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Occupational Therapy's Role: A Foundational Occupational Therapy Education Resource for Ghana

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Shalyn K. Hample  
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The authors wish to thank Dr. Haskins for her knowledge, expertise, sense of humor, and her ability to guide our thoughts and ideas into the creation of this scholarly project. This project has not only been a learning experience, but is envisioned to be a meaningful supplement to the developing occupational therapy program in Ghana, and most importantly, for facilitating occupational justice to the people of Ghana. The authors would also like to extend their gratitude to E.A. at the University of Ghana for the time she took to provide the authors with detailed assessment information about the current occupational therapy program, enabling the creation of educational resources that are tailored to the students’ unique needs. Lastly, we thank all the other individuals who helped aid in the development of this project, including our families who have loved us and have been extremely supportive throughout the entire process.
ABSTRACT

In the developing country of Ghana, West Africa, there is a population of over 1 million individuals with disabilities (Timney, 2007). Ninety-five percent of these people have no rehabilitation service access (Timney, 2007). Due to the presence of social, political, and economic factors including negative societal stigma towards people with disabilities, political corruption and poverty, Ghana's population is vulnerable for occupational deprivation. Occupational deprivation places this population at risk for preventing engagement in or forceful discontinuation of meaningful daily occupations such as farming, education, and employment opportunities (Whiteford, 2000; Yeoman, 1998).

The U.S. has helped offer some assistance to Ghana, focusing mainly on emergencies, such as prevention of infectious diseases (Timney, 2007). This assistance has neglected to include those who are disabled. Although rehabilitation faculty from other countries have visited Ghana to provide intermittent assistance, the immense rehabilitation needs of Ghana would be best met by the retention of rehabilitation personnel within the country. In response to this need, the School of Allied Health Sciences at the University of Ghana was established in 2012; however, the program lacks permanent occupational therapy faculty to teach incoming students (Crouch, 2001). In 2013, there were only two qualified occupational therapists reported in the country (Beguin, 2013). Ghana's developing occupational therapy program could be initially sustained with external assistance to develop educational coursework to train occupational therapists that will be retained in Ghana (Crouch, 2001; Timney, 2007). Therefore, the purpose
of this project was to create an education resource to provide to the University of Ghana to
further the development and sustainment of the occupational therapy program.

A comprehensive literature review was conducted on topics related to occupational
engagement, people with disabilities, and the development of an occupational therapy education
program in Ghana, Africa. Research was done on the culture of this country, prevalent
disabilities, adult learning style, the healthcare system, and steps that have already been taken in
Ghana, Africa to develop rehabilitation services for individuals with disabilities. In addition, data
was obtained from a series of needs assessments to provide a personal perspective for content of
the product and targeted audience. Lastly, a personal communication interview was conducted
with qualified individuals who had first-hand experience with this culture and occupational
therapy to gain insight into their professional opinion of foreseen needs to address. The Person-
Environment-Occupation Model has guided the data gathering process and development of the
product. This information has supported the need for implementation of occupational therapy
educational materials to further progress this country's developing occupational therapy
rehabilitation program and meet the unique needs of this population.

An educational resource was developed to provide the foundational materials needed for
occupational therapy students to learn about the role of this profession as well as the basic
assessment and intervention strategies that meet Ghana's population needs. This resource
contains foundational skills that teachers and students will use to prepare occupational therapy
students for meeting the unmet needs of people living with disabilities in Ghana. It is anticipated
that this foundational occupational therapy educational resource will enable this profession to
become better known and understood, in addition to aiding in the development of a sustainable,
established, and permanent occupational therapy program in Ghana.
CHAPTER I
INTRODUCTION

In the developing country of Ghana, there is a population of over 1 million individuals with disabilities (Timney, 2007). Ninety-five percent of these people have no rehabilitation service access (Timney, 2007). Due to the presence of social, political, and economic factors including negative societal stigma towards people with disabilities, political corruption and poverty, Ghana's population is vulnerable for occupational deprivation. Occupational deprivation places this population at risk for preventing engagement in or forceful discontinuation of meaningful daily occupations such as farming, education, and employment opportunities (Whiteford, 2000; Yeoman, 1998).

Rehabilitation faculty from other countries have visited Ghana to provide intermittent assistance; yet, the immense rehabilitation needs of Ghana would be best met by the retention of rehabilitation personnel within the country. In response to this need, the School of Allied Health Sciences at the University of Ghana was established in 2012; however, the program lacks permanent occupational therapy faculty to teach incoming students (Crouch, 2001). In 2013, there were only two qualified occupational therapists reported in the country (Beguin, 2013). Ghana's developing occupational therapy program could be initially sustained with external assistance to develop educational coursework to train occupational therapists that will be retained in Ghana (Crouch, 2001; Timney, 2007). Thus, a need remains for external assistance to help further the development and sustainment of the occupational therapy program in Ghana.
To represent the unique values and views of the occupational therapy profession as it relates to Ghanaians, literature review was uniquely guided by the Person – Environment – Occupation Model to guide the decision-making process in developing the most beneficial product for the occupational therapy students and faculty at the University of Ghana. We began by identifying the population of study, which is occupational therapy student learning at the University of Ghana. Next, we identified challenges and strengths of each of the individual components of person, environment, and occupation. Thereafter, the relationships between those components were analyzed to determine their congruence with one another to support occupational performance. Lastly, we made recommendations for change to one or more of the person, environment, and occupation components with the goal of creating an improved congruence between those components to facilitate occupational performance of occupational therapy student learning at the University of Ghana.

The following is a common list of terminology included in this scholarly project:

**Developing country**: “A poor agricultural country that is seeking to become more advanced economically and socially” (Oxford University Press, n.d.).

**Ghana**: The Republic of Ghana is located in Western Africa and bordered by Cote d’Ivoire, Togo, and the Gulf of Guinea, where its capital city of Accra is stationed (CIA, 2014).

**Occupational deprivation**: “The inability of an individual to engage in meaningful and desired life occupations” (Whiteford, 1997).

**Occupational justice**: Describes individuals’ rights to engage in meaningful occupations (Braveman & Bass-Haugen, 2009).

**Client/Patient**: used interchangeably to refer to recipients of occupational therapy services in Ghana.
**PEO Terminology:** (Law et al., 1996).

**Person:** The occupational therapy students at the University of Ghana as an integrated whole including their cognitive, spiritual, physiological, and psychological aspects.

**Environment:** The cultural, socioeconomic, institutional, physical and social elements that influence the occupational therapy students.

**Occupation:** Occupational students’ learning and their journey to begin practicing as competent occupational therapists, including productivity, leisure, and work.

Chapter I consisted of a brief introduction to the scholarly project. A synopsis of the literature review findings are provided in Chapter II. The methodology used to design the product is described in Chapter III followed by Chapter IV, which contains an overview of the developed product. Chapter V is a summary of the project and includes recommendations and limitations. Finally, the product in its entirety is found in the appendices including the demonstrative DVD which is found attached to the inside of the back cover of this book.
CHAPTER II

REVIEW OF LITERATURE

Occupational justice describes individuals’ rights to engage in meaningful occupations.

(Braveman & Bass-Haugen, 2009)

The focus of this scholarly project is to expand occupational therapy (OT) internationally, specifically in Ghana, Africa. The rationale for expansion of OT internationally is supported by the overall vision for the OT profession as explicitly stated by both the American Occupational Therapy Association’s (AOTA) Centennial Vision and the World Federation of Occupational Therapy (WFOT). In October 2003, the Board of Directors of AOTA derived the Centennial Vision for the future of the OT profession: “we envision that occupational therapy is a powerful, widely recognized, science-driven, and evidence-based profession with a globally connected and diverse workforce meeting society’s occupational needs” (American Occupational Therapy Association, 2007, p. 613).

The Centennial Vision of AOTA aligns with the WFOT’s definition of the OT profession as “a client-centered health profession concerned with promoting health and well-being through occupation” (WFOT, 2012, p. 1). The primary goal of OT is to enable people to participate in the activities of everyday life. Occupational therapists achieve this outcome by working with people and communities to enhance their ability to engage in the occupations they want to, need
to, are expected to do, or by modifying the occupation or the environment to better support their occupational engagement” (WFOT, 2011, p. 1).

The WFOT’s fundamental belief is that OT possesses the ability to contribute to occupational performance in regard to the health and well-being of all people. In order for OT to be recognized as a positively influential profession and valuable contributor to the health and well-being of all people, contribution and collaboration with other international organizations is imperative (WFOT, 2011). Occupational therapists have encouraging, motivating, and powerful visions for the expansion of OT internationally. For this project, specifically, the focus was on the expansion of OT in Ghana.

In 2013, the OT profession was not well understood largely due to the presence of only two qualified occupational therapists reported in Ghana (Beguin, 2013). Although there are currently OT programs in African countries being developed, many of these countries, including Ghana, have limited teaching staff to train new occupational therapists due to opportunities for higher paying jobs in other more developed countries (Crouch, 2001). In addition, there is a lack of funding to hire staff that will teach and supervise students, as well as inadequate facilities to be used for training new occupational therapists (Crouch, 2001).

When considering the expansion of OT to the country of Ghana, it is imperative to evaluate typical daily life and common meaningful occupations that Ghanaians commonly participate in within the context of Ghana. To systematically analyze the complex transactions between person, environment, and occupations of Ghanaian citizens, the theoretical perspectives of the Person-Environment-Occupation (PEO) Model were used to guide this literature review (Law et al., 1996). Through this analysis, facilitating and inhibiting factors were revealed, which informed the authors how to create a product to expand OT internationally within Ghana.
Theoretical Perspective

The PEO model (Law et al., 1996) was selected for the development of this project to emphasize the transactive relationships between person, environment, and occupation as they related to the occupational performance outcome of OT students in Ghana, West Africa learning about OT through utilization of the educational materials created through this scholarly project (Law et al., 1996). The term transactive is used to describe the relationships between person, environment, and occupation with the idea that the components cannot be separated and are mutually influencing (Law et al., 1996). Law et al. (1996) stated, “a person’s contexts are continually shifting and as contexts change, the behavior necessary to accomplish a goal also changes” (p. 10).

As a result of transactional relationships between person, environment, and occupation, Law et al. (1996) used the term event to refer to the unit of study. The event being studied in this scholarly project is OT students in Ghana learning about OT through utilization of the educational materials created through this project. In considering the person aspect of this model, we examined OT students as an integrated whole including their cognitive, spiritual, physiological, and psychological aspects (Law et al., 1996). The environment is defined as the cultural, socioeconomic, institutional, physical and social elements that influence the OT students. Within the occupation aspect of this model, the focus is on OT students’ learning and their journey to begin practicing as competent occupational therapists in Ghana (Law et al., 1996). By investigating who the students are as individuals and their transactive relationships with the surrounding environment and their occupational aspirations, the authors will be able to design a product that promotes optimal occupational performance as both OT student learners and as future practicing occupational therapists.
Although other OT models take into account aspects of the person, environment, and occupation, the PEO model (Law et al., 1996) allowed us to specifically analyze the dynamic transactions within the components of this model including person-environment, person-occupation, and occupation-environment and the overall transaction and interconnectedness of the three components as they relate to the learning of OT students in Ghana. Law et al. (1996) wrote that a change to any of the components of the model affects the congruence of all components and, thus, occupational performance. By evaluating these transactions of the PEO model, we were able to create an education resource that is tailored to best meet the learning needs of OT students in Ghana.

**Overview of the Republic of Ghana**

The country of Ghana must be examined from all aspects of the PEO model. These include the *person*, which encompasses the Ghanaians and his or her perception of healthcare along with his or her psychological and physiological characteristics. The *environmental* piece includes the physical characteristics accompanied by institutional aspects, which include government policies, socioeconomic factors including poverty statistics with relation to healthcare, and cultural influences. Lastly, *occupations* manifested in the typical life of a Ghanaian will be discussed to gain a clearer idea of the daily functions of Ghanaians.

The Republic of Ghana is located in Western Africa and bordered by Cote d’Ivoire, Togo, and the Gulf of Guinea, where its capital city of Accra is stationed (CIA, 2014). Ghana was once a part of the British colony, Gold Coast, and the Togoland trust territory with major exports including oil, gold, and cocoa. In 1957, Ghana was named the first sub-Saharan country in Africa to gain its independence (CIA, 2014). After gaining independence, Ghana continued to
have a history of political struggle, which included the repeated overthrowing of military groups and leaders of the country (Government of Ghana Official Portal, 2014).

Despite encouraging strides toward stability, Ghana continues to struggle with corruption, poverty, illiteracy, and other social issues (Ghanaian Chronicle, 2006; Health Research Unit, as cited in Salisu & Prinz, 2009). Ghana consists of 10 regions with a current population of over 25 million individuals who belong to three major religions (CIA, 2014). Of the many Ghanaian citizens, 71.5 percent are literate (CIA, 2014). Additionally, poverty remains a major issue with 28.6 percent of the population earning as little as one dollar a day (CIA, 2014; World Health Organization [WHO], 2014).

Although the healthcare system is challenged presently by several issues including political instability and poverty, healthcare of Ghana is of high value. Ghana’s constitution states, “…the state shall safeguard the health, safety and welfare of all persons in employment, and shall establish the basis for the full deployment of the creative potential of all Ghanaians” (Constitution, 1992, p. 37). In congruence with Ghana’s high value of healthcare, policies have been passed to develop health insurance programs that will assure integrity of healthcare coverage as well as healthcare access and protection against financial risk for the poor (National Health Insurance Scheme, 2014). In August 2003, the National Insurance Act was passed allotting for the launching of the National Health Insurance Scheme (NHIS) in December 2004 (Health Economics and Policy Network in Africa, as cited in Salisu & Prinz, 2009). The purpose of the NHIS was to allow for the functioning of the three insurance schemes, which includes District-Wide (Public) Mutual Health, Private Mutual Health, and Private Commercial Health (Health Economics and Policy Network in Africa, as cited in Salisu & Prinz, 2009). In May 2007, 41 percent of people received insurance coverage under the NHIS. By December 2007,
coverage ranged from 19 to 65 percent (Health Economics and Policy Network in Africa, as cited in Salisu & Prinz, 2009), indicating a need for further health coverage of Ghanaian citizens.

Not only was further development of effective health insurance programs necessary due to lack of coverage but also in part that the average income of a typical Ghanaian in 2004 was only $1.50 per day, while the average cost of a patient visit within the private health care system was 10 United State’s dollars (Van den Boom, Nsowah-Nuamah, & Overbosch, 2004). Because health insurances do not provide services for the whole population of Ghana and health services were often unaffordable to the majority of the population, faith-based services provide approximately 40 percent of healthcare available to Ghanaians (Ecumenical Pharmaceutical Network, n.d.). Ultimately, the largest obstacle in achieving desired healthcare in Ghana is discovering a way to increase coverage to more individuals and reach those in poverty more effectively (Public Agenda, as cited in Salisu & Prinz, 2009).

In addition to the development of health insurance, specific policies have been passed to improve the healthcare specifically for people with disabilities. In 2006, Ghana passed the first piece of legislation that advocated for the rights of people with disabilities called the Disabilities Rights Bill (Reynolds, 2010). The purpose of this bill was to promote equal rights and opportunities for people with disabilities in Ghana by 2016, which included equal access to public places, education, and employment opportunities (Reynolds, 2010). Several of the tenants of the Disabilities Rights Bill have not yet been actualized due to barriers within Ghana, which will need to be addressed before the components of the bill can be put into effect (Reynolds, 2010).

Although political changes have began to be made in Ghana to facilitate occupational justice for all Ghanaians including those with disabilities, everyday life typical in Ghana consists
of active engagement in a variety of meaningful areas of occupation including work, leisure, social participation, and education. Traditionally, women look after the home, which consists of a plentiful amount of work including firewood gathering, tending the fields, and caring for the sick or elderly (Our Africa, n.d.). Men are typically employed outside the home, commonly the decision makers, heads of households, and even local chiefs and leaders (Our Africa, n.d.).

Typical work that Ghanaians commonly engage in includes farming (Yeoman, 1998). There is a limited amount of modern farming machinery, so most farming is done manually in a tropical, warm climate (Ghanaian Embassy, 2014; Worldwrite, n.d.). Leisure participation common to people living in Ghana includes a variety of games including board games, folk games, and sports—especially football, otherwise known as soccer (Ghanaian Embassy, 2014; Our Africa, n.d.). Social participation for most Ghanaians consists of ceremonies—such as chieftaincies, religious practices, weddings, and funerals—dancing, and festivals (CIA, 2014; Ghanaian Embassy, 2014; Opoku, 1963). Lastly, Ghana’s education system consists of 13 years of school before applying to a university (Embassy of the United States Accra Ghana, n.d.). Education is competitive and depends on the passing of examinations to continue as a student (Embassy of the United States Accra Ghana, n.d.).

**Disability Culture in Ghana**

Although Ghana has politically taken steps to advance healthcare and improve the lives of people living with disabilities, significant barriers related to the person and environment components of the PEO model exist (Law et al., 1996). The person barrier of cultural beliefs pose challenges to the development of healthcare. Moreover, environmental barriers to healthcare advancement include poverty and institutional challenges of the Ghanaian public health system and government.
Traditional cultural values and beliefs position challenges to the development of healthcare, specifically to the development of services for people with disabilities. In Africa, traditional medicine comprises much of healthcare, with 80 percent of the population using such services (World Health Organization [WHO], 2003). This includes health practices that may consist of plant, animal, or mineral based medicines, spiritual therapies, manual techniques or exercises (WHO, 2003). In a study conducted by Reynolds (2010), five Ghanaian leaders were interviewed to collect information on their perceptions of disability culture in Ghana. A main theme that emerged from the data collection concluded that perpetuation of spiritual traditions and beliefs about the causes of disability continue to be prevalent ways of thinking among Ghanaians (Reynolds, 2010). Although some Ghanaians recognize biomedical reasoning as how disabilities are caused, the idea that the cause of disability is related to spirits and witchcraft continues to resonate with many Ghanaian people (Reynolds, 2010). As a result of superstitious views of disability, occupational injustices exist that create barriers for people with disabilities to attain an education, acquire work, and overall lack of treatment as valued members of society (Reynolds, 2010). Therefore, the persistence of negative values and beliefs about how people with disabilities are viewed and lack of opportunities this population is provided challenge the development of OT services in Ghana (Reynolds, 2010).

Although people with disabilities living in Ghana often experience discrimination and occupational injustice, it is important to note that people with more education tend to have more positive views on disability and are more likely to be supportive of equal rights and opportunities for people with disabilities (Reynolds, 2010). In a research study conducted in Ghana in 2009 by Andrzejewski, Reed and White, the results suggested that there is a positive correlation between higher education and literacy levels with increased health knowledge; however, individuals
living in wealthier households have higher levels of health knowledge without considering education and literacy levels. In essence, both individuals’ education and location influences their perceptions of disability and health. This is significant considering the reported lack of access to education in Ghana, which perpetuates the continued presence of severe social stigma and discrimination from the community towards people with disabilities (Yeoman, 1989).

In addition to the challenges of cultural beliefs, values, and lack of access to education, the prevalence of poverty is a barrier to developing healthcare in Ghana. The average income of a typical Ghanaian as of 2004 was $1.50 per day (Van den Boom et al., 2004). The prevalence of poverty has a transactive relationship with the number of diseases prevalent in rural communities (Adjei & Buor, 2012). Adjei and Buor (2012) surveyed and interviewed residents from rural households in nine rural communities in the Amansie West District of Southern Ghana. Those community members with a low socioeconomic status encountered difficulty meeting food needs of household members, lived in unsound houses with little or no protection from disease or other unhygienic conditions, possessed little or no knowledge about health seeking behaviors and their consequences, and were less able to utilize healthcare facilities available when ill (Adjei & Buor, 2012). Furthermore, Yeoman (1998) identified the district of Wenchi Ghana to be poorly developed and contain few resources with 95 percent of individuals having no access to rehabilitation services. Financial limitations are a barrier for people with disabilities to receive treatment, access and afford assistive devices, and limit access to school or training (Yeoman, 1998). Overall, poverty and general health conditions of households in rural communities of this particular district in Ghana have a significant relationship with one another (Adjei & Buor, 2012).
In addition to poverty, institutional challenges of the Ghanaian public health system and government create environmental challenges to healthcare development. Public health systems encounter a multitude of obstacles, which include limited personnel, funding and unequal distribution of healthcare workers throughout the region (van den Boom et al., 2004). Ghana’s most closely packed populated Western Region, includes 10 percent of the population and only 99 practicing doctors (Ghana Web, n.d.). However, in the five million plus Great Accra Region, 1,238 public and private medical and dental practitioners reside (Ghana Web, n.d.; Ghana Medical Association, as cited in Salisu & Prinz, 2009).

Despite person and environment barriers to healthcare development, the press for healthcare advancement and occupational justice for people with physiological and psychological disabilities in Ghana is evident. The WHO reported that out of the 21.6 million individuals living in Ghana, approximately 650,000 have a severe mental disorder, while 2,166,000 possess a moderate to mild mental disorder. Ninety-eight percent of individuals in the total population in Ghana are expected to have a mental health disorder (as cited in Salisu & Prinz, 2009). Additionally, in a study completed by Yeoman (1998), 74 percent of Ghanaian respondents had a physical disability, including visual, hearing, and speech impairments. Many of the Ghanaians have been forced to give up their meaningful occupation of farming due to their disability and its burden on others (Yeoman, 1998).

**Development of Occupational Therapy in Ghana**

Rehabilitation in Ghana is in a developmental stage. The Person-Environment-Occupation [PEO] model assists to organize the person, environment, and occupation components of the current availability of healthcare, especially rehabilitation services (Law et al., 1996). Within the person, there are a significant number of people living in Ghana who could
benefit from rehabilitation services (Yeoman, 1998). The *environmental* piece includes the shortage of rehabilitation healthcare professionals and the current status of the teaching hospitals in Ghana.

In 2013, the presence of only two qualified occupational therapists was reported in Ghana (Beguin, 2013). Beguin (2013) reported that the University of Ghana was in the process of developing a training program in OT. In 2013, there were 18 OT assistants working in three psychiatric hospitals and in a psychiatric rehabilitation center (Beguin, 2013). Although some OT assistants are working in Ghana, they have expressed their needs for better training (Beguin, 2013).

The OT profession remains unknown to many individuals and Ghanaian society and is not well understood (Beguin, 2013). Currently, OT practice in Ghana is primarily associated with psychiatry (Beguin, 2013). There are OT departments included in three psychiatric hospitals in Ghana; however, as of the year 2013, there were no qualified occupational therapists to practice (Beguin, 2013).

Occupational therapy was introduced in psychiatric hospitals in Ghana in the late 1960’s by occupational therapists returning from training in London (Beguin, 2013). However, in the 1980’s, psychiatry in Ghana was financially suffering and; therefore, many practitioners have left the OT profession (Beguin, 2013). Previous attempts to educate native Ghanaians abroad have failed because they do not return to Ghana to educate occupational therapists in training (Beguin, 2013). To meet the need to provide training for occupational therapists within Ghana, a curriculum for a training program at the University of Ghana has been developed in conjunction with Tanzania, South Africa, and three British Universities and with the assistance of the WFOT
(Beguin, 2013). However, in order to implement this program, more staff, teaching, and technical material is needed (Beguin, 2013).

Crouch (2001) explained the need for the development of OT in the developing countries of Africa, the barriers that exist, and suggestions for successful development of the profession in Africa in future. Crouch (2001) proposed an overall plan to develop OT programs within each country that will educate individuals that are native to their own country and will stay and work within their country of origin. By training occupational therapists who will stay within their country of origin, the individuals will be more familiar with the culture, needs of the population, and become more likely to stay in the country to work throughout their lifetime (Crouch, 2001).

Many barriers exist that challenge the development of OT education programs in Africa. First, many of these countries do not have teaching staff available to train new therapists, because there are more opportunities for higher paying jobs in other more developed countries (Crouch, 2001). Second, there is a lack of funding to hire staff that will teach and supervise students (Crouch, 2001). Third, there is a lack of adequate facilities to be used for training new occupational therapists (Crouch, 2001).

Despite these barriers, there are currently OT programs being developed in African countries. Undergraduate exchange programs with universities or training institutions in developed countries of the world have been shown to be successful (Crouch, 2001). These programs have functioned by creating mirror programs in underdeveloped countries that are equivalent to the programs in the developed countries (Crouch, 2001). In this way, the education programs in underdeveloped countries are given access to expert staff educators and educational resources to which these countries otherwise would not access (Crouch, 2001).
Korle Bu Teaching Hospital

Currently, healthcare in Ghana is offered at village or community health posts, district clinics, regional hospitals and two teaching hospitals, one of which includes Korle Bu Hospital (Van den Boom et al., 2004). Korle Bu Hospital in Accra, Ghana is a major tertiary medical center (Timney, Chiodo, Haig, & Wiredu, 2007). Timney et al. (2007) directly observed individuals at Korle Bu Hospital. In 2007, there were over one million individuals with a disability in Ghana, 95 percent of which had no rehabilitation service access (Timney et al., 2007). It was found that healthcare professionals are extremely understaffed due to most medical school students’ desires to receive continuing education in another country (Timney et al., 2007). In 2007, there were no psychiatrists on staff at Korle Bu Teaching Hospital (Timney et al., 2007). In addition, there remains no physical medicine and rehabilitation physicians, only one retired occupational therapist and one speech-language pathologist (Timney et al., 2007). Twenty to thirty physical therapists reside in this area, however, most only have 10 years or less of service left until forced retirement. There is only one prosthetist and five fabrication centers throughout the country (Timney et al., 2007). Timney et al. (2007) identified the first steps in helping Ghana develop their rehabilitation services as including a physiotherapy department in the University of Ghana. The first graduating date for these individuals was in 2006 (Timney et al., 2007). This department still lacks an OT, speech therapy, and prosthetics and orthotics department due to the lack of trained educators (Timney et al., 2007).

Education Models & Teaching Strategies

In order for this scholarly project to be useful, the product must provide culturally sensitive educational materials that meet the unique needs of the developing rehabilitation department in Ghana.
Examining learning styles and instructional methods with detail using the *occupation* aspect of the PEO model is a key component to this scholarly project in order to prevent this detrimental practice of false assumptions from reoccurring (Law et al., 1996). The researched learning styles and instructional methods reviewed will be compared with the *person* and *environment* components discovered through the needs assessment provided by the current rehabilitation contact in Ghana at Korle Bu Hospital. This thorough analysis will assist in the determination of the most efficient learning style and instructional method for Ghanaian OT students.

According to Fitzgerald (2011), there are many instructional methods utilized by educators in order to achieve the desired learning outcome for students. No perfect method exists for educating students in all settings. Therefore, in order to select the most effective methods to support student learning, educators must base their considerations on the characteristics of their audience (including preferred learning style, size, and diversity), expertise of the educator, learning objectives, achievement of learning outcomes potential, cost effectiveness, educational setting, and continuously changing technology (Fitzgerald, 2011). Possible methods include but are not limited to: lectures, group discussions, one-to-one instruction, demonstration, return demonstration, gaming, simulation role-playing, role-modeling, and self-instruction (Fitzgerald, 2011).

One of the most commonly used approaches to education is in the form of lecture, which is defined by a structured method in which the educator provides information verbally and directly to students for instruction (Fitzgerald, 2011). This method allows for minimal interaction between the teacher and learner (Fitzgerald, 2011). It is advantageous because of its cost-effectiveness and ability to target large groups with large amounts of information in a reasonable
amount of time (Fitzgerald, 2011). However, limitations include the lack of individualization and active participation (Fitzgerald, 2011). Effective strategies that are helpful in creating an effective lecture are the inclusion of an open summary, a presentation of key terms, provided examples, analogies, and visuals within an introduction, body, and conclusion (Miller & Stoeckel, as cited in Fitzgerald, 2011).

Methods that involve more hands-on learning include demonstration return, simulation, role-playing, and self-instruction (Fitzgerald, 2011). Demonstration return is a useful method involving the completion of a task by a learner with cues from the teacher (Fitzgerald, 2011). It is beneficial due to its psychomotor component, which provides students with immediate individual guidance (Fitzgerald, 2011). However, it involves much labor to view each individual’s performance (Fitzgerald, 2011). Simulations provide learners with a safe environment in which to practice realistic situations, but are also laborious and can be costly (Beaubien & Baker, as cited in Fitzgerald, 2011). Role-playing is designed to help learners develop an understanding of others, but can be a limiting method due to exaggeration or underdevelopment of different roles (Fitzgerald, 2011). Finally, self-instruction is a self-paced, cost-effective, and consistent method designed to provide the learner with individual feedback; however, learners may be limited due to decreased literacy and procrastination (Fitzgerald, 2011).

Teaching methods that include active participation have been shown to be effective in the increase of interest of learners and results in a greater retention of information (Fitzgerald, 2011). Multiple methods may be used during one education session in order to accommodate the group’s needs (Fitzgerald, 2011). It is also important to take into consideration accessibility of
the learner to the teaching environment and availability of resources and/or equipment required (Fitzgerald, 2011).

In addition to teaching methods, there are many supplemental techniques that may be used in order to improve the effectiveness of teaching. These strategies include: passionate and excited presentation of information, inclusion of humor, demonstration of risk-taking behavior, delivery of material dramatically, use of problem-solving activities, serving as a role-model, use of anecdotes and examples, and use of technology (Fitzgerald, 2011). Educators may also enhance student learning by giving positive reinforcement, projecting attitudes of acceptance and sensitivity, presenting with organization, promoting reciprocal feedback, encouraging reciprocal questioning to clarify concepts, knowing and understanding the audience, and repeating information to reinforce learning (Fitzgerald, 2011).

