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Abstract

Each fall, countless people of various ages, ethnicities, and intentions begin a college education at a variety of American institutions of higher education. Higher education has long been viewed as the doorway to the American dream; a 'social good,' in economic terms, that promises benefit to the American masses. Studying under higher minds in traditional and non-traditional college and university settings is an opportunity afforded to nearly any person of ability in the United States. Indeed, higher education touches nearly every aspect of American society, from research and biomedicine to technology and the arts.

Professors in contemporary American higher education are charged with the education and enlightenment of approximately one-third of each American age cohort.[1] According to the National Student Clearinghouse,[2] more than one-third of students in American colleges today are 25 years of age or older; they are 'post-traditional learners'.[3] But with the rampant availability of MOOCs (massive open online courses), badges for training, corporate universities, and a plethora of information available via the Internet, are traditional methods of educating college students effective for contemporary and adult learners?

Research in the area of adult education has resulted in the realization that adult learners are vastly different from children in their educational needs and motivations; nonetheless, many adult educators in the adult learning environment continue to use traditional teaching methods, which are geared toward the needs of children. Whether online or in a classroom, many college professors teach in ways that resemble how they were taught: lecture and dialogue in the learning environment, followed by reading and writing outside of the learning environment. While there is nothing inherently wrong (or exciting) about such approaches to teaching and learning, there are clues in the history of human education which, when intertwined with contemporary knowledge and research about how humans learn, suggests a new approach to teaching adult learners: translational learning.

Adult Learning: An Historical Perspective

The history of adult learning is important, for it reveals what people thought about various constructs, the role of education within society, and the condition of humanity, values, and society. Historical perspectives are valuable in understanding how things evolved and why they changed. Moreover, history helps us understand the importance of interpretation and the relevance of facts, individuals and biases.

Within the context of adult learning, the ancient Greeks provide(d) a compelling starting point. Pythagoras was a Greek mathematician and philosopher. Six hundred years before the birth of Christ, Pythagoras founded a school of philosophy at Metapontas in which men received full-time education for several years. Their education was focused on life applications, and was delivered primarily through mathematics and philosophical lessons that were founded on

the belief that truth was known. The goal of the school was to produce political, societal leaders of valor – men who strived to serve the good of the community. Pythagoras' school marked the beginning of general (liberal) education, an education accessible only to those who had the funds to drop work and daily life to pursue such means. From the early style of Pythagoras, we see importance placed on the pursuit of truth, a construct that remains at the heart of higher education even in contemporary times. We see another trend that continues today: the importance of communal learning. Learning from and with others remains an important hallmark of adult learning even in modern times.

Unlike Pythagoras, Socrates was convinced that only the gods were wise. He viewed truth as something worthy of being pursued, but that in the pursuit, man needed to be reminded of his ignorance. At the heart of Socrates' teachings was the dialogical methodology, the notion of how one *ought to live* and the importance of independent thought. We see these constructs in the commitments of Jesuit educators as well as in the modern-day belief that one of the principal charges of higher education is to teach men and women to think critically.

Various Athenian schools of thought emerged in the fifth through third centuries before Christ tied to citizenship, rights and daily life; this marked an important shift in the view of knowledge from sacred to secular. These schools were not for just the select few; rather, the Greeks became concerned with educating everyone about societal ideals. One such scholar and student of Socrates, Plato, believed that truth was objective and concerned his teachings primarily with the quest for truth and morality through thought and reason. Plato taught his students to defend their arguments and assertions, an approach that contrasted with the dialogical Socratic methodology.

Plato's student, Aristotle, believed that "All men by nature desire to know," [4] and differed from Plato in his belief that knowledge existed only in that which could be experienced. His

school, the Lyceum, focused on physics, zoology, politics, and other sciences. For all of its famous philosophers and varying approaches to education, for centuries the Greeks and Romans shared a common belief in the liberal arts as a way of training people to be good citizens, a priority that remains at the heart of higher education today and is particularly evident in Jesuit education. Roman Emperor Theodosius II in 425 AD created the first state university in which professors were forbidden from providing private lessons; rather, the university housed lecture rooms and subject-specific professors. In the next century, the notion of a general education for the masses spread quickly throughout the world, lecture halls became commonplace in universities, and education gradually became less focused on virtue and morality and more focused on preparation of learners for specific roles within society.

