Addressing Different Learning Styles

Students who enroll in World Academy of Safety & Health (WASH) courses are diverse in many ways as they come from a variety of backgrounds and form a variety of geographic locations across the world. Just as important is the fact that they are also diverse in how they learn, compartmentalize information and process that information.

Instructors should have a working understanding of the different styles and preferences of learning. How one learns differs from one person to the next and, as an instructor, it is necessary to know what the various learning styles are and, more importantly, how to ensure the course is delivered in a manner that is consistent with the World Academy of Safety & Health (WASH) philosophy that all learning styles need to be utilized to keep all participants engaged with the learning opportunities.

Generally speaking, there are four different learning styles:

Visual Learners
These people tend to learn by seeing. Students who learn in this manner thrive when content is presented, for example, using graphs, diagrams, and the written word.

Auditory Learners
These people tend to learn by hearing. Students who learn in this manner thrive when content is presented, for example, using lecture, listening to classmates explain a concept, or repeating aloud what was told to them.

Kinesthetic Learners
These people tend to learn by physical engagement. Students who learn in this manner thrive when they are able to use their hands to engage with the content.

Reading/Writing Learners
These people tend to learn by the use of the written word. Students who learn in this manner thrive when content is presented in writing or when asked to read the content.
(Malvik 2020).

It is also important to keep in mind that it is rare for a person to learn by just one of these styles. Instead, in most cases, the learner engages with content and learning while using several of the styles. The healthiest and most productive learning takes place in an environment that welcomes participants form every learning style and plans activities in each lesson to target each one of the learning styles.
Keep in mind that most teachers and instructors present material and content in the manner in which they learn best. World Academy of Safety & Health (WASH) instructors should be cognizant of this fact and remain self-aware when teaching – it is crucial that your students are

given the best learning environment possible and that can start with learning opportunities and activities that include each of the learning styles.

Hands-On Learning

World Academy of Safety & Health (WASH) believes and promotes a learning environment in which the students and instructor(s) all cooperate with one another to accomplish the goal of learning the content and skills by all students. The philosophy of incorporating hands-on learning is not mutually exclusive to including activities throughout the course to address all learning styles. As a matter of fact, these concepts, by their very nature, are intertwined. For example, when a student is practicing a skill, the other students are watching the skill being performed and listening to the coaching provided by the instructor – hence, this single activity is addressing students in the class who might be visual learners, auditory learners and kinesthetic learners. If the instructor has the students read the technical steps needed to successfully perform the skill prior to the practice session then the students who learn best by reading have also had their needs met.

Hands-on learning provides students with opportunities to apply content and skills to scenarios presented in the courses as well as to future situations. Students will be asked to take responsibility for their own learning, self-evaluate their progress and learn from the learning process (UC Davis, 2011 and Wurdinger & Carlson, 2010). This process allows the students to develop:
- self-confidence when interacting with the content and skills
- strong horizontal and vertical communication skills
- solid decision-making skills
- problem-solving skills

Integration of hands-on learning into teaching requires deciding what the students should gain from such a learning experience. Once the objective is chosen with the lesson plan and necessary materials complete, the instructor must only facilitate and evaluate the hands-on learning activity.

Motor Skills

A motor skill can be defined as one's body managing its movement. It involves any particular and specific movement(s) of one's body required to execute a certain intended act. Often times, motor skills are divided into two distinct categories – gross motor skills and fine motor skills. Gross motor skills are one's ability to perform daily functions such as walking, running, and swimming. While fine motor skills are one's ability to effectively utilize smaller muscles of the body, in particular the hands, to perform tasks such as eating, writing, and using small hand-held tools like scissors.

Motor skill development in young people is one manner. It is important to recognize and point out that the process of motor skill development in children can be impacted by a variety of factors. Some of these influential factors include genetics, muscle tone and development, overall growth rate, and gender.

Typically, development of motor skills occurs in progressive stages and include specific characteristics at each stage. In most cases, children reach each developmental stage around the same age.

Stages of Motor Skill Development

During an individual's life, motor skill development progresses through seven stages. These are reflexive, rudimentary, fundamental, sports skill, growth and refinement, peak performance, and regression. These stages are closely related to one's age but, not necessarily dependent upon one's age.

The corresponding characteristics of each developmental stage are: improvement, consistency, stability, and persistence and adaptability.

Stages of Motor Learning

Motor learning involves improvement, through practice, of the accuracy of one's muscle movements. As a person's development allows the capability to respond appropriately to their environment, motor learning can become a relatively permanent change – over time and through regular practice, the specific skill or set of skills is acquired and retained.