It is imperative to recognize the learner as the most important person in the education process, so it is essential to determine the most effective way to enhance learning for the student (Kitchie, 2011). In order to determine the proper instructional method, the educator must identify his or her students’ readiness to learn and styles of learning (Haggard, as cited in Kitchie, 2011). The provision of information does not guarantee the student will learn but learning can be advanced through identification of an optimal learning approach. Learning needs may be assessed through structured interviews, focus groups, self-administered questionnaires, tests, observations, and documentations. An effective assessment of learning is done by: 1) defining the target population; 2) analyzing learner and organizational needs; 3) analyzing learner’s perceived needs compared to actual needs; and 4) prioritizing the needs of learners with data (Panno, 1992).
Readiness to learn includes a learner’s ability to be receptive, willing, and able to learn (Kitchie, 2011). The educator is responsible for determining if learners are ready to learn, what they need or want to learn, and how to make adaptations to the content in order to facilitate each individual learner (Kitchie, 2011). It is important to consider physical, emotional, experiential, and knowledge readiness (Lichtenthal, as cited in Kitchie, 2011). This should include the assessment of environmental effects and complexity of the task, anxiety levels, support systems, volition, behavior, individual development, coping mechanisms, cultural background orientation, cognitive ability, present knowledge base and any learning disabilities (Kitchie, 2011).

Andragogy was coined by Malcolm Knowles to describe adult learning or how to teach adults (Bastable & Dart, 2011). This includes a technique that is more learner-centered as opposed to teacher-centered, forming a more horizontal relationship between the teacher and learner (Milligan, 1997). The theory states that adult learning is directly related to an immediate need, issue, or deficit (Burgireno, as cited in Bastable & Dart, 2011). It is voluntary and initiated by the learner (Burgireno, as cited in Bastable & Dart, 2011). Additionally, andragogy is self-controlled and self-directed (Burgireno, as cited in Bastable & Dart, 2011). The teacher takes on a facilitator role (Burgireno, as cited in Bastable & Dart, 2011). Information and assignments are more pertinent for the learning process (Burgireno, as cited in Bastable & Dart, 2011). Past experiences are used to relate to the introduction of new material (Burgireno, as cited in Bastable & Dart, 2011). This technique allows for active participation in learning, ability to learn in a group, frequent altering of the nature of learning, and the use of immediate feedback following application of learning (Burgireno, as cited in Bastable & Dart, 2011).

Of additional importance is the conclusion that students’ cognitive load is decreased with the use of the isolated-to-interacting-elements approach (Pociask, DiZazzo-Miller & Samuel,
This includes breaking down lecture material into short-term lessons (Pociask et al., 2013). Through this method, cognitive load is reduced and working memory resources are reserved as a result (Pociask et al., 2013). Learning may be hindered by the presentation of all necessary information in a single lecture; therefore, it is important that instruction and instructional process complements the learner’s cognitive capabilities in order to nurture learning and attainment of provided education (Pociask et al., 2013).

**Distance Education: E-learning**

In determining how to best provide educational material internationally, *environmental* aspects of the PEO model of distance learning have been examined (Law et al., 1996). Distance education and forms of electronic learning are important topics to investigate when considering the learning of Ghanaian students. Effective use of distance education technologies can have a direct and positive impact on the engagement of students with faculty, peers, and content (Carpenter, Theeke & Smothers, 2013).

Jeste, Dunn, Folsom, and Zisook (as cited in Hainsworth, 2011) discovered the effectiveness of multimedia DVD and CD aids as facilitators of illness management and as the provision of an increased understanding of medical information enabling patients and caregivers to assume an active role in making healthcare decisions. Additional studies support videos as a powerful learning material (Brooks, Renvall, Bulow, & Ramsdell, 2000; Brown & Williams, 2009; Green et al., 2003). This method is useful for capturing actuality and simulations of practical situations (Brown & Williams, 2009; Hainsworth, 2011). It is ideal for the role-modeling behaviors, attitudes, and values to be customized appropriately for the given topic (Hainsworth, 2011). Videos can also be used as excellent tools to promote discussion and for the analysis and critiquing of the demonstration with the provision of direct, immediate feedback.
(Hainsworth, 2011). Brown and Williams (2009) discovered DVD simulations promoted positive levels of interest, understanding, and information regarding multidisciplinary understanding. These instructional materials should support learning, but not be the one and only form comprising the learning experience (Brown & Williams, 2009). The use of DVD simulations may be a way to deliver interprofessional education and enhance practice placement in a beneficial and cost-effective way (Brown & Williams, 2009).

**Meaningful Occupations of Ghana**

When considering the expansion of OT to the country of Ghana, it is imperative to consider the occupation component of the PEO model including typical daily life, life roles, and common meaningful occupations related specific to Ghanaians. Ghanaians’ meaningful areas of occupation include work, leisure, social participation, and education.

Roles vary with the consideration of gender. In some areas of Ghana, men and women are considered equal; however, their roles remain different. Traditionally, women look after the home, which consists of a plentiful amount of work including firewood gathering, tending the fields, and caring for the sick or elderly (Our Africa, n.d.). Men are typically employed outside the home and commonly the decision makers, heads of households, and even local chiefs and leaders (Our Africa, n.d.).

Typical work that Ghanaians commonly engage in includes farming. Respondents from a study conducted in the Wenchi District of Ghana (which included nine villages) named their main occupation as agricultural activity (Yeoman, 1998). In fact, agriculture accounts for 60 percent of employment, employment from which many individuals in rural areas do not receive a salary (Salisu & Prinz, 2009; Yeoman, 1998). There is a limited amount of modern farming
machinery and thus most farming is done manually in a tropical, warm climate (Ghanaian Embassy, 2014; Worldwrite, n.d.).

Leisure participation common to people living in Ghana includes a variety of games. Specific to children are games such as hide and seek and leap frog (Our Africa, n.d.). Many boys play with hoops from tire rims while girls often skip with ropes or play with homemade wooden dolls (Our Africa, n.d.). Children also play folk games to exercise, for recreation, passing traditions, protecting against immoral practice, and for socialization (Ghanaian Embassy, 2014). Both children and adults also love games including football (soccer), as the most popular, followed by boxing, tennis, basketball, cricket, rugby, golf, and volleyball which are usually played following evening meals in the dark with neighbors in the village (Ghanaian Embassy, 2014; Our Africa, n.d.).

Social participation for most Ghanaians consists of ceremonies—such as chieftaincies, religious practices, weddings, and funerals—dancing, and festivals. Drumming and dancing make up a large and important part of traditional festivals, which includes active audience participation with singing, dancing, and arts and crafts (Our Africa, n.d.). Funerals are known as complex and intricate social events, lasting for multiple weeks and attended by many individuals. Many times an entire community unites to celebrate an individual’s life (Our Africa, n.d.). Additionally, religious practices often include Christianity (71.2 percent), with entails charismatic active participation in dancing, hand-clapping, and use of rhythmic instruments (CIA, 2014; Ghanaian Embassy, 2014; Opoku, 1963). Another common practice is the Islamic faith (17.5 percent) (CIA, 2014). Within this religious practice are men who may have multiple wives and as well as obligatory prayer practice five times daily for all family members (British Broadcasting Corporation World Service, n.d; CIA, 2014; Ghanaian Embassy, 2014.).
Education is highly valued by Ghanaians. Ghana’s educational system consists of primary school for six years, junior secondary school for three years, followed by senior secondary school for four more years before applying to a four year bachelor’s degree university (Embassy of the United States Accra Ghana, n.d.). Students study both the Ghanaian and French languages through the ninth grade; however, all textbooks and other materials are written in the English language (Embassy of the United States Accra Ghana, n.d.). Examinations are of much importance in Ghana and students are required to complete the Basic Education Certificate Examination at the conclusion of the ninth grade. Only 150,000 of 375,000 students who take this examination are admitted into secondary schools (Embassy of the United States Accra Ghana, n.d.). Once through Senior Secondary High School, all students are again required to complete the West African Senior Secondary Certificate Examination before admission to a university (Embassy of the United States Accra Ghana, n.d.). Admission to a Ghanaian university is also competitive, enrolling approximately 300,000 students (Embassy of the United States Accra Ghana, n.d.).

As previously discussed, Ghanaians live an active life in the areas of work, leisure, social participation, and education. Unfortunately, disability has limited engagement in these occupations for some citizens. Specifically, in the district of Wenchi Ghana, Yeoman (1998) discovered that 74 percent of respondents who had a disability were often forced to forfeit their meaningful occupation of farming. Furthermore, 95 percent of those with a disability were unable to access rehabilitation services, preventing treatment for their disability and access to assistive devices and school (Yeoman, 1998). These unmet needs have led to problems within the home and family (Yeoman, 1998). Overall, disability and the lack of access to rehabilitation services have significantly impacted Ghanaians ability to participate in meaningful occupations.
Justification of Occupational Therapy’s Role

The remaining unmet occupational needs of Ghanaian people justify the need for OT services. OT is a profession equipped for meeting the needs of Ghanaians with disabilities (Yeoman, 1998). An occupational therapist’s skills include: the promotion of independence; the ability to evaluate factors that enable or constrain individuals; emphasis on context within a culture; concentration on empathy; support for disabled people in self-advocacy; and collaboration with family, caregivers, and other supports (Yeoman, 1998). These areas of expertise relate to the activity demands of the previously mentioned values, roles, and occupations relative to Ghanaian people. Since farming is one of the main occupations of Ghanaians, occupational therapists can be a significant contributor to the successful engagement in this lifestyle (Yeoman, 1998).

Yeoman (1998) identified specific needs, which included implications and a direct assertion of the need for OT, and were determined by Ghanaian citizens. These needs incorporate intervention to prevent many of the disabilities commonly encountered by adults including both psychiatric and physical disabilities (Yeoman, 1998). Furthermore, Yeoman (1998) stated people living in Ghana would benefit from education on correct seating and positioning, vocational/agricultural training, specific skills training, disability equality education, and mobility aids (Yeoman, 1998). Moreover, assistive devices could be designed at a low-cost to help increase mobility, independence, and, therefore, quality of life (Yeoman, 1998).

Despite OT’s pivotal position in these areas of need, political and economic challenges continue to pose challenges. The recognition of mental health disabilities is an area that is often overlooked, even by people with strong psychosocial and educational backgrounds (Reynolds, 2010). However, there is ample opportunity for the OT profession to advocate for the rights of
people with disabilities and provide Ghanaians with education about disability (Reynolds, 2010). This would include both physical and mental disabilities to support acquisition of occupational justice for people with disabilities and positive engagement in meaningful occupations for all inhabitants in Ghana (Reynolds, 2010).

OT has been identified as a profession suited for addressing many of the unmet needs regarding disability in Ghana (Yeoman, 1998). In order to contribute education on disability and promote occupational justice from an OT standpoint, it is important that a needs assessment is administered directly to the University of Ghana. In doing this, the current developing OT program in Accra, Ghana can be carefully analyzed to provide a clearer view of the primary needs that can be met through a means of educational resources. These resources will ultimately promote a way to match the skills of an occupational therapist with the current and specific occupational health needs of the people in Ghana.

**Program Development**

When planning the development of OT educational programming in a developing country, the needs of the communities must be considered. To consider the unique needs of communities, strategic planning must be used in order to most effectively allocate funds and resources to develop a program that will best meet the needs of the population (Crouch, 2001).

According to Timney et al. (2007), the U.S. has helped offer some assistance to Ghana, focusing mainly on emergencies, such as prevention of infectious diseases. This assistance has neglected to include those who are disabled, and did not provide insight to functional independence (Timney et al., 2007). Although many Ghanaians view people with disabilities negatively, many consumer groups have helped to educate the population about the facts regarding people with disabilities (Timney et al., 2007). There remains a great need for medical
rehabilitation in Ghana. Timney et al. (2007) stated, “leadership is necessary” (p. 926). Initially leadership may be external, but in order to be effective, someone with leadership training must quickly take on the role internally. Ghana’s rehabilitation program could be sustained with assistance in training program development and accreditation (Timney et al., 2007).

Reynolds (2010) suggested that the treatment of people living in Accra with disabilities may benefit from the government and other overseeing entities providing education about the causes of disabilities and the “potential for overcoming disability-related impairments” (Reynolds, 2010, p. 206). In this way, the profession of OT is positioned to advocate for the present occupational injustices that people with disabilities living in Accra are experiencing.

To begin the development of an international program, the first step is to form connections with people native to the country. Suggestions to make these connections include networking with immigrants or refugees who are living in America and/or attending an international OT conference, such as the WFOT conference that is held every four years or the Occupational Therapy Africa Regional Group and a Latin American Regional Confederation congress that is held every two years (Waite, 2013).

After networking with people from the country of interest, the next step to develop international programming is to conduct a needs assessment (Waite, 2013). Conducting a needs assessment is vital for the success of a program because programs need to be developed that meet an existing need of a country. The needs assessment must be provided to the actual population that will be served in order to determine the people’s actual needs. Once the need of the target population is established, it is important to make sure all members of the program development team understand the mission and are working toward the same goal (Waite, 2013).
Once the program begins to develop within the country, all team members need to keep a country-centered focus (Waite, 2013). “Any time we are going to a country that is under-resourced, ethically, our focus should be on developing the profession and empowering the local occupational therapists rather than showing how great we are in the United States” (Waite, 2013, p. 13). Overall, program developers need to remember to focus the program on the needs of the population being served, which will require asking for feedback from the people often and being attentive to meeting their needs (Waite, 2013).

Often program developers will not reside permanently in the country where the program is developing, but rather they will visit the country in person various times of the year (Waite, 2013). When program developers are absent from the country, maintaining a relationship with the initial contacts is important for sustaining the program (Waite, 2013). Continued communication may be done in many ways including Skype, email, and meeting at international conferences (Waite, 2013).

Velde, Wittman, and Vos (2006) suggested that in order for OT students to eventually function effectively in the clinic, it is imperative they learn to ask questions designed to bring about important information, to make decisions among many choices, to act on difficult ethical and moral dilemmas, and to analyze information in abundance. Critical thinking skills are the underlying skills for these OT functions. Using the guided reciprocal peer questioning method “may enhance students’ skills for asking questions that include application, analysis, synthesis, and/or evaluation” (Velde et al., 2006, p. 56). Furthermore, the authors suggested that guided reciprocal peer questioning may pull from constructivist and sociocultural theories that enhance OT education. Velde et al. (2006) proposed that if students are able to learn the skill of asking higher order questions through use of constructivism in the classroom, then they would be able to
develop new knowledge when in the learning contexts of fieldworks and entry level practice. With constructivist and sociocultural theories as the basis of OT education, Velde et al. (2006) purported that students will become life-long learners and become less dependent on ‘cookie cutter’ therapy.

Chapter II Summary

As previously discussed, there is a significant need for occupational justice for the people living with disability in Ghana. With 650,000 Ghanaians having a severe mental health disorder and 74 percent of Ghana’s 21.6 million citizens having a physical disability, internal development of Ghana’s rehabilitative services is a priority in Ghanaian healthcare (as cited in Salisu & Prinz, 2009; Yeoman, 1998).

Chapter II consisted of a literature review and background information to justify the need for external assistance to facilitate continued development of internal OT services to meet the unmet occupational needs of Ghanaian citizens. The review of current literature suggests people with disabilities in Ghana are not treated as equal and valued members of society or being provided equal opportunities for engagement in meaningful occupations (Andrzejewski et al., 2009; Reynolds, 2010; Yeoman, 1998). According to the World Federation of Occupational Therapists Position Statement on Human Rights (2006), “occupational therapists have the knowledge and skills to support persons who experience limitations or barriers in participation in occupation...they have the role and responsibility to identify and raise issues of occupational barriers and injustices; and to work with groups, communities and societies to enhance participation in occupation for all persons” (p. 42).
Therefore, the development of OT educational resources to adjunct the University of Ghana’s developing OT program is not only justified, but imperative to meet the unmet occupational needs of Ghanaians living with disabilities.
CHAPTER III

METHODOLOGY

In Chapter II, a literature review was completed to better understand the role of occupational therapy (OT) in relation to person, environment, and occupation aspects of Ghanaian citizens. Chapter III consists of the sequencing, steps, and methods utilized in the development of this product. Through review of research articles, textbooks, and organization websites, several problems were identified in regards to the expansion of OT’s role in Ghana. The country of Ghana possesses limited resources such as staff, teaching, and technical material to implement a successful OT program (Beguin, 2013; Crouch, 2001). Specifically, Ghana currently has only two qualified occupational therapists residing in the country, despite the country having over 1 million individuals living with a disability and over 95 percent having no access to rehabilitation services (Benguin, 2013; Timney et al,. 2007). In response to the Ghanaian citizens’ needs for OT services, the first occupational therapist training program in the country began in 2012 (E.A., personal communication, June 16, 2014). There remains a need for OT educational resources to facilitate the implementation of the program (Beguin, 2013; Crouch, 2001).

In response to the problems identified through the literature review and needs assessments, the purpose of this scholarly project is to facilitate further development of the OT education program in Ghana. To create a product that is tailored to the unique learning needs of OT students in Ghana, an analysis of the information collected through completion of the
literature review was analyzed in terms of interactional and transactional relationships between the person, environment, and occupation components of the Person-Environment-Occupation (PEO) model as they relate to the key event of this scholarly project, OT students in Ghana learning about OT through utilization of the educational materials created through this scholarly project (Law et al., 1996).

In accordance with the PEO model, this scholarly project analyzed transactive relationships of the person, environment, and occupation. The analysis of interactive relationships per Law et al. (1996) refers to components that can be separated; change to a component is considered a cause and effect relationship that is predictable. Analysis of transactive relationships (Law et al., 1996) refers to interdependent mutually influencing relationships between the person, environment, and occupation components of the model and how they relate to occupational performance. Law et al. (1996) defined occupational performance as the “outcome of the transaction of the person, environment and occupation” (p. 16). Therefore, causation cannot be predicted when analyzing transactive relationships.

The authors used the PEO model as a guide to develop OT educational resources. In accordance with Law et al.’s (1996) recommended first step, the event was identified. Next, the challenges and strengths of each of the individual person, environment, and occupation components were identified. Thereafter, an analysis was completed to determine the fit of the three components in their relation to the event and the outcome of occupational performance. Lastly, the authors established guidelines for the final product of this scholarly product.

The event of study was identified as OT students in Ghana learning about OT through utilization of the educational materials created through this project. Analysis of the person component of this model entailed evaluation of the cognitive, spiritual, physiological, and
psychological aspects of the person. This includes students’ and Ghanaian citizens’ cognitive learning abilities and students’ individual learning styles. Additionally, the person involves the highly involved spiritual values of Ghanaians, Ghanaian’s values and beliefs regarding healthcare, and traditional medicine practices. It is also essential to consider the physical capabilities of students and citizens along with the prevalence of specific physical disabilities, diseases, and causes of death. Lastly, one must consider Ghanaian’s attitudes, emotions, and perspectives toward healthcare.

Analysis of the environment component of this model consisted of the evaluation of cultural, socioeconomic, institutional, physical, and social aspects related to the event. This encompasses hard-working, hospitable, and family-oriented values along with the common culture of farming. Of great importance is also the disability culture that perpetuates occupational injustices to people with disabilities. The environment piece also includes the high poverty statistics and low daily earnings of average Ghanaians. It is important to consider the institutional aspects from the governmental standpoint, which involves the National Health Insurance Scheme and Disabilities Right Bill. In conjunction with these institutional aspects is the stunning lack of occupational educators available to instruct OT students. Also, considering student expectations in the OT classroom is pertinent to the development of an educational resource for classrooms in Ghana. Furthermore, student access to individual computers, internet access, classroom space, and the lack of adaptive equipment must be examined for effective implementation of this scholarly project.

Occupation was analyzed through the component of work in terms of OT students engaging in schoolwork in preparation for fulfilling the role as practicing occupational therapists. Therefore, the learning of OT students and the lack of currently practicing occupational
therapists has been included.  

The analysis of the transactions between person and environment included how disability stigma affects students/citizens, how classroom space and supplies affects students, how government healthcare laws influences students/citizens, and how the environment facilitates or inhibits students’ cognition for learning. Of equal importance is how hard-working, hospitable, and family-oriented values shape students/citizens. Lastly, one must consider poverty’s influence on students/citizens and whether students are able to afford school.

The analysis of the transactions between environment and occupation entailed evaluation of the classroom set up and its effect on students’ learning abilities. In addition, government laws impacting student learning and the effects of poverty on the learning of students and occupational therapists has been assessed. One must also consider the significance of few available OT educators on the learning experience of occupational therapy students. Finally, how cultural values shape student learning and OT profession is an imperative interaction to consider.

The analysis of the transactions between occupation and person consisted of how student cognition as well as attitudes, emotions, and perception about healthcare affects learning in the classroom. Another considerable interaction is students’ physical capabilities and individual learning styles on overall learning. After completing analysis of all components and transactions related to the event of OT students’ learning through utilization of educational materials created through this project, our conclusion to create a variety of learning experiences for the students including visual demonstrative DVDs was supported for the following reasons. Occupationally, there was a stated need for demonstrations due to lack of OT educators and clinical placements for students to gain hands-on clinical OT knowledge. In addition, the literature review supports the strong need for educational resources to the OT program in Ghana in order to promote
student learning. Through this analysis, completed with the guide of the PEO model, a proper and efficient fit can be created to implement effective educational resources for OT students in Ghana, Africa.

**Needs Assessment Methodology**

A staged needs assessment with the OT Program supervisor in Ghana, E.A., was done to collect specific information of the strengths, weaknesses, opportunities and barriers of OT students’ learning about OT within their learning environment. This table can be found in Appendix C. Email was the medium used to communicate between E.A. and the authors. In creating the needs assessments, we purposefully integrated the components of the PEO model throughout, and questions were organized under headings of “Person”, “Environment” and “Occupation”. For example, questions 1-4 of the second needs assessment collected information about the institutional aspect of the environment. For further details, refer to Appendix A.

Specifically, three staged needs assessments were developed. The first two needs assessments were completed and collected prior to determining the specifics of what the final product would entail. The purpose of the first needs assessment was to collect broad information about the OT program in Ghana. This involved posing questions about the background, conception, and overseers of the program. Questions were asked about the programs’ faculty members, students, physical learning environment, course curriculum, and the process of graduating from the program. Furthermore, information was collected on the teaching techniques, student learning preferences and culture. Questions were posed to collect information on the characteristics of the population to be served by occupational therapists. Open-ended questions were posed to collect information from E.A.’s point of view about the needs of the OT program of which she thought we could best assist.
The purpose of the second needs assessment was to clarify information received from the first needs assessment, and to gain more specific information about the person, environment, and occupation components. Information received from the second needs assessment was used to make informed decisions on what the specifics of the final product would entail to be most beneficial for the learning of OT students in Ghana.

The purpose of the third needs assessment was to communicate with E.A. about the development and progress that had been made on the product so far and to create opportunity for her to provide feedback, and to determine how the final product would be provided to the faculty and students in Ghana. E.A. was provided options for what the development of the remainder of the product would entail. Upon receipt of her recommendations, the remainder of the product was developed to reflect the stated needs and recommendations to best meet the needs of the OT program in Ghana. Copies of the needs assessments that were completed by E.A. are included in Appendix A.

Through a series of needs assessments completed by E.A., the authors were provided with detailed information about the current position of the OT program in Ghana, the program administrator’s vision of where it is going, and what they are currently seeking assistance in. E.A. reported an existing three qualified occupational therapists in the country of Ghana, two of which are instructors for the OT program trained outside the country (E.A., personal communication, June 16, 2014). Due to this extreme lack of qualified occupational therapists in Ghana, Ghanaian citizens are unable to receive OT services. E.A. stated that Ghana is currently at a stage of creating awareness to the general public on the role of OT due to the vast unawareness of OT services throughout the country (E.A., personal communication, October 14, 2014). Due to the few occupational therapists and absence of a training school in Ghana, the
establishment of an OT program was deemed necessary (E.A., personal communication, June 16, 2014).

The structure of the developing OT program in Ghana is as follows. OT students apply for majors in the School of Allied Sciences. Most OT students who have enrolled do not actually intend on going to OT school. Occupational therapy is offered to them when they fail to be admitted to their preferred program (E.A., personal communication, June 16, 2014). The students, however, view OT as an employment opportunity as the culture itself is work-oriented (E.A., personal communication, June 16, 2014). The first class of OT students began in September 2012 (E.A., personal communication, June 16, 2014). Currently, this class of 18 is in their third year of the program and expect to graduate in 2016 as the first official OT class in Ghana (E.A., personal communication, June 16, 2014). The OT program was adapted from universities in the United Kingdom and resources were obtained from the World Federation of Occupational Therapists (E.A., personal communication, June 16, 2014). At present, only two lecturers instruct OT specific courses, which E.A. identified as inadequate for meeting the needs of the combined classes of 33 students (E.A., personal communication, June 16, 2014). Beyond the four years of academic work, these students are required to complete 1000 clinical contact hours and a one-year internship for the national service (E.A., personal communication, June 16, 2014). For full completion of the degree, students must pass the certification exam held by the Ghana Allied Health Council (E.A., personal communication, June 16, 2014). As student numbers increase, the University of Ghana program developers’ vision is to increase the number of OT educators (E.A., personal communication, June 16, 2014). Future plans include retainment of some students as they become qualified and further trained to be educators (E.A., personal
E.A. expressed multiple barriers to the success of the developing OT program in Ghana. She noted that the Disability Act was passed in 2006 as well as the Mental Health Act in 2011/2012 in which remains limited input from occupational therapists in the management of these clients’ groups (E.A., personal communication, June 16, 2014). E.A. made known that the country’s population is aging and is in need of OT intervention to live independently (E.A., personal communication, June 16, 2014). Recorded in the needs assessments is a list of current mandatory OT classes in Ghana. Formalized assessments and intervention approaches, related to both cognition and functional independence of individuals of all ages and diagnoses, were reported as an area of lacking information for the present OT program (E.A., personal communication, June 16, 2014). More specifically, E.A. stated, “What will be beneficial is practical demonstrations of occupational therapists assessments and interventions as carried out on clients or simulations of assessments and interventions with rationale as to why that is being done” (E.A., personal communication, October 14, 2014). As we investigated further how to best meet the needs of the existing circumstances, E.A. concluded, “A variety of the demonstrative videos if time will allow so that we can have a bit of everything to consolidate the theories that we are learning. We will be glad if the videos will focus on Neurological rehabilitations, Rheumatology and Geriatrics a bit on managing children with various forms of disability and aspects on mental health management” (E.A., personal communication, October 14, 2014).

The authors explored deeper the students’ learning styles and resources to find the most effective method to provide an educational resource for Ghana’s OT program. E.A. described the student environment as a small-group learning environment where most students use personal laptops, having internet access 80 percent of the time (E.A., personal communication, June 16, 2014).
For those who do not have a personal laptop, there are available centers on campus for computer use. Classroom education includes use of PowerPoint, class discussions, homework assignments, written tests, textbook readings, and practice with students and faculty (E.A., personal communication, June 16, 2014). The students learn best through a combination of visual, kinesthetic, and auditory styles with the incorporation of paper and pencil, computers/technology, and simulations/role-play (E.A., personal communication, June 16, 2014).

**Personal Communication Interview Methodology**

A personal communications interview was conducted with Dr. Anne Haskins and Dr. Sonia Zimmerman on February 10, 2015. Dr. Haskins and Dr. Zimmerman are Associate Professors at the University of North Dakota. These faculty members were selected as personal communications to guide this scholarly project based on their experiences assisting with the development of the OT education program in Ghana, which included a two week service trip to the Ghana, Africa in May 2013. Please refer to Appendix B for an outline of the interview questions that were conducted.

The purpose of this interview was to gain insight into the Ghanaian culture directly from citizens of the United States who have traveled to Ghana and experienced the culture whom also have a professional background in OT. This information provided us with a new perspective on the Ghanaian culture including strengths and areas of need with regard to the developing profession of OT in Ghana. By gaining a broader perspective of the Ghanaian culture and specific facilitators and barriers to both engagement in occupations and the development of the OT program, we were able to develop pertinent and applicable educational resources to aid in the development of the OT program in Ghana.
Within the two-week period of time Dr. Zimmerman and Dr. Haskins spent in Ghana, they experienced direct person-to-person contact with Ghanaian citizens in a variety of ways. They spent time in rural and urban clinics and hospitals both learning from the practicing clinicians as well as offering suggestions. Additionally, the professors had the opportunity to prepare and deliver guest lectures for students. Furthermore, they had the privilege of interacting with the members the Ghanaian community through staying in Ghanaian homes, tourist opportunities, and day-to-day contact with the natives through interactions in the clinic and schools.

In summary of the interview, there were elements of the person, environment, and occupation components of the PEO model that were analyzed (Law et al., 1996). Within the person, it was reported that Ghanaian values and character can be described as respectful individuals who possess excellent management skills and utilize available resources, even when those resources are limited (A.H. & S.Z., personal communication, February 10, 2015). In the interviewees’ experiences, young students and therapists were eager learners (A.H. & S.Z., personal communication, February 10, 2015). The classroom experience with college students consisted of a lecture-based teaching style (A.H. & S.Z., personal communication, February 10, 2015). Teaching and learning styles appeared to be very protocol driven with an emphasis on memorization and recall (A.H. & S.Z., personal communication, February 10, 2015). Common health conditions included strokes, cerebral palsy, and fractures or other orthopedic conditions often due to road-side accidents (A.H. & S.Z., personal communication, February 10, 2015).

Another important person factor that was observed was the Ghanaian view on disability. There were several cases reported regarding the seclusion and lack of engagement in occupation available to an individual with a form of a disability or illness (A.H. & S.Z., personal
communication, February 10, 2015). There remains a need to advocate for the understanding of disabilities and other health conditions to ensure that individuals are engaging in their desired occupations within their communities.

The primary environment aspect gleaned from the interview was that there are limited resources for healthcare in general. Ghana has a lack of modern supplies, tools, and techniques available to healthcare practitioners (A.H. & S.Z., personal communication, February 10, 2015). Additionally, the terrain is mostly rugged unpaved dirt, which is inaccessible for most mobility devices such as wheelchairs (A.H. & S.Z., personal communication, February 10, 2015). Homes varied from one-story huts to multiple-story brick buildings (A.H. & S.Z., personal communication, February 10, 2015). The classrooms visited had desks for students, projector screens, white boards, and air conditioning (A.H. & S.Z., personal communication, February 10, 2015).