In 1540 Pope Paul III approved Ignatius of Loyola's request to establish a new order of priests known as the Society of Jesus ("Jesuits"). These were well-educated men who were committed to helping others find God. Their mission included teaching, preaching, and the return of lost souls to the Catholic Church. Part of the Jesuits' mission was to help those who had turned from the faith to return to it, a task that the Jesuits endeavored to accomplish through moral and religious education.

The Jesuits spent the mid-1500s establishing schools for the purpose of educating young people,[5] an effort that proved to be an influential component of the Catholic reform. When Ignatius passed away in 1556, his order had established 35 institutions that brought together men from various nations to study in a decidedly integrated humanistic environment. The Jesuits became known for their scholarship in astronomy and other sciences, and are largely credited with much of European intellectualism in the period ranging from 1600 to the late 1800s.

The teachings of Ignatius, referred to commonly as Ignatian spirituality or Ignatian principles, became more than spiritual guides;

they became the road map for a specific, humanistic approach to education. Those principles are:

- A dedication to human dignity;
- Affording ample worthiness to imagination and emotion as well as intellect.
- Learning occurring within, "…a place of intellectual honesty, pluralism, and mutual respect where inquiry and open discussions characterize the environment of teaching…"[6]
- A commitment to finding the divine in all things.
- A community of dialogue and learning through "…listening, honest exchange, and through a desire to come to a new level of understanding and appreciation"[7]
- Stressing freedom, the importance of discernment, and responsible action.
- Empowerment of men and women to become leaders in service of others to build a more righteous and humane world.

At the heart of the more than 160 Jesuit educational institutions of higher learning today, there remains a stealth belief that when a learner's heart is touched by an experience, the mind is challenged to change.[8] The Jesuit approach to learning involves "… a sustained interdisciplinary dialogue of research and reflection, a continuous pooling of expertise. The purpose is to assimilate experiences and insights in 'a vision of knowledge which, well aware of its limitations, is not satisfied with fragments but tries to integrate them into a true and wise synthesis' about the real world"[9] for the purposes of social justice and greater glory of God. For Jesuit education, students' transformative impact on society has always been the ends, the means, and the ultimate measure of education.

20th Century Advancements in Adult Learning

We have learned a great deal about how people learn since the Jesuits began creating their schools. In particular, the 20th century brought great advancement in research and the generation of new knowledge related to human growth and development, educational psychology, and the brain sciences. One important distinction, generally credited to Malcolm Knowles[10], is the difference between the how learning (and thus, teaching) differs between children and adult learners.

Pedagogy, commonly understood as the art and science of educating children, may be literally interpreted from its original Greek meaning, 'child leading'. Pedagogy plays out every day in K-12 classrooms around the world: teachers transmit structured knowledge, deemed valuable by society, to children. In this process, pupil silence and obedience are viewed as optimal behaviors, and learners are often expected to assume a fairly passive role as recipients of knowledge during structured educational experiences. In the traditional pedagogical learning environment, knowledge is supplemented with structured readings and homework to be completed outside of class and the student is subsequently tested on the material.

This traditional, structured transmittal of knowledge is insufficient for adult learners, many of whom are frustrated by traditional strategies such as lectures, quizzes, memorization, tests, assigned readings, etc. Adults long to be self-directed in their learning, and to obtain knowledge they can apply to their current situations.[11]

Perhaps the most important factor for teachers of adult learners to understand is *why* adults turn to education later in life. Now more than ever, knowledge (especially technical knowledge) becomes obsolete quickly. Adults must update their skills, knowledge, and coping mechanisms to remain viable and competitive in a rapidly changing and increasingly "flat" world.[12]

In the rapid contemporary cycle of change and adaptation, we must comprehend adult learning as a constant, lifelong process of exploration in which new knowledge is obtained actively, and within the context of the life experiences of the learner. Direct, applicable experience is a rich resource for learning in adulthood. Learning labs, discussions, experiments, field experience,

simulation exercises, case studies, problem solving, etc. are therefore effective teaching tools for educators of adult students.

How did we come to know what we currently understand about learning in adulthood? Not unlike studies about human psychology, most of our knowledge about learning in adulthood has been gleaned from observation and experimentation. The works of Thorndike[13], Havighurst,[14] Houle,[15] and Knowles[16] serve as superior examples of progressive strides made in the field of adult education in the 20th century.

In a study of adult learners, Edward Thorndike[17] asserted that adult capacity for learning did not diminish until the mid 30's, and even then only at the rate of roughly 1% per year. This theory was later disproven - it is the speed of learning, not the capacity to learn that decreases with age. Thorndike's subsequent work regarding transferable learning (wherein the learner's current skill or knowledge set is connected to and informs the acquisition of new skills and knowledge) and active learning (learning by doing or experiencing as opposed to learning via lecture) changed the educational landscape.