Cognitive – This phase occurs when the learner is new to a particular task and/or activity. Hence, the learner must dedicate significant cognitive activity to determine the best route or course of action to achieve the desired outcome or goal. The learner will stop using strategies that do not help to achieve the desired outcome. During this phase, considerable progress can be made in a relatively short period of time.

Associative – This phase begins once the learner has determined the best practices and/or most effective strategies to use to achieve the goal. During this phase, the learner will begin to recognize and make progressive changes and improvements in his or her movements – movements will become more consistent and predictable. Learners tend to spend the most time in this phase and, over time, one becomes competent with his or her muscle movements becoming efficient.

Autonomous – This phase may not occur for a learner for several years after he or she begins to learn a skill and/or
work toward a specific goal (i.e. starts the cognitive phase). During this phase, the learner rarely needs to think about his or her actions or movements. Instead, he or she is able to perform the activity or action automatically.

During the childhood years, gender can have an impact on motor skill development. Generally speaking, boys perform better when it comes to object control and manipulation. However, there appears to be no developmental differences when it comes to locomotor skills from one gender to the other.

Influences on Development

Growth: Quantitative changes in one's body structure

Maturity: Qualitative changes that help support one's efforts to progress to more advanced levels of functioning. For the most part, this is intrinsic.

Experience: Factors that impact developmental characteristics during the learning process.

Adaptation: Interaction between natural forces within the learner and the learner's environment – nature versus nurture.

Stress: The imbalance between the learner's capability to accomplish the goal or execute the skill and the demands of achieving the goal or skill places on the learner.

Fatigue: Fatigue sets in when physical activity while working to achieve a goal or skill continues for a long period of time. This can have a significant impact on one's ability to continue working toward achieving the goal or skill. For example, the learner can experience a decrease in awareness; slowing down of both reaction times and speed of movement; disruption of timing; and a general disorganization of thought and physical performance. This can be mental and/or physical fatigue.

Vigilance: Refers to one's ability to maintain attention, awareness, and response to outside stimuli over a period of time. Vigilance ensures one's response to the outside stimuli occurs, is appropriate, and is timely.

Gender: Gender has an impact on the motor skill development timeline. For example, girls develop fine motor skills earlier than boys. While boys ae practicing object manipulation much sooner when compared to girls of the same age.

Pedagogical Principles & Facilitator Prep

Pedagogical Principles

Pedagogical principles are fundamental truths about the practice of teaching. These principles do not outline or provide any method of content or skill delivery nor do they provide a method of

teaching. Instead, these principles are designed to underpin the implementation of a curriculum. In other words, these principles leverage what is known about how people learn and what the brain science research indicates with regard to how people retain information in long-term memory.

World Academy of Safety & Health (WASH) has developed the following pedagogical principles as an indicator of good teaching and learning. These items should not be treated as a checklist when delivering lessons – these items, instead, are the fundamental truths and what underpins the practice of teaching.

- Focus on the purposes of the curriculum
- Challenge the learner(s) to sustain efforts to achieve a goal
- Employ various teaching techniques that address multiple learning styles
- Promote problem solving where appropriate
- Draw on and build upon the learner's previous experience and knowledge base
- Create authentic and/or real-world contexts
- Utilize informal and formal assessment tools
- Make connections between skills, areas of learning, and the learner's experience and knowledge
- Encourage learner (if age appropriate) to take responsibility for his or her own learning
- Support social and emotional development as well as positive and healthy relationship building
- Use positive reinforcement

World Academy of Safety & Health (WASH) believes a good instructor, for example, understands that challenging the learner(s) underpins good teaching. But, this knowledge does not tell an instructor whether a learner needs a moment in silent thought, reflection, or time to process information or that challenging the learner in that moment or on that day is not in the best interest of the learner. This comes from a deeper understanding the instructor has for the most effective methods of learning for the specific learner(s) the instructor has in front of them. This, in turn, is informed by the instructor having a clear understanding of how information is retained in one's long-term memory.

Feedback

Feedback is the response provided to a learner as he or she performs a set of activities to achieve a goal or task – it can be either positive or negative. It is information that the learner usually internalizes and processes as an indicator of his or her level of performance or ability level in achieving the specific goal or task at hand.

There are two general types of feedback a learner receives:

Inherent – This feedback occurs after completing the activity or skill. It is sensory information

that the learner receives and is an indicator of his or her progress toward a specific goal. For example, a person in a swim lesson may know he or she made a mistake if he or she is unable to remain afloat while engaging with a swim stroke. Another example might be a diver who knows he or she made a mistake because, when entering the water, he or she felt pain or the splash was undesirable.

Augmented – This feedback supplements the inherent feedback. In other words, the instructor may provide verbal feedback in the form of positive reinforcement when the learner properly and efficiently executes a skill in the water. Another example may be when the instructor provides the learner with verbal or written constructive criticism aimed at helping to improving a skill so that the time to mastery of said skill is decreased. Indirectly, this feedback should also increase the learner's overall performance.

