of higher education in the United States is the diversity of institutions, degrees, and programs available. Levels of education are represented by the academic degree conferred to graduates. A degree is a credential or title “conferred by a college or university as official recognition for the completion of a program of studies” (Shafritz, Koeppe, & Soper, 1988, p. 145). Academic degree levels include associate, baccalaureate, master’s, and doctoral.

Associate Degree

According to the National Center for Education Statistics, an associate degree is “an award that requires the completion of at least 2 but less than 4 full-time equivalent academic years of college-level work in an academic or occupationally specified field of study, and which meets institutional standards for otherwise satisfying the requirements for this degree level” (U.S. Department of Education [USDE], 2002, p. A-63).

Baccalaureate Degree

A baccalaureate degree is an award requiring completion of 4 to 5 full-time equivalent academic years of college-level work in an academic or occupationally specific field of study, and which satisfies institutional standards of the requirement of the degree level (USDE, 2002, p. A-63). Two common baccalaureate degrees are the bachelor of arts (BA or AB, for the Latin *a*trium baccalaurei) for programs in the humanities and the bachelor of science (BS) for programs in the sciences. Some institutions offer baccalaureate degrees in specialized areas, for example, bachelor of music (BMus) or bachelor of education (BEd) (Unger, 1996).

Master’s Degree

A master’s degree typically requires approximately 36 credits of post-baccalaureate education in a subject field. Three master’s degrees are commonly awarded. One type includes both the master of arts (MA) and the master of science (MS). MA and MS degrees are “awarded in liberal arts and sciences for advanced scholarship in a subject field or discipline and demonstrated ability to perform scholarly research” (USDE, 2002, p. 298). A second type of master’s degree is conferred for completion of a professional entry-level program; for example, an MEd in education, an MBA in business administration, or an MFA in fine arts. In occupational therapy, the MOT, or master of occupational therapy, degree is awarded by some institutions. The third type of master’s degree includes the award in professional fields for study beyond the first-professional (entry-level) degree, such as the master of laws (LLM) and the master of science (MS) in various medical professions. Occupational therapy has typically referred to this level of degree as a postprofessional master’s degree.

Various classifications of master’s degrees exist, including academic, professional, and experiential (Glazer, 1988). Curricular requirements for master’s degrees vary from institution to institution and from state to state. The diversity in master’s degree curriculum makes comparison of degree programs, fields, and credentials difficult (Glazer, 1988). For example, some master’s-degree programs require a thesis, whereas others do not. The master’s degree must be approached “as a class of degrees rather than as a generic model, and as a credential sought increasingly for its own merits rather than in relation to the bachelor’s or doctoral degree” (Glazer, 1988, p. 1).

Historically, the purpose of a master’s degree was to produce graduates with beginning research or inquiry skills. Not all professions offer a degree at the doctoral level, and thus the master’s degree may be the terminal degree (highest degree conferred) for some professions.

During the 1980s, master’s-degree programs were challenged by more convenient educational alternatives that were shorter in duration and less expensive (e.g., certificate programs). Such certificate alternatives typically did not result in the conferment of a graduate degree. To compete with certificate programs, some master’s-degree programs were oriented toward practice rather than research. Currently, approximately 85% of all master’s-degree programs in the United States are considered to be practice-oriented or professional degrees (LaPidus, 2000). These programs are specialized in their focus, applied in terms of their content, and decentralized in that they are frequently not housed under the auspices of a graduate school (LaPidus, 2000).

Doctorate: Professional and Research

A doctoral degree is the highest degree conferred by an institution of higher education. Most doctoral degrees require the equivalent of 3 years of full-time postbaccalaureate study (Kapel, Gifford, & Kapel, 1991). Commonly, universities require a minimum of 72 hours of postbaccalaureate study plus a residence requirement. “Doctorate entitles bearers to be addressed as ‘Doctor’ and to append their names with the appropriate letters of their degrees—that is, PhD (doctor of philosophy) or MD (doctor of medicine)” (Unger, 1996, p. 305). There are two types of doctoral degrees: the research doctorate and the professional doctorate (Shafritz et al., 1988; Unger, 1996). The professional doctorate is also referred to as a clinical doctorate in many health professions (Pierce & Peyton, 1999).

