Occupational Science
& Occupational Therapy
UNIVERSITY OF TORONTO

MScOT Educational Conceptual Framework, 2012

Preamble:

In response to the CAOT Accreditation Report (March 2011) of the Department of Occupational Science & Occupational Therapy (Department), and in conjunction with the development of a new Strategic Plan for the Department (October 2011), an ad-hoc sub-committee[1] of the Professional Curriculum Committee was struck in September 2011 to articulate the Department's educational conceptual framework. This document was prepared by the ad hoc sub-committee, in consultation with all core faculty members and with students and community faculty representatives on the Professional Curriculum Committee.

The University of Toronto's ***MScOT Educational Conceptual Framework*** addresses the ***why*** and ***how*** of the curriculum we use to educate students to become occupational therapists. In addition to providing a framework for teaching and learning, the document provides a guide for the renewal of both academic and fieldwork course content and teaching processes. The framework will evolve with new evidence on educational theory and instructional design and with the insights gained by faculty and students. As educators who aim to model reflective practice, instructors are encouraged to discuss their implementation of theory in their course contents and teaching processes with their students.

Our educational conceptual framework builds on the Structure and Flow White Papers (Hall et al., 2001; Cockburn et al., 2007; Dawson, Cockburn & Davis, 2010), and the mission of our Department (2011):

> *Create knowledge of occupation and its enablement, and prepare leaders in practice, research and scholarship to improve the health and well-being of individuals and communities, locally and globally.*

In addition to the resources referenced in this document, we also drew on the results of "Curriculum Conversations" held throughout May-June 2011 with core and status faculty to elicit a broad spectrum of views regarding the curriculum, and on open-ended conversations with key informants, including Professor Sylvia Rodger, Head of Occupational Therapy, University of Queensland and author of *Good practice guides and cases to support curriculum development and renewal in occupational therapy* (2011). The University of Toronto's MScOT Educational Conceptual Framework was ratified by the faculty at the May 2012 Curriculum Retreat.

[1] Committee members and authors: Deirdre Dawson (Chair), Barry Trentham, Lynn Cockburn, & Gail Teachman.

Overview:

The University of Toronto's MScOT Educational Conceptual Framework consists of a definition, a philosophy and values statement, a description of the key learning theories that provide the foundation to our curriculum, and examples of how this framework guides the curriculum as a whole, as well as decision-making regarding prerequisites, course content, instructional methods, and the evaluation of student learning.

Definition:

The MScOT Educational Conceptual Framework is an explicit representation of our educational philosophy, including the concepts, constructs, principles, values, beliefs, and theories that inform our approaches to teaching, learning, curriculum development, curriculum renewal, and the relationships between these.

Philosophy & Values:

We believe that:

- Learning is a life-long, interactive and transformative process.
- Flexible, student-centred pedagogies are critical for developing and fostering leaders.

And that the role of an educator is to:

- inspire
- inform
- challenge
- support
- model
- stimulate problem solving, reflexivity, and critical thinking
- collaboratively discover new knowledge with students

In educating occupational therapists we value:

- excellence, innovation, leadership, collaboration, partnership, occupation, justice, equity, diversity, inclusion, client and family-centredness, integrity, accountability, transparency, life-long learning, critical inquiry, and professionalism

Our purpose is to:

- prepare leaders in occupational therapy practice, research and scholarship to improve the health and well-being of individuals and communities, locally and globally
- ensure that occupational therapy graduates have the knowledge, attitudes, and skills necessary to enable the occupational engagement of all citizens

We expect University of Toronto MScOT students to:

- engage in and be transformed by the learning process
- actively contribute to the educational process by teaching and learning from each other
- mobilize their professional education as change agents at the micro, meso and macro levels of society through practice, research and scholarship in occupational science and occupational therapy

We acknowledge tensions inherent between some of the values and beliefs we hold, and we actively study these tensions to stimulate learning and creativity among faculty and students. Tensions also arise from competing philosophies on the purpose of education. For example, an essentialist[2] educational approach emphasizes educating competent therapists by means of transmitting expert knowledge, which conflicts with the premises of constructivist and transformative learning theories. These latter theories embody philosophical perspectives that value learning as a transformative experience. In these theoretical perspectives the role of educators is to enable learners to be independent problem solvers who appreciate and address the social issues that support or limit the occupational performance and engagement of individuals, communities and populations. We recognize and respect that students come from different academic and cultural backgrounds, are at different stages of learning, have different goals, and will vary in their ability to learn, integrate and reflect on the content within the MScOT curriculum.