Educational theory began to grow as a field of research following the 1948 work of Robert Havighurst in which he espoused six developmental stages of the human lifespan, as well as a series of developmental tasks based on physical and psychological maturation, values, and societal pressure. Within the context of these stages and various tasks, Havighurst argued that learning occurs continually throughout the lifespan of the individual. While Havighurst's theories have since been overshadowed by more recent research, he made two significant contributions. First, Havighurst recognized success or failure to accomplish developmental tasks as leading to individual success and fulfillment or societal embarrassment and future failure. Secondly, he brought to light the ability of adults to learn and retain new information by applying it to their life circumstances. Both of these principles remain important in the art and science of educating adults today.

The 1960s were a period of great discovery regarding the adult learning process. Cyril Houle,[18] through a series of in-depth interviews with adult learners, developed three classifications of adult learners:

1. *Goal Oriented Learners* – Those who seek education as a means of goal attainment.
2. *Activity Oriented Learners* – Those who learn extraneously through the activity of learning.
3. *Learning Oriented Learners* – Those who wish to learn simply for the sake of learning.
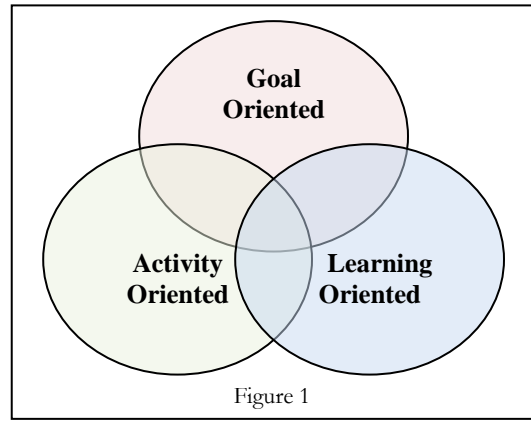

Figure 1

Figure 1 is a pictorial representation of Houle's three classifications of adult learners with a contemporary spin. Most modern psychological and educational researchers advocate that it is impossible to categorize a person as wholly one way or wholly another. According to Figure 1, every learner may be classified, at least in part, as one or any combination of the three types of learners posited by Houle. Therefore, the circles containing each typology overlap with one another, allowing for categorization of adult learners not as one type or another, but as unique individuals.

Allen Tough's[19] research studies on adult learners yielded results that forever changed the methodologies used with adult learners. This research suggested that adults are more self-directing when they *seek to learn* something as opposed to simply being *taught* something. Another important discovery credited to Tough's research is that when adults employ their own initiative in the learning experience, the knowledge is more elaborate and enduring

than when they are taught something. These are indeed important lessons for the educator of adult learners. The resulting implications for practical instructional application involve liberal structure, needs analyses, and learning independence. The rigorous structure imposed by traditional teaching methods conflicts with the adult need to be self-directing; the obvious solution is to allow the adult learner to be somewhat independent in his or her learning experience.

The work of Malcolm Knowles[20] made great strides in helping adult educators incorporate the expanding body of knowledge about adult learners into their classrooms, and he is widely noted as the mind behind adult learning theory, or andragogy.

Effective adult educators provide direction for growth through their recognition and implementation of individual needs and goals. Andragogy embraces the notions of maturity and personal growth as functions and byproducts of adult education. Knowles[21] developed fifteen dimensions of maturation which describe directions of growth in adulthood, as depicted in Figure 2.

Note that the dimensions of maturation are not absolutes which must be achieved; rather, they are directions for growth. The successful adult educator is one who recognizes and is focused on the differences between childhood developmental tasks and those of adulthood.

One of the key differences here lies between the pedagogical approach of providing answers and the andragogical approach of empowering adult learners to find answers for themselves. Knowles' work is important even today; discovering learners' needs and how they relate to developmental tasks and personal goals can result in a rewarding educational experience not only for the learners involved, but for the teacher as well.