Facilitation

A skilled facilitator is able to effectively engage the learners with the content while maintaining a student-centered approach. When facilitating learning, ensure the environment is a safe space for the sharing of information. When comfortable, people are more open to the process of learning.

Behaviors of a good facilitator:

- Acts as a servant-leader teacher – focuses on the success of the students
- Understands the difference between student-centered and teacher or instructor-centered approaches to teaching and learning
- Leads the students to the information .
- Asks guiding questions – keeps discussions effective and productive
- Assesses students on application of the skills and information as opposed to memorization of facts
- Creates an inclusive environment
- Effectively and clearly communicates directions
- Joins conversations as a neutral party and elicits student participation
- Makes the process of learning easier
- Link the course objectives to the course activities
- Provides coaching in order to reach a desired outcome for the students

Progressive Skill Building

The process of skill building and development begins with identification of both skill gaps or areas for improvement as well as key competencies (i.e. skills and abilities) of the learner. The instructor then develops a plan to address the gaps and develop the skills within the area(s) in need of improvement.

According to psychiatrist, Milton Erickson, "the process of learning and skill development in any area has four stages: unconscious incompetence, conscious incompetence, conscious competence, and unconscious competence"[7].
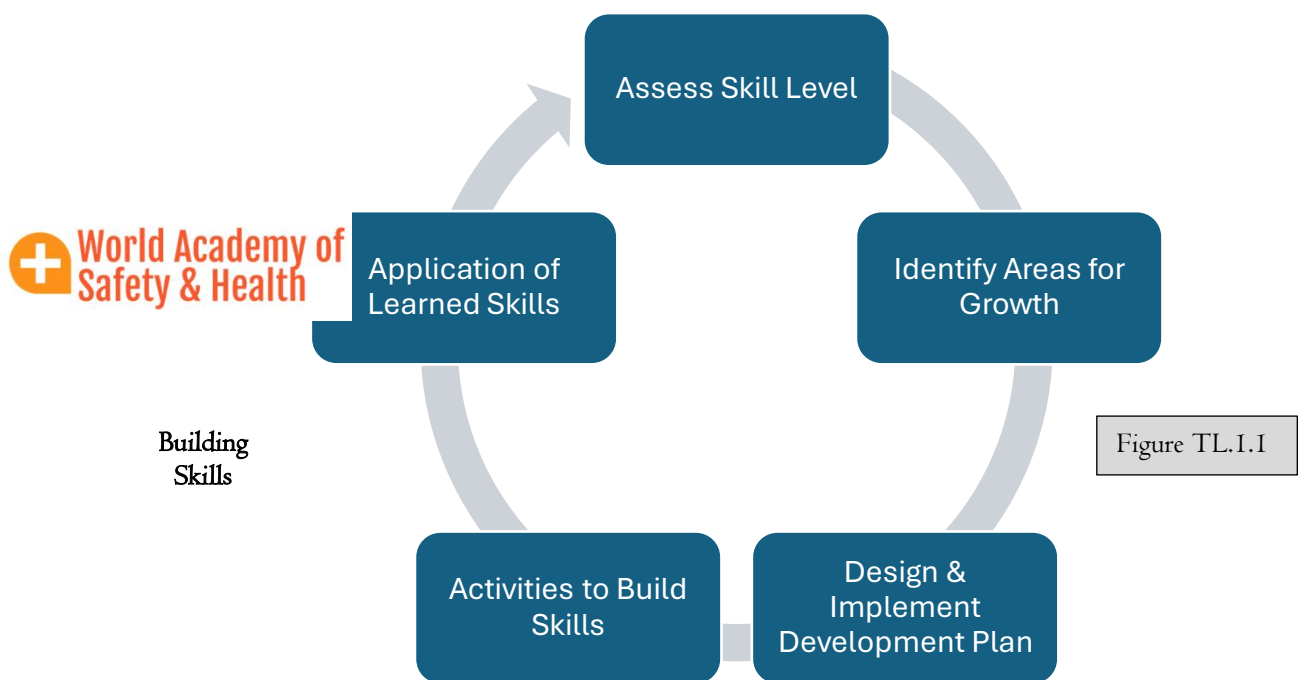
Unconscious Incompetence: As the saying goes, this is when one does not know what he or she does not know. In other words, the individual is clueless about his or her inability and/or lack of skill. Thus, the learner expresses no interest in doing anything differently or engaging in any learning process to correct the skill.

Conscious Incompetence: Eventually, learners move to a point of recognizing his or her own incompetence as it relates to ability or a skill. The learner tends to recognize the value of learning how to execute the skill differently. Thus, the learner is more apt to engage in the necessary practice as outlined by an instructor.