Theories on Learning:

Mezirow's transformative learning theory (1991) is foundational to our MScOT educational conceptual framework, and within this overarching approach we draw on Merriam and Caffarella's social constructivism (1999), Giroux's (2010) and Shor's (1996) critical pedagogy, Kolb's theory of experiential learning (1984), Mergel's cognitive neuroscience theory (1998), and Bloom's taxonomy of learning (Bloom et al., 1956). As learning may be understood as an occupation (or a process that incorporates many occupations), we view the learning process as being influenced by person level performance components (cognitive, affective, physical and spiritual in both educators and students), environmental level performance components (physical, institutional, cultural and social) and by the characteristics of the specific learning activity. Some theories explain person level processes (e.g., cognitive neuroscience theories), while others emphasize the environmental aspects of learning (e.g., social constructivism). Bloom's taxonomy characterizes learning activities. We recognize that these theories have overlapping principles (e.g., the need for reflecting on experience) and span several aspects of learning. While our courses incorporate strategies from several of these theories, we frame our curriculum on the overarching principles of transformative learning theory.

[2] Essentialist education philosophy assumes that people learn through the transmission of expert knowledge by a more knowledgeable instructor where there is a focus on techniques and products. Teachers following this approach would provide presentations, demonstrations and modeling (McNay, 2009). A commonly used analogy for this type of teaching is the image of the student as an empty vessel, which the teacher fills with her/his knowledge.

TRANSFORMATIVE LEARNING THEORY…..*……*

Brief Overview:

Transformative learning theory focuses on 'deep learning', that is, learning that occurs with a significant shift in meaning perspectives or in the system of shared beliefs that individuals use to make sense of lived experience (Mezirow, 1991). Transformative learning theory is based on adult learning theory and is grounded by similar theoretical principles and hypotheses (Knowles, 1984):

1. Self-Concept: As individuals mature, they move from dependency to self-directedness.
2. Experience: Adults draw upon their experiences to aid their learning.
3. Readiness: Motivation to learn is influenced by the adoption of new social roles where new learning is required.
4. Orientation: As new knowledge is gained, the adult learner is motivated to apply it in relevant situations where problem solving or new skills are required.
5. Motivation: As a person matures, she or he is motivated to learn from internal factors.

The transformative learning lens we have adopted as a faculty means that we understand that our students enter the MScOT program with knowledge that stems from their particular cultural, religious, educational and social experiences and their individual personal attributes. Our curriculum is designed to move our students to a broader understanding of how the world works, to understanding the value of occupation in that world, and to seeing themselves as occupational therapists. This is achieved by actively engaging the students in queries regarding how we know what we know, and explicit questioning of accepted views of power and authority. Fundamental shifts in their consciousness may occur resulting in new views of family, work, society and the world at large. Theorists of transformative learning suggest that the learner's capacity for compassion, understanding, tolerance and acceptance is greatly expanded using this approach, leading to new ways of interacting with family, work and society (Mezirow, 2000). We strive to ensure our curriculum is truly transformative, and that these changes in consciousness lead to significant changes in our graduating students' actions.

Transformative experiences are more likely to occur when learners gain experiences that are beyond their usual social location. Our fieldwork, in particular, provides opportunities in which students can be immersed in other cultures. We devote substantial resources to providing our students with cross-cultural learning opportunities both within and outside of Canada. Other examples of how transformative learning theory is implemented in our curriculum are given below. In addition, we provide examples of how educators reflect this theory in their teaching and assessments.

An educator in the classroom or in fieldwork using Transformative Learning Theory will:

- engage learners in the examination of diverse sources of information that may influence their worldview and belief system
- establish an environment that builds trust and care and facilitates development of sensitive relationships among learners (Taylor 1998)
- create a "community of knowers", individuals who are "united in a shared experience of trying to make meaning of their life experience" (Loughlin, 1993, pp. 320-321)

- model willingness to learn and change by expanding and deepening her/his own understanding of, and perspectives about, subject matter and teaching approaches (Cranton, 1994)
- model critical self-reflection regarding the belief systems that inform her or his own actions
- promote and enable dialogue on diverse student perspectives to elicit critical reflection
- problematize commonly accepted terms or conventions, e.g., medical versus social models of disability, and the assumptions behind strategies such as chronic disease self-management
- implement varied approaches in the classroom to convey the lived experience of potential users of occupational therapy, e.g., arts-informed methods such as narrative, drama, video, documentary and photographic images that lead to an expanded frame of reference for students
- model the critical examination of evidence, e.g., evidence on neurodevelopmental treatment, or factors that predict return to work outcomes following traumatic brain injury
- discuss how the social determinants of health challenge assumptions about disease causality
- acknowledge that the experiences of learners relate to real life situations

