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Proposing a Metacurriculum for Occupational Therapy Education in 2025 and Beyond

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Proposing a Metacurriculum for Occupational Therapy Education in 2025 and Beyond

Abstract

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Keywords

Occupational therapy curriculum, metacurriculum, occupational therapy education

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ABSTRACT

The American healthcare system has undergone significant changes in the past few years due to government and corporate-level changes. As healthcare requirements continue to shift, occupational therapists must continue to assert their role or risk losing relevancy. Therefore, educational programs must prepare students to meet the populations' shifting healthcare needs through agile curricula which focus less on isolated skills and more on broad areas of impact. To determine essential content comprising a 'metacurriculum' for occupational therapy education of the future, nine articles were analyzed using Bloom's Taxonomy (revised) to code each document into knowledge, skills, and behaviors. Major themes were identified across all documents. Through the coding analysis eleven themes were identified: population health, developing life-long learners, advocacy (at government and individual level), interprofessional collaboration, generation of evidence and translational science, diversity and inclusion, psychosocial concerns, aging, wellbeing and preventative care, contemporary issues and informatics. The themes can serve as an outline for academic programs to continue to evolve their curricula to ensure that practitioners are fully prepared to address the global issues that will manifest during their careers in occupational therapy.

INTRODUCTION

The implementation of new healthcare laws and changing national demographics have transformed the responsibilities of healthcare professionals in caring for their clients. The Affordable Care Act (ACA) shifted the healthcare system into one based upon

prevention and wellness, and thus chronic and mental health related conditions are gaining greater attention (Chiu et al., 2016). The new value-based reimbursement process has altered the delivery of care to focus on quality improvement and patient satisfaction (Henkel & Maryland, 2015). In addition to a changing healthcare infrastructure, the population is becoming more diverse as migration from crises and globalization occurs (Jones, Higgs, de Angelis, & Prideaux, 2001; Talero, Kern, & Tupe, 2015). A focus on preventative healthcare, culturally competent care, and on service delivery in community-based settings reflect approaches used by healthcare professionals to respond to the constantly changing landscape of healthcare (Anderson, Scrimshaw, Fullilove, Fielding, & Normand, 2003). Even so, progress has been slow in comparison to the pace of change. This is in part due to the practice of retrospectively identifying individual problems and responding with solutions rather than taking a broad, proactive and strategic approach (Jones et al., 2001). We suggest here that such a prospective lens may be better suited for health professionals to proactively meet society's demands.

One way educational programs can strategically prepare healthcare professionals is by forecasting the future set of knowledge, skills, and behaviors required for effective and value-added practice. As society and healthcare change, professional training as implemented through curricula must also change (Jones et al., 2001). However, current occupational therapy curricula may need enhancement to best meet the needs of a future healthcare climate. For example, occupational therapy programs across the country are inconsistently teaching prevention and wellness, cultural issues, and mental health (Egan & Cahill, 2017; Hildenbrand & Lamb, 2013; Talero et al., 2015). The literature suggests that culturally responsive education has too heavy a Western perspective and mental health content lacks a specific mental health focus beyond the Accreditation Council for Occupational Therapy Education (ACOTE) standards (AOTA, 2018; Egan & Cahill, 2017; Talero et al., 2015). For instance, mental health has already become a diminished area of practice as other professionals, such as psychologists, nurses, and social workers, have assumed the life-skills and work domains and limited the areas where occupational therapists are recognized as mental health providers (Gutman, 2011). Only in 2015, through advocacy in policy, has occupational therapy started to gain greater recognition in community mental health (Egan & Cahill, 2017). However, fewer occupational therapy students are entering the mental health field either due to a lack of interest fostered during the graduate program or fewer employment opportunities (Egan & Cahill, 2017). As healthcare requirements continue to shift, occupational therapists must assert their potential roles and value or risk losing relevancy in a competitive market. Occupational therapists must adopt a "professional consciousness", the ability to recognize and meet the changing demands in healthcare and the population (Hildebrand & Lamb, 2013, p. 2). In addition, successful therapists are those who can demonstrate quality care and its value to the healthcare team (Leland, Crum, Phipps, Roberts, & Gage, 2015).