Knowles' research suggests that adults must be active participants in their own learning, and must be supported by the teacher and other learners. Recognition and treatment of each student as a unique individual with valuable contributions to the learning experience encourages participation in the learning experience and can result in powerful motivation to continue learning. Teachers and adult learners each must fully comprehend the difference between an attitude of inquiry and one of "dependent edification,"[22] for it is not the purpose of the teacher to simply provide information. Rather, it is the purpose of the teacher to assist the learner in developing a curious state of mind and confidence in their abilities to discover the answers they seek. This assertion

Dependence	⇨	Autonomy
Passivity	⇨	Activity
Subjectivity	⇨	Objectivity
Ignorance	⇨	Enlightenment
Small Abilities	⇨	Large Abilities
Few Responsibilities	⇨	Many Responsibilities
Narrow Interests	⇨	Broad Interests
Selfishness	⇨	Altruism
Self-Rejection	⇨	Self-Acceptance
Amorphous Self-Identity	⇨	Integrated Self-Identity
Focus on Particulars	⇨	Focus on Principles
Superficial Concerns	⇨	Deep Concerns
Imitation	⇨	Originality
Need for Certainty	⇨	Tolerance for Ambiguity
Impulsiveness	⇨	Rationality

Figure 2

is also seen in the commitments of Jesuit higher education as described previously.

Knowles espoused five characteristics of the adult learner:
- Has an independent self-concept and can direct his or her own learning.
- Has accumulated a reservoir of life experiences that is a rich resource for learning.
- Has learning needs closely related to changing social roles.
- Is problem-centered and interested in immediate application of knowledge.
- Is motivated to learn by internal rather than external factors.[23]

Readiness to learn, a key concept in Knowles' writings about andragogy, refers to providing the necessary conditions and tools needed to kindle a need-to-know or what's-in-it-for-me frame of mind. The first rule of establishing readiness to learn is organizing lessons around life application.

Readiness to learn is further enhanced when the learner sees his/her education as an opportunity to increase competency and/or fulfill potential. Herein lies the rationale for using learning objectives. Due to the fact that adult learners tend to be performance-centered in their orientation to learning, it is useful to have clearly stated objectives that are applicable to their daily situations.

In addition to preparing the learners' frame of mind, Knowles emphasized the importance of the learning environment, which must be physically and psychologically comfortable. The physical and psychological needs of adult learners must be met before an accurate diagnosis of learning needs may be performed.

Accurately estimating the needs of adult learners, according to Knowles' work, requires an acute awareness that adult learners are motivated to learn that which they see as necessary or useful. Involving learners in the

identification of their learning needs by helping to construct competencies, assess present levels of competency in light of those established, and understanding the gap between their present level of competency and the level desired will result in recognition of a gap between what is currently known and what could be known. Knowles asserts that the resulting feeling of dissatisfaction will result in a motivation to improve, and to identify specific areas of needed growth. For example, Professor Trujillo is teaching a graduate class entitled, *The American Community College.* On the first day, he conducts a class dialogue regarding what students know, or presume to know, about community colleges, their programs, their students, and their faculty. Through this dialogue, Professor Trujillo is assessing his students' present levels of competency. To help the students recognize gaps in their knowledge, he identifies for the class incorrect statements that were made during the discussion. In concluding the class session, he asks for additional areas regarding community colleges about which the students would like to know more. At the beginning of the second class session, professor Trujillo presents a revised course syllabus that clearly reflects the dialogue held during the first class session.

Adult educators can enhance learner growth by involving the learner in every step of the andragogical educational process, whereas in traditional teacher/learner interactions, the teacher is solely responsible for the planning process. Malcolm Knowles,[24] however, holds that people tend to feel committed to something to the extent that they participate in its creation. Imposing a teacher's plans and ideals in the learning situation intrudes on adult learners' sense of self-directivity. This notion of self-directed learning has helped to propel collegiate learning from an exclusively classroom-based experience to the more autonomous influences of distance education.

Jack Mesirow[25] built on the work of Knowles in his *transformational learning* theory. Mesirow's work asserted that understanding

the meaning of an experience is a defining human condition, and cited individual interpretations derived from autonomous thinking was paramount to adult learning. Transformative learning is the practice of effecting change to one's frame of reference (habits of mind and points of view). These frames of reference define and limit the way in which individuals view the world; "we transform our frames of reference through critical reflection on the assumptions upon which our interpretations, beliefs, and habits of mind or points of view are based" [26]. Thus, transformative learning is not lecture-based, but incorporates considerable dialogue, building on the experience of participants, use of groups (support element), assignments that bridge gaps between theory and practice, student critiques, as well as autonomous work.