The occupation components of this interview included a description of commonly participated occupations. These included: sewing/weaving, community mobility by means of taxis and/or walking long distances, buying and selling goods at local markets, cooking, laundry, carrying and hauling equipment or necessary materials, farming, and caregiving (A.H. & S.Z., personal communication, February 10, 2015). Many of these occupations were found to be heavily dependent on physical abilities. Because of this, the activity demands of these occupations have become quite taxing on the bodies of people living in Ghana (A.H. & S.Z., personal communication, February 10, 2015). However, these activity demands are not limited to only physical elements, but also have a significant impact on mental health as well (A.H. & S.Z., personal communication, February 10, 2015).

When Dr. Zimmerman and Dr. Haskins were asked their professional opinions in regards
to the major needs for OT in Ghana in terms of this scholarly project, two main themes arose. First, there is a need for education on “how to think like an OT” (A.H. & S.Z., personal communication, February 10, 2015). The interviewees suggested this be incorporated into a thorough explanation of assessment and the various components involved such as effective interviewing and observation skills needed to conduct an appropriate OT assessment (A.H. & S.Z., personal communication, February 10, 2015). Secondly, the OT program in Ghana would benefit from receiving materials that have an emphasis on “doing occupations” or promoting the engagement in occupations despite disability and the current perspectives Ghanaians may have on such health conditions (A.H. & S.Z., personal communication, February 10, 2015).

In summary of analyzing the information received from this personal communication, we concluded that the educational resources developed for this scholarly project include a strong emphasis on defining the uniqueness of the OT profession. Additionally, an emphasis was made on careful and appropriate assessment of patients from an OT standpoint. Furthermore, occupation was used as a means and an end in the development of our educational modules to promote the engagement in occupations that each individual deserves as occupational beings despite presence of absence of a disability. With this recognition of existing assets and barriers to the development and implementation of the OT program in Ghana, these personal, environmental, and occupational components were considered in the methodology and development of the educational resources intended for a desired optimal fit for teachers and students in Ghana.

**Conclusion**

Through the analysis of the combined literature, needs assessments, and personal communication interview, we concluded that the product of this scholarly project would be
developed to serve as a useful educational resource for OT instructors and students in the country of Ghana. Information that was gathered and analyzed transactively through the PEO model was used to create this product. A PEO transaction table can be found in Appendix D. Included in our product are 14 modules that include educator handouts, student PowerPoints, student handouts, and demonstrative DVDs that were developed to be used as a supplement to the educational and clinical experiences of students studying OT at the University of Ghana. The series of module topics were selected based on the identified needs of the students, educators, and citizens of Ghana as collected from the literature review, completed needs assessments, personal communication interview, and thorough analysis with the use of the PEO model. These steps were completed to ensure pertinent, culturally sensitive material was constructed to meet the needs of OT students and teachers in Ghana.

It was our goal to create material that included OT-specific components in hopes to exhibit OT as a profession set apart from other professions of which it is closely identified. E.A. stated a request for practical demonstrations of OT assessments and interventions as carried out with clients or simulations with corresponding rationale. With this knowledge in mind, the importance of occupation was determined as an area of emphasis throughout the modules. Other skills such as activity analysis, and therapeutic use of self were included. Additionally, the basic assessment and intervention process of OT was depicted in a variety of forms that incorporated detailed descriptions of the terms and processes as well as such concepts applied to a variety of culturally-specific populations and occupations. All the modules were developed with similar structure; however, embedded lie a myriad of teaching and learning strategies. With the knowledge of Ghana’s primary use of lecture-based instruction, lecture material was provided for most modules to guide teaching and learning. In addition, several teaching and learning
strategies such as case studies and group discussion questions were also dispersed throughout the modules with hopes to provide the richest learning experience that would meet the needs of all the learning styles of the students. To ensure the request for assessment, intervention, and rationale simulations were met, we developed five DVD supplements to correspond to five modules (6-10) based on the requested populations including: the aging population, neurological conditions, pediatric conditions, mental health conditions, and orthopedic conditions. These short DVDs provide visual demonstration of the OT process applied to a population with the goal of occupational engagement. Other strategies for teaching and learning included were discussion-based material, case studies, worksheets, assignments, PowerPoints, and student handouts, etc.

The authors’ vision for this product was for educators to have a variety of resources to further advance the development of the OT program in Ghana and provide students with research-based, OT-specific material to enhance student learning experience and career in OT. Chapter III consisted of the sequencing, steps, and methods utilized in the creation and design of the product. Chapter IV includes the product of this scholarly project with the incorporation of educator lecture outlines and handouts, student PowerPoints, student handouts, worksheets, case studies, and demonstrative DVDs.
CHAPTER IV

PRODUCT

The purpose of this product is to provide the University of Ghana with educational resources to further the development and sustainment of the Occupational Therapy (OT) Program. The Person-Environment-Occupation Model (PEO) was used to guide the construction of this product. With PEO’s emphasis on the transactive relationship between person, environment, and occupation, we were able to create a comprehensive educational resource that is culturally sensitive to the country of Ghana and the current needs of the developing OT program.

Chapter IV includes the product of this scholarly project. The following materials were created to supplement the OT students’ learning throughout the OT program. A variety of educational resources were developed to assist OT educators in the facilitation of a rich learning experience for students. These resources are culturally sensitive and emphasize the specific role of OT. Dispersed throughout the product is a myriad of teaching and learning resources with the inclusion of OT-specific assessment and intervention material with regard to a variety of populations and culturally appropriate occupations. A total of 14 modules were created that include educator lecture outlines and handouts, student PowerPoints, student handouts, worksheets, case studies, and demonstrative DVDs. Refer to the Appendix to view this full product in its entirety.
CHAPTER V

SUMMARY

The purpose of this product was to provide the University of Ghana with an educational resource to further the development and sustainment of the Occupational Therapy Program (OT). The product of this scholarly project contains materials that were created to supplement the OT students’ learning throughout the OT program in Ghana. A variety of educational resources were developed to assist OT educators in the facilitation of a rich learning experience for students. These resources are culturally sensitive and emphasize the specific role of OT. Dispersed throughout the product is a myriad of teaching and learning resources with the inclusion of OT-specific assessment and intervention materials with regard to a variety of populations and culturally appropriate occupations. A total of 14 modules were created that include educator lecture outlines and handouts, student PowerPoints, student handouts, worksheets, case studies, assignments, and demonstrative DVDs.

Limitations of this product include our inability to correspond directly with students. There was no onsite occupational therapists available, minimizing the amount of OT assessment information that could be gathered to develop the project. Additionally, there is limited research regarding OT in Ghana, as it is a new and developing profession in that country. Furthermore, although great attempts were made to create culturally sensitive material, we (the developers of the project) are Americans designing Ghanaian resources, which may have led to unintentionally biased products.
The product of this scholarly project was designed to be implemented within the currently developing OT program at the University of Ghana. Through liaisons between the University of Ghana and the University of North Dakota, this product can be shipped and distributed to OT educators in the OT department at the University of Ghana. This educational resource includes a series of modules that may be used by professors to assist in the development of educational materials as well as supplement the students’ learning. This resource is not intended to be used as primary or sole educational curriculum, but rather as a supplement to the already existing educational materials utilized at the University of Ghana. Many of the modules may be used in conjunction with pre-existing resources that are currently being used. The materials were designed to benefit both teachers and students as they learn more about OT and its implementation in the community. There are no developed assessments for the measurement of student learning in relation to the usefulness of this product. It is recommended that a follow-up assessment be sent to gather educator perceptions of the effectiveness of the modules by future University of North Dakota scholarly project students. It is also recommended that in-country educators develop culturally appropriate assessments of the effectiveness of these modules in student learning.

In conclusion, the authors have developed a foundational educational resource to be utilized by OT teachers and students at the University of Ghana in hopes of providing external assistance that will help to further the development and sustainment of their program. It is envisioned that these supplementary resources will be useful in the teaching and learning process already taking place. To further improve this product, there remains a need for additional modules with the inclusion of specific OT assessments and interventions to aid in the continuing development of the OT program in Ghana. This product has the potential for further
development in the future as it provides the basis of foundational educational material needed to develop and sustain an already developing OT program. Future program developers may consider providing additional resources to sequel this material with the inclusion of more progressive and detailed information based on the needs assessment provided by the University of Ghana OT Program. The authors also recommend providing further information on useful OT assessments and interventions for specific populations. With the use of this educational resource, we hope to provide a form of external assistance that will aid in the development and internal sustainment of the Occupational Therapy Program in Ghana.
REFERENCES


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APPENDICES
Occupational Therapy’s Role:
A Foundational Occupational Therapy
Education Resource for Ghana
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Greetings to occupational therapy faculty and students,

We would personally like to thank you for this opportunity to collaborate with you in the development of useful educational resources for your occupational therapy program. This experience has enriched our understanding of Ghanaian culture and higher education as well as facilitating the expansion of the occupational therapy profession internationally.

This educational resource has been designed specifically with your unique needs in mind to foster student learning. We conducted an extensive literature review guided by a process that allowed us to investigate specific components of Ghanaian culture, as well as faculty and student teaching and learning methods. We believe occupational justice is a basic human right. Therefore, it is our vision that the development of this project will result in students achieving a deeper understanding of the occupational therapy profession, and thereafter, the retention of graduated occupational therapists to permanently reside in Ghana to serve the unmet needs of Ghanaians living with disabilities.

We commemorate you on the progress your occupational therapy program has made thus far. These educational resources included are designed to **adjunct** your current education materials. The modules were designed sequentially; however, they may be used interchangeably as best fit with your curriculum. A primary emphasis throughout the modules was promotion of engagement in occupations. Therefore, the modules facilitate student critical thinking to develop evaluation and intervention skills necessary to advocate for clients’ engagement in occupations.

This set of educational resources consists of 14 modules, which are intended to provide coursework for approximately two-hour class periods, however, educators may divide content among multiple sessions to best meet the needs of the students and course of study. Each module consists of an educator handout while some have corresponding student handouts via
PowerPoint, interactive class activities via worksheets, case studies, and class discussion questions, as well as selective demonstrative DVDs.

The beginning of each educator handout includes the purpose, activity description, learner requirements, student learning goals and objectives, instructional methods which provide the educator with suggestions on how to implement the module during a class session, and a list of the instructional resources students and teachers will need to complete the module.

- **Module 1:** Explains healthcare terminology utilized by the International Classification of Functioning (ICF), as ICF healthcare terminology was utilized throughout the modules.
- **Module 2:** Describes the occupational therapy delivery process including assessment, intervention, and outcomes. Make note that the remainder of the modules present information with specific emphasis on the OT delivery process while using ICF terminology.
- **Module 3:** Describes the skill of performing activity analysis.
- **Module 4:** Focuses on providing students with the opportunity to practice applying the skill of activity analysis.
- **Module 5:** Discusses using therapeutic use of self and therapeutic modes.
- **Modules 6-9:** Provides students with quick reference handouts to guide students through the occupational therapy process of assessment and intervention tailored specifically to four basic populations types including geriatrics, neurological disorders, pediatrics, and mental health. Also included with each handout is a corresponding DVD, which will aid in learning the occupational therapy process in providing services for the above stated populations. This DVD is included within this educational resource packet.
• **Modules 11-14:** Consists of case studies to provide students with opportunity to apply acquired knowledge of the ICF terminology, occupational therapy process, activity analysis, therapeutic use of self, and knowledge of diagnoses to evaluate and plan interventions to facilitate increased engagement in common meaningful Ghanaian occupations including cooking, caregiving, education, and community mobility.

We thank you again for this learning opportunity. We hope that these resources may be a positive asset to your occupational therapy program development. It has been recommended that future occupational therapy students at the University of North Dakota continue to progress the development of this project. If you have any questions regarding the use or content of this educational resource, please contact us via email at your convenience.

Our deepest regards,

Shalyn K. Hample, Maria J. Sundsted, & Anne M. Haskins

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MODULE 1:
An Introduction to Occupation and the International Classification of Functioning, Disability, and Health

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year one occupational therapy students

ACTIVITY TYPE: Lecture & group sharing activity

SETTING: Classroom

DURATION: 2 hours

PURPOSE:
Students will gain knowledge on the purpose, use, and structure of the International Classification of Functioning, Disability, and Health (ICF)

ACTIVITY DESCRIPTION:
The ICF will be introduced to serve as a framework to structure the thought process and establish a common language for analyzing people and their ability to participate in everyday occupations.

LEARNER REQUIREMENTS:
Prior to participating in this module, the student will need to:

- Have an interest in learning about the fundamentals of occupational therapy.
- Have a basic understanding of how engagement in activities and occupations serves as a central component of the values of occupational therapy.

GOAL:
Students will demonstrate a basic understanding of the purpose and use of the ICF.
OBJECTIVES:

Upon completion of Module 1 the participants will be able to:

- List the components of the ICF.
- Demonstrate and understanding of the interrelationship between the components of the ICF and their effect on an individual’s ability to function.

INSTRUCTIONAL METHODS FOR CONTENT:

- Instructors prepare for PowerPoint lecture and discussion through review of educator handout for Module 1.
- Provide students with PowerPoint handouts of the PowerPoint presentation of Module 1.
- Begin PowerPoint presentation located on DVD 1, Module 1; PowerPoint may either be projected or students may view PowerPoint from their personal computers.
- Instructors follow educator handout as outlined, incorporating discussion questions as indicated, facilitating completion of group sharing activity, and making variations and adaptations as needed to facilitate student learning.
- Request students to summarize learning from Module 1.

INSTRUCTIONAL RESOURCES NEEDED:

- Computer
- Access to the ICF
- PowerPoint presentation located on provided DVD 1
- Student handout via projection equipment to view PowerPoint or students may view PowerPoint on their personal computers
- Educator handout
METHODS FOR EVALUATION OF LEARNING:

Instructor evaluation of group discussion measured by students’ ability to summarize their understanding of the components of the ICF and complete ICF group sharing application activity.
MODULE 1

Educator Handout

I. Occupation vs. Activity: (ask students to decipher difference)

A. Activity: Execution of a task by an individual

   1. What makes an activity an occupation?

B. Occupation:

   1. “Groups of activities and tasks of everyday life, named, organized and
given value and meaning by individuals and a culture” (Law, Steinwender,

   2. “Everything people do to occupy themselves, including looking after
themselves (self-care), enjoying life (leisure), and contributing to the
social and economic fabric of their communities (productivity)” (Law,
Steinwender, & Leclaire, as cited in Willard & Spackman, 2009, p. 18).

   3. “The activities that comprise our life experience and can be named in the
culture” (Larson, Wood, & Clark, as cited in Willard & Spackman, 2009,
p. 18).

   4. The special meaning associated with an occupation is notable only to the
individual engaging in the occupation (Willard & Spackman, 2009).

      a) Activities may include: sewing, riding a taxi, walking, weaving,
        buying and selling at the market, cooking, doing laundry, farming,
        and child care.
b) These activities become occupations when “meaning” or “value” is attached.

(1) Example: *Cooking* may just be an activity to one who is simply “completing a task” with no meaning or value attached to it. The person may not enjoy it at all. However, cooking becomes an occupation when the person finds it meaningful (i.e. enjoyable, to fulfill a purpose, or to provide for needs, etc.).

5. Can be healthy, good, and promote well being but also be unhealthy, dangerous, self-destructive, or maladaptive (Willard & Spackman, 2009).

6. Why do we care?

   a) To be successful and effective occupational therapists, it is important to gain knowledge regarding the affected occupation that is based specifically on an individual’s personal meaning and experience.

   (1) Ask questions such as: What do they do? How do they do it? Where does it occur? What/who is involved? What does it require of them?

   (2) Engaging in occupations allows clients to achieve mastery in their environment, achieve goals, improve skills, and receive immediate feedback on performance.

7. Occupation cannot be separated from person and context. These aspects may change; however, are always present (Willard & Spackman, 2009).
C. When taking time to value the meaning of *occupation*, occupational therapists can effectively evaluate and intervene with patients using the following framework as a guide (Willard & Spackman, 2009).

II. **Definitions in the Context of Health:** (World Health Organization, 2001)

   A. **Function:** body structures, body functions, activities, and participation; includes *positive* aspects of interaction amongst the individual, health condition, and context of an individual.

   **Disability:** impairments, activity limitations, participation restrictions; includes *negative* aspects of interaction amongst the individual, health condition, and context of an individual.

   **Impairments:** problems in body function or structure such as significant deviation or loss.

   **Activity:** execution of a task or action by an individual.

   **Participation:** involvement in a life situation; represents social perspective of functioning.

   **Activity limitations:** difficulties an individual may have in executing activities.

   **Participation restrictions:** problems an individual may experience in involvement in life situations.

   **Environmental factors:** comprise the physical, social and attitudinal environment in which people live and conduct their lives.

III. **International Classification of Functioning, Disability, and Health (ICF)**

   (World Health Organization, 2001)
A. Provide students with link to ICF document. (May open link as a group or individually. Allow time for students to review ICF document).


B. Functions as a framework for organizing, comprehending, and studying health-related states in a meaningful and accessible fashion, while establishing a common language for the description of health-related states among varying users and countries.

C. An individual’s function and/or disability is viewed as a dynamic interaction between health conditions and context.

D. The ICF does not classify individuals, but rather, explains the situation of each individual within the health domains classified within.

E. Organized by:

1. Functioning and Disability
   a) Body
      (1) Body functions: physiological functions of body systems (including psychological functions)
         (a) Mental functions; sensory functions and pain; voice and speech functions; cardiovascular, hematological, immunological and respiratory systems; digestive, metabolic and endocrine systems; genitourinary and reproductive; neuromusculoskeletal and movement-related systems

Mod 1
(2) **Body structures**: anatomical parts of the body such as organs, limbs and their components

(a) Structures of the nervous system; eye, ear, and related; voice and speech; cardiovascular, immunological and respiratory; digestive, metabolic and endocrine; genitourinary and reproductive; movement; and skin

b) **Activities and Participation**

(1) **Performance Qualifier**: what an individual does in his/her current environment

(2) **Capacity Qualifier**: individual’s ability to execute a given task or action in a standard environment

(a) Learning and applying knowledge; general tasks and demands; communication; mobility; self-care; domestic life; interpersonal interactions and relationships; major life areas; and community, social and civic life

c) **Environmental Factors**: impact all components of functioning and disability, ordered by individual’s most immediate environment to the general environment. Interact with body functions and structures as well as activities and participation.

(1) **Individual perspective**: immediate environment (including physical and material features as well as direct contacts
with other people) including settings such as home, workplace, and school.

(2) **Societal perspective:** formal and informal social structures, services and overarching approaches or systems in the community or society including work environment, community activities, transportation services, laws, informal rules/attitudes, etc.

(a) Products and technology; natural environment and human-made changes to environment; support and relationship; attitudes; and services, systems and policies

d) **Personal Factors:** components within the person that are *not* part of a health condition or status including gender, race, age, lifestyle, habits, culture, coping styles, social background, education, profession, etc.

F. A person’s ability to function is a complex relationship between a person’s health condition and contextual factors.

(World Health Organization, 2001)

**IV. Application Group Activity**

A. Instruct students to each identify a favorite occupation such as cooking a special food or playing a game.
B. Have students identify and verbally share with class or small groups, two or three components within each of the introduced ICF categories that are necessary for the student to be successful in participating in their identified occupations.

1. ICF categories for students to share responses include:

   a) Body functions
   b) Body structures
   c) Performance qualifier
   d) Capacity qualifier
   e) Environmental factors
   f) Individual perspective
   g) Societal perspective
   h) Personal factors

C. Please note this activity introduces the skill of activity analysis, which will is described in further detail within Module’s 3 and 4. The primary purpose of the activity is to provide opportunity for students to apply and demonstrate understanding of the ICF terminology.

References:


An Introduction to: Occupation & The International Classification of Functioning, Disability, and Health (ICF)

Module 1: Student Slideshow
Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

Objectives
• Define and describe the purpose of activity analysis.
• Comprehend the steps required to complete activity analysis.

Occupation vs. Activity
• **Activity**: execution of a task by an individual
• **Occupation**:
  • “Groups of activities and tasks of every day life, named, organized and given value and meaning by individuals and a culture” (Law, Steinwender, & Lesler, as cited in Willard & Spackman, 2009, p. 18)

Occupations
• Special meaning held by individual
• Healthy and/or unhealthy
• OTs should ask questions:
  • What do they do? How do they do it?
• Occupation cannot be separated from person and context
• Allows for effective evaluation and intervention

Context of Health
• **Function**
• **Disability**
• **Impairments**
• **Activity**
• **Participation**
• **Activity limitations**
• **Participation restrictions**
• **Environmental factors**

ICF
• **ICF**: Functions as a framework for organizing, comprehending, and studying health-related states in a meaningful and accessible fashion, while establishing a common language for the description of health-related states among varying users and countries.
ICF

• Individual's function and/or disability is a dynamic interaction between health conditions and context
• Explains situation of each individual

ICF Components

• Functioning and Disability:
  • Body
    • Body Functions: physiological functions of body systems
    • Body Structures: anatomical parts of the body

ICF Components

• Activities and Participation
  • Performance Qualifier: what an individual does in his/her current environment
  • Capacity Qualifier: an individual's ability to execute a given task or action in a standard environment

ICF Components

• Environmental Factors: impact all components of functioning
  • Individual perspective: immediate environment
  • Societal perspective: formal and informal social structures
  • Personal Factors: components within the person not part of a health condition or status

Function

• A person’s ability to function is a complex relationship between a person’s health condition and contextual factors

Activity

• In small groups, identify a favorite occupation.
• Discuss 2-3 components within each of the ICF categories necessary for successful participation.
  • Categories include:
    • Body functions
    • Body structures
    • Performance qualifier
    • Capacity qualifier
    • Environmental factors
    • Individual perspective
    • Societal perspective
    • Personal factors
Objectives

- Define and describe the purpose of activity analysis.
- Comprehend the steps required to complete activity analysis.

Resources

MODULE 2:

Overview of the Occupational Therapy Process & Occupational Profile

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year one occupational therapy students

ACTIVITY TYPE: Lecture and case study

SETTING: Classroom

DURATION: 2 hours

PURPOSE:

Students will gain knowledge of the value, purpose, and process of conducting an occupational profile.

ACTIVITY DESCRIPTION:

The purpose and procedure of conducting an occupational profile will be taught through the use of a case study and the ICF for framework.

LEARNER REQUIREMENTS:

Prior to participating in this module, the student will need to:

- Have an interest in learning about the fundamentals of occupational therapy.
- Have a basic understanding of the ICF and its interrelationship with an individual’s function.

GOAL:

- Students will demonstrate understanding of the evaluation, intervention, and re-evaluation processes of delivering occupational therapy services.
• Students will demonstrate the ability to complete an occupational profile on a case study patient with the use of the ICF.

• Students will understand the value of a client’s occupational profile and have the foundational understanding of the steps required to gather occupational profile information from future clients.

OBJECTIVES:

Upon completion of Module 2, the participants will be able to:

• Identify and define the three areas of the occupational therapy process that were presented.

• Complete a mock initial evaluation interview with a classmate collecting information from all areas of the ICF.

• Demonstrate an understanding of the value, purpose, and methods of conducting an initial evaluation.

INSTRUCTIONAL METHODS FOR CONTENT:

• Instructors prepare for discussion/lecture and case study through review of educator handout for Module 2.

• Provide students with PowerPoint handouts of the PowerPoint presentation of Module 2.

• Begin PowerPoint presentation named Module 2 on provided DVD; PowerPoint may either be projected or students may view PowerPoint from their personal computers.

• Instructors may follow educator handout as outlined, incorporating discussion questions as indicated, and making variations and adaptations as needed to facilitate student learning.
• Use Forms 1 and 2 to collect information from a classmate from aspects of ICF to identify supports and barriers to a selected area of occupational performance.

• Request students to share their experiences of conducting an initial evaluation interview.

**INSTRUCTIONAL RESOURCES NEEDED:**

• Computer

• Access to the ICF

• PowerPoint presentation located on provided DVD

• Projection equipment to view PowerPoint or students may view PowerPoint on their personal computers

• Educator handout

• Student handouts

• “Occupational Therapy Initial Evaluation Activity” forms 1 and 2

**METHODS FOR EVALUATION OF LEARNING:**

• Students’ ability to complete the occupational therapy initial evaluation activity following the ICF framework to identify strengths and problem areas to occupational performance.
1. Three-Step Process of Delivering OT Services (Chisholm & Schell, 2014)

   1. **Evaluation**: Collection and analysis of client’s strengths and problems to participating in meaningful areas of occupation.

   2. **Intervention**: Process of addressing client’s problems areas to facilitate progress towards client engaging in the occupations he or she wants, needs, or is expected to engage in.

   3. **Re-evaluation of Outcomes**: Analysis of client’s response to interventions and progress towards goals. Checkpoint during therapy process to determine whether or not continued occupational therapist services are needed. May result in collaborating with client to change goals and/or the approach to intervention.

2. **Evaluation**: The first step of the OT process. Therefore, the purpose of the first OT session with client will usually be evaluation of client only (Shotwell, 2014).

**Purpose of Evaluation** (Shotwell, 2014)

   i. To identify the client’s strengths and problem areas to occupational performance.

      1. What are “strengths” and “problem areas”?

Strengths and problem areas are the components within the client’s body functions, body structures, environmental factors, capacity qualifiers,
performance qualifiers, and personal factors (Please see Module 1 to reference definitions of these ICF terms). In preparation for planning interventions, it may be helpful to write a prioritized list of problem areas to inform the therapist as to what to focus therapy interventions on first.

i. The therapist should be thinking about:

“What problem areas are most important to address in therapy first?”

“How can these identified problem areas be improved or altered for the client to be reach his or her goal?

“How can I use the client’s strengths to help reach therapy goals?”

➢ Suggested class discussion question: What other questions might an occupational therapist be considering during the initial evaluation?

ii. Why is an understanding a client’s strengths and problem areas important?

By understanding the specific components that are inhibiting the client’s meaningful occupations, the therapist will be able to select interventions that will improve those components. By understanding the client’s strengths, the occupational therapist may introduce alternative strategies using client’s strengths to reach goals. For example, a client with cerebral palsy might have spasticity in her arms that makes getting dressed difficult. However, the client has good cognitive ability to learn; therefore, the therapist might introduce and teach alternative techniques for the client to be able to reach their goal of dressing independently.
iii. To establish goals for the client to work towards during therapy.

iv. To provide therapist information about what interventions/treatment the client will benefit from.

**Methods of Evaluation** (Shotwell, 2014): The occupational therapist will conduct an interview with client and make observations during the first meeting with the client.

v. **Occupational Profile:** Process of collecting information via interview about client’s occupational history, current daily occupational routine, goals the client would like to gain from therapy, and the SUBJECTIVE perspective from the client’s point of view of how the client views his or her supports and barriers to occupational performance.

1. Who is involved?

   a. May include communicating with the client, family, friends, and other healthcare providers.

2. Questions the therapist asks during the interview to understand each client’s occupational profile:

   a. Who is this person?

   b. What is this client’s daily pattern of occupations?

   c. What does this client want, need, or is expected to do?

   d. Prioritize client’s goals. Which occupations does the client most want to be able to do as a result of OT intervention?
e. What does this client view as his or her main barriers and supports to occupational participation?

vi. **Observation** (Shotwell, 2014): The process of observing a client’s OBJECTIVE supports and barriers to participation in his or her occupations.

1. Observe client performing daily occupations and making observations of client’s strengths and problem areas to occupational performance.

2. Prepare suggested “Occupational Therapy Initial Evaluation Activity” at this time. Provide students with electronic and/or printed access to Module 2: Forms 1 and 2. The activity provides examples of interview questions and observations within all categories of the ICF to guide the occupational therapy students through the initial evaluation process.

3. Ask students to split into pairs of two. Ask students to take turns interviewing and observing one another using Form 1 as a guide. Have students record assessments findings using Form 2.

4. Note Module 3 expands on observation skills by providing detailed information on completing activity analysis.

vii. **Standardized and unstandardized assessments** (Chisholm & Schell, 2014): Many assessments have been created to objectively
measure various aspects of occupational performance. However, standardized and unstandardized assessments are largely inappropriate for use in Ghana at this time. The majority of assessments have not been specifically tested for reliability and validity on Ghanaian citizens; therefore, results of such assessments may not be accurate. In addition, many assessments are expensive to acquire and administer; therefore, students may be informed that careful consideration should be given to prioritizing the use of standardized assessments based on the client population, fit of the assessment with the environment, and also fiscal resources that are available.

**Writing Goals** (Sames, 2014): Goals are created through collaboration between client and therapist. This makes therapy client-centered. Clients are more motivated to work diligently during therapy when they are working towards goals that are personally meaningful and that they have helped to choose! There are two types of goals, long-term goals and short-term goals.

1. **Requirements of all goals** –
   
   ○ State time frame as to when goal is expected to be met.
   
   ○ Addresses a specific component to occupational performance (short-term goal) or actual area of occupation (long-term goal), condition or level of independence in which goal will be completed, describe observable behavior, and be measurable.
   
   ○ Designates level of independence
The Functional Independent Measure (FIM) is a widely used and accepted scale to measure and track level of assistance clients need to complete common daily tasks such as mobility, self-care, communication, and problem-solving (Uniform, 2012).

Includes seven assessment level categories in regard to eighteen items, thirteen of which measure motor functions and five that measure cognitive functions (Uniform, 2012).

FIM levels provide a more objective way to assess client, set goals, and track functional progress towards goals (Uniform, 2012).
2. **Short-term goals** (Sames, 2014) - Describes what the client will be able to do in the next 1 to 30 days of receiving OT services. Usually contains smaller components skills of the occupation included in the corresponding long-term goal.