Specific examples of the influence of Transformative Learning Theory in our curriculum include:

- students identifying changes in their clinical reasoning during case-based discussions, as well as documenting changes in their clinical reasoning across the program in their portfolios
- students gaining different perspectives through panels of individuals with diverse abilities, ethno-cultural backgrounds and other characteristics
- students' development of guidelines for transcultural dialogue, completed at the beginning of Term One and revised throughout the curriculum, with the aim to develop a transculturally safe and challenging learning environment
- distant and international health fieldwork opportunities that expose students to role merging practice areas or underserviced populations with follow-up reflective sessions
- use of role-playing, guided imagery, simulated patients and patient partners to engage students in learning about the perspectives of others
- experiential skills labs (e.g., wheelchair mobility lab)
- students' immersion in research where problems are analyzed from different theoretical and methodological stances

Assessments in our curriculum derived from Transformative Learning Theory include:

- the use of reflective papers and portfolios completed within the mentorship course where mentors facilitate an emerging awareness of a professional identity among their mentees
- assignments focused on occupational therapists as change agents, which challenge students to consider their role in bringing about social or organizational change that goes beyond the individual client (e.g. OT Practice 1 policy and OT Practice 3 entrepreneur assignments)
- group projects in which students develop creative solutions to common occupational issues (e.g., technology design project, older adult social issues response seminar)

While Mezirow's (1991) transformative learning theory is foundational to our curriculum, we also draw on other theories to guide our curriculum. In the educational literature, a common way to think about the relationship among the various learning theories is by using an historical frame that demonstrates how the various theories have developed over time. For example, early behaviourist theorists such as Pavlov and Skinner emphasized skill building through systems of rewards and feedback, which then informed cognitivist theorists, for example, Bandura, who sought to explain the internal cognitive learning processes (Snowman, McCown & Biehler, 2012). These theories are based on a more objectivist stance and have lost some prominence with the emergence of constructivist approaches. Constructivist approaches take a subjectivist stance to examine how learning, while constructed internally using cognitive schemas, is negotiated within diverse sociocultural perspectives on what is accepted as reality. According to Mergel (1989), behaviorism and cognitivism are both concerned with breaking down learning tasks and identifying clearly measurable, behavioural objectives. Behaviourist approaches are evident in reinforcing students' contributions during class, tests, receiving grades, and positive verbal feedback. Skill-based learning may benefit from a behaviourist approach (e.g. repetition of neuro-rehab techniques) that is reinforced by the practice partner, client, or supervising therapist. Cognitive approaches inform the breaking down of tasks and teaching from simple to more complex tasks. Constructivism fosters more divergent thinking and acknowledges that students may experience diffuse and lateral learning outcomes that are not easily quantified and measured.

SOCIAL CONSTRUCTIVISM [3]……

Brief Overview:

Social constructivism is based on specific premises about reality, knowledge and learning: reality is invented or constructed through human activity, and knowledge is developed through the interactions of people with each other and the environments that surround them. Learning, therefore, is seen as a social process. Merriam and Caffarella (1999) distinguish between constructivism as a process of creating the meaning of experience, and social constructivism which views meaning-making as a process shaped by social interaction and discourse. Social constructivism leads to a greater focus on self-directed learning. Social constructivism challenges the notion of the learner as a passive recipient of transmitted knowledge and assumes that learners construct knowledge based on internal cognitive processes, social interactions and other experiences. The interaction of the student group and their environment in the creation of knowledge is critical, and, therefore, considerations of culture and context are fundamental in the learning process.

It follows that instructional models based in this perspective will emphasize collaboration among learners within the environments that are important to them. Educational approaches from this

3 Though social constructivism and constructionism are often used interchangeably and while they both speak to the active involvement of learners in "constructing" knowledge the former has its basis in cognitive psychology and emphasizes cognitive processes while the later emphasizes that learning is constructed based on external social processes. *"The word with the v expresses the theory that knowledge is built by the learner, not supplied by the teacher. The word with the n expresses the further idea that happens especially felicitously when the learner is engaged in the construction of something external or at least sharable" (Papert & Harel, 1991, p.3).*

perspective focus on methods that involve learning with others, including reciprocal teaching, peer collaboration, cognitive apprenticeships, and problem-based instruction (Schunk, 2000).