In this study, we aimed to identify the knowledge, skills, and behaviors future occupational therapists will require in the year 2025 and beyond. We utilized Bloom's Taxonomy (revised) to provide a reference for curricular construction. Bloom's

Taxonomy (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956) is arguably the best known single element of educational literature. Since its inception over a half-century ago, it has been the foundation of many, if not most, educational curricula and instructional designs. In contemporary education, a revised version of Bloom's Taxonomy (Anderson et al., 2001) is the standard learning taxonomy in use. Although it consists of three different sections (cognitive, affective, psychomotor), most educators use the cognitive domain to support their teaching and writing of intended learning outcomes (Adams, 2015).

METHODS

A basic qualitative content analysis approach (Elo & Kyngas, 2008; Hsieh & Shannon, 2005) was utilized to code nine documents which were selected as representing a wide variety of forward-focused perspectives on the knowledge, skills and attitudes needed for entry-level healthcare practitioners current and future. A literature search ranging from 2000-2017 was completed using the Pub Med and Google Scholar databases. Primary search terms used included higher education, healthcare, occupational therapy, and skills. The search was limited based on relevance to the subject and accessibility of the full text versions of documents/articles. Source documents selected through the literature review were supplemented by lists provided by experienced health sciences educators. The sampling frame was purposeful, inclusive of international perspectives (four of the nine fit this descriptor) and yielded the final list (see Table 1).

The major divisions of Bloom's Taxonomy-revised (Anderson et al., 2001)- the cognitive domain (which includes conceptual and procedural [skills] knowledge) and affective domain- served as *a priori* coding categories for analyzing the content of the nine source documents using an inductive coding strategy. The three co-authors independently coded each of the nine documents using knowledge, skills or attitudes as categories. They then met to discuss and match codes, proceeding line-by-line through all the codes in each document, achieving greater than 90% agreement. Codes were first identified as subcategories using content-characteristic words (Elo & Kyngas, 2008). Each group of subcategories was condensed into eleven main categories, or themes, using inductive interpretation formed through consensus among the three co-authors. For example, the subcategories of culture, social determinants of health, social justice, advocacy and ethical were condensed into the theme of diversity and inclusion. Certain codes, such as culture, fit conceptually into more than one theme, namely population health and diversity and inclusion, for example. Such overlap is not uncommon in content analysis and was addressed here by reaching consensus among the three coders.

RESULTS

A total of nine documents were analyzed using Bloom's Taxonomy-revised (Anderson, et al., 2001) to categorize the major codes of each document into knowledge, skills, and behaviors (see Table 1). Through the coding analysis, eleven themes were identified which directly corresponded with knowledge areas in Bloom's taxonomy classification system. The major themes identified included: population health, developing life-long

learners, advocacy (at government and individual level), interprofessional collaboration, generating evidence and translational science, diversity and inclusion, impact of psychosocial factors, aging, wellbeing and preventative care, informatics, and contemporary issues (see Table 2). Each of these knowledge areas was supported by skills necessary to ensure the success of future practitioners as well as attitudes and behaviors essential to implementation of the skills and knowledge. It should be noted that there is some overlap between the skills and attitudes identified during this study. The presence of a skill or behavior can extrapolate to more than one knowledge area; similarly, a knowledge area can also serve as a skill or behavior. For the purposes of this study, codes were categorized into their most appropriate taxonomy level. The use of Bloom's Taxonomy-revised levels to delineate codes was meant to serve as a simple guideline for implementation into future occupational therapy curricula.

