

## **Adapting adult learning theory to support innovative, advanced, online learning - WVMD Model**

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### **ABSTRACT**

With innovations in technology, adult educators can begin to create learning opportunities in very expansive terms. But, innovative, technologically advanced learning environments still benefit from a solid foundation in adult learning theory, instrumental theories like John B. Watson's Behaviorism, Lev Vygotsky's Social Development Theory, Jack Mezirow's Critical Reflection and John M. Dirckx's Nurturing Soul in Adult Learning. These theories should serve as the foundation for an enriched online learning experience. The following paper will discuss and demonstrate how to build an innovative online course that has a significant foundation in key adult learning theories. Specifically illustrating what Behaviorism, Social Development Theory, Critical Reflection and Nurturing the Soul looks like in the online classroom and how to merge established learning knowledge with advancing technology so adult educators can implement a broad vision of opportunity.

Keywords: Behaviorism, Social Development, Reflection, Adult, Learning and Innovation



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## INTRODUCTION

“Tell me and I forget. Teach me and I remember. Involve me and I learn.” – Benjamin Franklin

Mr. Franklin’s famous quote is meaningful because it clearly defines a critical component of effective learning. Mr. Franklin identifies that telling and directing are the simplest methods of instruction whereas involvement of the learner in the learning process, results in the development of new information and new skills for the protege. So, Mr. Franklin’s quote is describing the instructional deference’s between basic learning experiences and advanced learning experiences. At a basic level, learning in some ways is an instinct, something possessed by all individuals, to seek meaning and understanding in their everyday lives. Have you ever watched a newly mobile baby, their curiosity is endless as they explore their environment? Likewise, a toddler that is develop language, from the beginning the newly vocal toddler seeks to know “why” to everything. Certainly, for most of us, the curiosity and questions continue as we grow, and our minds are constantly engaged in ideas, fact finding, assessment of experiences and gathering of information. And, as we reach adulthood learning is no less dynamic or engaging, rather equally valuable and it is important to note, effective adult learning is guided by unique learning principles. While child learners are often involved in pedagogical teaching philosophies like instructor driven learning environments, instructor directed learning experiences and instructor facilitated assessment, adult learners benefit from the opportunity to direct much of their own learning, from selecting learning topics to self-assessments. The recognition of unique adult learning principles was introduced into the research literature when, in 1968, Malcolm Knowles, distinguished professor of adult education introduced the term Andragogy. Specifically, Knowles identifies that adult learners are different from children learners and adults value self-directed learning, have a vast reservoir of experiences as their own personal learning resource, seek problem solving through learning, want to learn about topics relevant to their lives and they possess internal motivation (Knowles, 1990). Succinctly, adults look for ways of understanding experiences in real time, pursuing attainment of skills that can help them navigate the challenges of their life (Goffman, 1959).

Adult learners, sometimes referred to as non-traditional university students, have some common characteristics like they often have full time employment, dependents and are generally 25 years or older. And, individuals with these characterizes, the non-traditional adult learners, are a growing presence on college campuses and now represent a significant percentage of the undergraduate student population (Ross-Gordon, 2011). Consider, from 2000 to 2012 enrollment of students over the age of 25 increased by 35% (NCES, 2016) and it is projected that by 2019, the number of students over age 25 will increase by another 23% (Hess, 2011).

Universities are responding to the increasing non-traditional student enrollment with the expansion of distance learning options. In 2016, it was reported that the number of, “online courses grew to 5.8 million nationally, continually a growth trend that has been consistent for 13 years,” (OLC, 2016). So, there are more and more adult learners attending the university and one of their preferred learning methods is the online classroom, as reflected in the increasing numbers of online course offered across the country. With increased course offering each semester, it is important to create checks and balances to verify the quality of the online learning experience. One way to ensure quality learning is to maintain an online educational experience with a foundation in adult learning theory. But, do traditional adult learning theories translate easily to the online classroom? And how do we align the understood underlying principles of

adult learning with the online learning environment? The following paper will examine John B. Watson's Behaviorism, Lev Vygotsky's Social Development Theory, Jack Mezirow's Critical Reflection and John M. Dirkx's Nurturing Soul in Adult Learning and specifically how these theories should serve as the foundation for an innovative and advanced online learning experience.