3. **Long-term goals** (Sames, 2014) - Expectations of the client’s occupational performance at the end of receipt of OT services. Must include an occupation.
*Please refer to STG and LTG examples in Student PowerPoint.

3. **Intervention** (Gillen, 2014): After completing the assessment and determining the client’s primary strengths and limitations to occupational performance, the therapist provides intervention activities that address the client’s problem areas and utilize the client’s strengths. *Restorative* and *compensatory* strategies are the two main approaches that therapists use to facilitate clients to overcome the identified limitations. *Occupation-based* and *preparatory* are the two types of interventions.

**Intervention Approaches** (Gillen, 2014)

i. **Restorative approach** - Used to improve client’s body functions and body structures, for example increasing client’s range of motion of their arms to complete dressing independently.

ii. **Compensatory approach** - Using alternative strategies such as adaptive equipment, alternative techniques, and environmental modification. Used when the client’s limitations to occupational performance are permanent and he or she is unable to develop the body functions and structures necessary for successful occupational performance. For example, a client with cerebral palsy may have limited range of motion of her arms, which makes putting on a shirt difficult. Instead of using interventions to increase range of motion, the client will practice using adaptive equipment such as a dressing stick or selecting types of shirts that are easiest to take on and off.

Mod 2
**Intervention Types** (American, 2014a; Gillen, 2014)

i. **Occupation-based** - Intervention activities that involve the client performing actual occupations.

1. **Occupation as a means** – Using an occupational intervention to facilitate development of client skills needed to successfully perform the client’s end-goal occupation.
   a. For example, the intervention activity may include the client playing a board game while standing up, even though the client’s goal might be increasing independence with getting dressed. By playing a board game while standing, the client is practicing standing tolerance, reaching, and hand fine motor movements needed to successfully perform dressing independently.

2. **Occupation as an end** – When the client engages in the actual occupation that is the end-goal for that client to achieve.
   a. For example, the client directly practices getting dressed when being independent in dressing is that individual’s long-term occupational goal.

ii. **Preparatory** - Intervention activities that prepare the client for occupational performance, but do not involve performance in an occupation.
area of occupation. For example, stretching and strengthening exercises in preparation for occupational performance.

4. **Re-evaluation** (Chisholm & Schell, 2014): After the client has received a phase of intervention, the therapist re-evaluates the effectiveness/outcomes of intervention thus far and whether or not the client continues to have skilled occupational therapy needs.

**Outcomes** (Chisholm & Schell, 2014):

- Outcomes to evaluate include changes to client’s performance and participation in meaningful occupations, changes in client’s ability to adapt to various occupational challenges, “engaging in activities that prevent future limitations and promote health and wellness”, “improved quality of life, competence in occupational roles, and ability to self-advocate” (p. 476).
- Evaluation of outcomes informs both therapist and client as to the effectiveness of interventions, the potential need for modifications to future interventions, and whether or not the client continues to have a need for occupational therapy services.
- Results of re-evaluation may show that the client does not need further intervention to participate in occupations or that the client does need more intervention to reach client’s goals of occupational performance and participation.
References


Defining the OT Delivery Process: Evaluation

Objectives
- Identify and define the three areas of the occupational therapy process that were presented
- Complete a mock initial evaluation interview with a classmate collecting information from all areas of the ICF
- Demonstrate an understanding of the value, purpose, and methods of conducting an initial evaluation

Three Step Process of OT Delivery
- 1. Evaluation
- 2. Intervention
- 3. Re-evaluation of Outcomes

Defining Evaluation
- First step of the OT process!
- Purpose: To identify client strengths and problem areas to occupational performance
  - Strengths
    - Client skills & capacities that support occupational performance
  - Problems areas
    - Client skills & capacities that inhibit occupational performance

Evaluation Continued
- Thinking like an Occupational Therapist
  - “What problem areas are most important to address in therapy first?”
  - “How can these identified problem areas be improved or altered for the client to be reach his or her goal?”
  - “How can I use the client’s strengths to help reach therapy goals?”
- Class discussion question: What other questions might you be considering during the initial evaluation?

Evaluation: Strengths & Problem Areas
- Why is an understanding a client’s strengths and problem areas important?
  - To understand specific inhibitions and supports to occupational performance
  - To allow therapist to select client-centered interventions
  - To establish client-centered therapy goals

(Chisholm & Schell, 2014)
(Shotwell, 2014)
Methods of Evaluation

- Occupational Profile
- Observation
- Standardized & unstandardized assessments

(Shotwell, 2014)

Occupational Profile

- Who is this person? What does this client’s daily pattern of occupations like?
- What occupations does the client want or need to do? Which occupations are most important for the client to be able to do?
  - Body functions
  - Body structures
  - Environmental factors
  - Capacity & performance qualifiers
  - Personal factors
- What is preventing this client from engaging in the occupations he or she wants or needs to do?
- Body functions
- Body structures
- Environmental factors
- Capacity & performance qualifiers
- Personal factors
- What abilities and strengths does the client currently have?

(Shotwell, 2014)

Observation

- Process of observing objective supports & barriers to occupational performance

(Shotwell, 2014)

Activity Time!

- Please refer to Module 2: Forms 1 and 2
- Match up in pairs
- Take turns role-playing being a therapist and client to closely simulate an initial evaluation interview
- Students are encouraged to create pretend client scenarios

Standardized & Unstandardized Assessments

- Not included in this module
- Not appropriate due to not having been tested and normed on Ghanaians
- Expensive to acquire and administer

(Chisholm & Schell, 2014)

Writing Goals

- Created collaboratively between client & therapist
  - Increases client’s motivation
- Components of ALL goals
  - Designate specific time frame
    - For example, “By May 1st, pt will...”
  - Includes a component to occupational performance or actual area of occupational performance
  - Designate level of independence
- Measurable and Observable!!!!

(Sames, 2014)
Functional Independence Measure

- The Functional Independent Measure (FIM) - a widely used accepted scale to measure and track level of assistance clients need to complete common daily tasks such as mobility, self-care, mobility, communication, and problem-solving.
- Seven assessment level categories
- Provide objective way to assess client, set goals, and track functional progress towards goals.

Writing Goals Continued

- Measurable Goals
  1. By March 1st (date), patient will demonstrate ability to perform full body dressing (including shirt, pants, underwear, and shoes) (occupation) independently (level of independence).
  2. By April 8th (date), patient will demonstrate ability to prepare a simple meal (occupation) with minimal assistance.

- Immeasurable Goals
  1. Patient will increase ability to complete full body dressing.
     - This goal does not specify when goal is set to be completed, “increase” is not measurable, full body dressing could be described with more detail, and no level of independence indicated.
  2. Patient will soon be able to cook with increased independence.
     - “Soon” is not specific time frame, “increased” is not measurable, “cook” is too vague of an occupational task, and no level of independence indicated.

Short-term Vs. Long-term Goals

- Short-term
  - 1 to 30 days of receiving OT services
  - Usually smaller components of occupations
  - Correspond with long-term goals

- Long-term
  - Expectation at end of receipt of OT services
  - Must include specific occupation

Intervention

- Second step of OT process
- Activities client completes to address occupational deficits

Intervention Approaches

- Restorative
  - Used to improve client’s body functions and body structures
  - Some client are not able to improve body functions/structures

- Compensatory
  - Using alternative strategies such as adaptive equipment, alternative techniques, and environmental modification to reach occupational goals.
  - When is this approach used?
    - When client’s limitations to occupational performance are permanent and is unable to develop the body functions and structures necessary for successful occupational performance.
Intervention Types

- **Occupation-based** - Intervention activities that involve the client performing actual occupations.
  - Occupation as means – Using an occupational intervention to facilitate development of client skills needed to successfully perform the client’s end-goal occupation.
  - Occupation as ends – When the client engages in the actual occupation that is the end-goal for that client to achieve.
- **Preparatory** - Intervention activities that prepare the client for occupational performance, but do not involve performance in an area of occupation. For example, stretching and strengthening exercises in preparation for occupational performance.

[American, 2014a; Gillen, 2014]

Re-evaluation

- Forth step of OT process
- Therapist re-evaluation of the effectiveness/outcomes of intervention thus far
- Does client continues to have skilled occupational therapy needs?

[Chisholm & Schell, 2014]

Outcomes

- How has the client’s performance and participation in areas of occupation changed since the initial OT evaluation?
- Need for future OT interventions?
- Need for modification to interventions?
- Does client continue to have skilled OT needs?

[Chisholm & Schell, 2014]

Objectives

- Identify and define the three areas of the occupational therapy process that were presented
- Complete a mock initial evaluation interview with a classmate collecting information from all areas of the ICF
- Demonstrate an understanding of the value, purpose, and methods of conducting an initial evaluation

References

Suggested Activity Directions

Have students work in pairs. Use the Form 1 as guide to perform a mock initial evaluation interview; one student pretends to be the client while the other pretends to be the occupational therapist. The students can be instructed to “pretend this is your first time meeting your client. Introduce yourself and explain the profession of occupational therapy”. Students playing the role of the client can be encouraged to pretend to have specific health and occupational performance issues. Use interview questions included in form 1 as a guide. Students are encouraged to ask additional questions as they see fit.

Select at least one activity to make observations on occupational performance, such as taking shoes on or off, washing hands and/or face, going from sit to stand, and walking to and from bathroom, etc.

Upon completion of the interview questions, students complete Form 2 individually, and may share results verbally with instructor and classmates.

Post-Activity Class Discussion Question
What went well? What was challenging?

How could you have improved the flow of interview questions?

What will you do differently next time?
### Personal factors
Components within the person that are *not* part of a health condition or status including gender, race, age, lifestyle, habits, culture, coping styles, social background, education, profession, etc. (World, 2001).

<table>
<thead>
<tr>
<th>Interview Questions</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tell me about yourself?</td>
<td>Observe for signs of pain (grimacing, squinting eyes, writhing, irritability, combativeness during movement, immobility, etc.)</td>
</tr>
<tr>
<td>Tell me about a typical day.</td>
<td>Make observations on client’s cognitive, voice, and speech functions by observing client’s ability to answer questions during interview.</td>
</tr>
<tr>
<td>How old are you?</td>
<td>Observe how client moves during participation in daily activities.</td>
</tr>
<tr>
<td>Where do you live?</td>
<td>Is the client able to communicate his or her needs and wants?</td>
</tr>
<tr>
<td>Who do you live with?</td>
<td></td>
</tr>
<tr>
<td>Where do you work?</td>
<td></td>
</tr>
<tr>
<td>Do you attend school? Where? When?</td>
<td></td>
</tr>
<tr>
<td>What do you enjoy doing for fun? With whom?</td>
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</tr>
</tbody>
</table>

### Body functions
Mental; sensory and pain; voice and speech; cardiovascular, hematological, immunological and respiratory systems; digestive, metabolic and endocrine systems; genitourinary and reproductive; neuromusculoskeletal and movement-related systems (World, 2001).

<table>
<thead>
<tr>
<th>Interview Questions</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you experiencing any pain, tingling, numbness, or difficulty moving? Where?</td>
<td></td>
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<tr>
<td>How long have you had this sensation?</td>
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<tr>
<td>How would you rate your pain on a scale from 1-10, with 10 being high?</td>
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<tr>
<td>Have you had any difficulty with or procedures for your heart, lungs, stomach or reproductive system?</td>
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</table>

### Body structures
Structures of the nervous system; eye, ear, and related; voice and speech; cardiovascular, immunological and respiratory; digestive, metabolic and endocrine; genitourinary and reproductive; movement; and skin (World, 2001).

<table>
<thead>
<tr>
<th>Interview Questions</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have any difficulty with seeing or hearing?</td>
<td>Does client have visible impairment to body structures?</td>
</tr>
<tr>
<td>Have you had injuries that I should be aware of, such as falls or car accidents?</td>
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<tr>
<td>Do you currently have wounds or injuries?</td>
<td></td>
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<tr>
<td>Performance qualifiers</td>
<td>Capacity qualifiers</td>
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<td>------------------------</td>
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<tr>
<td><strong>What an individual does in his/her current environment</strong> (World, 2001).</td>
<td></td>
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<tr>
<td><strong>In the client’s current environment, have client perform some basic activities of daily life such as washing hands/face, getting in and out of a bed or chair, getting dressed, bathing, toileting, etc. Observe the client’s ability to complete activities.</strong></td>
<td><strong>Note: capacity qualifiers can only be assessed if therapist and client have access for client to practice completing daily activities in his or her standard environment in which the activity typically occurs. If therapy sessions have been taking place outside of the client’s standard environment, planning a therapy session at client’s home or work place will be the best test of client’s ability to perform occupations.</strong></td>
</tr>
<tr>
<td><strong>Which activities are difficult and why?</strong></td>
<td><strong>Which activities are difficult for you to perform and why?</strong></td>
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<tr>
<td></td>
<td>Strengths</td>
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<td><strong>Personal factors</strong></td>
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<td><strong>Capacity qualifiers</strong></td>
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<td><strong>Environmental factors</strong></td>
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<tr>
<td><strong>Individual perspective</strong></td>
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<td><strong>Societal perspective</strong></td>
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References:


MODULE 3:

An Introduction to Activity Analysis

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year one occupational therapy students

ACTIVITY TYPE: Lecture and group discussion

SETTING: Classroom

DURATION: 2 hours

PURPOSE:

Students will gain knowledge regarding skills required to conduct an activity analysis.

ACTIVITY DESCRIPTION:

This module will define the purpose of activity analysis and explain the importance of using this fundamental skill in occupational therapy practice. Module 3 provides information on the required steps to complete activity analysis. The students will utilize the International Classification of Functioning (ICF) to serve as a framework to organize information and establish a common language when completing activity analysis.

LEARNER REQUIREMENTS:

Prior to participating in this module, the student will need to:

- Have an interest in learning about the fundamentals of occupational therapy.
- Have a basic understanding of how engagement in activities and occupations serves as a central component of the values of occupational therapy.
GOAL:
Students will demonstrate a basic understanding of the purpose, benefit, and steps required to complete an activity analysis.

OBJECTIVES:
Upon completion of Module 3, the learners will be able to:

- Define and describe the purpose of activity analysis.
- Comprehend the steps required to complete activity analysis.

INSTRUCTIONAL METHODS FOR CONTENT:
1. Instructors prepare for PowerPoint lecture and discussion through review of educator handout for Module 3.
2. Provide students with PowerPoint handouts of the PowerPoint presentation of Module 3.
3. Begin PowerPoint presentation located on DVD 3, Module 3; PowerPoint may either be projected or students may view PowerPoint from their personal computers.
4. Instructors follow educator handout as outlined, incorporating discussion questions as indicated, and making variations and adaptations as needed to facilitate student learning.
5. Request students to summarize learning from Module 3.

INSTRUCTIONAL RESOURCES NEEDED:
- Computer
- PowerPoint presentation located on provided DVD 3
- Projection equipment to view PowerPoint or students may view PowerPoint on their personal computers
- Educator handout
- Student handouts
METHODS FOR EVALUATION OF LEARNING:

Instructor evaluation of group discussion will be determined by students’ ability to summarize ideas, opinions, and information regarding activity analysis.
MODULE 3:

Educator Handout

I. An individual’s ability to function is determined by an interactive relationship between the health condition and contextual/personal factors. Therefore, it is important to analyze the activity an individual participates in to yield a successful fit between the person’s abilities and his or her desired engagement in occupations. Following analysis of both the activity desired and the individual’s capabilities, activities may need to be graded up or down in complexity in order to be completed successfully.

II. Activity analysis: Used to understand activities and their component parts, the performance skills required, the possible meaning to clients, and the activity’s therapeutic potential (Crepeau & Schell, 2009).

   A. Provides occupational therapist with understanding of what is required for a client to complete an activity (equipment, materials, space, and time)
   B. Informs occupational therapist on therapeutic ability of an activity and for whom
   C. Allows for ability to grade or adapt an activity to support successful completion
   D. Helps to discover the influence context has on occupational performance
   E. Assists in the selection of appropriate activities and identify the “just right challenge” for each individual client
   F. Helps to determine areas in need of client intervention
   G. Presents justification or rationale for the intervention activity selected by the occupational therapist in order to yield therapeutic benefits for the client

(Thomas, 2012)
III. **Occupation-Based Analysis:** Activity analysis based on how a particular client would engage in the occupation (activity) in his/her own context.

   A. Add the *personal context* factors into evaluation of person and occupation.

      1. Ask questions about gender, age, health conditions, culture, habits, race, education, upbringing, coping styles, social background, profession, psychological assets/characteristics, and past and current experiences (Thomas, 2012).

IV. **Analysis Process** (Thomas, 2012)

1. **Activity Awareness**

   a. Identify activity to be analyzed.

      i. Separate each activity and identify requirements for success

      ii. Determine whether you will be conducting an activity analysis or an occupation-based activity analysis

    (Thomas, 2012)

2. **Identify the steps required**

   a. Activity is broken down into a list of specific steps and timing

      i. Consider:

         1. How the action takes place

         2. Objects used or interacted with

         3. Time/amount elements

      ii. Example: Cracking an egg:

         1. Take egg out of container (a few seconds)

         2. Hold egg in hand (one second)
3. Crack against hard surface (one second)

4. Hold egg over dish you wish to add egg to (a few seconds)

5. Throw away outer shell (one second)

(Thomas, 2012)

3. **Determine activity demands through detailed use of the ICF Framework (ask students to use ICF to participate in answering questions)**

   a. Activity demands are determined through the evaluation process of a specific activity. Consider body functions, body structures, and environmental factors.

   b. What body functions and body structures are required to complete the activity?

      i. **Egg Example:**

         1. Mobility of joints of shoulder, elbow, wrist to move pieces; sensation in hand to feel egg; respiratory functions for endurance to complete task; memory functions; mental functioning of sequencing complex movements; attention to task;

   c. What environmental factors are required to complete the activity?

      i. **Egg Example:**

         1. (Social factors) Additional people in the same room talking/making noise; (facilitators) unavailability of or inaccessibility to the egg;

4. **Analysis of therapeutic intervention:** Evaluate the activity and the needs of the client to formulate possible outcomes, which may include adapting or grading the activity to increase or decrease the challenge of the activity for the client.

   a. Evaluate the activity

      i. Evaluate needs of the client (occupational profile).
ii. Is this activity appropriate for your client?

iii. Do you need to grade the activity up or down (i.e. make it easier or more difficult) to increase or decrease the *demands* of the activity in order to develop skills?

iv. Do you need to adapt the activity (change or modify the *activity* to support successful engagement at the client’s current level)?

(Thomas, 2012)

VII. Intervention Justification

1. Why did I select this activity for this client?
   a. What is it doing for the client (enjoyment, skills are being developed, etc.)?

2. How do the demands of the activity match with my client’s needs?
   a. How does the activity address client’s skills/enable the client to meet his or her goals?

(Thomas, 2012)

References


Mod 3
An Introduction to Activity Analysis

Module 3: Student Slideshow
Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

Objectives

• Define and describe the purpose of activity analysis.
• Comprehend the steps required to complete activity analysis.

Activity Analysis

• Used to understand activities and their component parts, the performance skills required, the possible meaning to clients, and the activity’s therapeutic potential.

Activity Analysis

• Provides OT with understanding of what is required for a client to complete an activity
• Informs OT on therapeutic ability of an activity
• Allows ability to grade/adapt activity
• Discover contextual influence on occupational performance
• Just right challenge
• Determines areas of need
• Presents justification of selected intervention

Occupation-based Analysis

• Activity analysis based on how a particular client would engage in the occupation (activity) in his/her own context
• Adds personal context factors into evaluation of person and occupation

Analysis Process

• Activity Awareness
  • Identify activity to be analyzed
    • Separate each activity and identify requirements for success
    • Determine type of analysis
  • Identify Steps Required
    • Break activity down into specific steps and timing
Analysis Process

• Therapeutic Intervention
  • Evaluate activity and the needs of the client to formulate possible outcomes
    • Adapting or grading the activity

Evaluating the Activity

• Occupational profile
  • Is this activity appropriate for your client?
  • Grade the activity to increase/decrease the demands of the activity in order to develop skills?
  • Do you need to adapt the activity (change or modify activity)?

Intervention Justification

• Why did I select this activity for this client?
• How do the demands of the activity match with my client’s needs?

Objectives

• Define and describe the purpose of activity analysis.
• Comprehend the steps required to complete activity analysis.

Resources

MODULE 4:

Application of Activity Analysis

Developed by: Shalyn Hample, OTS & Maria Sundsted, OTS

AUDIENCE: Year one occupational therapy students

ACTIVITY TYPE: Lecture followed by activity and corresponding worksheet

SETTING: Classroom

DURATION: 2 hours

PURPOSE:

Students will demonstrate ability to apply concepts required to complete an activity analysis.

ACTIVITY DESCRIPTION:

Students will select an activity from a provided list of basic activities of daily living. Students will then utilize a worksheet to guide them through the process of the activity analysis of their selected activity. The ICF will be used for student reference as needed for defining and understanding the components of a selected activity. After completion of activity analysis, students will identify complexity of activity and gain the ability to accommodate for a variety of client needs through the ability to grade activities appropriately.

LEARNER REQUIREMENTS:

Prior to participating in this module, the student will need to:

- Students will have completed Module 3, Introduction to Activity Analysis.

GOAL:

Students will demonstrate ability to complete activity analysis.
OBJECTIVES:

- Students will demonstrate ability to utilize the ICF when completing activity analysis.
- Students, working in pairs, will demonstrate ability to present one completed activity analysis to the class.
- Students will identify complexity of activity.
- Students will demonstrate ability to grade an activity appropriately to match client needs.
- Students will be able to generalize activity analysis concepts to multiple activities.

INSTRUCTIONAL METHODS FOR CONTENT:

1. Instructors prepare for class activity and discussion through review of educator handout for Module 4, which includes activity analysis worksheet and list of activity options to analyze.
2. Provide each student with personal computer access to and/or printed copy of activity analysis worksheet and list of activity options to analyze.
3. Assign students to work in pairs in order to complete an activity analysis of one activity of their selection.
4. Students utilize personal computer and/or printed copy to guide activity analysis worksheet completion.
5. Instructors follow educator handout as outlined to facilitate activity analysis class activity.
6. Request student pairs to present completed activity analyses to their classmates.

INSTRUCTIONAL RESOURCES NEEDED:

- Activity analysis worksheet
- Personal computers with access to ICF PDF and/or printed copy of ICF
**Educator handout**

**METHODS FOR EVALUATION OF LEARNING:**

Students’ ability to work in pairs and successfully present a completed and accurate activity analysis.
Module 4: Activity Analysis Worksheet

Step 1: Activity Awareness. What activity will I be analyzing? Am I analyzing the activity just for the knowledge of the activity or with a client in mind? *(If you have a client in mind, you already have completed part of Step 4, the occupational profile)*

Step 2: Identify the steps required to complete the activity (sequencing and timing).

Step 3: Determine the activity demands.

What environmental factors (social/physical) are required?

What objects are required? What are their properties?

What is the space required?

Social?

What body functions/structures are required?

<table>
<thead>
<tr>
<th>Body Function/Structure</th>
<th>How is it used?</th>
<th>Level of skill</th>
<th>Simple ← →</th>
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<tbody>
<tr>
<td>Mental Function/Skill</td>
<td>1</td>
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<tr>
<td>Sensory Function/Skill</td>
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<td>Body Structure</td>
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</table>

Complexity:
Step 4: Analysis for therapeutic intervention:

Client’s occupational profile: (insert pertinent information gathered from evaluation process)

Rationale/Justification for intervention choice: (be sure you have addressed: a) sequencing of steps; b) activity demands; c) complexity and how these match your client’s needs. Think, “HOW does the skill get used/addressed in the activity”?

A. Sequencing

B. Activity demands (body functions and structures demanded by activity)

C. Complexity

D. Meaning to client

Describe one way to adapt the activity (make more/less complex).

References
Module 4: Activity Analysis [Teacher Example]

Step 1: Activity Awareness. What activity will I be analyzing? Am I analyzing the activity just for the knowledge of the activity or with a client in mind? (If you have a client in mind you already have completed part of step 4, the occupational profile)

Playing soccer.

Step 2: Identify the steps required to complete the activity (sequencing and timing).
1. Select desired/assigned playing position
2. Kick/pass ball to teammates
3. Run across field/toward teammates
4. Shout out plays to teammates

Step 3: Determine the activity demands.

What environmental factors (social/physical) are required?

What objects are required? What are their properties?
Semi-hard, round, soccer ball; 2 large goals, soccer shoes

What is the space required?
Field approximately 100m long and 60m wide

Social?
Teammates; referees; social interaction expectations

What body functions/structures are required?

<table>
<thead>
<tr>
<th>Body Function/Structure</th>
<th>How is it used?</th>
<th>Level of skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Function/Skill</td>
<td></td>
<td>1   2       3</td>
</tr>
<tr>
<td>Memory</td>
<td>Apply the rules of the game</td>
<td>X</td>
</tr>
<tr>
<td>Sequence complex movements</td>
<td>Ability to run, kick, pass, etc. at appropriate times and directions</td>
<td>X</td>
</tr>
<tr>
<td>Attention</td>
<td>Able to attend to task for 90 minutes</td>
<td>X</td>
</tr>
<tr>
<td>Higher cognitive level functions-problem solving</td>
<td>Evaluate options for placement of ball and body position</td>
<td>X</td>
</tr>
<tr>
<td>Emotional</td>
<td>Using appropriate coping skills to control frustration; display appropriate emotions</td>
<td>X</td>
</tr>
<tr>
<td>Sensory Function/Skill</td>
<td></td>
<td>1   2       3</td>
</tr>
<tr>
<td>Seeing</td>
<td>Visually scan the field to direct the ball and body position</td>
<td>X</td>
</tr>
<tr>
<td>Proprioceptive</td>
<td>Ability to feel where body is in space to run and kick ball</td>
<td>X</td>
</tr>
<tr>
<td>Pain sensation</td>
<td>Sense pain if hurt on field to prevent further injury</td>
<td>X</td>
</tr>
</tbody>
</table>
### Sensory Function/Skill

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility of Joints</td>
<td>Ability to run and kick the ball</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Muscle Endurance</td>
<td>Ability to run for a long period of time</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Heart functions</td>
<td>Ability to pump blood through the body at high exertion demand</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Respiratory</td>
<td>Ability to exchange oxygen at fast rate at increased body exertion</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Water, mineral, electrolyte</td>
<td>Maintain stability of fluids throughout activity</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

### Body Structure

<table>
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<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyeball</td>
<td>To see the ball, field, and teammates</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Brain</td>
<td>recognition, impulse control, judgment, attention, memory, emotion regulation etc.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Musculoskeletal structures related to movement</td>
<td>Legs, feet, pelvis, head, and neck</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

### Complexity:
Playing a game of soccer requires a variety of skills all being used at the same time with relatively complex activity demands and a high degree of structure. This is evident in the complex rules to follow and skills required to play the game. Certain components of the activity may be more complex for a client given his or her abilities.

### Step 4: Analysis for therapeutic intervention:

**Client’s occupational profile: (insert here as you would have had this from the evaluation process)**

Paul is a 13-year-old boy who has two younger brothers, ages 11 and 8 years. He resides with his parents in a one-story home. The family has been receiving reports from Paul’s teacher that he is having difficulty with motor planning during physical education and when observed playing outdoors with his peers. He appears to have awkward movements when interacting with kicking a ball or running with friends. Additionally, Paul becomes easily frustrated when he is unable to perform as he or his peers would like, exhibiting low frustration tolerance. He often acts out in anger towards others. Paul is very intelligent and has high functioning cognitive skills (attention, memory, sequencing, etc.). However, Paul’s difficulty playing with peers outdoors is affecting his ability to socially participate with friends and he is becoming discouraged with himself. Paul values playing with his brothers and indicates he wants to learn how to “play with his peers like they play”. Paul’s parents report that they are willing to work with Paul at home if they have some ideas for supports, such as skill training or strategies for participation. Recently, Paul has been meeting with an occupational therapist independently to work on motor skills, coordination, and dynamic balance. Paul is showing improvements and ready for an increased challenge.
**Rationale/Justification for intervention choice:** (be sure you have addressed: a) sequencing of steps; b) activity demands; c) complexity and how these match your client’s needs.  

Think, “HOW does the skill get used/addressed in the activity”?  

The game of soccer was selected for an intervention activity for Paul for a variety of reasons. First, Paul struggles with motor skills (i.e. coordination). Since a therapist has been working with Paul beforehand on specific motor skills, Paul appears to be ready for a more complex activity that will allow him to challenge his motor skills in a more demanding environment with additional teammates and structure. Playing a game of soccer with his brothers would allow Paul to feel comfortable around his peers while challenging his motor skills, frustration tolerance, and social interactions. Paul is reportedly intellectual so the rules and cognitive demands of the game should be a good match for him as the focus of the interventions is primarily on motor skills, frustration tolerance, and appropriate social responses. A small game of soccer will allow Paul to work on handling conflict resulting from low frustration tolerance because he and his teammates/opponents will perform well at times, but also make mistakes other times and will need to develop appropriate social responses. The game also requires teammates to make decisions together, which also leaves opportunity to use appropriate skills for social responses and handling frustration. Finally, because Paul values playing with his brothers, his brothers have been invited to the session so that the session has meaning to Paul.

**E. Sequencing**  
Motor planning to interact with the ball, field, and teammates; turn taking when kicking and passing the ball to teammates

**F. Activity demands (body functions and structures demanded by activity)**  
Attention and memory to task; frustration tolerance (emotional regulation); appropriate social responses; handling conflict; making joint decisions; motor planning (coordination); joint mobility; endurance; proprioception

**G. Complexity**  
Involves controlled motor planning processes, social appropriateness and frustration tolerance to handle conflict and disappointment, and joint decision making to be successful in playing soccer.

**H. Meaning to client**  
Paul likes to play outdoors (soccer) as well as play with his brothers and peers, making this a good match for Paul’s values and abilities as well as a challenge for his areas of growth.