Table 1

Documents Coded

The Minimum Standards for the Education of Occupational Therapists (World Federation of Occupational Therapists [WFOT], 2016)

Health Professions Education: A Bridge to Quality (Greiner & Knebel, 2003)

A Framework for Educating Health Professionals to Address the Social Determinants of Health (National Academies of Sciences, Engineering, and Medicine, 2016)

The Blueprint for Entry-Level Education (American Occupational Therapy Association [AOTA], 2010)

The College of Occupational Therapists Pre-registration Education Standards (College of Occupational Therapists, 2008)

The Profile of Practice of Occupational Therapists in Canada (Canadian Association of Occupational Therapists [CAOT], 2012)

Healthy People 2020 (Office of Disease Prevention and Health Promotion, 2016)

Reference Points for the Design and Delivery of Degree Programmes in Occupational Therapy (Berding et al., 2008)

The Essential Learning Outcomes of Liberal Education and America's Promise (Association of American Colleges & Universities, n.d.)

Table 2

Themes, Sub-themes, and Thematic Exemplars

Theme (Knowledge Area)	Skills and Behaviors Required	Exemplars
Population Health	Environment (political structure and power dynamics)	“Understanding the complexities of working with communities and population facing a wide range of social issues ...” (Berding, 2008, p. 33)
	Community evaluation and intervention	“...call occupational therapists to engage in community capacity building and society change beyond the individual. (WFOT, 2016, p. 5)
	Social determinants of health	“Social environment support of or impact on performance, participation, and well-being.” (AOTA, 2010, p. 5)
	Advocacy	Advocate on behalf of, and with clients, working towards positive change to improve programs, services, and society...” (CAOT, 2012, p. 3)
	Resource planning and provision	“Health professionals should make efforts not to waste resources...” (Greiner & Knebel, 2003, p. 47)
	Clients as experts	“...aims to ensure that persons are actively engaged in the whole process, the success of which is measured in terms of the resulting satisfaction that the person experiences with their everyday life.” (Berding et al., 2008, p. 26)
	Social justice focus	“...competence, skill, and passion to take action, independent of their role and position in the health system, on these crucial contributors to individual and community health...” (National Academies of Sciences, Engineering, and Medicine, 2016, p. 2)

Developing Life-long Learners	Locate and evaluate evidence	“Critically appraise best evidence...” (CAOT, 2012, p. 10)
	Implement evidenced-based practice	“...base their work on the best evidence from research, best practices, and experiential knowledge.” (CAOT, 2012, p. 3)
	Problem-solving	“Can apply ...their problem solving abilities in new or unfamiliar environments within a broader context. (Berding et al., 2008, p. 55)
	Critical thinking	“... a strong emphasis on critical inquiry...” (Association of American Colleges & Universities, n.d., p. 5)
	Theory	“Demonstrates innovation and evidence of critical engagement in developing occupational therapy methods and processes, informed by contemporary research and/or theory.” (Berding et al., 2008, p. 56)
Advocacy	Communication (oral & written)	“...habitual and judicious use of communication...” (Greiner & Knebel, 2003, p. 3)
	Leadership	“Educate occupational therapists who are empowered and prepared as leaders ...” (WFOT, 2016, p. 11)
	Autonomy	“Autonomous, self-regulated professional, who individual and collective monitor and manage their personal and professional limits.” (CAOT, 2012, p. 3)
	Strong sense of occupational therapy’s role	“...promoting the profession’s concerns with inclusion, diversity, justice and human rights in daily life due to: disability, poverty, abuse, violence, environmental disasters and other restricting conditions...” (WFOT, 2016, p. 5)