An educator in the classroom or in fieldwork who uses Social Constructivism will:

- appreciate that learners bring prior academic knowledge and social and cultural experiences to the learning environment
- require students to consider the social, physical and policy contexts when seeking possible solutions to individual and social problems
- facilitate a process of critical questioning to build shared understandings
- challenge the notion that there is one solution to each problem

Specific examples of Social Constructivism in our curriculum include:

- case-based discussions where students examine their own understanding of the problems and their contexts, and collaboratively (with student peers, instructors and where possible, clients, families and other informed members of the public) construct potential solutions
- collaborative project development within study and mentor groups leading to papers and seminar presentations
- fieldwork placements where learning is constructed within particular practice contexts
- student portfolios, which offer students an opportunity to construct their professional self through self-reflection and dialogue
- interprofessional educational opportunities where students learn about the profession and practice of occupational therapy and other health disciplines within the context of an interprofessional team

Assessments derived from Social Constructivism:

- emphasize the need for clinical rationales, including contextual analyses of case-based class discussions, written assignments, and examinations
- use group assignments where students build their conceptual knowledge through shared creative problem-solving
- prompt students to identify assumptions that may or may not be shared by others in both class discussions and in fieldwork

CRITICAL PEDAGOGY……

Brief Overview:

Closely linked to transformative learning theory is critical pedagogy. Critical pedagogy is a philosophy of education that endorses and nurtures students' critical thinking (Giroux, 2010; Shor, 1996). Critical pedagogies promote students' learning through cycles of theory, application, evaluation and reflection. Students and teachers engage in questioning 'taken-for-granted' assumptions by unmasking and challenging power inequities and social injustices, and resisting the reproduction of social constraints and hierarchies. Students and teachers value alternate ways of knowing and acknowledge the perspectives of marginalized or under-represented people alongside

more dominant, authoritative scientific knowledge. The goal of critical pedagogy is social transformation. We view the adoption of a critical pedagogical approach as key to the education of future occupational therapists, who will individually and collaboratively advocate and mediate positive social change. Though closely linked to transformative learning, critical pedagogy more explicitly identifies and problematizes the social and power inequities in everyday interactions that shape the lives of the people served by occupational therapists. [4]

An educator in the classroom or in fieldwork who uses Critical Pedagogy will:

- require students to critically examine implicit assumptions, power imbalances, inequities and the social structures that maintain these
- facilitate students' identification of how social locations may further marginalize the people they aim to serve, for example, in their roles as gatekeepers to government funding for assistive devices, occupational therapists may reinforce inequitable social policies
- acknowledge that there are dominant worldviews which maintain concentrations of power and privilege through existing social structures and language
- clarify that society is not always just, and since the mechanisms that sustain power inequities may be invisible to those who are marginalized, an ongoing struggle for equity is required

Specific examples of the influence of Critical Pedagogy in our curriculum include:

- the anti-oppression frameworks workshop held in the mental health foundations course where students are led through exercises that help them to identify their own fluctuating positions of power, privilege and oppression
- student engagement in identifying and challenging professional dominance during clinical problem-solving e.g., the weighting of client self-knowledge versus scientifically derived norms in decision-making in classroom cases and in fieldwork
- educator use of narratives of exemplar change agent strategies used by occupational therapists and others to affect change beyond the individual level
- educator modeling of responsible critical analysis of power structures such as language, economic institutions and social practices that affect one's occupational engagement

Assessments derived from Critical Pedagogy:

- ask how students' understanding of power structures and mechanisms has affected their knowledge of the practice of occupational therapy
- evaluate students' knowledge of critical theory concepts, for example, social structures, social location, and disability activism

[4] Because of their similarities, critical pedagogy influences in the curriculum also are reflected in some of the strategies outlined in the section on transformative learning.

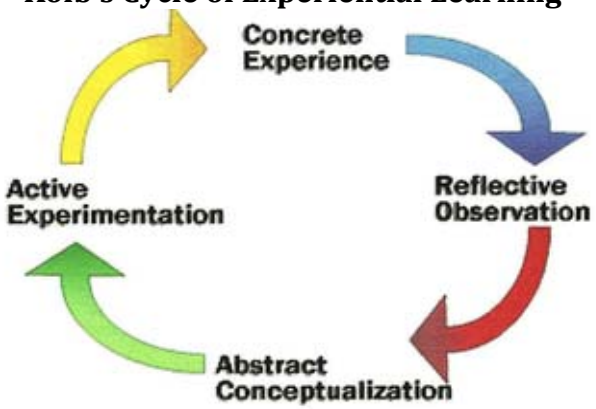
KOLB'S THEORY OF EXPERIENTIAL LEARNING…….