## BRIEF DESCRIPTION OF THE THEORIES

### John B. Watson's Behaviorism

John B. Watson (1878-1958) was an American born psychologist recognized for establishing the psychological school of Behaviorism. The Yale University archives contains letter correspondence between early behaviorist John B. Watson and Robert M. Yerkes, another distinguished American Psychologist, most noted for his work on comparative psychology and intelligence testing. The two exchanged letters regarding Watson's development of Behaviorism in which Watson says in a letter:

I came up through philosophy into introspective psychology, ran the laboratory at Chicago for years, doing both my animal work and looking after the problems and teaching straight introspective psychology. I had to put away all outside thought and fight to make introspective psychology scientific, and I have had many rows and arguments with biologists and others trying to make my points. The first few years at Hopkins I had to do the same thing, running both the human laboratory and the animal. Finally, my stomach would stand no more and I took the plunge I did in 1912.- John Broadus Watson, in a letter to Robert Yerkes (Plaud, 1991).

And in 1913, Watson promoted this change in psychology through lectures given at Columbia University. In his lectures, Watson said, "The time seems to have come, when psychology must discard all reference, to consciousness." And as time passed, John B. Watson became something of a 1920s "celebrity" psychologist, publishing a series of self-help manuals promoting behavioral engineering as a potential foundation for personal peace and social order (Reed, 1989).

Watson wanted a complete break or thorough separation between psychology and mentalism and philosophical concerns. With his pursuits, the behaviorist began to gain support and in 1913, Watson published the article entitled *Psychology as the Behaviorist Views It*. This article establishes the underlying assumptions regarding Behaviorism.

1. All behavior is learned from the surroundings.
2. Psychology should be a science with theories supported by experimentation through controlled observation.
3. Behaviorism is primarily concerned with observable behavior. Internal events like thinking and emotion should be discounted.
4. There is a little difference in the learning that occurs in humans and other animals.

5. All behavior, no matter how simple or complex, can be reduced to a simple stimulus-response learner association.

### **Applications in Adult Education**

In summary, Behaviorism is a learning theory supporting the idea that behavior can be controlled or modified based on the preceding or following reactions to behavior. So, in the learning experience a behavior will occur if given the right environment and a behavior is only likely to reoccur based on the consequences that follow, either reward or punishment. An advantage of Behaviorism is the ability to clearly define the intended behavior and then create an environment that will measure the behavior, support the behavior and foster reoccurrence.

Behaviorism is, from a scientific standpoint, looking for simple explanations of human behavior.

As an example, consider an online algebra class. First, the instructor creates a video and posts the video in the online classroom showing the learner how to solve an algebra problem, then the problem will be assigned to the student. The student is asked to create a video of the process they use to solve the problem. The student is told if they solve the problem, they will receive an immediate electronic medal. With ten electronic medals, they will receive extra credit in the course. This is a new algebra problem to the student. None of their previous learning has prepared them to complete the problem. What will they do? This depends on their previous experiences with math. The student will apply their previous math strategies to solving this equation. Suppose the student has 10 attempts, learned and unlearned responses and through this process the student solves the math problem. The time it took the student to solve the problem was 15 minutes. Once solved, the student receives an electronic medal. The next time the student is given the problem, they make fewer mistakes and solve in 5 minutes. In three trials or less the student will be able to solve the type of problem rapidly. The student's ability to complete the problem with increased speed is a function of frequency and regency (Watson, 1930, p. 204). In the online classroom, assignments should be structured such that desired student behaviors can be defined and are directly scaffolded by the assigned work. The student's developmental behavior and growth should be observable and desired student performance should be rewarded.

### **Lev Vygotsky's Social Development Theory**

Lev Vygotsky (1896-1934) was a Russian born Psychologist who gained global attention with his 1962 publication of his Social Development Theory, one of the foundations for constructivism. Vygotsky's Social Development Theory (SDT) introduces two major principles:

1. Cognitive development is limited up to a certain extent or within a certain range, at any given age of the individual.
2. An individual's full cognitive development requires social interaction.

Three themes support Vygotsky's SDT principles: Social Interactions, The More Knowledgeable Other (MKO), and the Zone of Proximal Development (ZPD).