Conscious Competence: The learner has the desire to improve his or her skill level and is willing to practice building and developing the skill(s). At this level of development, the learner must still focus and be intentional about every aspect of learning and practicing.

Unconscious Competence: The learner is now able to perform the skill at such a high level that he or she rarely needs to think about what to do, how to do it, or when to do it. Instead, the learner's ability to execute the skill is natural.

Progressive skill building is when one learns individual and/or smaller subsets of skills that are part of a larger systemic program of skill development. This type of skill building is most effective when the practice of skills s continually measured and the level of difficulty of the practice or of the skill drills is adjusting according to the learner's present ability specific to each skill or smaller subset of skills.

Building
Skills

Assess Skill Level

Identify Areas for Growth

Application of Learned Skills

Figure TL.1.1

Activities to Build Skills

Design & Implement Development Plan

SMART Goals

The acronym SMART when referring to goals stands for: Specific, Measurable, Achievable, Relevant, and Time-Bound. These parameters are assumed to help one attain better results and provides the learner with a sense of direction. Generally speaking, setting SMART goals allows one to plan out the steps necessary to work toward and achieve a goal or, in our case, develop a skill.

Specific: What needs to be accomplished? What steps must be taken to achieve the goal?
Measurable: One's goal(s) must be quantified so that progress toward the goal(s) can be tracked. Setting up benchmarks along the way is a convenient way to measure progress during the process.
Achievable: One's goal(s) should be realistic and something the person can reasonably expect to achieve.
Relevant: Why is one setting the goal he or she is setting? Is it related to a bigger picture? Is the goal helping one work toward a larger goal or skill?
Time-Bound: In order for progress to be measured, the goal(s) must be achievable within a certain set amount of time.

Effective Communication Strategies

Successful instructing requires a 50:50 ratio of content knowledge to good communication skills. Effective communication has both verbal and non-verbal components. Body language and general demeanor has as much impact on instructor's effectiveness as all of the other verbal skills.

Verbal skills that impact one's ability to effectively communicate and positively impact student learning:
- Speaking clearly, loudly and concisely
- Actively listening
- Speaking in full sentences with well-developed and well-organized thoughts
- Speaking at a pace that allows students time to process the information being shared
- Providing students with positive feedback.
- Establishing a rapport with students through use of your sense of humor

Lesson Plan Design

Warm-Up/Drill: The Swim Lesson Instructor (INSTRUCTOR) can chose to engage participant(s) in an activity that asks him/her/them to call upon prior knowledge to answer questions and/or perform a physical skill(s). The activity should be age and swim lesson program and level appropriate This is a great way for the INSTRUCTOR to informally assess each participant's knowledge and skill level.

Prior Knowledge/Skill Review: The INSTRUCTOR should briefly review the knowledge gained and skills acquired during the previous lesson. The INSTRUCTOR may choose to present this in any one of multiple ways: informal discussion; informal guided question and answer; demonstration of skills; peer to peer practice.

Introduce New Knowledge/Skill: The introduction of new skills can be approached in one of several ways and the INSTRUCTOR should gauge the overall "personality" of the group along with the experience level of participant(s) as a guide in making a decision as how best to present new skills(s).

The INSTRUCTOR can:
- Verbally explain the skill(s)
- Demonstrate the skill(s)
- Allow participant(s) to try the skill as you are verbally explaining it
- Show a brief video clip of the skill being executed
- Explain, demonstrate, re-explain

Practice New Skill: Once the introduction s completed, participant(s) should be provided time to practice the new skill(s). This should be accomplished by first using guided practice followed by peer-to-peer practice (if and when age and lesson/level appropriate). The complexity of the skill and participant(s) experience and skill level are, typically, the determining factors for the amount of practice time required. However, this is not an exact science and the INSTRUCTOR should rely on his/her own assessment of participant progress.

Knowledge/Skill Assessment & Exit Ticket:

Participant practice with INSTRUCTOR feedback are critical components of each lesson and the INSTRUCTOR should make all reasonable efforts to provide feedback during each part of each lesson.

The WASH program are progressive in nature. Therefore, the INSTRUCTOR must always remember:
- Skills presented in previous lessons into all future lessons (whether explicitly listed in lesson plan or not).
- The sequence of the presentation of skills is designed to build upon what was previously taught
- No participant should be moved along in the program unless and until the skills at the current category and level are performed to standard.
- INSTRUCTOR should freely split lessons in this manual into multiple lesson sessions as needed and should also freely repeat lessons as many times as s needed for the participants to become proficient with the skills presented in the lesson.
- To provide positive reinforcement and continual verbal praise to participants.