	Policy formation	"Is proactive and responsive to change and development of policies at international and national levels." (Berding, 2008, p. 57)
Interprofessional Collaboration	Team work	"Works within the limitations of own knowledge and skills and refers to other professionals when required." (Berding et al., 2008, p. 54)
	Communication (oral & written)	"...enable communication and effective dynamic interactions with clients, team members and others about occupations, engagement in life's occupations, as well as occupational therapy services." (CAOT, 2012, p. 3)
	Problem-solving/ decision-making	"... learning to work and solve problems in the company of others..." (Association of American Colleges & Universities, n.d., p. 5)
	Distinct value of occupational therapy	"...the work of occupational therapists is defined by congruency with the core values and beliefs that inform the occupational therapy profession and the application of knowledge, skills and abilities related to occupational enablement." (CAOT, 2012, p. 16)
Generating Evidence and Translational Science	Health outcomes research and data recording and analysis	"Is able to lead scientific investigations regarding intervention programs and evaluation of assessment tools and treatment strategies..." (Berding, 2008, p. 60)
	Scholarly writing and presentation	"Can clearly communicate research conclusions and methodology underpinning these, to peers and non-specialist audiences." (Berding, 2008, p. 57)
Diversity and Inclusion	Recognition of personal limits & biases	"Need to be well informed of the external forces shaping their opportunities and resources." (WFOT, 2016, p. 22)

	Culturally competent communication	“Communication approaches vary widely and require a high level of expertise that is adapted and changed...” (CAOT, 2012, p. 3)
	Client-centered care	“Include the client as an active team member...” (CAOT, 2012, p. 8)
	Professionalism	“Design or implement systems to support professionalism and quality of practice.” (Greiner & Knebel, 2003, p. 12)
Impact of Psychosocial Factors	Trauma-informed care	“Early childhood experiences of trauma, abuse and neglect with life-long relational consequences...: (WFOT, 2016, p. 31)
	Interventions for psychosocial concerns	“...psychosocial rehab techniques to engage adults in their own empowerment.” (CAOT, 2012, p. 20)
	Rapport building	“...effective working relationships with recipients of occupational therapy and their families...” (WFOT, 2016, p. 34)
	Environmental concerns related to psychosocial dysfunction	“The relationship between psychological, social and economic factors and occupation...” (WFOT, 2016, p. 31)
Aging	Occupations of older adults	“The relationship between occupation and human development over the life course: healthy ageing.” (WFOT, 2016, p. 31)
	Health conditions of aging	“...explore or raise critical questions about occupational performance, occupational engagement, occupational participation and environment support and limits for...older citizens...” (WFOT, 2016, p. 38)
	Environmental concerns related to aging	“Economic, social, political and cultural impact and potential of an ageing society, as well as, aspirations

		of ageing people” (Berding, 2008, p. 167)
	Government-based services	“The philosophy and practices of the governments shaping health and social services access and policies...” (WFOT, 2016, p. 21)
Wellbeing and Preventative Care	Health empowerment	“...support and empower communities, the health workforce, and educators to work together in an equal partnership to address the social determinants of health...” (National Academies of Sciences, Engineering, and Medicine, 2016, p. 31)
	Wellness	“...the integration of disease and illness prevention and wellness into medical education...” (Greiner & Knebel, 2003, p. 76)
Informatics	Understand and utilize virtual tools and electronic communication	“Communicate, manage knowledge, and mitigate error, and support decision making using information technology.” (Greiner & Knebel, 2003, p. 4)
	Telehealth	“Using information technology to support programming and promote function.” (WFOT, 2016, p. 33)
	Ethical use of technology	“Understand...data security and data encryption, and directly address ethical and legal issues related to the use of information technology in practice.” (Greiner & Knebel, 2003, p. 63)
Contemporary Issues	Business fundamentals	“...demonstrating accountability to the public and funders for contributing the effective client programs and services that enable participation through occupation.” (CAOT, 2012, p. 3)
	Media relations	“Consultation with decision-makers and the media” (Berding, 2008, p. 57)

Critical consciousness	“Monitoring...as the local health needs, occupations, services, legislation and student knowledge, skills and attitudes change over time or more quickly as a result of environmental, political and economic events.” (WFOT, 2016, p. 22)
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DISCUSSION

As global societies experience the challenges of an increasing population, the need for greater healthcare, environmental impacts and other constantly evolving social concerns, occupational therapy practitioners must adapt to meet the needs of the world’s citizens. Therefore, educational programs must continue to evolve and provide their students with the information and skills necessary to address the challenges of the future. Based on the results of this qualitative content analysis, educational programs will benefit by evolving their curricula on a regular basis and to broadly prepare future practitioners to address dynamic issues affecting health and wellbeing on a global scale.