**Describe one way to adapt the activity (make more/less complex).**  
- add or subtract number of teammates playing  
- incorporate time parameters (more complex)  
- decrease or increase size of goal  
- decrease or increase length/width of the field  
- use larger or smaller ball

**References**  
MODULE 5:

Therapeutic Use of Self

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year one occupational therapy students

ACTIVITY TYPE: Lecture, discussion, and worksheet

SETTING: Classroom

DURATION: 2 hours

PURPOSE:

Students will gain appreciation for the value and use of therapeutic use of self as a key component of occupational therapy practice.

ACTIVITY DESCRIPTION:

This module will define the purpose and value of therapeutic use of self as a key component to successful occupational therapy practice. Teachers and students will discuss what defines a good therapist, therapeutic modes, and strategies to become a better therapist. Students will use worksheet to discover preferred therapeutic mode and form goals to develop skills to grow professionally.

LEARNER REQUIREMENTS:

Prior to participating in this module, the student will need to:

● Students will have a basic understanding of occupational therapy.

GOAL:

Students will verbalize an understanding of the importance and value of therapeutic use of self in
occupational therapy practice.

OBJECTIVES:

- Students will identify therapeutic use of self as a key component of occupational therapy practice.
- Students will identify the six therapeutic modes.
- Students will identify their preferred therapeutic mode.
- Students will demonstrate understanding of the strengths and weaknesses associated with each therapeutic mode.
- Students will identify 3 personal goals to develop their therapeutic use of self.
- Students will identify strategies to increase therapeutic mode versatility.

INSTRUCTIONAL METHODS FOR CONTENT:

1. Instructors prepare for class lecture and discussion through review of educator handout for Module 5, which includes lecture material.
2. Distribute therapeutic mode preference either before class as an assignment or use the first part of class time to allow students to complete.
3. Provide each student with personal computer access to and/or printed copy of lecture notes.
4. Instructors follow educator handout as outline to facilitate lecture and group discussion.
5. Encourage students to discuss in groups about preferred therapeutic modes, strengths and weaknesses involved, goals, and strategies.
6. Request students to share their preferred therapeutic mode and at least one goal for therapeutic use of self-development.
7. Assign student reflection paper assignment.
INSTRUCTIONAL RESOURCES NEEDED:

- Personal computers with PowerPoint access or printed copies of student notes
- Student therapeutic modes handout
- Educator handout
- Six Therapeutic Modes Chart

METHODS FOR EVALUATION OF LEARNING:

Students’ ability to state preferred therapeutic mode and goals for therapeutic use of self.
MODULE 5

Educator Handout

I. Therapeutic Use of Self:

A. “The conscious use of self as the ability to deliberately use one’s own responses to clients as part of the therapy. To select appropriate responses to a client, the therapist was required to have self-awareness, empathy, flexibility, humor, honesty, compassion, and humility” (Mosey, 1981, 1986, as cited in Taylor, 2008, p. 5).

II. Therapeutic Relationship: Required to address clients’ emotional, psychiatric, and internal personal difficulties (Taylor, 2008).

A. Collaborative and client-centered approaches (Taylor, 2008)

1. Encourage client to become actively engaged in the problem-solving process in his/her own situation.

2. Caring (being supportive, friendly, and building rapport)

3. Partnering (gathering reflective feedback and seeking and acknowledging input from clients.

4. Informing (gathering, explaining, and clarifying information

5. Directing (providing advice and instruction)

6. Facilitate an open and comfortable communication.

7. Select approaches that convey respect and trust in the client’s perspectives, strengths, and ways of coping.
8. Consider diversity and differing, unique perspectives

9. Establish shared goals and priorities.

10. Clearly emphasize that client’s difficulties will be addressed together in a partnership.

11. Self-awareness
   
a) Therapists are encouraged to recognize, control, and correct reactions that may be potentially non-therapeutic, as these reactions may emerge from unresolved conflicts or own experiences of being parented in negative ways.

b) Reciprocal giving and sharing between therapist and client.

12. Client-centered approach: “Clients are treated with respect and are considered partners in the therapy process” (p. 10).
   
a) Orient to and value the client’s perspectives (values, sense of meaning, natural ways of coping, and choice of occupations).

b) Use client’s strengths to encourage problem solving and decision-making, identification of needs and setting goals, envisioning possibilities, and challenging themselves.

c) Use of communication that includes client education, collaboration, and open and honest discussion.

B. **Emphasis on caring and empathy** (Taylor, 2008)

1. Caring
   
a) Know and respond to individual in an intimate manner and as a unique individual.
b) Maintain a holistic view of client that includes attention to the whole person encompassing the person’s values and belief system, mental, social, and physical challenges etc.

c) Be flexible when adapting to environmental and situational demands.

d) Connect at emotional level.

e) Restore personal control through activity.

f) Attain attitudes: patience, honesty, trust, humility, hope, and courage.

g) Caring relationship: Respects clients’ innate ability to achieve self-actualization, which is defined as a person’s desire for self-fulfillment and recognition of his/her potential.

h) 7 features of a positive, effective therapeutic relationship:

   (1) Competence, belief in the dignity and worth of the individual, belief that each individual has the potential for change and growth, communication, values, touch, and sense of humor.

2. Empathy

   a) Communicate fellowship with client.

   b) Turn soul toward client.

   c) Consider similarities between therapist and client and how client is unique.
d) Connect with client’s feelings with ability to recover from connection and maintain strength to be able to work with others.

e) Convey respect for client’s dignity.

f) How can we develop empathy?

(1) Self-reflection, literature, imagination, art, etc.

C. **Use of narrative and clinical reasoning** (Taylor, 2008)

1. Highlight thought, reflection, and understanding in the therapeutic relationship.

2. Clinical reasoning: “Thinking about the client-therapist interaction as a part of a therapist’s overall approach to making sense of assessment findings and developing a treatment plan” (p. 13).

   a) Used before, during, and after encounters with clients

   b) Utilize collaboration—provide choices to client, individualize treatment, structure activities to maximize success potential, do special favors/acts of kindness for clients, share personal stories, and joint problem-solving.

3. Use of narrative: Think in the form of a story to uncover the meaning of the disability experience from the client’s perspective (p. 13).

   a) Use methods of data collection: case histories, life stories, narrative slopes, therapeutic employment, and other biographical methods.

   b) Strive to understand client’s past, present, and future story.
III. **Therapeutic modes**: “A specific way of relating to a client” (Taylor, 2008, p. 67).

A. **Personality** (Taylor, 2008)

1. Composed of emotional experiences, unique patterns of interpersonal behavior, and psychobiological profile.
2. Form early in life (genetics, biology, and family/social experiences) and are relatively fixed.
3. Interpersonal strategies vary with context. (I.e. empathy, compassion, hopefulness, kindness, assertiveness, power, aggression, avoidance, etc.)
4. Well-functioning personalities adapt a variety of interpersonal strategies. If an individual has a poorly functioning personality, he or she may over utilize a small set of interpersonal strategies. The individual may also have a more fixed style that prevents him/her from being able to move into alternate roles within a group.
5. Therapist’s personalities are reflected in:
   a) His or her fundamental motivation to serve others.
   b) His or her preferred approach to serving.
   c) The values he or she holds while serving.

B. **Occupational Therapists should** (Taylor, 2008):

1. Develop an awareness of their natural modes (stemming from their personalities).
2. Develop self-discipline to use modes in response to client needs rather than own internal comfort level responses.
3. Be aware of mode limits and develop capacity to utilize modes beyond just the natural modes (ability to switch comfortably between modes based on the client’s needs).

C. Six Therapeutic Modes (Taylor, 2008)

1. Advocating:
   a) Ensure clients are provided with all resources necessary to engage in all meaningful, daily activities.

2. Collaborating:
   a) Engage clients in joint decision-making and active engagement in therapeutic processes.

3. Empathizing
   a) Striving to fully understand all aspects of the client’s experience including physical, psychological, emotional, and interpersonal experience.

4. Encouraging:
   a) Therapist makes efforts to promote hope, courage, and the will to engage in meaningful activities.

5. Instructing:
   a) Highlights the education aspect of therapy for clients while assuming a teaching style during interpersonal communications.

6. Problem-solving
   a) Emphasis lies on an approach based on reason and logic.

D. What is your mode?
1. Break into groups of 3-4 based on students’ preferred therapeutic mode (all encouragers break into groups, advocators, etc.) and have students discuss the following questions to reflect on their preferred therapeutic mode.

   a) Why do you think this is your preferred therapeutic mode?
   b) How do you think this mode will enhance your practice?
   c) How do you think it could inhibit your ability to be an effective clinician?
   d) What are the modes that you are least comfortable with? Are they similar/different to your group members?
   e) What ideas/strategies can you come up with to enhance your ability to adapt comfortably between all the different therapeutic modes?

2. Discuss questions as a large group and allow students to report their discussion conclusions.

3. Suggested Assignment:

   a) Students will write a reflection paper that contains the following information:

      (1) Students’ perceived natural/preferred therapeutic mode.
          Explain why.

      (2) Strengths and weaknesses perceived when using that particular mode.
(3) Students perceived most unnatural and least preferred therapeutic mode. Explain why.

(4) At least 3 personal goals to achieve increased mode versatility (increased ability to switch between modes/increased ability to use least preferred mode).

(5) Strategies student will use to achieve goals.

References

Therapeutic Use of Self

Objectives
- Identify therapeutic use of self as a key component of occupational therapy practice
- Identify the six therapeutic modes
- Identify preferred therapeutic mode
- Demonstrate understanding of the strengths and weaknesses associated with each therapeutic mode
- Set 3 personal goals to develop their therapeutic use of self
- Identify strategies to increase therapeutic mode versatility

Therapeutic Use of Self

- “The conscious use of self as the ability to deliberately use one’s own responses to clients as part of the therapy. To select appropriate responses to a client, the therapist was required to have self-awareness, empathy, flexibility, humor, honesty, compassion, and humility” (Mosey, 1981, 1986, as cited in Taylor, 2008, p. 5)

Therapeutic Relationship

- Important to address client’s emotional, psychiatric, and internal personal difficulties
- Collaborative and client-centered approaches
- Emphasis on caring and empathy
- Use of narrative and clinical reasoning

Therapeutic Relationship

- Collaborative and Client-centered approaches
  - Encourage client active engagement
  - Caring
  - Partnering
  - Informing
  - Directing
  - Facilitate open and comfortable communication
  - Select respectful approaches

Collaborative and Client-centered approaches

- Collaborative and Client-centered approaches
  - Consider diversity
  - Establish shared goals and priorities
  - Emphasize client difficulties in partnership
  - Self-awareness
  - Client-centered approach
    - Orient to client’s perspectives
    - Utilize client’s strengths
    - Inclusive communication
Emphasis on Caring and Empathy

- Emphasis on caring and empathy
  - Caring
  - Intimate responses
  - Holistic view
  - Flexible
  - Emotional connection
  - Restore personal control through activity
  - Attain good attitudes
  - Caring relationship

Use of Narrative and Clinical Reasoning

- Use of Narrative and Clinical Reasoning
  - Highlight thought, reflection, and understanding in the therapeutic relationship
  - Clinical reasoning:
    - "Thinking about the client-therapist interaction as a part of a therapist’s overall approach to making sense of assessment findings and developing a treatment plan (p. 13)."
  - Use of narrative:
    - Thinking in the form of a story to uncover the meaning of the disability experience from the client’s perspective.

Therapeutic Modes

- Therapeutic mode:
  - “A specific way of relating to a client (p. 67).”
- Personality:
  - Emotional experiences, unique patterns of interpersonal behavior, and psychobiological profile
  - Form early in life; fixed
  - Interpersonal strategies vary with context
  - Reflects in therapist’s approach to serving others

Therapists should...

- Develop awareness of natural modes
- Develop self-discipline to use modes in response to client needs
- Be aware of mode limits
- Develop capacity to utilize modes beyond natural modes
Six Therapeutic Modes

- Advocating
- Collaborating
- Empathizing
- Encouraging
- Instructing
- Problem-solving

(Taylor, 2008)

Therapeutic Modes

- Advocating
  - Ensure clients are provided with all resources necessary to engage in all meaningful, daily activities
- Collaborating
  - Engage clients in joint decision-making and active engagement in therapeutic processes
- Empathizing
  - Striving to fully understand all aspects of the client’s experience including physical, psychological, emotional, and interpersonal experience

(Taylor, 2008)

Therapeutic Modes

- Encouraging
  - Therapist makes efforts to promote hope, courage, and the will to engage in meaningful activities
- Instructing
  - Highlights the education aspect of therapy for clients while assuming a teaching style during interpersonal communications
- Problem-solving
  - Emphasis lies on an approach based on reason and logic

(Taylor, 2008)

What is Your Preferred Mode?

- Break into groups of 3-4 based on your preferred therapeutic mode and discuss the following questions:

(Taylor, 2008)

Discussion Questions

- Why do you think this is your preferred therapeutic mode?
- How do you think this mode will enhance your practice?
- How do you think it could inhibit your ability to be an effective clinician?
- What are the modes that you are least comfortable with? Are they similar/different to your group members’?
- What ideas/strategies can you come up with to enhance your ability to adapt comfortably between all the different therapeutic modes?

Objectives

- Identify therapeutic use of self as a key component of occupational therapy practice
- Identify the six therapeutic modes
- Identify preferred therapeutic mode
- Demonstrate understanding of the strengths and weaknesses associated with each therapeutic mode
- Set 3 personal goals to develop their therapeutic use of self
- Identify strategies to increase therapeutic mode versatility
References

## Six Therapeutic Modes

<table>
<thead>
<tr>
<th>Mode</th>
<th>Style/Strategies</th>
<th>Strengths</th>
<th>Cautions</th>
</tr>
</thead>
</table>
| **Advocating** | - Ensure clients have materials and interpersonal resources required.  
- Tend to take on roles of facilitator and/or consultant.  
- Assures client to have opportunities for participation and access.  
- Raises consciousness with clients regarding legal rights and barriers to access and independence.  
- Willing to be involved in civil rights or legal activities for client.  
- Handle interpersonal difficulties by adjusting and assisting to the client’s needs.  | - Equip clients with access to helpful resources.  
- Allows clients to regain self-esteem and develop a positive identity because therapist embraces client’s disability and believes that the true issue is the social attitudes and environmental barriers prevailing outside the individual.  | - Client may not have the opportunity to obtain awareness of existing injustices due to premature action on the therapist.  
- There may be limited time to spend on remediation or accommodation of client problems due to a greater focus on social and environmental obstacles.  |
| **Collaborating** | - Make decisions together with client.  
- Include clients in reasoning during therapy.  
- Encourage clients to actively participate in therapy.  
- Request ongoing feedback from clients.  
- Value and promote autonomy and independence.  
- Handle interpersonal difficulties through client empowerment to make own judgments and presume a leadership role during therapy.  | - Usually exude beliefs in clients’ capacities, dignity, and independence.  
- Promotes self-confidence and independence in clients.  
- Decreased risk for encouraged dependent or regressive behavior.  
- May be less defensive due to ability to accept and utilize client feedback to improve therapy.  | - May show favoritism to clients with more will to take responsibility and acquire independence.  
- May clash with clients who do not value making decisions together or those who are less likely to uptake some responsibility in therapeutic progress.  
- Some clients from cultures who value a hierarchical patient-provider relationship will view this style as inexperience.  
- May overestimate client’s capabilities and in turn, rush therapy or miss a client’s need for direction, empathy, or emotional security.  
- May cause confusion regarding who is responsible for the different parts of the therapy process and the roles embedded in the therapeutic relationship.  |
<table>
<thead>
<tr>
<th><strong>Empathizing</strong></th>
<th><strong>Encouraging</strong></th>
<th><strong>Mod 5</strong></th>
</tr>
</thead>
</table>
| - Place strong emphasis and great amount of time seeking to understand a client’s perspective precisely.  
  - Listen, watch client’s communication, and adjust approach according to client’s needs.  
  - Take breaks during therapy to communicate with clients.  
  - Notice and respond to slight changes in mood/emotions/affect/behavior.  
  - Validate and accept client’s current report of negative emotions and do not jump to fixing problems.  
  - Seeking to understand is the bridge to resolving rifts, obstacles, and conflicts.  
  - Pace introduction to activities, provide feedback, and make recommendations more slowly due to majority of focus on listening.  
  - Exhibit discretion during revealing personal genuine reactions to clients or disregarding self to allow space for client’s reactions and experience. | - Able to work with a wide range of clients because of their abilities to be patient, listen, and accept negativity.  
  - Able to get through to clients who are the most challenging, negative, resistant, reluctant, and critical.  
  - Through empathizing, clients are enabled to empathize with themselves, engage in self-reflection, and gain insight into their emotions.  
  - Most likely to witness resolved conflicts, rifts, and misunderstandings.  
  - Clients feel more responded to, cared for, and respected.  
  - More likely to attain open and honest communication with clients, and therefore increase trust, rapport, and strengthen the therapeutic relationship. | - Too much listening and validation may overprotect clients, inhibiting them from progressing.  
  - Fundamental occupational therapy tasks may not be completed due to a slower pace for listening and communication.  
  - If clients are unfamiliar with this approach, they may withdraw due to perception of too much intimacy or emotional involvement.  
  - Use of empathy may lead to confusion with regard to the role of the therapist and occupational therapy objectives. Professional boundary setting may be difficult.  
  - Some therapists have the tendency to set unrealistic goals due to their optimism and belief in improvement for all clients.  
  - If therapists overuse encouragement, clients may become desensitized to their motivation strategies.  
  - If overused, clients may become dependent on extrinsic motivation from therapist and neglect to develop intrinsic motivation to engage in occupation.  
  - Some clients reject outward encouragement and motivation as a misinterpretation of manipulation. They may also be perceived as foolish or insecure. |
| - Encouraging - Gives clients hope, courage, and will to explore, engage in, or perform an activity.  
  - Pay close attention to clients’ values to determine motivators for engagement in therapy and occupations.  
  - Focus is on making activities more desirable or pleasurable to the client.  
  - Use frequent positive reinforcement, positive feedback, humor, cheering, coaxing, complements, applause, or motivational words. | - Able to identify and rejoice in the smallest client gains.  
  - Portray optimism and hope to clients.  
  - Observant of motivational issues in clients.  
  - Skilled in selection and adaptation of activities to increase motivation for clients.  
  - Effective in gaining the most reluctant clients’ participation.  
  - May be skilled in humor, cheerfulness, or a playful attitude, benefitting clients in some situations. | - If therapists overuse encouragement, clients may become desensitized to their motivation strategies.  
  - If overused, clients may become dependent on extrinsic motivation from therapist and neglect to develop intrinsic motivation to engage in occupation.  
  - Some clients reject outward encouragement and motivation as a misinterpretation of manipulation. They may also be perceived as foolish or insecure. |
| Instructing | - Takes educational/teaching approach.  
- Skilled in delivering information and structuring therapeutic activities.  
- Uses active and directive style, training, coaching, and gives feedback comfortably.  
- Assertive about stating professional opinion, setting limits, providing feedback, or disagreeing with patients.  
- Skilled with ability to approach confrontation with gentleness.  
- Approach interpersonal difficulties through education, restating points, providing further justification of therapist’s point of view, and comfortable with agreeing to disagree. |
|---|---|
| | - Portray strong confidence to clients through ideals, opinions, and assertions about what the client should do to achieve the best outcome.  
- Have strong sense of conviction about their own assessment findings and therapeutic approach, not wavering in difficult or manipulative situations.  
- Views education (knowledge transfer, feedback, structure, etc.) as a foundational aspect of occupational therapy.  
- Clients tend to learn and comply with activities in therapy due to the therapist’s skilled communication nature.  
- Ensure client that therapist is invested in achieving positive outcomes.  
- Clients who value authority and expert knowledge tend to trust this mode. |
| | - If overused, therapists may make premature statements regarding a client’s performance or over-protect them from the experience of failure.  
- Behavior may be perceived as controlling, dominant, or parental by clients who have difficulty with trust or attitudes of authority.  
- Because of leadership tendencies, power struggles and arguments may arise.  
- May assume too much responsibility for client’s outcomes due to high investment in success. Some may convey disappointment if negative outcome achieved.  
- May be too eager to fix the problem rather than empathizing. |
| Problem-solving | - High technical and creativity skills  
- Biomechanical approaches, cognitive rehabilitation, and use of assistive devices.  
- Handle interpersonal difficulties through reasoning, problem-solving, or logical and strategic approaches. |
| | - More likely to witness improvements in occupational performance earlier on in therapy due to high emphasis on technical aspects.  
- May witness more tangible direct benefits from their work due to being outcome-oriented.  
- Boundaries, expectations, and limits are clear to client.  
- Clients who are less comfortable with emotion-focused situations are more comfortable with this predictable approach. |
| | - Therapists may begin to view work as repetitive due to strong focus on technical aspects of therapy and less focus on intimacy with clients.  
- Overemphasis may lead to neglecting to attend to client’s needs.  
- May be more likely to use occupational therapy technical terms with clients, confusing them.  
- May become frustrated with difficult clients who are emotionally and interpersonally demanding due to their disengaged therapeutic relationship.  
- May over-rely on practical, technical, and mechanical therapy aspects instead of the needed empathy and communication for a particular situation. |

*All information included in this table was adopted from Table 4.1 Summary Description of Six Therapeutic Modes in (Taylor, 2008) p. 70-72. Adapted and used with permission.

Taylor (2008). Knowing ourselves as therapists: Introducing the therapeutic modes. In C. Fratantoro & D. LeMelledo (Eds.), The Intentional Relationship: Occupational Therapy and Use of Self (pp. 70-72). PA: F. A. Davis Company
MODULE 6:

Age Related Changes

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year two occupational therapy students

ACTIVITY TYPE: Video, discussion, and handout

SETTING: Classroom

DURATION: 1 hour

PURPOSE:
Students will gain knowledge on the normal age-related changes and interruptions in function, assessment, and intervention for older adults as they age.

ACTIVITY DESCRIPTION:
Students will view a short DVD clip accompanied by an easy-to-follow handout that will demonstrate assessment and intervention of older adults. Student will conclude the session with discussion of the assessment and intervention processes viewed on the DVD with regard to occupational functioning of an aging individual.

LEARNER REQUIREMENTS:
Prior to participating in this module, the student will need to:

- Have a basic understanding regarding an occupational therapist’s way of viewing individuals holistically and understanding the interrelationship between the many factors that affect a person’s function.
● Have a basic understanding of evaluation, intervention, and outcome as they pertain to occupational therapy.

● Have an interest in the area of the aging population/gerontics and older adults’ ability to function.

GOAL:

Students will demonstrate a basic understanding of common age-related changes older adults experience with relation to function.

OBJECTIVES:

Upon completion of Module 6, the learners will be able to:

● Describe common age-related changes experienced by older adults.

● Demonstrate ability to analyze age-related changes through use of ICF and student handout.

● Apply knowledge and understanding to corresponding assignment.

INSTRUCTIONAL METHODS FOR CONTENT:

● Instructors play DVD clip for students to view.

● Provide students with easy-to-follow student handout for Module 6.

● Instructors facilitate discussion about age related changes and encourages students to use ICF terminology to analyze interruptions in function from a holistic standpoint.

● Request students to discuss in small groups (3-4) about assessment and intervention processes used in the DVD with regard to occupational functioning.

INSTRUCTIONAL RESOURCES NEEDED:

● Computer

● Access to the ICF
• Video clip provided DVD Module 6
• Projection equipment to view video clip or students may view from personal computers
• Student handouts
• Assignment to interview/observe older adult

METHODS FOR EVALUATION OF LEARNING:
• Students’ ability to report to the class the aspects of assessment and intervention in regard to the occupational functioning of an aging older adult viewed on the DVD clip.
I. Interview an older adult (someone 50 or older):

   A. Comprise self-written interview. Sample questions include:

      1. Tell me about yourself. What do you do well? What kind of supports do you have? How do you feel looking back on your life you’ve lived so far? What are your fondest memories? What advice do you have for our generation?

   B. Reflect on the following questions to report to the class on date determined by the instructor.

      1. Were you surprised by the answers you received? Why or why not?
      2. What were the main take-away points?
      3. What kind of adaptations has this person had to make to his or her everyday life in order to engage in the occupations the individual performs.
Age-Related Changes for Older Adults

Sensory Function
- Decreased visual acuity
- Hazy/blurred vision
- Altered color perception/discrimination
- Increased sensitivity to glare
- Difficult night vision
- Difficulty viewing low contrast images
- Image distortion
- Decrease in central vision field
- Age-related hearing loss
- Inability to understand speech
- Deteriorated taste discrimination:
  - Decreased ability to detect touch & pressure
  - Less able to sense skin temperature changes
  - Impaired sweating
  - Shivering response less effective

CARDIOVASCULAR & PULMONARY FUNCTION
- Lungs less efficient for gas exchange
- Decreased airway compliance
- Declined diffusing capacity
- Decreased chest wall compliance
- Reduced force of coughing (increase risk for aspiration)
- Abnormal frequency & regularity of cardiac impulses
- Reduced efficiency of myocardial contraction
- Decreased elasticity in blood vessels
- Decreased ability to move blood through vascular system

Neuromusculoskeletal & Movement Function
- Decreased muscle strength & power
- Marked loss of skeletal muscle mass
- Increased muscle fatigue
- Decreased ability for rapid & power movements
- Flexed postural alignment
- Bone and cartilage changes
- Changes in balance and gait
- Decreased maximal speed of movement and initiation of responses to stimuli
- Increased threshold for vibration sensation
- Decreased proprioception
- Increased fat and connective tissue
- Joint stiffness
- Decreased bone strength
- Decreased joint protection
- Decreased postural stability (balance)
- Decreased reaction time
- Slower hand-eye coordination
- Decreased motor coordination
- Decreased manual dexterity
- Decreased joint position sense (proprioception)
- Decreased step length in gait
- Slower walking velocity
- Decreased stride length
- Decreased gait cadence

Mental Function
- Declined ability to adapt to and use new information
- Less proficient at abstract reasoning tasks
- Decreased attention
- Declined ability to sort relevant material from irrelevant
- Decreased storage for working memory
- Deficits in recall of information
- May misplace objects
- May forget appointments
- Decreased reaction time
Assessments

- **Manual Muscle Test**: Examiner physically applies matching force of specific muscle being tested either through make test or break test.

- **Handheld Dynamometer**: Use handheld device which provides a force reading of the strength of the specific muscle being tested.

- **Observation of performance of functional activities**: Use of older adults’ performance of functional activities to rate strength.

- **Coordination Tests**: Finger to Nose; Finger to Therapist’s Finger; Finger to Finger; Alternate Nose to Finger; Finger Opposition; Mass Grasp; Pronation/Supination; Rebound Test; Tapping (hand); Tapping (foot); Pointing and Past Pointing;

- **Balance Tests**: Functional Reach Test; Multi-directional Reach Test; Timed Up and Go; Berg Balance Scale; Tinetti Performance-Oriented Mobility Assessment.

- **Depression Screens**: Be aware of signs: sleep problems, fatigue & exhaustion, lost interest in hobbies, social withdrawal & isolation, weight loss/loss of appetite, fixation on death, increased use of substances, loss of self worth, etc.

- **Functional Independence Measure**: Measure of functional status, and disability on the individual and caregiver

Interventions

- **Stretching**: Static stretches: 10-39 second hold for each muscle group, at least 4 repetitions, at least 2-3 days/week; every day.

- **Strengthening/Resistance**: Moderate (60% of repetition maximum) to high (70-80% of repetition maximum) intensity; 8-12 repetitions; 1-3 sets; 3 times/week.

- **Balance**: Dynamic exercises; static exercises; exercises for specific postural control problem; Tai Chi; Combined exercise programs

- **Compensatory Strategies**: Reduce number of task steps; gather all tools/materials at beginning of task; take breaks; change views on ideal task completion; reduce demands of task; share performance with someone else; develop a consistent routine; reduce time pressures to complete task; minimize visual auditory distractions; reduce unnecessary clutter; use labels; emphasize process of doing rather than end outcomes; short 1-2 step commands; do task with patient as role model; provide calm, reassuring feedback.

- **Joint Protection**: Reduce activity level; maintain muscle strength & ROM surrounding affected joints (pain-free); avoid positions of deformity (ulnar deviation); proper body mechanics; change positions frequently; avoid activities that cannot be stopped immediately; manage fatigue (schedule rest breaks); energy conservation techniques; reduce force on affected joints (decrease repetition; avoid strong efforts and resistive motion; distribute load over 2 or more joints; lift objects with 2 hands; use joints in anatomical positions; use larger/more proximal joints to protect delicate joints; stress management & relaxation techniques); isometric exercise; splinting; change physical environment to be more accommodating

- **Energy Conservation**: Complete occupations in sitting when possible; take frequent breaks; wear loose-fitting clothing with front closing zippers, ties & buttons; prioritize and break down weekly activities; slide objects instead of lifting; carry things/complete activities at midline instead of sideline; assemble materials before starting project; plan ahead; organize lists; remove rugs and small items to eliminate trips/slips

References:
MODULE 7:

Neurological Conditions

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year two occupational therapy students

ACTIVITY TYPE: Video, discussion, and handout

SETTING: Classroom

DURATION: 1 hour

PURPOSE:
Students will gain knowledge on common neurological conditions, assessment, and intervention as they relate to occupation and function.

ACTIVITY DESCRIPTION:
Students will view a short DVD clip accompanied by an easy-to-follow handout that will illustrate common neurological conditions, assessment, and intervention as they relate to occupational functioning. Student will conclude the session with discussion of the assessment and intervention processes viewed on the DVD with regard to occupational functioning of an individual with a neurological condition.

LEARNER REQUIREMENTS:
Prior to participating in this module, the student will need to:

● Have a basic understanding regarding an occupational therapist’s way of viewing individuals holistically and understanding the interrelationship between the many factors that affect a person’s function.
● Have a basic understanding of the evaluation and intervention process through use of the ICF.

● Have an interest in the area of the neurological conditions and their effect on function.