Brief Overview:

Experiential learning can be understood as a "direct encounter with the phenomena being studied rather than merely thinking about the encounter, or only considering the possibility of doing something about it" (Borzak 1981:9). Although there are a number of theorists whose work is based on experiential learning, Kolb's theory of experiential learning (1984) is the most widely known and cited. Kolb focuses on understanding the processes required to make sense of concrete experiences and the associated styles of learning.

Figure 1 shows that experiential learning theory is based on four key elements: (1) concrete experience, (2) observation and reflection, (3) the formation of abstract concepts, and (4) testing in new situations (Kolb, 1984). While Kolb hypothesized that his learning cycle can be entered at any point, he suggested the optimal point of entry is the concrete experience that forms the base for reflection.

Figure 1 [5]
Kolb's Cycle of Experiential Learning



Through the cycle of doing and observing the consequences, the learner analyzes patterns and hypothesizes general principles (abstract conceptualizations), and then tests these in context (active experimentation). Kolb's theory is particularly useful in guiding educators on how and when to introduce theory in the learning cycle. Kolb (1984) believed that individuals are stronger in some aspects of learning than others, and posits the four types of learners that are described in Table 1.

Table 1: Kolb's Types and Characteristics of Learners

Learning Style & Characteristics	Description
Convergence: Abstract conceptualizations and active experimentation	• strong in practical applications of ideas • can focus on hypo-deductive reasoning on specific problems • can be unemotional, has narrow interests

[5] Image by Karin Kirk, Professional Studies, Regis University. Retrieved June 27, 2012 from http://academic.regis.edu/ed202/subsequent/kolb2.htm.

Diverger: Concrete experience and reflective observation	• strong in imaginative ability • good at generating ideas and seeing things from other perspectives • interested in people and has broad cultural interests
Assimilator: Abstract conceptualization and reflective observation	• strong ability to create theoretical models • excels in deductive reasoning • concerned with abstract concepts rather than people
Accommodator: Concrete experience and active experimentation	• greatest strength is doing • more a risk taker; solves problems intuitively • performs well when required to react to immediate circumstances

An educator in the classroom or in fieldwork who uses Kolb's Cycle of Experiential Learning approach will:

- explicitly ask students to reflect, conceptualize, and experiment with new experiences, ideas and skills
- continually add new variables or contingencies into case discussions to assist students in their efforts to generalize or theorize new ideas

Specific examples of the influence of Kolb's Cycle of Experiential Learning in our curriculum include:

- case-based learning
- modeling by lab facilitators to promote students' reflections and conceptualizations while on employing, for example, adult learning principles during ADL training tasks to enable clients' desired skills
- fieldwork (inherently an experiential activity)
- mentorship groups offering students opportunities to experience and receive feedback on essential therapeutic skills such as giving and receiving feedback, group facilitation and mediation
- reflecting on students' fieldwork experiences in the classroom and theorizing applications to future placements and contexts of practice
- using various forms of simulation where students have the opportunity to practice competencies

Assessments derived from Kolb's Cycle of Experiential Learning will:

- use observation of skill development to evaluate student performance
- use simulated clients to assess student performance
- ask students to generalize newly acquired knowledge to novel and variable situations

COGNITIVE NEUROSCIENCE THEORY…….