Population Health

The subject of population and community level health was prevalent across many documents used for this study (AOTA, 2010; Berding et al., 2008; Greiner & Knebel, 2003; National Academies of Sciences, Engineering, and Medicine, 2016; Office of Disease Prevention and Health Promotion, 2016; WFOT, 2016). For future practitioners to demonstrate proficiency in the area of population health they must understand how all aspects of the environment interact to affect health. This includes knowledge in political structure and power dynamics. Broadly, skills in the area of population health focus on evaluating, intervening in, and collaborating with the community. Social determinants of health, advocacy at the population level, and resource planning and provision are also core skills within this knowledge area. Based on the need for these skills, certain attitudes are required for future practitioners to be successful. Providing education to increase students’ abilities to see their clients as the experts in their own lives while also promoting a strong sense of social justice will be necessary for future practice in population health.

Developing Life-long Learners

The knowledge areas of evidence-based practice, continuous quality improvement, and career competence have been combined into the broad knowledge domain of developing life-long learners. Within this realm, the documents identified the ability to locate, synthesize, and apply new information as skills necessary for future occupational therapy practitioners (AOTA, 2010; Berding et al., 2008; Greiner & Knebel, 2003; National Academies of Sciences, Engineering, and Medicine, 2016; Office of Disease Prevention and Health Promotion, 2016; WFOT, 2016). Skills in the areas of problem-solving and critical thinking were prevalent throughout the documents, leading to the necessity for explicit skills building in these areas in future curricula. Further, the

documents noted that students should have a strong theoretical basis with which to evaluate evidence. Attitudes required for competency in this domain require future practitioners to be motivated to seek new evidence and evaluate all evidence with a critical eye.

Advocacy

Among the documents reviewed, advocacy was discussed in various forms in every article. Advocacy may be necessary at the individual (client) level, organizational level, or community (governmental) level. Regardless, for future practitioners to engage in advocacy they must possess skills in communication and leadership. Within the knowledge area of leadership is the inherent need for effective oral and written communication, autonomy, planning and realizing occupational therapists' role as a change agent. The authors note that several documents called for future practitioners to have strong skills in the area of policy formation in order to advocate for new policies to best suit the profession and clients served (Berding et al., 2008; Greiner & Knebel, 2003; National Academies of Sciences, Engineering, and Medicine, 2016; Office of Disease Prevention and Health Promotion, 2016; WFOT, 2016).

Interprofessional Collaboration

Evidence continues to suggest the benefits of interprofessional education and team-based care in improving patient satisfaction and outcomes (Baggs et al., 1999; Martin, Ummenhofer, Manswer, & Spirig, 2010). Through the review the authors noted that delivering services in interdisciplinary, multidisciplinary, and transdisciplinary teams were consistently an area of focus (AOTA, 2010; Berding et al., 2008; CAOT, 2012; Greiner & Knebel, 2003; National Academies of Sciences, Engineering, and Medicine, 2016; Office of Disease Prevention and Health Promotion, 2016; WFOT, 2016). The skills required for full participation in a team environment are based in communication. While also addressed in other knowledge domains, communication among team members is essential for developing partnerships, problem solving, and decision making. Practitioners engaged in interdisciplinary teams must have a developed understanding of their profession's unique value within the team while simultaneously sharing responsibility for quality patient care.