The research doctorate (also called the academic doctorate), or PhD, was originally awarded for the study of philosophy in the mid- to late 19th century. However, the degree was extended to include many disciplines of the humanities and sciences, with each PhD simply modified to indicate the field of study; for example, PhD in engineering, PhD in history, or PhD in chemistry. The purpose of the PhD degree is to develop graduates who are independent researchers and are knowledgeable in a specific area of study. Requirements for the PhD degree usually include a course of didactic study, followed by written or oral comprehensive examinations (upon passing, one applies for candidacy), and the completion of a dissertation in some area of new knowledge as deemed appropriate by a committee of senior faculty after an oral defense of the research (Shafritz et al., 1988).

The Doctor of Science (ScD) is an alternative doctoral degree similar to the PhD. Its curriculum is focused on the study of an applied science, such as audiology, occupational therapy, and so forth. ScD degree programs commonly include didactic course-
work focused on the study of an applied science, an advanced clinical practicum, and a supervised clinical research project (Kidd, Cox, & Matthies, 2003). Other alternative doctoral degrees include the doctor of education (EdD) and the doctor of public health (DPH).

The professional doctorate reflects academic attainment and seldom requires a master's degree or dissertation (Unger, 1996). Unlike the PhD's focus on developing independent researchers, “sophisticated practice competencies” (Pierce & Peyton, 1999, p. 64) are emphasized in the professional doctorate degree. A person with a professional doctorate, such as an MD or doctor of jurisprudence (JD), must pass state or national qualifying examinations to obtain a license to practice (Unger, 1996). In the health sciences, the term clinical doctorate is synonymous with the term professional doctorate and the program of study typically requires “mentored advanced clinical experiences for autonomous practice competencies” (Edens & Labadie, 1987; Faut-Callahan, 1992; Hummer, Hunt, & Figuers, 1994; Pierce & Peyton, 1999; Watson, 1988).

**Postdoctoral Education**

With the growing complexity of knowledge and the need for scholars trained to high, creative levels, postdoctoral education has become increasingly popular to meet work demands in universities, industries, and government (Carmichael, 1961). However, postdoctoral education is widely misunderstood because there is little uniformity.

The adjective postdoctoral is frequently used to describe the variety of postdoctoral educational experiences. For example, terms such as postdoctoral fellow, postdoctoral research associate, and postdoctoral trainee are typically used. Despite the lack of uniformity among terms, postdoctoral is used to denote a research appointment after a doctoral degree has been awarded within a discipline or profession (Knowles, 1977).

**Residencies**

Although residencies are not common practice in occupational therapy, they are a form of postdoctoral education. “The purpose of postprofessional residency education is to advance the resident’s preparation as a provider of patient care services in a defined (specialized) area of clinical practice” (DiFabio, 1999, p. 81). Residency training activities are designed to promote the integration of practice, research, and scholarly inquiry (Medeiros, 1998). Professions such as medicine, pharmacy (American Society of Health-System Pharmacists, 2001; Miller & Clarke, 2002), and physical therapy (DiFabio, 1999; Farrell, 1996; Medeiros, 2000) offer postdoctoral specialty residencies to qualified practitioners.

**Levels of Education in Occupational Therapy Within the United States**

**Technical Level**

OTA. Occupational therapy assistant (OTA) programs are classified as technical and obtain accreditation from the Accreditation Council for Occupational Therapy Educa- tion (ACOTE®). OTA programs are commonly offered at community colleges, private junior colleges, and some 4-year colleges and universities. All OTA programs must adhere to the Standards for an Accredited Educational Program for the Occupational Therapy Assistant. As articulated in the Preamble of the Standards, an entry-level OTA must

- Have acquired an educational foundation in the liberal arts and sciences, including a focus on issues related to diversity;
- Be educated as a generalist, with a broad exposure to the delivery models and systems utilized in settings where occupational therapy is currently practiced and where it is emerging as a service;
- Have achieved entry-level competence through a combination of academic and fieldwork education;
- Be prepared to work under the supervision of and in cooperation with the occupational therapist;
- Be prepared to articulate and apply occupational therapy principles, intervention approaches and rationales, and expected outcomes as these relate to occupation;
- Be prepared to be a lifelong learner and keep current with best practice;
- Uphold the ethical standards, values, and attitudes of the occupational therapy profession (ACOTE, 1999b, p. 583).