GOAL:

Students will demonstrate a basic understanding of neurological conditions, assessment, and intervention as they relate to engagement in occupation.

OBJECTIVES:

Upon completion of Module 7, the participants will be able to:

● Describe common neurological conditions.

● Demonstrate the ability to analyze engagement in occupations for individuals with the presence of neurological conditions through use of ICF and student handout.

● Apply knowledge and understanding to discussion with peers and faculty.

INSTRUCTIONAL METHODS FOR CONTENT:

● Instructors play DVD clip for students to view.

● Provide students with easy-to-follow student handout for Module 7.

● Instructors facilitate discussion about neurological conditions and encourage students to use ICF terminology to assess interruptions in function and develop interventions from a holistic standpoint.

● Request students to discuss in small groups (3-4) about assessment and intervention processes used in the DVD with regard to occupational functioning.

INSTRUCTIONAL RESOURCES NEEDED:

● Computer

● Access to the ICF
● Video clip provided DVD Module 7
● Projection equipment to view video clip or students may view from personal computers
● Student handouts

METHODS FOR EVALUATION OF LEARNING:

● Students’ ability to report to the class the aspects of assessment and intervention in regard to the occupational functioning of an individual with a neurological condition viewed on the DVD clip.
Neurological Conditions

**Cerebral Vascular Accident (CVA or Stroke)**

**Defined:** sudden onset of neurological deficits due to vascular injury to the brain

- **Ischemia:** blockage in cerebral vessel (thrombosis/embolism)
- **Hemorrhage:** rupture of cerebral blood vessel
- **Hemiparesis/Hemiplegia:** mild weakness to complete paralysis to one side of the body opposite of CVA location
- **Hemianopsia:** visual deficits
- **Aphasia:** impaired speech and comprehension of verbal/written language
- **Dysarthria:** slurred speech, impaired oral motor functions, and altered facial expressions
- **Somatosensory deficits:** impaired coordination and dexterity
- **Incontinence:** Loss of independent toileting
- **Dysphagia:** impaired ability to eat/drink by mouth; high aspiration risk
- **Apraxia:** decreased independence in motor activities and learning of new skills
- **Cognitive deficits:** decreased ability to learn new skills, decreased social interactions, and decreased ADL/IADL independence
- **Depression:** decreased motivation and participation in activities; decreased social interaction

**Spinal Cord Injury (SCI)**

**Defined:** disrupted motor and sensory pathways at lesion location

- **Complete Injury:** “absence of sensory and motor function in the lowest sacral segments” (Kirshblum et al., 2011, p. 537)
- **Incomplete Injury:** “Preservation of any sensory and/or motor function below the neurological level that includes the lowest sacral segments” (Kirshblum et al., 2011, p. 537)
- **Tetraplegia:** “Impairment or loss of motor and/or sensory function...results in impairment of function in the arms as well as typically in the trunk, legs and pelvic organs” (Kirshblum et al., 2011, p. 536)
- **Paraplegia:** “Impairment or loss of motor and/or sensory function in the thoracic, lumbar or sacral (but not cervical) segments of the spinal cord” (Kirshblum et al., 2011, p. 536)
- **Zone of Partial Preservation:** occurs with complete injuries to describe dermatomes and myotomes caudal to the sensory and motor levels that contain partial innervation
- **Neurological Level:** lowest level where key muscles are at least 3+/5 on MMT and intact sensation at level’s dermatome
- **Functional Level:** lowest segment where key muscles are at least 3+/5 on MMT and intact sensation.
- **Central Cord Syndrome:** greater weakness in upper extremities than lower
- **Brown-Sequard Syndrome:** loss of proprioception, vibration, and motor control at and below lesion level, sensory loss of all modalities at lesion level, and loss of pain and temperature sensation on contralateral side
- **Anterior Cord Syndrome:** “loss of motor function, pain sensation and temperature sensation at and below the injury level with preservation of light touch and joint position sense” (Kirshblum et al., 2011, p. 543)
- **Cauda Equina Syndrome:** results in lower limb flaccid paralysis and areflexic bowel and bladder; all sensory modalities impaired and may include partial or complete loss of sensation; sacral reflexes absent
- **Conus Medullaris Syndrome:** mixed manifestation of upper motor neuron and lower motor neuron symptoms; similar to Cauda Equina Syndrome

**Traumatic Brain Injury (TBI)**

**Defined:** insult to the brain as a result of an external physical force

- **Glasgow Outcome Scale (GOS):** scale used to assess post-injury and determine prognosis
- **Severe:** consciousness loss for 6+ hours; initial GOS ≤ 8
- **Moderate:** post-traumatic amnesia of 1-24 hours; initial GOS 9-12
- **Mild:** trauma-induced disruption to one of the following: loss of consciousness, memory loss of events immediately before or after accident; altered mental state at time of accident; focal neurological deficit; initial GOS 13-15
- **Diffuse Axonal Injuries:** likely result in coma due to damaged axons at midbrain reticular activating system
- **Anterograde Amnesia:** state of confusion and inability to recall events beginning with onset of condition
Assessment

CVA
Assessment of Occupational Performance: desired daily tasks
Postural Adaptation: assess trunk control, bilateral integration, automatic postural control, and maintaining balance during functional tasks
Upper Extremity Function:
Somaticsensory: sensory awareness and dexterity; Touch Awareness, Touch Localization, Touch Threshold, Pain Awareness, Temperature Awareness, Proptoeception, Stereognosis, Static, Two-Point Discrimination
Mechanical: ROM, joint alignment, muscle tone, & pain
Voluntary Movement: reflexive vs voluntary movements; stabilizing ability of proximal segments; voluntary movements against gravity; voluntary movements isolated; speed and precision of reciprocal movements
Strength & Endurance: MMT & ability to sustain movement/activity
Functional Performance: test dominant arm for comparison; Power of Grasp; Pinch Strength; functional ROM; Quick Coordination Assessment
Motor Learning Ability:
Visual Function: tests for hemianopsia; unilateral neglect; Line Bisection Test,Cancellation Test, Draw-a-man/Draw-a-clock; ocular alignment; visual fixation; convergence; visual pursuits; saccades; visual field/confrontation, & alternating simultaneous stimuli
Speech & Language: note aphasia and/or dysarthria
Motor Planning: signs of apraxia (failure to orient head/body to task correctly; failure to orient hand to objects correctly; difficulty with initiation/carry-out of sequences; hesitant or perseverative movements; ability to only perform movements in familiar context
Cognitive Processing: tests to detect deficits in planning, judgment, problem solving, & initiation; Copying Designs & Block Designs Constructional Apraxia
Psychosocial Aspects: depression/anxiety screen

IV. Task Specific Intervention:

TBI
Rancho Los Amigos Scale:
I-No response: unresponsive to stimuli
II-Generalized response: non-specific, inconsistent and non-purposeful reaction to stimuli
III-Localized response: response directly related to type of stimulus but still inconsistent or delayed
IV-Confused, agitated: response heightened, severely confused, may be aggressive
V-Confused-inappropriate: same response to simple stimuli, but confusion with more complex commands; high level of distractibility
VI-Confused-appropriate: response more goal directed but cues necessary

Intervention
CVA:
Skin Care: proper transfer & mobility techniques; appropriate positioning for bed and chair; signs of skin breakdown/sores
Soft Tissue: controlled & frequent movement of the passive ROM; positioning & soft tissue & joint mobilization for contraindication prevention
Full Prevention: detect & remove environmental hazards; optimize motor control; adaptive devices; teach safety measures to patient & family
Improve Occupational Tasks:
Compromising Methods: if functional deficits are persistent & non-remediable; use adaptive devices only if other methods not being learned
Improve Component Capacities:
Postural Adaptation: 1) full ROM in trunk & extremities; 2) differentiate body parts (rotational abilities independently of hips); 3) stop & hold movement at midrange to stabilize against gravity; 4) increase & decrease postural tone in body segments automatically; 5) move both sides of body symmetrically
Upper Extremity Function: promote bilateral use of UE
Somaticsensory Functions: sensory reduction; encourage use of involved hand
Voluntary Movement & Motor Learning:
progress from unilateral activities to bilateral simultaneous activities, to bilateral alternating activities
Task Specific Intervention: provide context-relevant & meaningful engagement in activities
Constraint-Induced Movement Therapy: use of restraint coupled with massed & intensive practice
Visual Dysfunction: improve unilateral neglect & visual scanning; use spatiomotor cuing; may use prisms
Speech & Language: for aphasia select and adapt non-verbal forms of communication boards and gestures

Motor Planning: manually guide movement; repetitive graded use of objects & contexts to evoke automatic responses; explain components of task clearly; backward chaining; & practice activities close to usual context/routine
Cognition: use prompts/cues to shape desired behavior (visual aids, memory logs, checklists, maps, diagrams, & simplified environments)
Psychosocial Adaptation: ensuring understanding of impairments and effect on function; address depression

VII. Automatic-appropriate: response robot-like, judgment and problem solving lacking
VIII. Purposeful-appropriate: response adequate to familiar tasks, subtle impairments require standby assistance with acknowledging other people’s needs and perspectives, modifying plans
IX. Purposeful-appropriate: responds effectively to familiar stimuli but generally needs cues to anticipate problems and adjust performance; low frustration tolerance possible
X. Purposeful-appropriate: responds adequately to most tasks but may need more time or periodic breaks; independently employs cognitive compensatory strategies and adjusts tasks as needed

SCI
Standard Neurological Classification of SCI: determine impairments
ASA Impairment Scale: grades degree of impairment
Evaluation of Performance in Areas of Occupation:
Home & Community: assess home accessibility & safety
Work: strengths & challenges present

Survival Phase:
Life care plan; follow up; possible referral sources

SCI:
Autonomic Dysreflexia: 1) stop activity; 2) check blood pressure; 3) sit up with head elevated; 4) remove constrictions to body
Orthostatic Hypotension: 1) check blood pressure; 2) lower head below heart and lift legs; 3) lay down
Pressure Relief: shift position in bed every 2 hours; shift position in chair every hour for 1 minute
Bowel & Bladder Management: develop elimination routine; provide adaptive equipment; intermittent catheterization or relex voiding
Sexual Function: educate on sexual and reproductive functioning; address grooming, adequate environment, and equipment
Temperature Regulation: edication on neutral temperatures and prevention of skin exposure to severe temperatures

Discharge Context: visit or consider the home context returning to

Muscle Strengthening: strengthen innervated muscles

References:

MODULE 8:

Pediatric Conditions

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year two occupational therapy students

ACTIVITY TYPE: Video, discussion, and handout

SETTING: Classroom

DURATION: 1 hour

PURPOSE:

Students will gain knowledge on common pediatric disabilities, injuries, and conditions and assessment and intervention of those conditions as they relate to engagement in occupation.

ACTIVITY DESCRIPTION:

Students will view a short DVD clip accompanied by an easy-to-follow handout that will illustrate common pediatric conditions, assessment, and intervention as they relate to occupational functioning. Students will conclude the session with discussion of assessment and intervention processes viewed on the DVD with regard to occupational functioning of an individual with a pediatric condition.

LEARNER REQUIREMENTS:

Prior to participating in this module, the student will need to:

- Have a basic understanding regarding an occupational therapist’s way of viewing individuals holistically and understanding the interrelationship between the many factors that affect a person’s function.
● Have a basic understanding of the evaluation and intervention process through use of the ICF.

● Have an interest in the area of pediatrics.

GOAL:

Students will demonstrate a basic understanding of pediatric conditions, assessment, and intervention as each factor relates to engagement in occupation.

OBJECTIVES:

Upon completion of Module 8, the learners will be able to:

● Describe common pediatric disabilities, injuries, and conditions.

● Demonstrate ability to analyze engagement in occupation for individuals with the presence of pediatric conditions through use of ICF and student handout.

● Apply knowledge and understanding to discussion with peers and faculty.

INSTRUCTIONAL METHODS FOR CONTENT:

● Instructors play DVD clip for students to view.

● Provide students with easy-to-follow student handout for Module 8.

● Instructors facilitate discussion about pediatric conditions and encourage students to use ICF terminology to assess interruptions in function and develop interventions from a holistic standpoint.

● Request students to discuss in small groups (3-4) about assessment and intervention processes used in the DVD with regard to occupational functioning.

INSTRUCTIONAL RESOURCES NEEDED:

● Computer

● Access to the ICF
● Video clip provided DVD Module 8
● Projection equipment to view video clip or students may view from personal computers
● Student handouts

METHODS FOR EVALUATION OF LEARNING:

● Students’ ability to report to the class the aspects of assessment and intervention in regard to the occupational functioning of individual with a pediatric condition viewed on the DVD clip.
## Pediatric Conditions

### Normative Developmental Milestones of Play Occupations (Case-Smith, 2010a)

#### Birth to 6 Months
- Shows pleasure when touched and handled
- Cuddles
- Listens to a voice and searches with eyes for sounds
- Explores objects with hands and mouth
- Follows moving person with eyes; turns head to side
- Transfers objects from hand to hand
- Plays with hands at midline (4 months)
- Lifts head and raises trunk when prone (4-6 months)
- Bangs objects
- Smiles, laughs out loud, cries when feeling discomfort, expresses facial expressions for simple emotions

#### 6 Months to 12 Months
- Begins to demonstrate functional play by using objects for functional purposes and with intention
- Socially attached to parents and caregivers
- Enjoys being held up in the air and moved rapidly up in the air
- Demonstrates attention to speech
- Reaches accurately for toys and objects
- Grasps and releases toys with accuracy
- Sits without assistance
- Stands with support
- Crawls on all fours (10 months)
- Walks with hand held assist (12 months)
- Demonstrates recognition of own name
- Lifts arms to be picked up

#### 12 to 18 Months
- Engages in pretend play with self such as pretending to eat or sleep.
- Explore spaces in rooms
- Rolls and crawls during play
- Begins to interact with peers
- Enjoys messy activities
- Demonstrates accurate grasp, release, and placement of toys and small objects
- Uses two hands when playing; plays while standing
- Walks, squats, and picks up objects from floor effectively

### 12 to 18 Months Continued
- Beings to run
- Demonstrates understanding of how objects work and function
- Uses trial-and-error to problem solve
- Responds to facial expressions of others

#### 18 to 24 Months
- Enjoys some solitary play
- Enjoys rough and tumble play
- Grasps writing utensils and can draw simple shapes
- Strings beads
- Kicks balls forward
- Walks up and down stairs independently
- Runs, squats, and jumps on furniture
- Plays pretend with inanimate objects
- Object permanence completely developed
- Expresses wider variety of emotions including fear, anger, sympathy, joy, and frustration
- Laughs in response to someone being silly

#### 24 to 36 Months
- Uses objects for multiple pretend ideas
- Uses toys/objects to represent animals or people
- Draws, completes puzzles
- Enjoys jumping, making messes, playing rough
- Can trace objects, begins to snip with scissors, draws accurate circles, builds towers
- Catches large ball against chest, begins to hop on one foot
- Begins to play well with others and share

#### 3 to 4 Years
- Enjoys rough play, swinging, sliding, jumping, and running
- Sings and dances in groups; sharing and taking with peers discusses play goals; prefers play with other children
- Uses precision grasp on writing utensils
- Begins to copy letters and simple shapes; cuts with scissors; balances briefly on one foot
- Categorizes and sorts objects; shows a sense of humor

#### 4 to 5 Years
- Engages in games with rules and understands rules
- Organized play with roleplaying with peers
- Holds writing utensil with dynamic tripod grasp
- Copies own name
- Jumps down from steps
- Hops up to 4-6 steps
- Throws ball with accuracy at targets
- Begins abstract problem-solving, sings whole songs, role plays based on parent’s roles, participates in planning play

#### 3 to 4 Years Continued
- Engages in rough play, swinging, sliding, jumping, and running
- Sings and dances in groups; sharing and taking with peers discusses play goals; prefers play with other children
- Uses precision grasp on writing utensils
- Begins to copy letters and simple shapes; cuts with scissors; balances briefly on one foot
- Categorizes and sorts objects; shows a sense of humor
**Normative Developmental Milestones of Play Occupations Continued**

### 5 to 6 Years
- Board games, cooperative and competitive games
- Writes name from copy, hops for long distances, skips with good balance, catches ball with two hands, stands on one foot 8-10 seconds
- Engages in organized play in groups of 2 to 4, enjoys singing and dancing, reflects meanings of words, demonstrates understanding of other’s emotions.

### 6 to 10 Years
- Engages in games that require problem-solving and abstract thinking, plays organized and complex sports with groups of children, plays with consistent friends, good hand dexterity for manipulating small objects and building complex structures
- Runs with speed and endurance, jumps, hops, skips, accurate catches ball with hands, throws ball accurately long distances
- Abstract reasoning, flexible problem-solving, cooperatives, values pleasing others, has best friend, demonstrates increased ability to regulate behavior

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**Evaluation** *(Case-Smith, 2010b)*

- Assess strengths/supports and problem areas/barriers to occupational performance of the following by personal interview and observation.

**Personal Factors:**
- What are the primary concerns of parents, caregivers, and child leading up to this evaluation?
- Presenting problems and disabilities?
- What is a typical day like?
- What does the child needs help with and what can the child do independently? How much help does the child need for each activity such as dressing, feeding, mobilizing, bathing, and other self cares. Who helps with what?
- What does the child like to do for fun?
- What would the child/family/caregiver like the client to be able to do?
- Interview teacher is applicable and appropriate to gather more information about child’s performance in the classroom.

**Body Function:**
- What areas may be more difficult for you at this time? Memory, solving problems, concentrating, organization, making decisions, paying attention, understanding what you hear or read?
- Compare client’s observed functions with age appropriate developmental milestones listed under “Assessment” of this handout.

**Body Structures:**
- Does child have visible or stated physical impairment to body structures?
- Does child have difficulty with seeing or hearing?

**Performance Qualifiers:**
- Observe the child performing daily occupations in current environment such as at the hospital or clinic?
- How does the child perform daily activities/occupations in the current environment?

**Capacity Qualifiers:**
- Directly observe the child performing daily occupations in their standard environment such as at home or school if possible.
- How does the child perform daily activities/occupations in their natural environments? What are the child’s supports and barriers to successful performance?

**Environmental factors: Individual Perspective:**
- Obtain information about child’s home, school, and community and specific occupations/activities client engages in, desires to engage in, or is expected to engage in?

**Environmental factors: Societal Perspective:**
- What does the child/family/caregivers feel other people expect you to do?
- How does the child/family/caregivers feel about those

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**Intervention**

- Compare observed child play functions with the designated developmental milestones listed under “Assessment” of this handout. In addition, consider information on child’s function gained from interview.
- Identify barriers and supports to occupational performance for child.
- Consider child, family, and caregiver’s concerns and desires for therapy.
- Through activity analysis, provide interventions that comprise components of functional occupations the child wishes to become successful in completing or provide opportunity for child to practice the exact occupation the child wants to perform.

**References**
MODULE 9:
Mental Health Conditions

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year two occupational therapy students

ACTIVITY TYPE: Video, discussion, and handout

SETTING: Classroom

DURATION: 1 hour

PURPOSE:
Students will gain knowledge on common mental health conditions, assessment, and intervention as they relate to occupation and function.

ACTIVITY DESCRIPTION:
Students will view a short DVD clip accompanied by an easy-to-follow handout that will illustrate common mental health conditions, assessment, and intervention as they relate to occupational functioning. Student will conclude the session with discussion of the assessment and intervention processes viewed on the DVD with regard to occupational functioning of an individual with a mental health condition.

LEARNER REQUIREMENTS:
Prior to participating in this module, the student will need to:

- Have a basic understanding regarding an occupational therapist’s way of viewing individuals holistically and understanding the interrelationship between the many factors that affect a person’s function.
- Have a basic understanding of the evaluation and intervention process through use of the ICF.
- Have an interest in the area of the mental health conditions and their effect on function.

GOAL:

Students will demonstrate a basic understanding of mental health conditions, assessment, and intervention as they related to engagement in occupation.

OBJECTIVES:

Upon completion of Module 9, the learners will be able to:

- Describe common mental health conditions.
- Demonstrate ability to analyze engagement in occupation with the presence of mental health conditions through use of ICF and student handout.
- Apply knowledge and understanding to discussion with peers and faculty.

INSTRUCTIONAL METHODS FOR CONTENT:

- Instructors play DVD clip for students to view.
- Provide students with easy-to-follow student handout for Module 9.
- Instructors facilitate discussion about mental health conditions and encourage students to use ICF terminology to assess interruptions in function and develop interventions from a holistic standpoint.
- Request students to discuss in small groups (3-4) about assessment and intervention processes used in the DVD with regard to occupational functioning.

INSTRUCTIONAL RESOURCES NEEDED:

- Computer
- Access to the ICF
• Video clip provided DVD Module 9
• Projection equipment to view video clip or students may view from personal computers
• Student handouts

METHODS FOR EVALUATION OF LEARNING:

• Students’ ability to report to the class the aspects of assessment and intervention in regard to the occupational functioning of an individual with a mental health condition viewed on the DVD clip.
**Mental Health Conditions**

### Delusional Disorders
- **Schizophrenia**: Distorted thinking and perception, inappropriate or blunted affect, delusions, hallucinations. May be continuous or episodic. May result in inability to meet demands of society and occupational performance (World, 1992).
- **Schizotypal Disorder**: Eccentric behavior, abnormal thinking and affect similar to schizophrenia, but not fully characteristic of schizophrenia abnormalities. Symptoms include odd thoughts, anhedonia, thought disturbances, social withdrawal, no set course or evolution of symptoms (World, 1992).

### Mood Disorders
- **Bipolar Affective Disorder**: Two or more episodes with disturbed mood and activity levels (World, 1992).
  - **Hypomania episode**: Persistent mild elevation of mood, increased energy and activity, and feelings exceptional mental and physical well-being (World, 1992).
  - **Mania episode**: Elevated mood beyond client’s actual circumstances, increased energy, overactivity, decreased need for sleep, low attention, inflated self-esteem, grandiose ideas, over-confidence, reckless behavior (World, 1992).
  - **Depressive episode**: Low mood, decreased energy, decreased activity, anhedonia, decreased self-esteem, and psychomotor retardation (World, 1992).
- **Persistent Mood Disorders**: Persistent and fluctuating disorders of mood that are more mild than manic or depressive episodes (World, 1992).
  - **Cyclothymia**: Persistent mood instability involving mood depression and elevation (World, 1992).
  - **Dysthymia**: Chronic depression of mood, lasting at least several years, but not severe enough to be a depressive disorder (World, 1992).
- **Recurrent Depressive Disorder**: Repeated episodes of depression, without history of manic or hypomanic episodes. May be brief mood elevation after depressive episode. First episode may occur at any age (World, 1992).

### Neurotic & Stress-Related Disorders
- **Generalized anxiety disorder**: Persistent and generalized anxiety that is not triggered by any particular circumstances. Symptoms include persistent nervousness, trembling muscular tensions, sweating, palpitations, dizziness, and stomach ache (World, 1992).
- **Panic disorder**: Recurrent attacks of severe anxiety (World, 1992).
- **Obsessive-compulsive disorder**: Obsessional and uncontrollable thoughts, and compulsive acts that are repeated. Obsessional thoughts and compulsive acts are often irrational, pointless or ineffectual. If compulsive acts are resisted, anxiety increases (World, 1992).
- **Phobic anxiety disorders**: Anxiety experienced by specific situations that are not currently dangerous. As a result, those situations are avoided and endured with dread. For example, agoraphobia is fear of leaving home, crowds, or public places (World, 1992).

### Behavioral Syndromes
- **Anorexia nervosa**: Intentional weight loss with a goal weight below healthy weight, and obsessive anxiety of being fat or flabby. Symptoms may include restricted caloric intake and obsessive exercise (World, 1992).
- **Bulimia nervosa**: Repeated pattern of binge eating followed by vomiting or use of purgatives with rigid and obsessive thinking about eating and controlling body weight (World, 1992).

### Mental Retardation
Incomplete or interrupted development of the mind which results in deficits in overall level of intelligence including cognitive, language, motor and social abilities. May improve with therapy and training (World, 1992).
- **Mild**: Intelligence which corresponds with ages 9 to under 12-years-old. Commonly experience difficulties with school, many able to work and function socially (World, 1992).
- **Moderate**: Intelligence which corresponds with ages 6 to under 9-years-old. Most can develop some independence with self-care and acquire adequate communication and academic skills. May require support to live and work in the community (World, 1992).
- **Severe**: Intelligence which corresponds with ages 5 to under 6-years-old. Most often results in need for continuous 24/7 support (World, 1992).
- **Profound**: Intelligence which corresponds with age 3 and under. Results in severe limitation in self-care, continence, community and mobility (World, 1992).
Evaluation

- Assess strengths/supports and problem areas/barriers to occupational performance of the following by

Personal Factors:
- Tell me about a typical day. What has been going well? What hasn't been going well for you?
- What are your key issues?
- How have symptoms of mental illness affected daily function?
- On a scale of 1 to 5, with 5 being high satisfaction and 1 being low satisfaction, how satisfied do you feel in your role as a child, sibling, spouse, employee/worker, parent, student, and friend. If your level of satisfaction is 3 or lower in any of these roles, please explain.
- What do you enjoy doing for fun? Has that changed recently? What are some things that get in the way of doing things for fun? (anxiety, isolation, low mood, no time, no enjoyment, no friends, no interest, no energy, no money, no transportation, nothing to do).

Intervention

Delusional Disorders:

- Provide education for client and family to understand the disorder (Bonder, 2010).
- Assist to create a healthy and satisfying structured daily routine including self-care, sleep, work, and leisure (Bonder, 2010).
- Build on identified strengths.
- Build motivation through discussion about values, beliefs and spirituality (Bonder, 2010).
- Foster development of self-esteem through positive feedback and activities in which client can experience success (Bonder, 2010).
- Build social skills through group activities.
- Assist to identify family and community supports.
- Adapt tasks and the environment to meet client’s skills (Bonder, 2010).

Mood Disorders:

- Recurrent depressive disorder - Depressive episode - Dysthymia - Cyclothymia
  - Provide education for client and family to understand the disorder (Bonder, 2010).
  - Assist to create a healthy and satisfying daily routine including self-care, sleep, work, and leisure (Bonder, 2010).
  - Assist client to find activities that improve self-esteem and increase motivation (Bonder, 2010, p. 151).
  - Activities that encourage self-expression.
  - Assisting client to set goals for reengagement in valued occupations (Bonder, 2010).
  - Re-establishing healthy routines and habits (Bonder, 2010).
  - Build motivation through discussion about values, beliefs and spirituality (Bonder, 2010).
  - Social skills training (Bonder, 2010).

- Manic-hypomanic episode
  - Provide education for client and family to understand the disorder. Discuss warning signs of impending episode (Bonder, 2010).
  - Advocate for client by educating and consulting with work supervisors (Bonder, 2010).
  - Protect client from harming self or others by asking if he or she is having suicidal or homicidal thoughts. Inform healthcare team as client may need hospitalization (Bonder, 2010).
  - Assist to establish plan for regular medication routine (Bonder, 2010).
  - Structure sessions by setting limits, limiting choices, and eliminating distractions (Bonder, 2010).

Mental Retardation:

- Provide education for client and family to understand the disorder (Bonder, 2010).
- Assist to create a healthy and satisfying daily routine including self-care, sleep, work, and leisure (Bonder, 2010).
- Provide concrete and simple directions and activities. Repeat instructions to facilitate learning (Bonder, 2010).
- Provide and encourage engagement in activities that are mental age appropriate rather than chronological age appropriate activities (Bonder, 2010).
- Advocate and prepare client for least restrictive environment (Bonder, 2010).
- Facilitate healthy daily routines including adequate nutrition and exercise (Bonder, 2010).
- Provide occupation-based interventions to teach increased occupational independence such as learning to manage money, shop at the market and work (Bonder, 2010).
- Communicate with employers to suggest reasonable work accommodations such as more frequent breaks, less stimulating environment, concrete and simple instructions (Bonder, 2010).

Behavioral Syndromes:

- Anorexia nervosa - Bulimia nervosa
  - Provide education for client and family to understand the disorder (Bonder, 2010).
  - Assist to a create healthy and satisfying social participation and leisure activities that de-emphasize food (Bonder, 2010).
  - Stress management techniques (Bonder, 2010).
  - Facilitate positive body self-image, time management, and sense of control through use of activity (Bonder, 2010, p. 222).
MODULE 10:

Orthopedic Conditions

Developed by: Shalyn K. Hamble, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year two occupational therapy students

ACTIVITY TYPE: Video, discussion, and handout

SETTING: Classroom

DURATION: 1 hour

PURPOSE:

Students will gain knowledge on commonly treated orthopedic conditions, assessment, and intervention as they relate to a person’s ability to engage in occupations.

ACTIVITY DESCRIPTION:

Students will view a short DVD clip accompanied by an easy-to-follow handout that will demonstrate assessment and intervention opportunities for orthopedic conditions. Students will conclude the session with discussion of the assessment and intervention processes viewed on the DVD with regard to occupational functioning of an individual with an orthopedic condition.

LEARNER REQUIREMENTS:

Prior to participating in this module, the student will need to:

- Have a basic understanding regarding an occupational therapist’s way of viewing individuals holistically and understanding the interrelationship between the many factors that affect a person’s function.
• Have a basic understanding of evaluation, intervention, and outcome as they pertain to occupational therapy.

• Have an interest in the area of the orthopedic injuries and the effects on function.

GOAL:
Students will demonstrate a basic understanding of common orthopedic conditions, assessment, and intervention as they relate to occupation and function.

OBJECTIVES:
Upon completion of Module 10, the learners will be able to:

• Describe common orthopedic conditions.

• Demonstrate ability to analyze engagement in occupations for an individual with the presence of orthopedic conditions through use of ICF framework and student handout.

• Apply knowledge and understanding to discussion with peers and faculty.

INSTRUCTIONAL METHODS FOR CONTENT:

• Instructors play DVD clip for students to view.