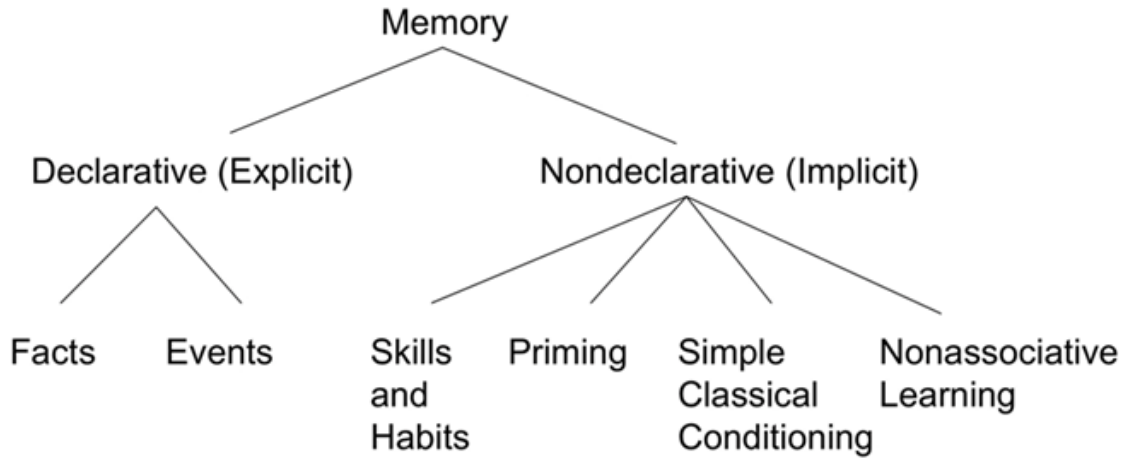
Brief Overview:
Cognitive learning theories emerged in the 1920's in response to behaviourism, which according to early critics was not able to explain all learning (Mergel, 1998). There is evidence that the learning process occurs within the networks and neurons of the brain and that learning process makes permanent changes in the neural architecture of the brain. Discoveries about learning from the cognitive neuroscience field have critical implications for the educational process.

***Memory*:** The manner in which learners attend to, encode, organize, transform, rehearse, store and retrieve information is understood to be critical for learning (Ertmer & Newby, 1993):

1. Memory has several components and systems (Squire & Zola Morgan, 1998), as depicted in Figure 2 below.
2. Memory formation and retrieval involve encoding, storage or retention, and retrieval (free recall, cued recall, recognition).
3. How information is encoded affects retention (e.g. verbal vs. visual; shallow vs. deep processing).
4. Prior learning can interfere with new learning.
5. Our brains learn and process both non-conscious, automated knowledge (implicit memory) and conscious, controllable knowledge (explicit).
6. Working memory, that is, manipulating information while holding it 'on-line', has a very limited capacity and duration.

***Cognitive Load Theory (CLT)*:** Cognitive load theory is derived from the neuroscience of memory, particularly the limited capacity of working memory and the unlimited capacity of long-term memory. CLT asserts that learning by being asked to construct or discover how to solve problems or perform complex tasks overloads working memory and inhibits learning for students who have basic to intermediate levels of relevant prior knowledge (Clark & Clark, 2010). Van Merrienboer & Sweller (2009) have recently described how CLT should inform instructional design in medical education, noting that working memory load is affected by the intrinsic nature of the learning task (intrinsic load) and by the manner in which the tasks are presented (extraneous load). Thus, one approach to enhancing learning may be through reducing the extraneous load by, for example, replacing conventional problem solving tasks with worked examples which have full solutions that students can critique. Another way to manage the intrinsic load by is by building examples or cases from simple to complex.

Figure 2: Components of Memory (Squire & Zola-Morgan, 1998)



An educator in the classroom or in fieldwork who uses Cognitive Neuroscience Theory will:

- reduce the working memory load associated with having to mentally integrate several sources of information by physically integrating those sources of information
- increase working memory capacity by using auditory as well as visual information under conditions where both sources of information are essential (i.e., non-redundant) to understanding
- introduce experiences to allow students to encode information more deeply, e.g., read what is written on slides, encourage students to take notes
- provide students with worked examples of, e.g., treatment plans for them to critique prior to expecting them to develop a treatment plan (Sweller, 1988)

Specific examples of the influence of Cognitive Neuroscience Theory in our curriculum include:

- the use of reflection to deepen encoding and to link present learning to past experiences in order to maximize learning opportunities
- consistent use of complementing audio with visual materials

Assessments derived from Cognitive Neuroscience Theory will:

- be graded from simple to more complex to match development of students' knowledge, attitudes and skills across the curriculum
- consider the amount of information included in each question to prevent overtaxing working memory systems in an exam situation