After completing the OTA didactic and fieldwork requirements, the OTA graduate is eligible to sit for the national certification examination for OTAs. On successful completion, the certified occupational therapy assistant (COTA) may apply for the appropriate state credential and, under specified supervision, render occupational therapy services at the technical level of practice.

**Professional Level**

**Master’s: Entry-Level and Postprofessional.** As of January 2007 the master’s degree is the lowest degree level at which one can enter the profession as an occupational therapist. In occupational therapy education, there are entry-level (or sometimes referred to as the first professional degree) and postprofessional master’s-degree programs. Distinguishing between entry-level and postprofessional master’s-degree programs is not typical in other professions and disciplines (Rogers, 1980a, 1980b). Entry-level master’s-degree programs are the entrance into the profession of occupational therapy and are accredited by ACOTE. Some entry-level programs may require students to earn a baccalaureate degree in a related field before entering the master’s-degree program in occupational therapy. Other entry-level programs may require extensive prerequisite coursework but not mandate a baccalaureate degree. For example, the course of study may be a 5-year program leading to a master’s degree; or, in other programs, the study comprises two semesters beyond an undergraduate degree in a major such as occupational science. Coursework that may be considered remedial or prerequisite is not generally included in the total credits required for the master’s degree. On successful completion of the academic and fieldwork requirements, the graduate is eligible to take the national certification examination, then apply for state licensure and provide occupational therapy services at the professional level.

Postprofessional master’s-degree programs are available to individuals who have a professional degree in occupational therapy (e.g., baccalaureate, entry-level master’s, or an entry-level doctorate degree). Such postprofessional degrees are typical of master’s-degree programs in other disciplines with a range of 30 to 36 cred-
its. Postprofessional programs are developed to enhance occupational therapy skills in a specific area (e.g., pediatrics, assistive technology, gerontology). Other master’s-degree programs may provide a general program with a curricular emphasis (e.g., leadership or research).

**Doctorate: Professional and Research.** Currently, doctoral-level occupational therapy offerings include the professional (or clinical) and research doctorates. Some programs offer the PhD degree in occupational therapy. Other doctoral-degree programs related to occupational therapy exist, such as the PhD degree in rehabilitation sciences or occupational science or the ScD. Although many of these programs focus on the application of occupational therapy, it is beyond the scope of this document to describe the variations of doctoral programs closely aligned with occupational therapy.

The professional or clinical doctorate degree in occupational therapy confers the degree of doctor of occupational therapy (OTD) or doctor of occupational therapy (DrOT) degree to graduates. Two pathways exist for pursuing the clinical doctorate degree. The first is available to postprofessional students, that is, students who have an entry-level degree in occupational therapy. The second pathway leading to the clinical doctorate degree is an entry-level program. Entry-level clinical doctorate degree programs are available for individuals who do not have an entry-level degree in occupational therapy but who have completed specified prerequisite coursework and, as of 2010, a baccalaureate degree.

Although the clinical-doctorate-degree programs vary in philosophy and curriculum, typically the postprofessional clinical-doctorate programs are shorter in duration than the entry-level clinical-doctorate programs. The rationale for the difference in program length is that postprofessional clinical-doctorate students have previously completed an entry-level occupational therapy degree.

Several occupational therapy programs offer the PhD degree in occupational therapy. These doctoral programs focus on preparing graduates who are independent researchers and who will develop original knowledge pertinent to occupational therapy.

**Accreditation**

There are two types of accreditation: institutional (or regional) accreditation and program (or specialized) accreditation (Kaplin & Lee, 1995). Accreditation of occupational therapy programs is completed by ACOTE, which is part of a larger accreditation context (Kramer & Graves, 2005).

**Institutional Accreditation**

Regional or national accrediting bodies do not accredit programs but rather accredit institutions. “Institutional accreditation applies to the entire institution and all its programs, departments, and schools” (Kaplin & Lee, 1995, p. 873). There are 6 regional agencies that accredit institutions located in distinct geographical areas. Accreditation standards from regional or national accrediting bodies influence ACOTE in that their standards must be aligned with requirements from the USDE and the Council for Higher Education Accreditation (CHEA) (Kramer & Graves, 2005). In postprofessional OT programs, there is no specialized accrediting body. However, institutional accrediting bodies can require a focus visit of a particular program. A focus visit does not result in the accrediting of a specific program.