• Provide students with easy-to-follow student handout for Module 10.

• Instructors facilitate discussion about orthopedic conditions and encourage students to use ICF terminology to assess interruptions in function and develop interventions from a holistic standpoint.

• Request students to discuss in small groups (3-4) about assessment and intervention processes used in the DVD with regard to occupational functioning.

INSTRUCTIONAL RESOURCES NEEDED:

• Computer

• Access to the ICF
● Video clip provided DVD Module 10
● Projection equipment to view video clip or students may view from personal computers
● Student handouts

METHODS FOR EVALUATION OF LEARNING:

● Students’ ability to report to the class the aspects of assessment and intervention in regard to the occupational functioning of an individual with an orthopedic condition viewed on the DVD clip.
**Orthopedic Injuries**

### Shoulder Injuries
- **Bicipital Tendonitis**: injury and delayed healing to biceps tendon due to inflammation from overuse
- **Thoracic Outlet Syndrome**: arterial insufficiency, venous engorgement, or nerve dysfunction from compression or stretch of subclavian artery, vein, or portions of brachial plexus
- **Fractures of the Humerus**: proximal end most common
- **Supraspinatus Tear (Rotator Cuff Injury)**: impingement or tear due to traumatic event or repetitive motions
- **AC Joint Instability**: instable acromioclavicular joint or separation
- **Brachial Plexus Injury**: upper extremity pain syndrome

### Elbow Injuries
- **Cubital Tunnel Syndrome/Ulnar Nerve Compromise**: compression of the ulnar nerve as it passes through the cubital tunnel
- **Lateral Epicondylitis**: degeneration of extensor carpi radialis brevis tendon at lateral epicondyle
- **Medial Epicondylitis**: involving tendinous origin of pronator teres, flexor carpi radialis, and palmaris longus at medial epicondyle
- **Pronator Teres Syndrome**: median nerve compressed at proximal forearm
- **Fracture of the Wrist & Forearm**: most common
- **Hyperextension**: torn anterior elbow capsule
- **Radial Collateral Ligament Damage**: damage to radial collateral ligament
- **Ulnar Collateral Ligament Damage**: damage to ulnar collateral ligament
- **Anterior Osseous Nerve Pathology**: pain in proximal forearm; weakness of flexor digitorum profundus of index and middle fingers, flexor pollicis longus, and pronator quadratus

### Wrist & Hand Injuries
- **Carpal Tunnel Syndrome**: nerve is impinged under the transverse carpal ligament
- **Amputation**: removal of all or part of an extremity, digit, organ, or projecting body part
- **Collateral Ligament Tear**: complete or incomplete tears to UCL/RCL of the thumb or fingers
- **DeQuervain’s Tenosynovitis**: tenosynovitis of the first dorsal compartment of the wrist with extensor pollicis brevis and abductor pollicis longus tendons involved as they pass through osseoligaentous tunnel of the radial styloid and transverse fibers of the dorsal retinaculum
- **Tendon Injuries**: lacerations, avulsion-type injuries, & crush injuries to the flexor or extensor tendons
- **Fractures of the Finger**: take place in continuity of a bone, epipheseal place, or cartilaginous joint surface

### Range of Motion:

<table>
<thead>
<tr>
<th><strong>Shoulder</strong></th>
<th><strong>Elbow</strong></th>
<th><strong>Wrist</strong></th>
<th><strong>Thumb</strong></th>
<th><strong>Finger</strong></th>
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<tr>
<td><strong>Flexion</strong></td>
<td><strong>Flexion/Extension</strong></td>
<td><strong>Flexion</strong></td>
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<td><strong>MP Flexion/Ext.</strong></td>
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<td><strong>Extension</strong></td>
<td><strong>Supination</strong></td>
<td><strong>Extension</strong></td>
<td><strong>IP Flexion/Ext.</strong></td>
<td><strong>MP Hyperext.</strong></td>
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<td>0-80°-90°</td>
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<td>0-80°</td>
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<td><strong>Abduction</strong></td>
<td><strong>Pronation</strong></td>
<td><strong>Ulnar Deviation</strong></td>
<td><strong>PIP Flexion/Ext.</strong></td>
<td><strong>DIP Flexion/Ext.</strong></td>
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<td><strong>Radial Deviation</strong></td>
<td><strong>Abduction</strong></td>
<td><strong>DIP Flexion/Ext.</strong></td>
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## Assessment

### Shoulder:
- Supraspinatus: Empty Can Test
- Bicipital Tendinitis: Yergason’s test; Speed’s Test; Lundington’s test
- Rotator Cuff Pathology: Drop Arm Test
- Impingement: Cross-over impingement; Neer Impingement Sign; Hawkins-Kennedy Sign
- Thoracic Outlet Syndrome: Roos Test; Allen’s Test
- AC Joint Instability: Piano Key Sign

### Elbow:
- Lateral Epicondylitis: Cozen’s Test; Resisted Tennis Elbow Test; Passive Elbow Test
- Medial Epicondylitis: Golfer’s Elbow Test
- Hyperextension/Torn Anterior Elbow Capsule: Hyperextension test
- Cubital Tunnel Syndrome: Elbow Flexion Test
- Radial (lateral) Collateral Ligament Damage: Varus Stress Test
- Ulnar (medial) collateral Ligament Damage: Valgus Stress Test
- Ulnar Nerve Compromise: Tinel’s Sign (elbow)
- Anterior Osseous Nerve Pathology: Pinch Grip Test
- Ulnar Nerve Compromise: Wartenberg’s Sign; Froment’s Sign
- Ulnar Nerve Pathology: Intrinsic Plus Position

### Wrist & Hand:
- Fracture: Tap Test; Percussion Test; Compression Test
- Flexor Digitorum Superficialis & Flexor Digitorum Profundus Compromise and/or Nerve: Long Finger Flexion test
- DéQuervain’s syndrome: Finkelstein Test
- Carpal Tunnel Syndrome: Phalen Test; Reverse Phalen Test; Tinel’s Sign
- Ulnar Neuropathy: Froment’s Sign
- Denervated Tissue: Wrinkle Test
- Collateral Ligament Tear: Valgus Stress Test; Varus Stress Test

## Intervention

- **Edema Management:** elevation; active exercise; contrast baths; retrograde massage; string wrapping; compressive garments; manual edema mobilization
- **Scar/Wound Management:** compression and desensitization to promote scar softening and maturation; scar tissue massage
- **Tendon and Nerve glides:** used to maximize total and differential gliding of digital flexor tendons at the wrist; promote digital and joint motions
- **Blocking Exercises:** i.e. block portions of phalanges to help isolate and exercise flexion and extension of a particular digit
- **Place-and-Hold Exercises:** used to achieve increased ROM when PROM exceeds AROM; effective in combination with blocking exercises
- **Thermotherapy:**
  - **Indications:** stiff joints; subcutaneous adhesions; contractures; chronic arthritis; subacute and chronic inflammation/cumulative trauma; neuromas; sympathetic nervous system disorders; muscle spasms
- **Cryotherapy:**
  - **Indications:** acute/subacute inflammation; acute pain & chronic pain secondary to muscle spasm; acute swelling; myofascial trigger points; muscle guarding; muscle spasm; acute muscle strain; acute ligament strain; acute contusion; bursitis; tenosynovitis; tendonitis; arthritic flareup; spasticity; delayed onset muscle soreness; postexercise to maintain soft tissue elongation
- **Precautions:** monitor blood pressure; avoid patients with impaired circulation or hypersensitivity to cold; avoid direct application over wounds 2-3 weeks postinjury; avoid prolonged placement over superficial nerve
- **Splinting:** promote ability to restricted structures

Reference:
MODULE 11:

Occupation: Cooking

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year two occupational therapy students

ACTIVITY TYPE: Case study

SETTING: Classroom

DURATION: 1 hour

PURPOSE:
Students will apply an integration of their knowledge of common medical diagnoses and evaluation, intervention, and outcome skills to an occupation-based case study scenario to further develop their ability to “think like an occupational therapist”.

ACTIVITY DESCRIPTION:
Students will divide into groups of 3-4 and review the occupation-based case scenario to determine accurate and appropriate evaluations, interventions, and outcomes to promote successful engagement in occupations for the specific case study. Students will report findings to the class to conclude the session.

LEARNER REQUIREMENTS:
Prior to participating in this module, the student will need to:

- Have a basic understanding of the ICF as it relates to occupational therapy evaluation and treatment.
- Have a basic understanding of evaluation, intervention, and outcome as they pertain to occupational therapy.
- Understand the value of occupation vs. activity.
- Have ability to conduct activity analysis and occupational analysis.
- Have understanding of effective use of therapeutic use of self.

**GOAL:**

Students will demonstrate their ability to apply an integration of knowledge on evaluation, intervention, and outcome; activity analysis; therapeutic use of self; and medical diagnoses and procedures to realistic, an occupation-based case study scenario.

**OBJECTIVES:**

Upon completion of Module 11 the participants will be able to:

- Demonstrate ability to apply integration of occupational therapy evaluation, intervention, and outcome concepts to an occupation-based case study scenario.
- Demonstrate analysis of classmate’s case study results based on group discussion.

**INSTRUCTIONAL METHODS FOR CONTENT:**

- Instructors introduce case study to students
- Divide students up into groups of 3-4 for case study work groups.
- In groups, students discuss occupation-based case study scenario with creative occupational therapy evaluations, interventions, and outcomes based on integration of previous learning.
- Request students to share and report their case study conclusions to the class as a large group.

**INSTRUCTIONAL RESOURCES NEEDED:**

- Case study worksheet
- Computer
- ICF access

**METHODS FOR EVALUATION OF LEARNING:**

- Students’ ability to report analysis of occupation-based case study scenario.
Mini Case Study Scenario: Cooking

Sarah is a 30 year-old woman who suffered a traumatic brain injury from a motorcycle accident. She and her husband were riding home when she went fell from the motorcycle onto the ground where she was found unconscious. The husband, fortunately, remained conscious and suffered only cuts and bruises. She was transported to the hospital where she spent several weeks in acute care becoming stable, and is now partaking in the rehabilitation process.

Prior to the accident, Sarah took care of her children ages 1, 3, and 7 years in a 1-story home. She had no deficits in any occupational area. She was spending most of her time cooking for the family. This included gathering ingredients from the garden, starting a fire, grinding casava, cutting with a knife, multitasking, keeping track of time, etc. Sarah’s husband traditionally worked as a teacher in the schools every day. However, he is able to take some time off to be with Sarah during her recovery process, though he is unsure how much time he will be allowed.

Sarah appears to be at a Ranchos Level V—confused inappropriate. She responds to simple directions, but is highly distractible, has poor short-term memory, and has little carryover for new learning. She has intact sensation, vision, and hearing. Perceptual processing is impaired for spatial relations, categorization, and position in space. Her upper extremities present with mild to moderate increased tone as well as in her trunk and lower extremities. She is demonstrating some primitive reflexes (ATNR) and has decreased equilibrium and righting reactions. She requires frequent verbal cueing for all transfers and mobility. She is currently non-ambulatory. Sarah has little insight into her deficits. She talks about her family and children a lot and how she misses cooking for them. She lacks initiation and says whatever is on her mind in social situations causing others to dislike her when she is inappropriate. She states, “I just want to be able to cook a meal for my family so they can eat.”

Mini Case Study Worksheet: Cooking

I. Role play assigned mini case study scenarios with a partner to gather the following information:

A. **Evaluation:** Use the following ICF factors to conduct activity analysis (activity demands of what the client wants to be able to do) and occupation-based analysis:

1. Body functions

2. Body structures
3. Performance qualifier
4. Capacity qualifier
5. Environmental factors
6. Individual perspective
7. Societal perspective
8. Personal factors

B. **Evaluation: Assessment of results (occupational profile)**

1. Areas of strength
2. Areas of difficulty
3. Select one long-term goal
4. Select three short-term goals

C. **Intervention: Comprise two strategies for each short-term goal selected.**

1. Goal #1:
   a. Strategy #1:
   b. Strategy #2:
2. Goal #2:
   a. Strategy #1:
3. Goal #3:
   a. Strategy #1:
   b. Strategy #2:

<table>
<thead>
<tr>
<th>D. Outcomes: What areas will you need to re-evaluate following intervention implementation to ensure successful intervention strategies were used?</th>
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<tr>
<td>➢ What are some ways you can increase or decrease the complexity of your activities used for adjusting treatment strategies?</td>
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<th>Goal #1 Strategy #1:</th>
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<td>1. Increase:</td>
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<td>Goal #1 Strategy #2:</td>
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<td>1. Increase:</td>
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<td>2. Decrease:</td>
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<td>c.</td>
<td>Goal #2 Strategy #1</td>
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<td></td>
<td>1. Increase:</td>
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<td>2. Decrease:</td>
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<td>d.</td>
<td>Goal #2 Strategy #2:</td>
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<td>e.</td>
<td>Goal #3 Strategy #1:</td>
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<td>1. Increase:</td>
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</table>
2. Decrease:

f. Goal #3 Strategy #2:

1. Increase:

2. Decrease:
MODULE 12:

Occupation: Caregiving

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year two occupational therapy students

ACTIVITY TYPE: Case study

SETTING: Classroom

DURATION: 1 hour

PURPOSE:

Students will apply an integration of their knowledge of common medical diagnoses and evaluation, intervention, and outcome skills to an occupation-based case study scenario to further develop their ability to “think like an occupational therapist”.

ACTIVITY DESCRIPTION:

Students will divide into groups of 3-4 and review the occupation-based case scenario to determine accurate and appropriate evaluations, interventions, and outcomes to promote successful engagement in occupations for each specific case study. Students will report findings to the class to conclude the session.

LEARNER REQUIREMENTS:

Prior to participating in this module, the student will need to:

- Have a basic understanding of the ICF as it relates to occupational therapy evaluation and treatment.
- Have a basic understanding of evaluation, intervention, and outcome as they pertain to occupational therapy.
- Understand the value of occupation vs. activity.
- Have ability to conduct activity analysis and occupational analysis.
- Have understanding of effective use of therapeutic use of self.

**GOAL:**

Students will demonstrate their ability to apply an integration of knowledge on evaluation, intervention, and outcome; activity analysis; therapeutic use of self; and medical diagnoses and procedures to realistic, occupation-based case study scenarios.

**OBJECTIVES:**

Upon completion of Module 12 the participants will be able to:

- Demonstrate ability to apply integration of occupational therapy evaluation, intervention, and outcome concepts to an occupation-based case study scenario.
- Demonstrate analysis of classmate’s case study results based on group discussion.

**INSTRUCTIONAL METHODS FOR CONTENT:**

- Instructors introduce case study to students
- Divide students up into groups of 3-4 for case study work groups.
- In groups, students discuss occupation-based case study scenario with creative occupational therapy evaluations, interventions, and outcomes based on integration of previous learning.
- Request students to share and report their case study conclusions to the class as a large group.

**INSTRUCTIONAL RESOURCES NEEDED:**

- Case study worksheet
- Computer
• ICF access

METHODS FOR EVALUATION OF LEARNING:

• Students’ ability to report analysis of occupation-based case study scenario.
Mini Case Study Scenario: Caregiving

Rebecca is a 50-year-old Ghanaian female who has been referred to occupational therapy by her doctor. She has a diagnosis of depression. She came to visit her doctor when her family started noticing her not being able to keep up with preparing meals, washing, clothes, sewing, and taking care of her children as she normally has done. She became hopeless and sad when her oldest son died in a car accident four weeks ago. Her son, David, was 18-years-old and had lived at home, along with Rebecca’s five younger children. David had worked full-time farming with her husband to help financially support the family. Initially after her son’s death, she continued to function at home by completing her daily household activities and taking care of her children, but soon began to have difficulty getting out of bed in the morning to take care of her children and household. Her husband became concerned, and brought her to the doctor where she was diagnosed with depression.

During the initial OT evaluation she was asked about her change in daily routine, and she responded with short responses. She has a flat affect, speaks softly, and answers in short responses. Rebecca has a history of depression in her family. Rebecca has no deficits in hearing, vision, sensation, or perception. When asked about what she likes to do for fun, she does not note many current interests, but explains she used to enjoy taking care of her family and keeping their home clean. She does not identify any close friends, stating, “I didn’t need them. I have my family.” She closely identifies with the role of caregiver, wife, and mother; however, she feels she must have been terrible caretaker since she was not able to prevent her son from taking his own life. Although Rebecca continues to be soft spoken and listless during the OT evaluation, she explains her goal is to be able to take care of her family and home as she did before her son’s death.

Mini Case Study Worksheet: Caregiving

I. Role play assigned mini case study scenarios with a partner to gather the following information:

A. Evaluation: Use the following ICF factors to conduct activity analysis (activity demands of what the client wants to be able to do) and occupation-based analysis:

1. Body functions

2. Body structures

3. Performance qualifier
4. Capacity qualifier

5. Environmental factors

6. Individual perspective

7. Societal perspective

8. Personal factors

**B. Evaluation:** Assessment of results (occupational profile)

1. Areas of strength

2. Areas of difficulty

3. Select one long-term goal

4. Select three short-term goals

**C. Intervention:** Comprise two strategies for each short-term goal selected.

3. Goal #1:
   a. Strategy #1:
   b. Strategy #2:

4. Goal #2:
   a. Strategy #1:
   b. Strategy #2:
3. Goal #3:
   a. Strategy #1:
   b. Strategy #2:

   **D. Outcomes:** What areas will you need to re-evaluate following intervention implementation to ensure successful intervention strategies were used?

   ➢ What are some ways you can increase or decrease the complexity of your activities used for adjusting treatment strategies?

   a. Goal #1 Strategy #1:
      1. Increase:
      2. Decrease:

   b. Goal #1 Strategy #2:
      1. Increase:
      2. Decrease:

   c. Goal #2 Strategy #1
      1. Increase:
      2. Decrease:

   d. Goal #2 Strategy #2:
      1. Increase:
      2. Decrease:

   e. Goal #3 Strategy #1:
      1. Increase:
      2. Decrease:
d. Goal #3 Strategy #2:

   1. Increase:

   2. Decrease:
MODULE 13:

Occupation: Education

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year two occupational therapy students

ACTIVITY TYPE: Case study

SETTING: Classroom

DURATION: 1 hour

PURPOSE:
Students will apply an integration of their knowledge of common medical diagnoses and evaluation, intervention, and outcome skills to an occupation-based case study scenario to further develop their ability to “think like an occupational therapist”.

ACTIVITY DESCRIPTION:
Students will divide into groups of 3-4 and review the occupation-based case scenario to determine accurate and appropriate evaluations, interventions, and outcomes to promote successful engagement in occupations for each specific case study. Students will report findings to the class to conclude the session.

LEARNER REQUIREMENTS:
Prior to participating in this module, the student will need to:

- Have a basic understanding of the ICF as it relates to occupational therapy evaluation and treatment.
- Have a basic understanding of evaluation, intervention, and outcome as they pertain to occupational therapy.
• Understand the value of occupation vs. activity.
• Have ability to conduct activity analysis and occupational analysis.
• Have understanding of effective use of therapeutic use of self.

GOAL:
Students will demonstrate their ability to apply an integration of knowledge on evaluation, intervention, and outcome; activity analysis; therapeutic use of self; and medical diagnoses and procedures to realistic, occupation-based case study scenario.

OBJECTIVES:
Upon completion of Module 13 the participants will be able to:
• Demonstrate ability to apply integration of occupational therapy evaluation, intervention, and outcome concepts to an occupation-based case study scenario.
• Demonstrate analysis of classmate’s case study results based on group discussion.

INSTRUCTIONAL METHODS FOR CONTENT:
• Instructors introduce case study to students.
• Divide students up into groups of 3-4 for case study work groups.
• In groups, students discuss occupation-based case study scenario with creative occupational therapy evaluations, interventions, and outcomes based on integration of previous learning.
• Request students to share and report their case study conclusions to the class as a large group.

INSTRUCTIONAL RESOURCES NEEDED:
• Case study worksheet
• Computer
• ICF access

METHODS FOR EVALUATION OF LEARNING:

• Students’ ability to report analysis of occupation-based case study scenario.
MODULE 13

Mini Case Study: Education

Micah is a 7-year-old boy who has a diagnosis of cerebral palsy. Micah’s doctor referred him to occupational therapy as he has been having difficulties with school and his parents and teachers are debating whether or not to keep him enrolled. Micah’s mother owns a basket weaving business and his father is a farmer. He has five siblings, four older siblings who all attend school and a three-year-old sister.

Micah and his family live two miles from school, and he needs to be able to mobilize to and from that distance as his parents do not own a vehicle. Although Micah has learned to walk, he walks with a classic scissors gait, walks half the speed as the other children, and requires hand-held to minimal assist to walk the uneven path between his home and school. His older siblings have been willing to leave for school early to allow Micah more time, and some days his siblings will pull him in a metal wagon. Once in the classroom, Micah has significant difficulty with handwriting due to moderate-severe spasticity in his left arm and hand, and mild spasticity in his right arm and hand. Fortunately, he is right hand dominant, but exhibits difficulty with fine motor coordination and gripping a pencil. He uses a primitive grip, holding a pencil with the whole hand, pronating the forearm, and using the shoulder to move the pencil, which results in him requiring extra time for handwriting and difficulty with producing legible letters.

In addition to reading and writing educational activities, Micah’s teacher facilitates learning through songs and expects students to demonstrate learning through verbalizing thoughts. Micah has moderate difficulty expressing himself and his verbalizations are limited to simple words and short phrases.

Despite Micah’s challenges to school participation, his family and teachers describe him as an energetic and fun-loving child. He enjoys going to school and learning. His teacher has verbalized that she is willing to make accommodations, as she is able; however, she has 50 other students with who she is responsible to teach each day within the crowded single-room classroom. Both Micah and his parent’s goal for occupational therapy is to keep Micah in school so that he may continue to receive an education and socialize along side his peers.

Mini Case Study Worksheet: Education

I. Role play assigned mini case study scenarios with a partner to gather the following information:

A. Evaluation: Use the following ICF factors to conduct activity analysis (activity demands of what the client wants to be able to do) and occupation-based analysis:

1. Body functions
2. Body structures

3. Performance qualifier

4. Capacity qualifier

5. Environmental factors

6. Individual perspective

7. Societal perspective

8. Personal factors

B. **Evaluation:** Assessment of results (occupational profile)

1. Areas of strength
2. Areas of difficulty
3. Select one long-term goal
4. Select three short-term goals

C. **Intervention:** Comprise 2 strategies for each short-term goal selected.

1. Goal #1:
   
   . Strategy #1:

   a. Strategy #2:
2. Goal #2:
   a. Strategy #1:
   b. Strategy #2:

3. Goal #3:
   a. Strategy #1:
   b. Strategy #2:

D. **Outcomes:** What areas will you need to re-evaluate following intervention implementation to ensure successful intervention strategies were used?

   ➢ What are some ways you can increase or decrease the complexity of your activities used for adjusting treatment strategies?

   a. Goal #1 Strategy #1:
      1. Increase:
      2. Decrease:
   b. Goal #1 Strategy #2:
      1. Increase:
      2. Decrease:
   c. Goal #2 Strategy #1
      1. Increase:
      2. Decrease:
   d. Goal #2 Strategy #2:
      1. Increase:
      2. Decrease:
e. Goal #3 Strategy #1:
   1. Increase:
   2. Decrease:

d. Goal #3 Strategy #2:
   1. Increase
   2. Decrease:
MODULE 14:

Occupation: Community Mobility

Developed by: Shalyn K. Hample, OTS & Maria J. Sundsted, OTS

AUDIENCE: Year two occupational therapy students

ACTIVITY TYPE: Case study

SETTING: Classroom

DURATION: 1 hour

PURPOSE:

Students will apply an integration of their knowledge of common medical diagnoses and evaluation, intervention, and outcome skills to multiple occupation-based case study scenario to further develop their ability to “think like an occupational therapist”.

ACTIVITY DESCRIPTION:

Students will divide into groups of 3-4 and review the occupation-based case scenario to determine accurate and appropriate evaluations, interventions, and outcomes to promote successful engagement in occupations for each specific case study. Students will report findings to the class to conclude the session.

LEARNER REQUIREMENTS:

Prior to participating in this module, the student will need to:

- Have a basic understanding of the ICF as it relates to occupational therapy evaluation and treatment.
- Have a basic understanding of evaluation, intervention, and outcome as they pertain to occupational therapy.
• Understand the value of occupation vs. activity.
• Have ability to conduct activity analysis and occupational analysis.
• Have understanding of effective use of therapeutic use of self.

GOAL:
Students will demonstrate their ability to apply an integration of knowledge on evaluation, intervention, and outcome; activity analysis; therapeutic use of self; and medical diagnoses and procedures to realistic, occupation-based case study scenario.

OBJECTIVES:
Upon completion of Module 14 the participants will be able to:
• Demonstrate ability to apply integration of occupational therapy evaluation, intervention, and outcome concepts to an occupation-based case study scenario.
• Demonstrate analysis of classmate’s case study results based on group discussion.

INSTRUCTIONAL METHODS FOR CONTENT:
• Instructors introduce case study to students.
• Divide students up into groups of 3-4 for case study work groups.
• In groups, students discuss occupation-based case study scenario with creative occupational therapy evaluations, interventions, and outcomes based on integration of previous learning.
• Request students to share and report their case study conclusions to the class as a large group.

INSTRUCTIONAL RESOURCES NEEDED:
• Case study worksheet
• Computer
• ICF access

METHODS FOR EVALUATION OF LEARNING:

• Students’ ability to report analysis of occupation-based case study scenario.
Abraham is a 36-year-old Ghanaian male who fell off a ladder while fixing a sign at the store he owns. His employee saw the fall and called for help. He was transported to the nearest emergency room and it was determined he had sustained a complete fracture of the spinal cord at the T-3 level. He also fractured his right tibia and fibula and right proximal radial and ulna. He is married with 4 children. At his store he sells many forms of music including CDs and DVDs. He typically spends about 60-70 hours a week at the store. His wife takes care of the children at home and does household work throughout the day. They live in the city in small house with 2 bedrooms, 1 bathroom, a living space, and kitchen. Abraham and his wife’s extended families live nearby. They are considerably supportive, however lack understanding of this kind of injury and how it will affect his life and loved ones.

Abraham is soft-spoken and does not say or express much concerning the injury, as this is also new knowledge and adjustments. He is worried about how to get back to work in order to keep his business running. Abraham’s leisure interests include motorcycle riding and soccer. Abraham demonstrates no deficits in cognition, perception, vision, or hearing. His sensation is absent in both lower extremities, lower trunk, and buttocks. Upper extremity and superior trunk sensation is intact. Abraham has no AROM in lower extremities. His motion is intact in his left upper extremity and cervical area. He has a cast on his right upper extremity preventing full assessment; however he is able to lift cast over head. His left upper extremity has normal strength. Abraham has slight edema in MCP to DIP joints, but has normal digit motion.

Abraham’s sitting balance is poor to fair and requires some assistance to sit up. He does not have the back strength to correct himself to upright posture when leaning. He is currently unable to complete transfers from surface to surface. He is non-ambulatory and non-weight-bearing on his right leg. He can bathe with ability to reach face, hands, chest, and peri-area; however, requires assistance for back, buttocks, and legs. He requires maximum assistance for dressing himself. He can feed himself with help, however tends to “make a mess.” Abraham uses a catheter for urination and has been incontinent of bowel since the accident. He appears angry and confused, expressing no understanding of a complete SCI and wants to know if he will ever walk in order to get around and work in his store again to keep the business running and support his family.

Mini Case Study Worksheet: Community Mobility

I. Role play assigned mini case study scenarios with a partner to gather the following information:

A. Evaluation: Use the following ICF factors to conduct activity analysis (activity demands of what the client wants to be able to do) and occupation-based analysis:

1. Body functions

Mod 14
2. Body structures

3. Performance qualifier

4. Capacity qualifier

5. Environmental factors

6. Individual perspective

7. Societal perspective

8. Personal factors

B. **Evaluation: Assessment of results (occupational profile)**

1. Areas of strength

2. Areas of difficulty

3. Select one long-term goal

4. Select three short-term goals

C. **Intervention: Comprise 2 strategies for each short-term goal selected.**

2. Goal #1:
   a. Strategy #1:
   b. Strategy #2:
2. Goal #2:
   a. Strategy #1:
   b. Strategy #2:

3. Goal #3:
   a. Strategy #1:
   b. Strategy #2:

D. Outcomes: What areas will you need to re-evaluate following intervention implementation to ensure successful intervention strategies were used?

   ➢ What are some ways you can increase or decrease the complexity of your activities used for adjusting treatment strategies?

   a. Goal #1 Strategy #1:
      1. Increase:
      2. Decrease:

   b. Goal #1 Strategy #2:
      1. Increase:
      2. Decrease:

   c. Goal #2 Strategy #1
      2. Increase:
      2. Decrease:

   d. Goal #2 Strategy #2:
      3. Increase:
      4. Decrease:
e. Goal #3 Strategy #1:
   1. Increase:
   2. Decrease:

d. Goal #3 Strategy #2:
   1. Increase
   2. Decrease
Appendix A
Needs Assessments
Needs Assessment
Developed June 16, 2014

Program Background/Conception/Overseers of the Program

Background
1. Briefly describe the reason for the establishment of the occupational therapy program.

To start training Occupational Therapists (OTs) in the country as there was no training school for OTs. The few OTs in the country were all trained outside the country.

2. When was the first occupational therapy class implemented at your teaching hospital?
   In September 2012

3. What procedures/guidelines were used to develop your occupational therapy program?

   Various consultations were made with some Universities in the UK that runs OT programs as well as some resources information from the World Federation of Occupational Therapists.

4. Who are the overseers (i.e. director, teachers, etc.) of the occupational therapy program?

   The Occupational therapy program is within the College of Health Sciences, University of Ghana. Until 1st August 2014, the occupational therapy department was part of the School Of Allied Health Sciences which is now the School of Biomedical and Allied Health Sciences. The School has a Dean and he reports to the college Provost. At the department level, there is the Co-ordinator of the OT program who oversees the day to day affairs of the occupational therapy department with the other faculty members.