Similarly, Hase and Kenyon[27] also posited a theory that built on Knowles' work, called heutagogy. Heutagogy, meaning self-directed learning, promotes a truly self-directed approach to adult learning and finds its roots in humanistic theory. Hase and Kenyon's theory is not a departure from andragogy, but a modernization of Knowles' work that adds to it the notion of self-directed learning and openness to learning as something which does not necessarily need to be planned. "Heutagogical approaches to education and training emphasize: the humanness in human resources; the worth of self; capability; a systems approach that recognizes the system-environment interface; and learning as opposed to teaching. Heutagogy addresses issues about human adaptation as we enter the new millennium."[28] In particular, the "what's in it for me" mentality of the contemporary learner becomes the catalyst for learning, and in this way, heutagogy is similar to transformative learning. This approach to adult learning places an emphasis on learner-to-learner transmission of knowledge as being of equal importance with teacher-to-learner or resource-to learner transmission. Additionally, it posits a shift in thinking from teacher-directed learning environments to learner-directed environments.

In 2008 William Purkey and John Novak[29] proposed *invitational education*. While conceived as a K-12 paradigm, the theory encompasses many of the aspects seen in this historical overview. Invitational education is a largely democratic view of education which is, "intentionally inviting, so as to create a world in which each individual is cordially summoned to develop intellectually, socially, physically, emotionally and morally."[30] While idealistic and arguably imaginative in its premises, at the heart of Purkey and Novak's work is the belief in the dignity and worth of all actors within the learning environment, an ideal that mirrors Jesuit education ideals.

From the early philosophers to the Jesuits to contemporary theorists, humans have long sought the best way to transmit knowledge from one to another. The time for a new approach to educating adults is now, and the audience is not limited only to colleges and universities. Corporate trainers, workforce centers, and governmental service agencies stand to benefit from an Ignatian-inspired approach to andragogical practice.

Translational Learning: An Approach for the 21st Century

Imagine an approach to adult education that builds on the best practices of the early philosophers, the enduring and successful Jesuit approach to education, and the new knowledge about learning in adulthood that emerged in the 20th and early 21st centuries. Imagine an approach that embraces technology, nontraditional means of knowledge attainment, and life experience. An educational premise that, at its very core, is humanistic and modern, service-oriented and practical, authentic and life-changing. A translational endeavor in which learners translate and understand new information by comparing, modeling, and applying knowledge to their experience, their beliefs, their values, their lives, their work.

Such a theory would borrow from the best ideas of the past, the most inspirational practices of the present, and the potential vision of the future.

- From the Jesuits we borrow the most: a dedication to human dignity; creating of a culture of mutual inquiry, dialogues focused on research and reflection, service for the greater good, and the importance of discernment.
- From Pythagoras we borrow a necessary focus on values, life, pursuit of truth, and communal learning.
- From Socrates we borrow a focus on how one ought to live and critical thinking.
- From Plato we borrow cultivating morality and strength of belief through thought and reason.
- From Aristotle we borrow a commitment to educating a good citizenry and a belief that knowledge and experience are intertwined.
- From the Athenians we borrow a focus on the importance of societal ideals, rights and daily life.
- From Thorndike's work we borrow a modified speed for learning, the importance of connecting new knowledge to learner's existing knowledge and experience, and a commitment to active learning.
- From Havighurst we borrow an acknowledgement of the importance of success in learning, recognition of individual learners' goals, and opportunities to apply new knowledge to life circumstances.
- From Houle we borrow an understanding that adults learn in different ways and have specific reasons for returning to education.
- From Tough we borrow a respect for the adult's need seek to learn something as opposed to simply being taught something as a means to improve initiative to learn.
- From Malcolm Knowles we borrow learner self-direction, practical application of new knowledge, an adult's place in his or her maturational process, a commitment to nurturing curiosity and confidence, incorporation of social roles and contexts, and practical applications.
- From Mesirow we borrow a commitment to designing transformational learning

opportunities that challenge one's frame of reference.
- From Hase and Kenyon we borrow an acknowledgement of learning systems beyond traditional classrooms, the importance of system-user interface; and teaching learners to adapt to a rapidly changing world.
- From Purkey we borrow an invitational attitude toward learners and a reverence for their dignity and worth as learners and participants in the learning environment.
- Finally, from Friedman we borrow the acknowledgement of a rapidly changing and increasingly "flat" world.

Operationally, this new model for adult education is a model for planning and growth, both for the facilitator of learning and for the learner. Figure 3 depicts the Translational Model for Adult Learning.