Generating Evidence and Translational Science

The importance of continuous generation of research was prominently discussed in several of the documents. The WFOT Minimum Standards (2016) cited research as a means to "create and disseminate knowledge and [as a means of] leading with vision" (p.7). The generation and dissemination of research is a vehicle through which the profession continues to remain relevant and improves overall service provision for all consumers. Several articles noted the importance of skills in conducting health outcomes research, data recording, and analysis. In addition, while not solely used for scholarly inquiry, skills in writing for grants, journals and abstract preparation, as well as skills in delivering presentations were noted as beneficial additions to the professional repertoire (Berding et al., 2008; CAOT, 2012; Greiner & Knebel, 2003; WFOT, 2016). Additional behaviors associated with generating research include safety, ethics, and a desire for inquiry.

Diversity and Inclusion

Diversity and inclusion continue to be at the forefront of changing global societies with the millennial generation leading the charge for health equity (Castro, 2010). Healthcare professionals are required to move towards cultural competence and humility to bolster their ability to provide quality healthcare to individuals of all races, cultures, and ethnicities (Cohen, Gabriel, & Terrell, 2002). Under this domain, the authors found that practitioners must be able to recognize the limits of their personal experience, fine-tune awareness of biases and communicate with diverse groups of people. For occupational therapy practitioners, this takes the form of providing client-centered and occupation-based services that best suit the client even if that may go beyond the therapists' cultural norms. While certainly there are a host of behaviors required for diversity and inclusion, professionalism may be essential for future practitioners to explore new cultural perspectives in a sensitive and humble manner.

Impact of Psychosocial Factors

Following the largest expansion of funding for mental health services with the Patient Protection and Affordable Care Act (2010) awareness, support and services for mental healthcare have become a pivotal issue. Due to the current social and political climate, as future practitioners enter the workforce, they will be required to demonstrate skills to address psychosocial factors across all treatment settings (Costa, Molinsky, Kent, & Sauerwald, 2011). Students must be prepared to demonstrate skills in providing trauma-informed care, interventions designed to reduce and counteract symptoms of mental illness and generate rapport with clients experiencing psychosocial concerns through therapeutic-use-of-self. Further, students must be prepared to explore all areas of the environment as they relate to mental health and impact occupational performance and participation.

Aging

The National Institutes of Health (NIH; He, Goodkind, & Kowal, 2015) reported that advances in medicine, greater access to healthcare, and preventative care are drastically increasing the global life expectancy, which is predicted to be 76.2 years in the 2050. Further, NIH predicted that the number of Americans age 65 or older will double to 88 million people by the year 2050. Based on these numbers, future practitioners must be prepared to tackle issues related to aging. Students must be prepared to address the creation of new occupations in older adulthood, health conditions related to aging, environmental concerns with aging, as well as the financial implications of government-based services.

Well-being and Preventative Care

As a response to the Affordable Care Act's prioritization of preventative care, the United States Surgeon General released the National Prevention Strategy (NPS) with the goal of increasing the health of Americans through preventative health and wellness approaches (National Prevention Council, 2011). The goals of the NPS were to engage community partners, generate national leadership, create policies and programs and generate evidence to improve overall health outcomes. Despite possible changes to the Affordable Care Act, evidence continues to demonstrate the benefit of health promotion

and prevention on improved health outcomes (Center for Disease Control, 2009). Occupational therapy, as a holistic profession, continues to have a central role in wellness and prevention using evidenced-based interventions targeted at increasing awareness and self-management skills (AOTA, 2015). Moving forward, occupational therapy students will require skills in empowering individuals to take charge of their own health through attitudes and behaviors that encourage motivation and promote health beliefs.

Informatics

Over the past decade, informatics has quickly become an essential area supporting the healthcare world. Merged from various names such as computer medicine and medical information science, health informatics is defined by the National Library of Medicine, citing Dr. Richard Proctor, as the “interdisciplinary study of the design, development, adoption, and application of IT-based innovations in healthcare services delivery, management, and planning” (Proctor, 2009). The umbrella term encompasses multiple electronic forms of data including electronic medical records, data collection devices, and personal devices and accounts (McGowan, Cusack, & Bloomrosen, 2012). With the rapid creation and implementation of new forms of medical technology it is imperative that occupational therapy practitioners possess the skills to access and utilize new virtual tools as they are developed. Students must be prepared for practice with a basic understanding of technology, electronic communication, the potential of telehealth and the ability to make informed decisions regarding effective and ethical technology use.