### **Social Interaction**

According to Vygotsky, cognitive, conscious intellectual activity, is a result of reciprocal interaction exchanges between individuals and society. Just as society is shaping the individual,

the individual is shaping society. Beginning as children we cannot learn without some interaction with things or people. Rather through exploration, communications and observations with others we gradually grow and develop. And social interactions continue to play a fundamental role in our cognitive development as we age. Vygotsky believes development is preceded by social development, stating: “Every function in the child’s cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (inter-psychological) and then inside the child (intra-psychological)” (Vygotsky, 1978). To summarize, social exchange is required for learning and social interaction is necessary to function and become fully developed.

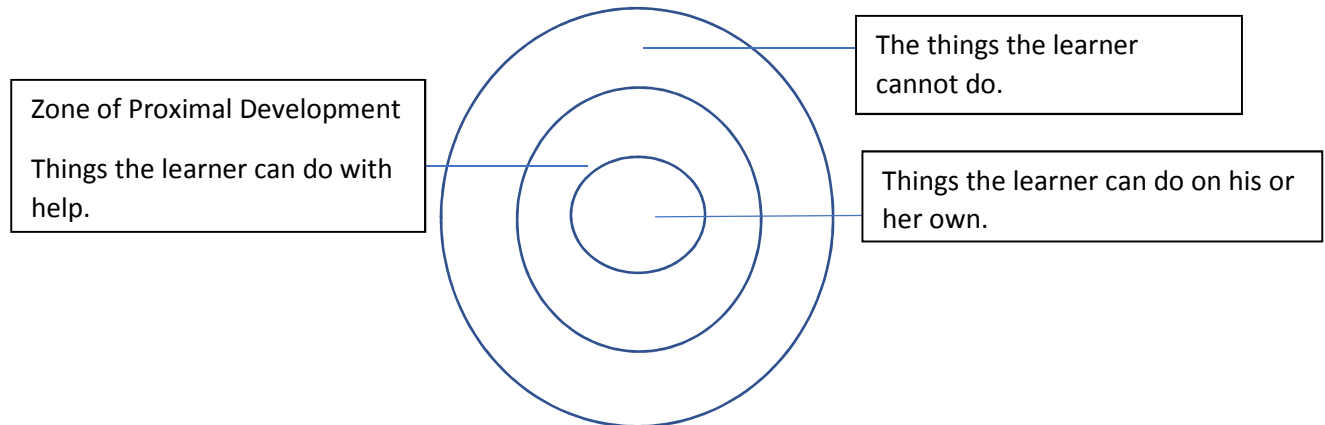
### **More Knowledgeable Other (MKO)**

When we have something new to learn, we often seek a knowledge expert to help us gain new information and apply new skills, we are seeking a mentor or as Vygotsky would say, a More Knowledgeable Other (MKO). The MKO is any individual that has greater understanding or a higher skill level than the learner, with respect to a concepts, process or task. While the MKO can be a peer, a younger person or even technology, most often the MKO is a teacher, coach or older adult. Although, self-initiated learning and discovery can be effective, learning will become increasingly productive and contribute to cognitive development when supported by a more knowledgeable other.

### **The Zone of Proximal Development**

The MKO works in conjunctions with Vygotsky’s Zone of Proximal Development (ZPD). The ZPD is something of a gap analysis, where the learning facilitator identifies the learner’s ability to perform a task independent and at what point the learner will require MKO support and guidance to complete a task. Vygotsky claims it is the space between independence and requiring guidance, the ZPD, that learning occurs.

As a visual for the ZPD, consider an inner circle that represents what a learner already knows and the outer most circle that represents what the learner does not know. The middle circle represents what the learner can achieve or discover on their own. The inner circle, the gap, between independence and full support is where learning occurs. Within this zone, the learner is most responsive to instruction and coaching from the MKO. The MKO should provide guidance and allow the learner to develop their own skills, by fostering independence the MKO will help the learner gain higher mental functions faster.