In the Translational Learning Model, educators and learners engage in a highly participative endeavor of mutual planning, discourse, application and reflection. The *Foundations* element of adult learning is comprised of three components: pursuit of truth, dignity of the learner as an individual, and the current and future maturation of the student. These elements must be explicitly evident in each learning activity and interaction in the learning experience. This does not mean that the learner is not challenged or held accountable; indeed, these things are critical. Rather, it is the manner and explicitly understood purpose for which things are done that is critical to success for the adult learner. For example, holding a learner accountable for plagiarism in a manner that preserves their dignity but enhances their maturity is reflective of the intent of the model. Challenging preconceived notions of that which is believed to be true within an environment of mutual inquiry, shared experience, application, reflection and a global context is at the heart of the Translational Learning Model.

The *Preparations* element in the Translational Learning Model is most important and time

INSPIRATIONS

Greater good of humankind   How ought we to live?   Morality
Citizenship   Human Rights

APPLICATIONS

Service learning   Life applications   Societal ideals   Social context   Roles & Responsibilities

ASPIRATIONS

Reflection   Discernment   Critical thinking   Reasoning   Goal attainment   Transformation   Adaptation

PREPARATIONS

Decisions for learners   Invitations   Culture of inquiry   Discourse and dialogue   Communal learning   Planned time for
Learning Experiences   Connected Learning   Learning systems   Positive reinforcement/success   Curiosity cultivation

FOUNDATIONS

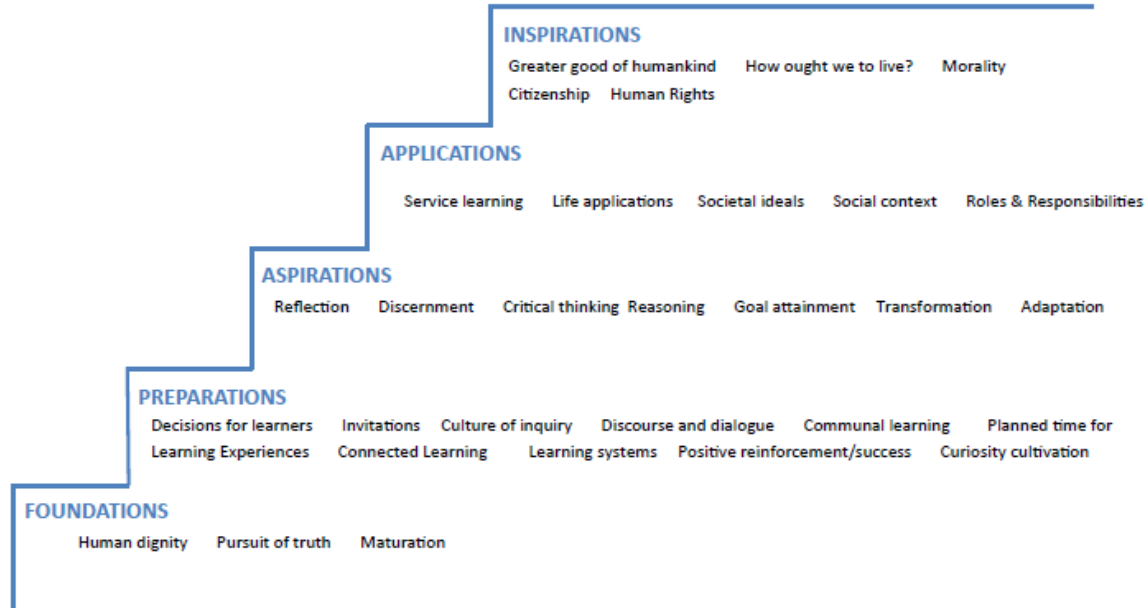Human dignity   Pursuit of truth   Maturation

Figure 3

consuming for creators, facilitators, and learners. The preparations element requires the creator and facilitator to decide how a mutually respectful culture of discourse and inquiry will be established in which learners develop their ability to learn effectively and to mature developmentally. The adult educator must identify desired changes in the learner, and strive to create a respectful, engaging climate of mutual inquiry. Which decisions pertaining to the learning experience will be up to the learner? How will these be communicated and agreed to? For example, is the final project to be defined by the facilitator, or will the facilitator provide a rubric and leave the creation of the learning artifact up to the learner? How will the learner be invited to participate and to succeed? How will a mutual climate of respect and inquiry be established and maintained? What rules will be established for dialogue? How will peer-to-peer sharing, critique, and learning take place? How much time and repetition should be allotted for learning key knowledge? How will new knowledge be introduced, and how will connections between existing knowledge/experience and new information be made? In what ways might learners and facilitators cultivate curiosity about the intended learning, and in what ways can they

provide mutual positive reinforcement for confidence and success? What learning tools and systems will be employed? With adult learners it is especially important to use tools appropriate for intended purposes, not for effect or bells and whistles. In other words, the learning environment should be more steak than sizzle, yet a little sizzle can make things interesting!