Contemporary Issues

Finally, as the needs of the world’s population rapidly shift and individuals face concerns related to global health disparities and issues of climate change, disease, psychosocial wellbeing, conflict, and inequitable division of resources, future practitioners must be prepared to address novel challenges which impact health and wellbeing in unanticipated ways (World Health Organization, 2017). Occupational therapy practitioners must be equipped with the agility to articulate the role of occupational therapy, apply occupation-based principles and function as a client-centered expert in occupational performance and engagement as related to a variety of rapidly changing contexts. In addition, skills in contemporary business fundamentals and media relations will further serve graduates in generating an income for their services particularly in underfunded areas of practice. Therefore, educational programs must prepare students to develop a critical consciousness of community and global events and to identify any impact on full occupational participation.

Limitations

There are several limitations to the current study. Primarily, the qualitative methodology was limited as a desire to create a guide for entry-level education rather than complete an in-depth analysis of the content. Secondly, the choice to use Bloom’s Taxonomy-revised rather than Bloom’s Digital Taxonomy may have resulted in the exclusion of some digital technology. Further research on this topic may include examining current curricula for potential opportunities to implement changes, creating a model curricula

containing blueprint knowledge, and exploring how various occupational therapy educational institutions incorporate these suggested topics.

Implications for Occupational Therapy Education

The current ACOTE standards (AOTA, 2018) provide an extensive list of essential skills and knowledge to cover in curricula. The document can appear overwhelming during the process of curriculum development. In addition, many programs grapple with the task of preparing their students for entry-level practice while minimizing student debt loads and limiting curriculum creep. Therefore, implementation of additional information into an already packed curriculum can seem daunting. The knowledge, skills, and attitudes essential for future practitioners as described in the eleven themes above must therefore be assimilated into an already lengthy list of requirements that educational programs must meet. The eleven themes represent conceptual areas of emphasis for occupational therapy curriculum design. The themes include foundational knowledge, therapeutic skills, and professional attitudes and characteristics necessary for successful intervention in addressing society's occupational needs. All three aspects are present within each individual theme and are not mutually exclusive. How, and to what degree, the themes are built into curricula is dependent upon institutional context, program mission, and available resources. One approach to integrating themes into clinical skills could be through constructing individual student skills competencies. For example, students learning client interview techniques (communications skills, different modes of communication, or therapeutic use of self) with clients from a different culture must understand the impact of contemporary issues, diversity and inclusion, psychosocial factors, wellbeing and preventative care, and population-level health. A student completing a client interview skills check, would need to ascertain information about social determinants of health, health management occupations, cultural occupations, and the mental wellbeing of the client before generating a holistic treatment plan. This is just one example of how several themes can be incorporated into an existing skill checks to ensure that future practitioners are prepared for changing practice.

Many of the themes identified in our analysis are currently covered to some degree through the ACOTE standards (AOTA, 2018) and in AOTA's Vision 2025 (AOTA, 2017). Current ACOTE standards require that educational institutions prepare students to practice in the areas of health and wellbeing, community-level interventions, and contemporary health delivery systems, while being cognizant of psychosocial concerns and their impact on occupational functioning. The standards also require the use of evidence-based practice, a life-span approach, advocacy for the consumer and profession and methods of intradisciplinary and transdisciplinary collaboration. Knowing the cultural context of diversity and the environmental impact of technology are also indicated. In Vision 2025, AOTA cites the need for future practitioners to have strong skills in leadership and collaboration with a focus on providing client-centered, culturally responsive care (AOTA, 2017). Therefore, many of the domains identified are already

being incorporated into the current curriculum and may result in minimal barriers to implementation, depending upon program and institutional context.