**Figure 1: Vygotsky's Zone of Proximal Development**

### Applications in Adult Education

The Social Development Theory (SDT) supports active learning, directed by students, facilitated by teachers where learners are encouraged to construct their own meaning. With the SDT, learning becomes an interactive and dynamic process for the instructor and the student. As an example, consider an online management student that emails the instructor saying they do not understand the weekly content discussing Elton Mayo's 1924 Study at the Hawthorne Plant. Instead of directly defining and restating Mayo's Theory, the instructor sends back a series of pictures that show a motivational work environment and then the instructor asks the student to recall a positive working experience and if their manager was highly communicative or rarely communicative. From the pictures and the reflection on their own experiences, the student will begin to understand Elton Mayo's Hawthorne Effect and Mayo's conclusion that employees need attention, recognition and support to be productive and satisfied at work.

### Jack Mezirow's Critical Reflection

Jack Mezirow (1923-2014) developed the Transformative Learning Theory (TLT), explained as "constructivist, an orientation which holds that the way learners interpret and reinterpret their sense experience is, central to making meaning and hence learning" (Mezirow, 1994, p. 222). At its core, Transformational Learning is a developmental process that requires significant learner engagement. Mezirow describes the Transformational Learning process in this way, "learning is understood as the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one's experience in order to guide future action" (Mezirow 1996, p. 162).

The theory recognizes two types of learning: communication and instrumental learning. Communication learning describes how individuals, "communicate concerning values, ideals, feelings, moral decisions, and such concepts as freedom, justice, love, labor, autonomy, commitment and democracy" (Mezirow 1991, p. 8). Instrumental learning focuses on cause and effect relationships through task-oriented problem solving.

In addition to the two types of learning in TLT, the learning is examined further through sub-categories of leaning perspectives, schemes and structures. Meaning perspectives are a "broad sets of predispositions resulting from psycho-cultural assumptions which determine the

horizons of our expectations” (Mezirow, 1994, p. 223), while meaning schemes, are “made up of specific knowledge, beliefs, value judgments, and feelings that constitute interpretations of experience” (Mezirow 1991, pp. 5-6). And finally, meaning structures are developed from reflection, specifically, “reflection involves a critique of assumptions to determine whether the belief, often acquired through cultural assimilation in childhood, remains functional for us as adults” (Mezirow, 1994, p. 223). In other words, reflection is essential for learning and through reflection we begin to understand ourselves more and as we understand ourselves we can organize and learn new information. Ultimately, Mezirow’s Theory is an examination of people, their worldviews and what leads people to change their view of the world (Christie, Carey, Robertson & Grainger, 2015).

Finally, to support Transformative Learning, the learning environment must:

- Offer opportunities for critical thinking. Critical thinking can be fostered by providing content that introduces new ideas through journaling, critical assessment of personal views or discussion with classmates.
- Offer opportunities for the learners to interact with other learners simultaneously engaged in the same transformative experience.
- Support a community of learning as transformation often occurs in community where learners are engaged in the exchange of ideas.
- Provide opportunities for the learner to apply their new perspectives.
  - To complete a transformative learning experience, students generally require a final step of actively acknowledging their new belief.

### **Applications in Adult Education**

Transformational learning utilizes “disorienting dilemmas” to challenge learning’ thinking, followed by critical thinking and introspective questioning regarding their underlying beliefs and assumptions about the world. “To facilitate transformative learning, educators must help learners become aware and critical of their own and others’ assumptions. Learners need practice in recognizing frames of reference and using their imaginations to redefine problems from a different perspective. Finally, learners need to be assessed to participate effectively in discourse,” (Mezirow, 1997, p. 7).

Consider a business student taking a college course in Ethics and Sustainability. Prior to beginning the course, the student believes a business cannot be profitable and charitable at the same time. She is certain of this belief because her family has owned and operated a business for many years. Her family business requires a very lean budget and at this time could not make payroll and give additional funds to charity. As a semester long assignment, in the Ethics and Sustainability Course, this student with her classmates, will examine the relationship between sustainability, profitability and philanthropy. The assignment will begin by asking students to research one company that is based in philanthropic actions like Tom’s Shoes. Their research regarding the philanthropic organization’s actions and profits will serve as preparation for the second half of the assignment, an interview with a CEO from a local business regarding their views on philanthropic organizational activity. Students will be placed in teams and asked to share their project progress throughout the semester. Finally, the instructor will share specific feedback from industry experts like the following:

- “When you support your community your business is healthier,” (Neves, 2010).