Faculty
1. What is the educational background (i.e. credentials and years of tertiary schooling) of the educators for occupational therapy students?

   The university appoint faculty with a minimum of MSc or MPhil as Faculty members. The least of tertiary education will be six years but there are PhD holders and Professors who have had more years of tertiary education.
2. How many faculty provide education for occupational therapy students?
   The school runs a system where similar courses are taken together by all the departments at the level. E.g. Anatomy shared class will consist of students from Physiotherapy, occupational therapy, medical laboratory sciences, dietetics and radiology.
   For Occupational Therapy, there are two lecturers currently teaching the OT specific courses.

3. Do you believe this number is adequate to meet the needs of the students?
   - [ ] yes
   - [x] no

4. What is your vision for future occupational therapy educators?
   As the student numbers are increasing, expecting the third cohort this academic year, we are looking at increasing the number of occupational therapy educators. In future, there are plans to retain some of the students when they qualify and further train to be educators.

Students
1. What motivates students to become occupational therapists? (Check all that apply)
   - [ ] Money
   - [x] Desire to help others
   - [ ] Personal interest
   - [ ] Personal experiences with disability
   - [ ] Other (Please specify in the space below)
   - Most of the current level 200 & 100 students did not apply for Occupational therapy but other courses within the then School of Allied Sciences. Occupational Therapy was offered to them when they did not get admission to their preferred program.
   - Employment opportunity

2. How many students are enrolled in the occupational therapy program with all classes combined?
   33

3. How many students in each class? Level 200 – 18 students, Level 100 - 13 students
4. How are students selected for the occupational therapy program?
   Students completes the University wide admission forms and apply to the school and select in order of preference, the programs within the school. Those short listed are then invited for interview.

5. What are students typical educational background prior to the occupational therapy program?
   - Primary schooling
   - Secondary schooling (Junior high and senior high school)
   - Tertiary schooling
   Specify average number of years in the space below.

Physical Environment
1. Where do occupational therapy classes meet? In the first and second year when they do most of their basic and applied sciences, they join students from the other program and uses lecture halls and the various laboratory. As they progress, the occupational therapy classes are held in smaller lecture hall and at the Occupational Therapy demonstration room.

2. How many hours each week do occupational therapy classes meet?
   Students complete a minimum of 19 and a maximum of 22 credit hours per week

3. What kind of learning environment is available for occupational therapy students?
   - Classroom the school have shared facilities in terms of classrooms so there are time tables for their uses but enough to cover the various departments.
   - Specify number of classrooms available in the space below.
   - Do students share a classroom with students from other disciplines during class meeting times?
     - No
     - Yes (If yes, please specify in the space below)
   - Describe classroom by checking all that apply
     - Small
     - Large and adequate
     - Distracting
     - Quiet
     - Busy
     - Comfortable
     - Uncomfortable
     - Other (Please specify in the space below)
If a classroom is not used, where does the class meet? **There is the demonstration room that can be use.**

4. How many students are in each classroom? **About 25 to 30 seating capacity except for the larger classes shared with the other disciplines.**

5. What kind of the technology do your students have access to?
   - **Computers**
     - What is the ratio of students per computer? (Please specify below) **No quiet sure of the ratio but there are various students ICT centres on campus. Most students have their personal computers or laptops as well**
     - Are students equipped with adequate skills to use computers?
       - Yes
       - No
   - **Television**
   - **Internet**
     - If so, is it reliable?
       - Yes about 80% of the time
       - No
     - Are YouTube videos accessible?
       - Yes
       - No

6. What kind of learning resources/tools are available?
   - **Chalkboards**
   - **Desks**
   - **Writing utensils (pencils/pens)**
   - **Paper**
   - **Mat tables**
   - **Wheelchairs (few)**
   - **Crutches**
   - **Canes**
   - **Goniometers**
   - **Textbooks**
   - **Adaptive equipment** (Adapted cutlery, other OT equipments)
   - **Other** (Projectors, white boards with makers)
Course Curriculum
1. How much time does the occupational therapy program take to complete?
   - 1 year
   - 2 years
   - 3 years
   - 4 years

2. What formalized assessments do you currently teach in your curriculum?
   MOHO, COPM, KAWA RIVER MODEL etc

3. Where is your curriculum in need of additional formalized assessments?
   Paediatric assessments
   Hand writing assessments

4. Are students required to complete hands on experience with patients in a clinical setting before graduation?
   - No
   - Yes

   5. If yes, what are the required hours needed in clinical experience? **Minimum 1000 hours of clinical contact.**

   6. Are students required to learn/practice in specific clinical settings? (i.e. physical dysfunction, mental health, pediatrics, outpatient care, inpatient care, etc.) **Yes**

   7. What other requirements are implemented for the clinical experience for your occupational therapy students? **School setting clinical experience**

Conclusion of the Program (For U.S. students, it is certification exams, etc.)

1. What requirements are enforced for concluding the program and becoming a practicing occupational therapist?
   **A mandatory one year internship after the four years for national service and still in the pipeline, certification examination to be conducted by the Ghana Allied Health Council.**
2. What are the names of the courses occupational therapy students must complete in order to obtain the degree?

I have copied below in italic some of the courses that the students take as outline in their curriculum.

*Occupational Therapy Theory and Practice*, *Advanced Anatomy*
*Introductory Biochemistry II, Human Growth & Development*
*Statistics, Medical Sociology (Understanding Human Societies)*

*Neuroscience, OT for Physical Dysfunction, Individuals, Institutions and Change, Health Promotions and Disease Prevention, Biomechanics, General Pathology, Immunology*

*Enabling Expression of Needs, Kinesiology, Neuro-rehabilitation I, Environmental Planning, Orthotics/Seating, OT Practice Skills I (Practical), Research Methodology, Rheumatology, Systemic Pathology,*

*Designing for Clients Needs (+ Practical)*

*Traumatic Skeletal Disorders*

*Neuro-Rehabilitation II*

*Health Law and Ethics*

*Environmental Planning II (Building construction)*

*OT for Psychosocial Dysfunction*

*Community Therapy Services*

*OT Practice Skills II*

*Inter-professional Assessment*

*Dermatology & Burns*

*OT for Developmental Dysfunction (Pediatrics)*
3. Does your program have a goal of meeting specific accreditation standards?
   ❑ No
   ❑ Yes (Please specify in the space below)

4. Does your program offer for occupational therapy students any optional or elective courses?
   ❑ No, All the courses as at now are mandatory.
   ❑ Yes

5. Are requirements for program completion the same for all occupational therapy students?
   ❑ No
   ❑ Yes

Teaching Techniques/Student Learning Preferences/Culture

1. How do your students learn best? (Check all that apply)
   ❑ Visually (by seeing)
   ❑ Kinesthetically (doing)
   ❑ Auditorily (hearing)
   ❑ Paper and pencil
   ❑ Computers or other technology
   ❑ Simulations (role playing)
   ❑ Combination of any of the above? (Please specify)

   ❑ Other? (Please specify)
2. What methods are currently being used to teach students? (Check all that apply)
   - PowerPoint
   - Verbal lectures
   - Class discussion
   - Homework assignments
   - Written tests
   - Oral tests
   - Textbook readings
   - Practice with other students/faculty
   - Other? (Please specify)

Content Specific Areas / Populations Served
1. What are common diagnoses/conditions of patients that occupational therapists will need to treat in Ghana? (Check all that apply) Literally all the diagnosis.
   - Musculoskeletal disorders
   - Neurological disorders
   - Orthopedic disorders
   - Rheumatology disorders
   - Mental health disorders
   - Physical disabilities
   - Cerebral palsy
   - Arthritis
   - Amputations
   - Traumatic brain injury
   - Multiple sclerosis
   - Stroke
   - Spinal cord injury
   - Depression
   - Bipolar disorders
   - Anxiety disorders
   - Post traumatic stress disorder
   - Personality disorders
   - Developmental delays
   - Hand injuries
   - Wrist injuries
   - Elbow injuries
   - Shoulder injuries
   - Back injuries
   - Mobility needs
   - Positioning needs
   - Other? Please specify in the space below.
2. What age population is in the most need of occupational therapy services?
   - Infants (birth-12 months)
   - Children (1-11)
   - Adolescents (12-18)
   - Adults (19-59)
   - Older Adults (60 and above)

3. Are Ghanaian citizens aware of occupational therapy services?
   - Yes
   - No, still at the stage of creating awareness to the general public on the role of OT

4. How does occupational therapy meet the values and needs of Ghanaian people?
   The country in 2006 passed the Disability Act and in 2011/2012 passed the mental health Act as well. In these two broad client groups, there are major role for occupational therapists. Currently, there is limited input from Occupational therapists in the management of these client group. Further, the population is ageing who needs more OT intervention to continue living independently. In the physical health settings, there is a focus in the country on Multidisciplinary approach to management of the clients as well as rehabilitation of the patient once medically stable to reduce disability.

5. Are there any specific areas within your program you would like us to address in order to best meet your program’s current needs?
   The major challenge for the OT program is placements for the students. There is one mental health facility with OT department managed by OTAs trained at post and other few facilities that are utilized for placements.

   What will be beneficial is practical demonstrations of Occupational therapists assessments and interventions as carried out on clients or simulations of assessments and interventions with rationale as to why that is being done.

6. Is there any additional information that was not covered in this assessment that you would like us to know?
   In the first two years, students do more basic and applied sciences courses which are shared courses. The last two years is where they do more profession specific courses. Our first cohort will commenced their third year in September 2014 and expected to graduate in 2016. Currently, there are three qualified OTs in the country and two are teaching on the occupational therapy program as well as provides limited OT services to needed clients.
Second Needs Assessment  
Developed October 14, 2014

1. What do you see the purpose of OT’s role in Ghana? Currently? The next 5 - 10 years? 
Currently, the OT role is creating awareness of the role of the profession in the country and training adequate Occupational Therapist. The first cohort will finally be qualified after their national service in 2017. Through the awareness and during practice placement, the faculty provides OT services to patients identified by some doctors who are aware of the OT services.

In the next 5 years, there will be qualified OT at post in the various teaching and regional hospitals in the country.

Hopefully by 10 years, the focus will be on community practice with effective structures in place with the Ghana Health Services.

2. What are the institutional expectations of the occupational therapy classroom setting with regard to the following categories:

-Student attendance: Students must attend all lectures and a 21 days absent from lectures without following due process calls for a discipline action.

-Dress code: Wear casual but formal attire.

-Deadlines for assignments: Always given by the lecturers but lecturers can be flexible if there are genuine reasons.

-Consequences for late/unfinished assignments: Student losses some marks for late submission

How do students complete homework assignments or reading tasks?

- X Individually
  - X With partners
  - X Small groups
  - ___ Large groups (entire class)
3. How would you describe the grading scale and procedures for grading student assignments?
   
   The grading is usually done by the lecturer with no external input and usually expressed in percentages.

4. How would you describe the work ethic of the students? Most of them have good work ethics and takes what they do seriously as well as very motivated.

5. You mentioned you have other OT equipment available i.e. adapted cutlery. What other equipment does this include, and what is the availability of this equipment to future OT patients?
   
   Other equipment include; wheelchairs, commode, mattress variator, hoist, electric profiling bed, slide sheets, transfer board etc. Most of them were donated and the department through the school acquire some of them too. For their availability to future OT patients, some can be bought from the market or medical equipment stores. Others however are not available in the country to be purchase.

6. You mentioned you need pediatric and handwriting assessments, which specific assessments does the OT program currently teach?

   We have not started teaching these courses so have not decided on which ones but guess it will be the common ones and those that will be mostly relevant in our setting.

7. What specific assessments would be most beneficial for the OT program to receive demonstrative educational materials for at this time?

   _X_ Manual muscle testing: test of a person’s muscle strength, or ability of the muscle to move a part of the body against resistance.
   _X_ Collecting occupational profile via interview with patients
   ___ Glasgow Coma Scale: neurological scale that aims to give a reliable, objective way of recording the conscious state of a person for initial as well as subsequent assessment.
   _X_ Functional Independence Measure (FIM)
   _X_ Ashworth Scale: indicator of spasticity, measures the resistance of a muscle being stretched with a five-point scale ranging from 1 (no increase in tone) to 5 (limb rigid in flexion or extension).
__X_ Ranchos Los Amigos Scale: used to assess individuals after a closed head injury, including traumatic brain injury, based on cognitive and behavioural presentations as they emerge from coma.

__X_ Montreal Cognitive Assessment (MOCA): rapid screening instrument for mild cognitive dysfunction. It assesses different cognitive domains: attention and concentration, executive functions, memory, language, visuoconstructional skills, conceptual thinking, calculations, and orientation.

__X_ Saint Louis University Mental Status Examination (SLUMS): tests for orientation, memory, attention, and executive functions; a screening tool developed to give clinicians a better gauge of early changes in an individual’s cognitive levels that could signal the onset of dementia and indicate to physicians when they should pursue further testing to support or rule out a dementia diagnosis.

__X_ Provocative tests: procedures in which a suspected pathophysiologic abnormality is deliberately induced by manipulating conditions known to provoke that abnormality.

- Drop Arm Test: Rotator cuff tear
- Empty Can Test: Rotator cuff tear
- Phalen’s Test: Carpal Tunnel
- Cozen’s Test: Lateral Epicondylitis
- Tinel’s Sign: Carpal Tunnel
- Kenny-Hawkin’s Test: Impingement
- Speed’s Test: Bicipital Tendonitis
- Varus Stress Test: Instability of radial collateral ligament
- Valgus Stress Test: Instability of ulnar collateral ligament
- Allen’s Test: Vascularity of radial/ulnar arteries
- Golfer’s Elbow Test: Medial Epicondylitis

__ Other, please list specific assessments or assessment areas

Assessment to review ADL independent
Cognitive assessment
Administering standard assessments like COPM, MOHO, AMPS etc
8. What specific intervention demonstrations are most imperative to advance the OT program at this time.

- X_ Therapeutic use of self
- _X_ Building rapport/therapeutic relationship
- X_ Joint mobilization
- X_ Pressure ulcer prevention/seating and positioning
- X_ Adaptive strategies for people with amputations
- X_ Scar tissue massage
- X_ Splinting
- X_ Cognitive behavioral techniques
- X_ Upper extremity range of motion (ROM) exercises
- X_ Upper extremity strengthening
- XX_ Stroke rehabilitation interventions
- X_ Spasticity management
- X_ Prevention of musculoskeletal disorders
- X_ Ergonomics/Body mechanics
- X_ Activities of daily living interventions
- X_ Dressing techniques for people with disabilities
- X_ Energy conservation/Metabolic equivalents (MET levels)
- _X_ Safety and proper use of assistive devices and adaptive equipment
- _X_ Transfer training
- X_ Grading activities
- X_ Aging in place
- __ Other, please list specific interventions

**Fine motor skills to improve hand writing**

9. Are your students aware of research in public access databases (i.e. WHO, OT Seeker)?
   Yes

10. Would the OT program most benefit from a variety of demonstrative videos or a series of related videos on a specific subject?
    _A variety of the demonstrative videos if time will allow so that we can have a bit of everything to consolidate the theories that we are learning._
11. As this will be the last communication before we begin developing the demonstrative DVDs, please include additional comments, questions, or concerns that will help us to determine how to best meet the OT programs needs.

   We will be glad if the videos will focus on Neurological rehabilitations, Rheumatology and geriatrics a bit on managing children with various forms of disability and aspects on mental health management
THIRD NEEDS ASSESSMENT:

On 1 Apr 2015 04:35, "Sundsted, Maria" <maria.sundsted@my.und.edu> wrote:

Dear Ellen,

Good day to you, and we hope you are well! Thank you on behalf of Shalyn, Dr. Haskins, and myself for your insightful information you provided to assist us in developing occupational therapy coursework for the OT program at the University of Ghana. We are currently placing the final touches on the educational resources we have developed, and wanted to communicate with you what we have created and provide opportunity for you to provide additional feedback and/or recommendations.

This package of educational resources consists of 14 Modules, which are intended to provide coursework for approximately 2 hour sessions each, however, can be divided into multiple sessions as needed. Each module consists of an educator handout while some have corresponding student handouts via Powerpoint, class activities via worksheets, case studies, and class discussion questions, as well as selective demonstrative DVDs.

The beginning of each educator handout includes the purpose, activity description, learner requirements, student learning goals and objectives, instructional methods which provide suggestions on how to utilize the module during a class session, and the instructional resources needed to complete module.

The first module consists of explaining healthcare terminology utilized by the International Classification of Functioning (ICF), as ICF healthcare terminology was utilized throughout the modules. The second module describes the OT delivery process including assessment, intervention, and outcomes. The remainders of the modules present information with specific emphasis on the OT delivery process while using ICF terminology. The third module describes the skill of performing activity analysis, while the fourth module focusing on providing students with the opportunity to practice applying the skill of activity analysis. The fifth module discusses using therapeutic use of self and therapeutic modes. Modules six through ten provide students with quick reference handouts to guide students through the OT process of assessment and intervention tailored specifically to four basic populations types including geriatrics, neurological disorders, pediatrics, and mental health. Finally, modules 11-14 consists of case studies to provided students with opportunity to apply acquired knowledge of the ICF terminology, OT process, activity analysis, therapeutic use of self, and knowledge of diagnoses to evaluate and plan interventions to facilitate increased engagement in common meaningful Ghanaian occupations including cooking, caregiving, education, and community mobility.

Please feel welcome to provide any feedback, requests, or recommendations you may have in regards to the above description of the educational resources, as it is our goal to provide resources that will truly be useful in meeting needs of the OT program in Ghana. We are planning to send the final educational resources by June 2015 which will include hard copies via spiral bound booklets and DVD copies of electronic versions of the demonstrative DVDs, educational handouts, and student Powerpoints. What would be the most convenient mailing address for you to receive these products? Please let us know if you have any further feedback, recommendations, or requests in regards to any aspect of these educational resources.

We thank you again for your correspondence, and we look forward to hearing from you!

Maria Sundsted, Shalyn Hample, & Dr. Anne Haskins
REPLY:
On 3 Apr 2015 03:01

Dear All,
Thanks so much for your hard work at developing the resource. Maria and Shalyn well done I hope this has been a very good learning experience for you. Dr Haskin, thanks again for your continuous support to the OT program in Ghana.
The resource from what I have read in the email is very comprehensive and actually meet the need of our program. We look forward to the final product.
The mailing address is as below:

E.A.
School of Biomedical and Allied Health Sciences
College of Health Sciences
University of Ghana
Box KB 143
Korle Bu
Accra
GHANA
WEST AFRICA
Appendix B
Personal Communications
Personal Communication Interview
Dr. Anne Haskins, PhD, OTR/L and Dr Sonjia. Zimmerman PhD, OTR/L
Conducted February 10, 2015

Introductory Questions
1. Please explain the capacity of your involvement with the development of OT in Ghana?
   a. What initiated your involvement in assisting with the development of OT in Ghana?
   b. When did your involvement begin?
   c. How have you been involved, including initial to present involvement?

Person
2. What did you notice about culture-specific values?
3. How would you describe the “Ghanaian” character?
4. What were some common disabilities/illnesses you saw and/or were commonly spoken of in your experience with other healthcare professionals?

Environment
5. Describe the environment of the medical facilities you visited?
6. Describe the environment with regard to the homes in which Ghanaians lived/worked.
7. Did you visit any colleges? What was your experience in the classroom?

Occupation
8. What was a typical class period like?
   a. Student attitudes? (person)
   b. Student to teacher ratio? (environment)
   c. Environmental resources? (environment)
   d. Style of teaching? (occupation)
9. When reflecting on your experience in Ghana, what were the most common occupations you witnessed people participating in/speaking of participating in?
10. What were the most common vocations of Ghanaians?

Closing Questions
11. In your professional opinion, what are the major needs for OT in Ghana?
12. What would you say should NOT be left out of the educational resources being sent to help in the development of Ghana’s OT program?

Appendix C
SWOT Analysis
## SWOT ANALYSIS
This SWOT analysis contains data collected from the literature review, needs assessments, and personal communication.

<table>
<thead>
<tr>
<th><strong>Strengths</strong></th>
<th><strong>Opportunities</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- OT program created September 2012</td>
<td>- OT program development provides opportunity for OT to be integrated into the healthcare system</td>
</tr>
<tr>
<td>- Consultations with Universities in UK</td>
<td>- OT program development provides learning and job opportunities for students</td>
</tr>
<tr>
<td>- Use of World Federation of Occupational Therapist resource</td>
<td>- With current resources and knowledge of resources, the OT program has potential to develop into a successful, sustaining program</td>
</tr>
<tr>
<td>- Students and educators are well-educated</td>
<td>- With available physical resources, students have a place to learn about OT</td>
</tr>
<tr>
<td>- Currently two OT lecturers</td>
<td>- Students have opportunities to learn about evidence-based research through internet access and knowledge of databases</td>
</tr>
<tr>
<td>- 33 students enrolled in OT program total</td>
<td>- With curriculum requirements, student will be equipped for practicing occupational therapy upon completion of the program</td>
</tr>
<tr>
<td>- Basic and applied sciences are taught in the first two years of OT</td>
<td>- Because of the many learning styles the students present, multiple teaching and learning strategies can be used to deliver instruction and promote student learning</td>
</tr>
<tr>
<td>- Classrooms available for learning</td>
<td>- The country of Ghana may be more supportive of OT services due to the recently passed bills</td>
</tr>
<tr>
<td>- Some classrooms are large and adequate, quiet, and comfortable for learning</td>
<td>- The current working occupational therapists in the country of Ghana provide opportunity to deliver OT services to patients in Ghana and learning to students in OT school</td>
</tr>
<tr>
<td>- There is a demonstration room available for use</td>
<td>- Good student motivation and work ethic provides a solid bases for learning and implementing a profession that is not well known in the community</td>
</tr>
<tr>
<td>- ICT centers on campus available for computer access</td>
<td>- There is an increasing need for OT services in the country of Ghana as there are many populations identified with needs, providing an opportunity for OT to be successful</td>
</tr>
<tr>
<td>- Most students have personal computers or laptops</td>
<td>- Positive visions for OT and the OT program provide a solid basis for teaching and program development and sustainment</td>
</tr>
<tr>
<td>- Students are equipped with adequate skills to use computers</td>
<td></td>
</tr>
<tr>
<td>- Internet reliable 80% of the time</td>
<td></td>
</tr>
<tr>
<td>- Resources available such as desks, writing utensils, paper, wheelchairs (few), textbooks, &amp; some adaptive equipment</td>
<td></td>
</tr>
<tr>
<td>- Minimum of 1000 hours of clinical contact required before graduation</td>
<td></td>
</tr>
<tr>
<td>- Students required to complete necessary courses required to earn OT degree</td>
<td></td>
</tr>
<tr>
<td>- Students learn best through a combination of visual, kinesthetic, auditory, paper and pencil, computers, and simulations</td>
<td></td>
</tr>
<tr>
<td>- Current teaching methods include PowerPoint, class discussion, homework assignments, written tests, textbook readings, and practice with other students/faculty</td>
<td></td>
</tr>
<tr>
<td>- Disability Act passed in 2006</td>
<td></td>
</tr>
<tr>
<td>- Mental Health Act passed in 2011/2012</td>
<td></td>
</tr>
<tr>
<td>- Multidisciplinary approach to management of clients and rehabilitation</td>
<td></td>
</tr>
</tbody>
</table>
Currently 3 occupational therapists in the country (2 teaching the program)
- Students complete homework assignments individually, with partners, and in small groups
- Good student work ethic
- High motivation level of students
- Students aware of research in public access databases
- Identified all diagnoses as populations to treat in Ghana including but not limited to musculoskeletal, neurological, orthopedic, rheumatology, mental health, cerebral palsy, etc.)
- Have positive vision for OT in the future regarding involvement of OT in various teaching and regional hospitals in the country and community practice with Ghana Health Services

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Few OTs in the country (all trained outside Ghana)</td>
<td>Number of OT faculty may not be adequate to meet the needs of the students</td>
</tr>
<tr>
<td>Currently two OT lecturers</td>
<td>OT may be viewed as a job opportunity by students as opposed to a passion to help others through the specific profession</td>
</tr>
<tr>
<td>Most OT students did not apply for OT, but rather other courses within the School of Allied Sciences</td>
<td>Limited number of occupational therapists provides a decreased ability to meet the occupational needs of the country</td>
</tr>
<tr>
<td>Classrooms available are shared by other departments when not meeting</td>
<td>The unreliability of resources such as internet, classrooms, etc. may pose challenges in meeting deadlines and accessing material necessary for teaching and learning</td>
</tr>
<tr>
<td>Some classrooms are small</td>
<td>Lack of assessments can lead to a learned inability to accurately assess a patient from an OT standpoint</td>
</tr>
<tr>
<td>Internet reliable 80% of the time</td>
<td>The continued need of assessment and intervention of a large variety of populations could indicate a gap in learning for this OT program and lack of knowledge for practicing as an occupational therapist</td>
</tr>
<tr>
<td>Lack pediatric and handwriting formalized assessments</td>
<td>Due to the unawareness of OT in Ghana, students may not enroll in OT and when practicing, citizens may not seek services</td>
</tr>
<tr>
<td>Identified all diagnoses as populations to treat in Ghana including but not limited to musculoskeletal, neurological, orthopedic, rheumatology, mental health, cerebral palsy, etc.)</td>
<td></td>
</tr>
<tr>
<td>Ghanaian citizens are currently unaware of the role of OT and the services available to them</td>
<td></td>
</tr>
<tr>
<td>Limited input from occupational therapists in the management of mental health and physical disability groups</td>
<td></td>
</tr>
</tbody>
</table>
- Major challenge for OT program is placements for the students for practicals
- Only 3 occupational therapists in the country of Ghana (2 teaching the program)
- First OT class graduation: 2017
- Limited assessment resources
- Limited cognitive assessment
- Limited assessments on ADL independence
- Need videos to consolidate theories and concepts

| - Students may not be able to complete the program if they do not have a placement for their clinical experience |
| - New occupational therapists will not be practicing in Ghana until 2017, which indicates the occupational needs of Ghanaian citizens are still being left unmet |
| - Without the resources needed (assessments, interventions, videos, etc.) the OT program may not be able to sustain itself |
Appendix D
PEO Schematic
**PEO Schematic**

*This PEO schematic contains data collected from the literature review.*

<table>
<thead>
<tr>
<th>Person</th>
<th>Environment</th>
<th>Occupation</th>
</tr>
</thead>
</table>
| Cognitive | - Student’s cognitive abilities to learn  
- Cognitive level of Ghanaian citizens (71.5% literacy rate in Ghana)  
- Individual learning style  
**Spiritual** | - Hard-working  
- Farming culture  
- Hospitable  
- Family oriented  
- Disability culture that perpetuates occupational injustices to people with disabilities (stigma)  
**Socioeconomic** | - Poverty  
- Low daily earnings  
- Can students afford school?  
**Institutional** | - National Health Insurance Scheme (3 types)  
- Disabilities Right Bill  
- Student expectations in the occupational therapy classroom  
- Lack of occupational therapy educators to instruct students  
**Physical** | - The event is learning in the classroom  
- Access to individual computers  
- Internet access  
- Classroom space  
- Lack of adaptive equipment  
**Social** | - Negative perception toward people with disabilities  
**Work** | - Occupational therapy students’ learning  
- Current status and education of occupational therapists practicing in Ghana is limited  
**Self-care** | - The morning routine students engage in to present themselves at school.  
**Leisure** | - Playing soccer  
- Dancing  
- Games |

**Culture**

- Hard-working  
- Farming culture  
- Hospitable  
- Family oriented  
- Disability culture that perpetuates occupational injustices to people with disabilities (stigma)

**Socioeconomic**

- Poverty  
- Low daily earnings  
- Can students afford school?

**Institutional**

- National Health Insurance Scheme (3 types)  
- Disabilities Right Bill  
- Student expectations in the occupational therapy classroom  
- Lack of occupational therapy educators to instruct students

**Physical**

- The event is learning in the classroom  
- Access to individual computers  
- Internet access  
- Classroom space  
- Lack of adaptive equipment

**Social**

- Negative perception toward people with disabilities
<table>
<thead>
<tr>
<th>P x E</th>
<th>E x O</th>
<th>O x P</th>
</tr>
</thead>
</table>
| -How disability stigma affects students/citizens’ engagement in their environment  
-How classroom space and supplies affects students  
-How government healthcare laws affect students/citizens  
-How poverty affects students/citizens  
-How hard-working, hospitable, and family-oriented values affect students/citizens  
-How the environment facilitates or inhibits learning | -Classroom set up effect on student’s learning abilities  
-Government laws that impact student learning  
-How cultural values shape student learning and occupational therapy profession  
-Effects of poverty on the learning of students and occupational therapists  
-Impact of few available occupational therapy educators to instruct occupational therapy students  
-How the classroom has an effect on the students’ ability to engage in/incorporate leisure interests into learning | -How student’s cognition affects learning in the classroom  
-How student’s attitudes, emotions, and perception about healthcare and learning affect learning in the classroom  
-How healthcare affects student learning  
-Student’s physical capabilities for learning  
-How student’s individual learning style affects learning  
-Can students afford school?  
-Do personal factors such as views of disability interfere with an individual’s ability to participate in leisure and self-care occupations? |

The following content was adapted from Law et al., 1996.
April 13, 2015

Ms. Shalyn Hample
University of North Dakota
2751 2nd Avenue, N. Stop 7126
Grand Forks, ND 58203
Email: shalyn.hample.2@my.und.edu

Dear Ms. Hample,

The Permissions Committee has met and considered your request to use Table 4.1 of Taylor: The Intentional Relationship, Occupational Therapy and Use of Self; to create a paraphrased table as a useful handout/resource for students attending the Occupational Therapy Program at the University of Ghana, which you plan to distribute by August 2015.

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