Regardless of the existence of language related to the eleven themes in the ACOTE standards and Vision 2025 (AOTA, 2017), the attention given to each domain will need to be more focused to meet the changing needs of the global population. Moving forward, occupational therapy practitioners will need to be specifically prepared to address an aging population that is living for several decades after retirement and engaging in new occupations late in life. Mental health will need to be addressed earlier and with services at the population level to prevent mental health crises and manage chronic mental health conditions. Interventions such as early implementation of coping skills and the provision of mental health services in new locations such as elementary schools, college campuses and in the workplace will be important for ensuring psychosocial wellbeing. Policy level changes to immigration, the impact of global conflict, and rising racial tension will bring new cultural perspectives at the consumer and practitioner level which inform the needs for diversity and inclusion initiatives. Healthcare's focus on cost-effective preventative care will continue to require occupational therapy practitioners to address population-level interventions targeted at health, wellness, and lifestyle redesign. It will be essential for future practitioners to be consumers and producers of research to further the profession and be able to utilize evidence-based practice to address new barriers which prevent meaningful participation. As the practice of healthcare itself changes, practitioners must have advanced knowledge in constantly evolving technology, as well as the ability to learn to use new technology as it emerges. Beyond new technology, the focus on the healthcare team will continue to require skills in collaborative communication and team-based care.

Having considered the conceptual presence of many of these themes in current ACOTE standard language and arguing for more focused attention, we further suggest that a 'metacurriculum' composed of the eleven themes (see Table 2) offers a supplemental and enhanced perspective which can aid curriculum designers in several central ways. First, the metacurriculum provides a starting point for development of comprehensive intended learning outcomes; these reflect a backwards design (Fink, 2013; Wiggins & McTighe, 2005) approach which contrasts from the traditional 'list of topics' strategy unintentionally reinforced by standards and similar documents. Second, the metacurriculum represents an educational paradigm that facilitates not only sustained effort from learners, but also greater depth in fewer topics; both of which lead to more enduring learning (Bjork & Bjork, 2009; Fink, 2013; Schwartz, Sadler, & Tai, 2009). Third, we suggest that perhaps it's not merely a matter of adding 'more' content. Rather, the focus should be on shaping curriculum design and creation of intended learning outcomes to better integrate concepts and guide learning based upon subject-centered learning models (Hooper et al., 2015; Mitcham, 2014). The clarity and structure of the metacurriculum offers some key concepts around which to build a subject-centered curriculum. Fourth, the metacurriculum provides a basic structure which allows curricula to be more easily adjusted on a regular basis in contrast to the more commonly encountered static process for curriculum renewal. With the continuous rapid pace of change in healthcare, expertise can be fleeting. Finally, the metacurriculum can act as a

translating medium to embed the pillars (most notably accessibility and customization of care) of Vision 2025 (AOTA, 2017) into curricula. Therefore, the use of the eleven themes identified through this study can serve as a foundation through which future practitioners can be prepared for the ever-changing field of healthcare with knowledge and skills that adapt to that changing world.

CONCLUSION

Ultimately, for the profession of occupational therapy to remain valuable and relevant in a changing world, educational programs must continue to prepare entry-level practitioners to address emerging trends and policy level changes. As based upon eleven themes identified in this analysis, we have proposed a ‘metacurriculum,’ which offers a high-level roadmap to guide curriculum design for established programs as well as the increasing number of newly developing occupational therapy education programs. It is intended to serve as a supplement and practical alternative to documents such as the Blueprint for Entry-level education and the ACOTE Standards. The metacurriculum can serve as a foundation for education programs to continue to shape their curricula to ensure that practitioners are fully prepared to address the global issues that will manifest during their careers in occupational therapy. If education programs fail to prepare students to tackle the dynamic practice contexts and the changing demographics of society, the field of occupational therapy risks becoming stagnant and less vital in a constantly evolving world. The profession of occupational therapy is potentially suited to address many evolving global issues, yet without curricula which equip students with the tools to face new challenges head on, the evolution of the profession may be slowed.

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