- “A 2010 Hope Consulting study of wealthy investors found over \$120 billion in potential investments in mission-driven companies, the likes of which are candidates for benefiting corporation status,” (MetroFocus, 2011).
- “As long as a brand chooses a social cause that fits their demographic, such as Yoplait supporting breast cancer research, the brand can utilize the cause in order to increase profits and make the company look better,” (Thompson, 2012).
- “Companies use charitable giving programs to improve their competitive position, which enhances financial performance,” (Tonello, 2011).

Through the student’s initial research, class discussion, local interviews and instructor offered expert perspectives, the student’s understanding of the role of organization, philanthropy and profit will likely shift. The instructor and classmates will facilitate discussions regarding how the newly obtained information may contrast with previous personal experiences. The student will be asked to reflect on and consider these contrasts. Upon completing the semester project students will be asked to write their own summary statement defining a corporation’s role regarding profit and philanthropy. The summary statements will be discussed in small online groups with classmates and the final step will be to present personalized final conclusions with the class. Overall, the goal of transformation learning is a “paradigm shift” in the learner’s understanding of the world around them that directly impacts their future actions.

### **John M. Dirx’s Nurturing the Soul in Adult Learning**

October 6 through 9, 2005, Michigan State University, held the Sixth International Transformative Learning Conference and in a full conference meeting, Jack Mezirow and John Dirx discussed where their theories integrate in the session, “Whole Group Learning: Integration of Theories.” During which, the two theorists examined variations and consistencies between their perspective of transformative learning. Mezirow’s transformational learning process is rational and based on the learner’s frame of reference, “Here is how I see the process of transformative learning. This rational process of learning within awareness is a metacognitive application of critical thinking that transforms an acquired frame of reference—a mind-set or worldview of orienting assumptions and expectations involving values, beliefs, and concepts—by assessing its epistemic assumptions,” (Dirx and Mezirow, 2006). In contrast, John Dirx’s transformation learning view is subjective, rooted in the learner’s sense of identify and how the individual sees their soul (Dirx and Mezirow, 2006). Dirx says, “The perspective on adult learning from which I have been working for the past 20 years reflects a focus on the nature of the self, the various ways we have come to think about and understand our senses of self, our senses of identify, our subjectivity,” (Dirx and Mezirow, 2006). “I have come to refer to this view of transformative learning as soul work or inner work,” (Dirx, 1997).

John M. Dirx, current Professor and Mildred B. Erickson Distinguished Chair (Emeritus) in Higher, Adult and Lifelong Education at Michigan State University has made significant contributions to research regarding the emotional and spiritual dimensions of transformative learning. Through his research, Dirx has expanded upon the emotional dynamics that develop within adult engaged in learning and ultimately Dirx seeks clarity regarding how educators can support the emotional dynamics of the learning process in a meaningful way. Dirx, says of his work with adults, learning and emotions, “I have come to refer to this view of transformative learning as soul work or inner work (Dirx, 1997).



Many researchers support or agree with Dirkx that emotions are a part of the learning process and part of our everyday experiences (Callahan, 2002; Dirkx, 2006; Perry, 2006; Reeve, 2001; Wolfe, 2006). “Emotions are important in adult learning because they can either impede or motivate learning” (Dirkx, 2001, p. 63). People that are experiencing anxiety, discomfort or fear may be unable to learn (Perry, 2006). Emotions can be motivators, create purpose and shape learning context (Merriam & Caffarella, 1999). Emotions can alter our thought patterns and impact the experience of learning (Opengart, 2005). Emotion plays a critical role in the construction of meaning and knowledge of the self in the adult learning process (Dirkx, 2001). “Through the experience of emotions, [we] come to recognize what is cognitively and affectively of value,” helping determine how and why we respond to the world around us (Dirkx, 2006, p. 31). Finally, emotional, response to internal and external stimuli, is part of the human experience and as learning occurs within the human it is impossible to separate emotion from the learning environment (Brookfield, 2006; Lehman, 2006).