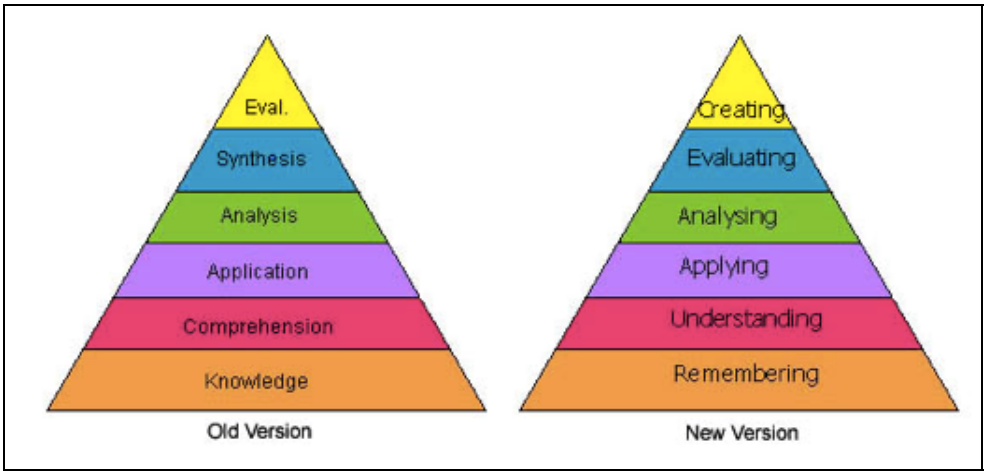
BLOOM'S TAXONOMY OF LEARNING……

Brief Overview:

Bloom's taxonomy of learning (Bloom et al., 1956) is not a theory that explains how people learn, but rather a comprehensive categorization of the developmental aspects of knowledge types and

learning processes. It is a foundational tool in the MScOT curriculum and is used by our faculty to move from theory to practice. Bloom's taxonomy of learning was developed in the 1950s, and it has been used widely since to develop educational goals and objectives. The original taxonomy and the revised version by Anderson and Krathwohl (2001) are shown in Figure 3.

Figure 3: Bloom's Taxonomy: Original & Revised Versions [6]

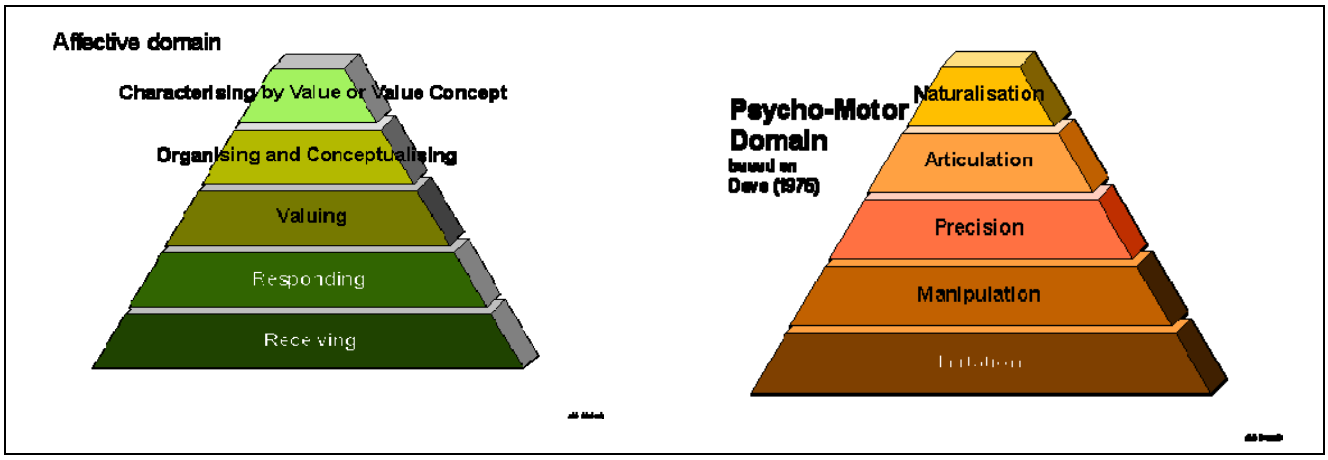


In addition to changing the nouns to verbs, Anderson and Krathwohl's (2001) revised version also incorporates different types of knowledge (factual, conceptual, procedural, meta-cognitive) at each level of learning. Heer (2009) has designed an interactive model of learning objectives that highlights the intersection between the 'knowledge' dimension and the original 'cognitive-process' dimension and provides examples of learning objective verbs at each level. For example, the verb 'list' is at the intersection of 'factual knowledge' on the knowledge dimension and 'remember' on the cognitive dimension, while the verb 'create' is at the intersection of 'meta-cognitive' on the knowledge dimension and 'create' on the cognitive-process dimension.

Later developments have incorporated affective and psychomotor domains, thereby providing a more holistic approach to education (Figure 4). The affective domain is used to characterize student values and attitudes and includes: (1) *Receiving:* being aware or conscious of an event; (2) *Responding*: reacting to an event; (3) *Valuing*: internalizing a belief; (4) *Organization*: commitment to a set of values; and (5) *Characterization*: a change in character or an internalization of a revised value system. The psychomotor domain is concerned primarily with motor skill development necessary for complex motor or technical tasks and includes: imitation, manipulation, precision, articulation and finally, naturalization.