The *Aspirations* element of the translational model represents the first of the elements that pertains to desired ways in which learners might translate new knowledge. Remember that we know that adults need to understand how new knowledge is applicable to them, their life circumstances, their daily work. The aspirations element concerns itself with the aspirations of adult learners, and also with aspirations that educators have for their learners. An education that helps adults adapt to changing environments, transform their frames of reference, attain their goals, think critically, discern the best option among a plethora of options in a given situation, and engage in contemplative reflection is a lofty endeavor. Through consideration of how each learning activity can strengthen one or more of these aspirations for the adult learner and ensure that each activity embraces one or more of these aspirations, the facilitator

accomplishes several things: relevance to the adult learner, learning that endures,[31] an opportunity to remind the adult learner about how the learning or activity is beneficial for them individually, and a continuous dialogue regarding the meaningfulness of the learning journey.

Because we know from Knowles' work and Ignatian educational practice that application is helpful in transforming learners' frames of reference, the fourth element of the Translational Model, *Applications*, is arguably the most important. The lessons of Pythagoras, Socrates, and the Jesuits focused their lectures on the context of life and how one ought to live, and Havighurst[32] and Thorndike[33] underscored the importance of connecting new knowledge to existing knowledge and applying new knowledge to life circumstances. Each adult learner comes to the learning environment with 'luggage.' Packed in each student's luggage is his or her unique set of experiences, prior knowledge, education, training, opinions, and values. Experience is arguably the most valuable tool in the adult education and training endeavor for engaging and motivating learners. Experience and self-identity have tremendous effects not only on the classroom climate, but also on the educational experience itself. Adults have amassed a large volume and a wide variety of experiences. The self-identity of children is defined by external sources such as parents, friends, etc. Conversely, adult identity is derived from their experiences. "Adults are what they have done;"[34] it therefore makes sense to tap into the valuable resource of experience contained within each learner. Providing learners an opportunity to connect new concepts to existing knowledge and experience and to practice new knowledge and skills through direct application – active learning – is the premise of the Applications element of the Translational Model. In this element facilitators and learners explore how new concepts have played out in learners' past experiences, and how those experiences might have differed had the new principles been applied. Exploration and dialogue pertaining to new knowledge within the context of social

norms, values, and the various roles and responsibilities of the learners bring abstract concepts to life. Case studies, experimentation, action research, internships, mentorships, small group and service learning activities provide experiential opportunities for learners to discover real-world applications and implications of new concepts and skills. During the Applications phase of the learning process, facilitators and students breathe life into new material and learning becomes concrete and enduring.

The *Inspirations* element of the Translational Model brings forth the opportunity for personal and societal transformation. In this phase facilitators and learners reflect on learning experiences. They consider how the new information they have explored and applied together might be used individually and societally for the greater good of the world. They explore the morality of the new information locally and globally, its potential impact on human rights and dignity, and its impact on how each individual aspires to live and contribute to society. By framing and concluding lessons in this paradigm, the facilitator models for learners the art of contemplative practice: thoughtful consideration of the global and philosophical context of new knowledge and potential impacts of knowledge, situations, and action. The resulting translation of new information is one that compels the learner to consider the impact beyond the 'what's-in-it-for-me' focus of the *Applications* element. Herein lies the ultimate goal of the Jesuits and of the Translational Model: education as a means of preparing men and women in service of others for the purpose of transforming the world.

Conclusions

The Translational Model requires the educator plan carefully, considering five primary elements: Foundations, Preparations, Aspirations, Applications, and Inspirations. Within each element are key factors for successful translational learning, the goal of which is to prepare men and women who will change the world for the better.

The translational educator embraces the roles of expert, planner, and guide (as opposed to the traditional 'information-giver' role) with the purpose of helping students discover better ways of thinking, knowing and doing. The translational educator and the learner each brings his or her unique experience, training, education, convictions and enthusiasm to *share* with others in the learning environment. These intangible elements provide a framework by which learners can compare, frame, and form their own ideas.