### **Applications in Adult Education**

“Those engaged in online learning deal with the effects of emotion on a daily basis, whether in designing instruction, teaching, or learning online,” (Cleveland-Innes and Campbell, 2012). Educators can use the power of emotion to affect learning (Wolfe, 2006). One-way educators can use the power of emotions to affect learning is to support learning communities in the online classroom. Many researchers have identified the value of learner driven community as support system in the online classroom (Shakelford and Maxwell, 2012) (Shea, 2006)(Rovai, 2002). Shakelford and Maxwell (2012), published a study, “Sense of Community in Graduate Online Education: Contribution of Learner to Learner Interactions,” examining which type of interactions are most predictive of students’ sense of community in an online classroom. The researchers identified exchanges between learners like introductions, collaborative group projects, contributing personal experiences, entire class online discussions and exchanging resources as contributing the most to learner’s sense of community.

Rovai (2002) is agreement with Shakelford and Maxwell that a sense of community can foster emotions in the online learner, specifically she reports an online learning community can minimize online student’s feelings of disconnect, distraction, isolation or lack of personal attention which can affect a learner’s persistence and ability to learn in an online environment. Rovai, elaborates that a classroom community can be defined in four dimensions: trust, spirit, interaction and commonality of expectations of goals. The online learner will be managing all kinds of emotions from self-awareness to trust and the instructor will be building or destroying emotions with consistent behaviors or encouragement or absence, disconnect or chastising. In summary, “As an instructor, it’s crucial that you set up the learning situation in a manner that arouses learners’ feelings of security, well-being, and self-confidence. It’s equally important to challenge them without threats, intimidation, or pressure” (Weiss, 2000, p. 3).

There are at least two ways to build or create an online classroom that is supporting positive emotions like team, trust, development and spirit and minimizes emotions like disconnect, isolation and distraction. The first, is for the instructor to lead with consistency, openness, willingness to dialogue, encouraging comments, supporting teams and collective decision making. Consistent, open, dialogue will help students gain comfort, security and trust in the online learning community. Second, the instructor must create a course where there are opportunities for the students to experience introductions, collaborate, contribute personal

experiences and exchange resources. This can occur with discussion threads, group wikis, group blogs and team resource summaries. With these assignments, rooted in a classroom of communication, consistency and openness, the instructor is striving to facilitate positive emotions that support a healthy learning environment.

### **HOW ARE THE THEORIES USED TO SUPPORT INNOVATIVE, ADVANCED ONLINE LEARNING?**

To summarize the theories:

- Watson seeks to measure changes in behavior to acknowledge learning.
- Vygotsky believes learners should be engaged and active in their learning experiences, where they have social interaction and the MKO is scaffolding learning not directing learning.
- Mezirow encourages reflection in which learner's review experiences and their interpretations of the experiences, with this information they create meaning which can lead to changes in behavior.
- Dirkx supports expression of emotion within the learning experiences. When emotions are included with learning, there is potential for the learner to experience deep involvement in the construct of new meaning and new knowledge.

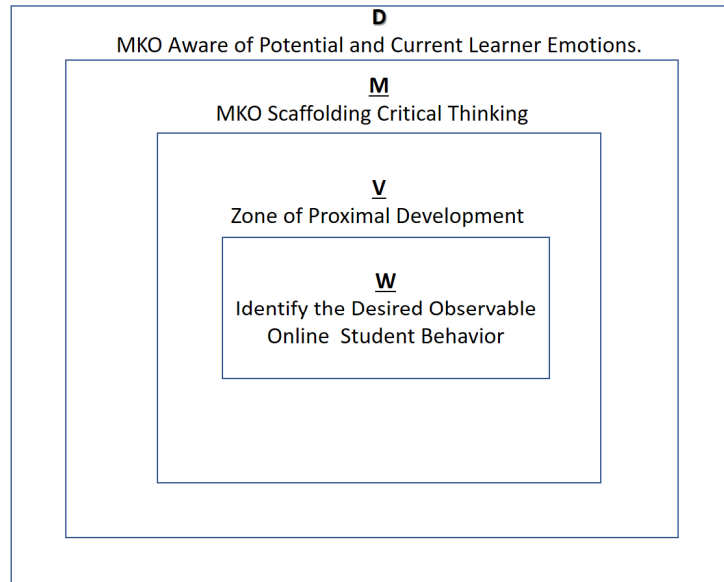
The online classroom is often set up to offer content for which the learner is, in many ways, independently responsible for reviewing, understanding and applying. Assignments such as readings, papers and tests usually are solo learner functions and completed in greater isolation for the online learner.