**Program or Specialized Accreditation**

Program or specialized accreditation “applies to a particular school, department or program within the institution” and “may also apply to an entire institution if it is a free-standing, specialized institution … whose curriculum is all in the same program area” (Kaplin & Lee, 1995, p. 873). The USDE and the CHEA afford ACOTE “the distinction of being reflected as a national recognized accrediting agency that is seen as a reliable authority about the quality of education offered by the occupational therapy and occupational therapy assistant programs it accredits” (Kramer & Graves, 2005, p. 1). Currently ACOTE accredits OTA and entry-level or first professional-degree programs in occupational therapy. Such accreditation endeavors are considered specialized, because the accrediting body, ACOTE, reviews OT and OTA programs to ensure quality and that educational standards are met. The educational standards are developed through ACOTE with input from stakeholders.

**Suggested Considerations When Choosing an Occupational Therapy Educational Program**

When choosing an occupational therapy educational program, important factors must be considered (see Table 1).

A variety of resources can help one to obtain information about specific education programs. Institutional Web sites can be helpful in acquiring information about the program’s curriculum and faculty. Brochures, catalogs, and bulletin descriptions often present the program’s mission, philosophy, curriculum, or policies. These materials can be requested from the admissions office of each institution. Contacting faculty within the program is frequently useful to answer specific questions. Prospective students may request contact with a current student or alumni to gain a consumer’s perspective of the program.

**References and Resources**

Accreditation Council for Occupational Therapy Education. (1999a, August). *ACOTE Motion and Resolution J* [Minutes at the meeting of the Accreditation Council for Occupational Therapy Education]. Bethesda, MD: Author.


Table 1. Considerations for Occupational Therapy Entry-Level and Postprofessional Education

<table>
<thead>
<tr>
<th>Location of program</th>
<th>Tuition</th>
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<tr>
<td>Length of program</td>
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<td>Availability of student scholarships</td>
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<td>Full- or part-time programs</td>
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<td>On-campus or distance-formatted programs</td>
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<td>Admission requirements</td>
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<tr>
<td>- Interview</td>
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<td>- Entrance exams (e.g., Miller’s Analogy, Graduate Record Exam)</td>
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<td>- Letters of recommendation, essays</td>
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<td>- Prerequisite classes or degree</td>
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<td>- Observation hours in occupational therapy</td>
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<tr>
<td>Type of program</td>
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<tr>
<td>- Degree awarded (e.g., AA, MS, MA, MOT, PhD, ScD, OTD)</td>
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<td>- Thesis requirement</td>
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<td>- Dissertation requirement</td>
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<td>- Curriculum (e.g., courses offered, course descriptions printed in catalog)</td>
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<td>- Program mission and philosophical grounding</td>
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<td>- Specialization (e.g., gerontology, pediatrics, entrepreneurialism)</td>
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<td>- Experiential components</td>
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<td>- Fieldwork, internships, rotations, etc.</td>
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<td>- Length of clinical preparation</td>
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<td>- Opportunities for postdegree experiences (e.g., residencies/ fellowships)</td>
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<td>Institutional variables</td>
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<tr>
<td>- Carnegie classification</td>
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<td>- Library resources</td>
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<td>- Information technology/computer support</td>
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<td>- Stability of program</td>
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<td>- Graduate or professional school</td>
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<td>- Ratings and rankings of programs</td>
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<td>Graduate/alumni accomplishments</td>
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<td>- Graduation rate</td>
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<td>- Employment rates, sites</td>
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<td>- Employer satisfaction with graduates</td>
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<td>- Consumer satisfaction with graduate performance</td>
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<tr>
<td>Faculty</td>
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<tr>
<td>- Faculty credentials (e.g., doctorally prepared, specialty certified)</td>
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<tr>
<td>- Faculty-to-student ratios</td>
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<td>- Faculty accessibility</td>
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<tr>
<td>- Faculty projects (e.g., grants, publications)</td>
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<tr>
<td>- Faculty clinical practice</td>
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In addition, it is important to answer the following questions:
- What are my future career goals?
- Does the degree offered contribute to accomplishing my short-term and long-term goals?
- If considering an online program, do I have the necessary skills to be successful (e.g., motivation, self-initiative, technical skills)?


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