[6] Figure 3 is adapted from R. C. Overbaugh and L. Schulz's "Bloom's Taxonomy" (2009). Retrieved June 27th 2012 from http://www.medschool.vcu.edu/graduate/pgmdir_res/documents/bloomtaxonomy.pdf

Figure 4: Atherton's (2011) Versions of Bloom's Taxonomy: Affective & Psycho-Motor Domains



Bloom's taxonomy's influences in the MScOT curriculum:

The use of Bloom's taxonomy is reflected in the developmental flow of our curriculum and courses as outlined here:

Basic	←→	Complex
Generic	←→	Specific
Teacher-directed	←→	Student-directed
Novice	←→	Expert
Foundation	←→	Occupational Enablement

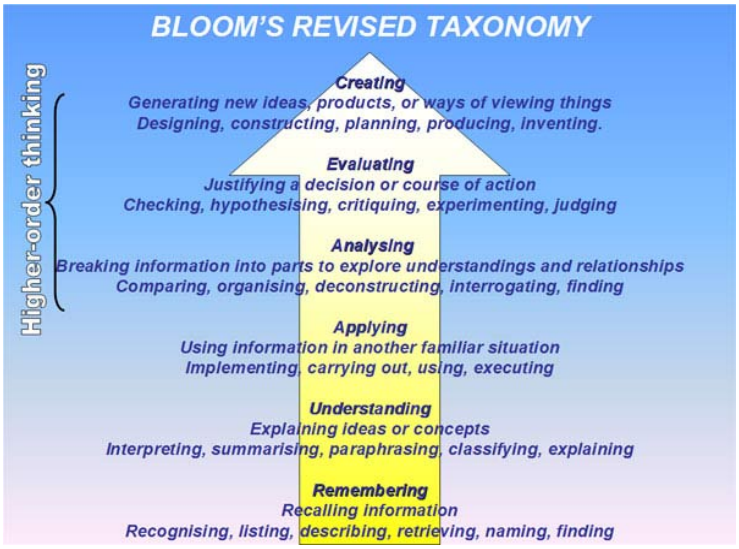
Specific examples of the influence of Bloom's Taxonomy in our curriculum include:

- using the categories and key words of the domains in writing learning objectives for classes and courses
- planning and evaluating how a class, an assessment process or a course incorporates a range of cognitive, affective, and psychomotor learning objectives and competencies
- planning and evaluating whether courses, terms and the program move students' learning from simpler to more complex concepts and reasoning, behaviours and professional behaviours
- provide a "just right challenge" in learning tasks and environments
- the developmental flow of the divergent case method process (Cockburn & Polatajko, 2004)

Assessment derived from Bloom's Taxonomy will:

- use various levels of the cognitive domain of Bloom's taxonomy to develop assessment tools and test questions by identifying behaviours associated with increasing levels of complexity (Figure 5)

Figure 5: Alcorn's Bloom's Revised Taxonomy for Assessment [7]



Summary:

The **University of Toronto MScOT Educational Conceptual Framework, 2012** describes the concepts, constructs, principles, values, beliefs, and theories that inform our overall approach to teaching, learning, and curriculum development and renewal. This document is intended for use by faculty and students to explicitly identify the theoretical assumptions that influence both teaching and learning. Faculty members draw upon specific educational theories and taxonomies to address particular learning objectives for building students' competencies in knowledge, skills and professionalism for entry to occupational therapy practice. Social constructivism, critical pedagogy, Kolb's theory of experiential learning and cognitive neuroscience theory are utilized within the overall principles of transformational learning theory.

Diverse educational theories within the curriculum allow the program to accommodate students' varied learning styles. Our educational conceptual framework explicitly acknowledges the diversity of individuals' learning needs and the breadth of the practice of occupational therapy, and provides a resource for the evolution of curricular content and educational processes. Our educational conceptual framework is dynamic and will evolve with emerging educational scholarship, changes in professional practices, feedback from students and graduates, faculty members' continuous reflection on their educational practices, and ongoing course and curriculum evaluation.

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[7] Margaret Alcorn (nd). Essential Skills Teachers for Excellence, CPD Scotland Retrieved June 27 2012 from: http://www.cpdscotland.org.uk/what/lead/tfe/skillsfortfe.asp

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