The author proposes applying Watson, Vygotsky, Mezirow and Dirkx to the standard online classroom as "check list" for course development, projects or assignment alignment with adult learning theory. An online classroom with a foundation in Watson, Vygotsky, Mezirow and Dirkx would be a classroom where the instructor and the learner/learners are seeking observable changes in behavior as indicators for learning. Where the instructor and the learner/learners are engaged in ongoing social interactions to co-design the course and the instructor is scaffolding experiences where the learners are taking leadership. Where the instructor and learners are using reflection not only on course content but on past relevant experiences seeking understanding and interpretation of the experiences with intent of developing new ideas and new perspectives. Finally, the instructor and learner are aware of and encouraged to express emotion regarding the development process of meaning and knowledge gained in the course.

The following is the Online Adult Learning Course and Assignment Learning Alignment Model, WVMD Model, and it can be applied to a complete course, a course project or course assignment. The application encourages the instructor to consider if the course, project or assignment is thoroughly based in adult learning theory and appropriately aligned to support the needs of online learners.

**Figure 2: Adapting Adult Learning Theory to Support Innovative, Advanced, Online Learning**

**Waton Vygotsky Mezirow Dirkx (WVMD) Model**



**Two Examples of WVMD Application**

As an example, consider a business management course where the online student is to demonstrate an understanding of fundamental accounting. To check for thorough application of adult learning theory in this assignment, the instructor should move through the WVMD model. First, W, the desired observable behavior would be to create a basic balance sheet from provided instructor information. Next, V, the students have had instructor led experiences reviewing balance sheets but have not completed a balance sheet problem on their own, the project will be in their Zone of Proximal Development. Third, M, the instructor will not directly answer questions, rather scaffold critical thinking regarding the completion of the balance sheet assignment. If students ask questions, the instructor will direct the students to recall similar course video exercises that should offer some support and previous experiences that can help the student complete the assignment. Finally, D, the instructor will maintain a positive classroom environment, allowing questions, encouraging students and creating online group discussion so classmates can review what steps, in the balance sheet process, they did well and where errors may have occurred. These discussions will be ongoing, occur within their learning community of peers and positive feedback and communication strategies will be modeled in each online learning group by the instructor. All learning students will conclude the balance sheet problem with brief writing reflections regarding their learning experience and the new skills they obtained.

As a second example, consider a writing assignment, a common collegian assignment of a book review. Often, students will be assigned a book to read that is relevant to course content and then they are asked to write a report. This assignment can be adjusted to fit the WVMD

Model. The following is an example of this process. Consider a management class where students are asked to read a book regarding Corporate Social Responsibility.

- Watson
  - The first instructor step is to identify the desired observable student behavior that can be measured. For this assignment, it is desired that each student can identify three organizational benefits to a robust corporate sustainability program.
- Vygotsky
  - Second, instead of having the students write a book report, the students are asked to create a business report that outlines a corporate sustainability program that can be used today in a local business. This is a new skill for the students. They have not created a business report or a corporate sustainability program. But, they have resources about corporate sustainability and they have good writing skills. This will be in their ZPD. The instructor will create online discussion groups where classmates can share and exchange ideas about their corporate sustainability program.
- Mezirow
  - The instructor will not give answers about how to create the corporate sustainability program, rather, refer the students to local organizations that have effective corporate sustainability programs. Students will be directed to study these effective models and identify for themselves what is effective or ineffective.
- Dirkx
  - Finally, throughout the entire process, the instructor is contributing to create a classroom environment that is supportive, accepting of discussion, supportive of unique ideas and consistent with feedback. All of these characteristics will support positive student emotions.

## CONCLUSION

The number of available distance learning courses is going to increase. More and more adult learners will participate in online learning through their jobs, their personal lives or their personal pursuit of knowledge. E-learning professionals must ensure that their online classrooms are not only taking advantage of technology but incorporating the widely accepted and significantly important adult learning theories. Specifically, Watson, Vygotsky, Mezirow and Dirkx theories can be applied to support rich adult learning experiences that result in behavior changes, new learning constructed in social context, critical reflection and application of emotion.

*“Students do not learn much just sitting in classes listening to teachers, memorizing prepackaged assignments, and spitting out answers. They must talk about what they are learning, write reflectively about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves.”* - Arthur W. Chickering and Stephen C. Ehrmann

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