Effective teachers of adults *welcome* skeptical minds and questioning learners. Translational educators are the expert and the calm skeptic, a model for the mindset of the critical learner. Adults will learn best when encouraged to test new ideas against their own experience, embrace those ideas that are beneficial to them, and institute them creatively. Both teachers and learners in the adult learning environment must be willing to take risks, have adventures, experiment, and learn from mistakes – a significant feat in light of the diversity of adult learners.

The tremendous diversity within the adult classroom leaves traditional educator to struggle with variance in learning styles, motivation, lifestyles, responsibilities, and experiences; however, these are powerful tools for the translational educator. The Translational Model provides an opportunity to tailor learning to the experience, goals, and aspirations of each learner by involving learners in the planning, execution, and assessment of the learning experience. In this process, the teacher serves as expert, guide, and resource and the teaching-learning transaction becomes a mutual responsibility between teacher and learners.

If the teach-learn transaction is the mutual responsibility of the teacher and the learners, then learning experiences must be designed to ensure that all actors in the learning environment (not always or necessarily the teacher) are contributing to the translation of new materials with and for one another. This is especially important during the *Applications* element of the Translational Model.

Many traditional educators are unconcerned with helping their students generalize new knowledge to real world situations. Perhaps some of us as teachers are 'frozen' in our view of teaching as the simple dissemination of information – whether or not the student applies that knowledge is up to the student. "*Unfreezing*"[35] is as important to teachers as it is to students. Unfreezing enables adults to look at themselves, their situations, and the world more objectively, and to free their minds from bias. This is the aim of the *Inspirations* element of the Translational Model.

Contrary to the adage, 'You can't teach an old dog new tricks', research has shown that adults *can* learn. At the 1927 American Association for Adult Education annual meeting, Edward Thorndike[36] presented the results of his research on adult learners, which suggested that when adult learners had been away from education for a while, they underestimated their ability to learn. This resulted in low confidence in learning abilities and low motivation to learn. Thorndike, like Knowles, also recognized the adult learner's tendency to respond to *internal* motivation (such as fulfillment) to learn, as opposed to *external* motivation (such as grades). By employing the *Applications* element of the Translational Model, adults are permitted to approach the learning experience within the context of their individual set of accomplishments and experiences. Applying information to their experience increases confidence, motivation, and engagement for the adult learner.

Understanding who adult learners are as individuals and why they have arrived in the educational setting is crucial for success in the teaching and learning experience. The Translational Learning Model is a model of assumptions about adult learners, the crux of which is the role of the adult educator - to plan, orchestrate, actualize and inspire translational learning. Experience (including mistakes) provides the basis for learning activities for adults who seek immediate relevance to their job or personal life. Translational learning is life-centered as

opposed to content-centered; content is a tool for understanding, maturation, and transforming lives.

The role of the translational educator is challenging and multifaceted. In the very important back pocket of a translational teacher or trainer may be learning objectives, course management systems, grades and other traditional learning components. But outwardly the teacher of adults must be willing to function as a 'change agent', a motivator of adult learners to achieve their full potential. The function of the translational educator is *not* remedial development, transmitter of knowledge, authority figure, or disciplinarian,[37] but that of planner, challenger, guide, mentor, facilitator, consultant, resource, and encourager.

The translational educator relates to adult students not as passive recipients of knowledge, but as mutual inquirers with important insights in search of truth, knowledge, beauty, justice, and a better world. Finally, the translational educator serves not to help learners earn good grades, but instead to challenge learners' assumptions, conclusions, and ways of thinking; to help them translate new knowledge within the context of their experiences, goals, roles, and aspirations; to prepare men and women in service of others for the purpose of transforming our world for the better. HJE

Notes

[1] Howard Bowen and Jack Schuster. *American Professors: A National Resource Imperiled.* (Oxford University Press, 1986).

[2] National Student Clearinghouse. (2012). "More Than One-Third of College Students are Over 25" [Press release]. Accessed August 16, 2013, http://www.studentclearinghouse.org/about/media_center/press_releases/files/release_2012-04-19.pdf

[3] U.S. Advisory Committee on Student Financial Assistance. (2012). *Pathways to Success: Integrating Learning with Life and Work to Increase National College Completion. A Report to the US Congress and Secretary of Education.* (ERIC Document Reproduction Service No. ED 529 485)

[4] George D. O'Brien. "The University as a Place of Learning." *Liberal Education, v72* n2 (1986): 139-44.

[5] George W. Traub, S.J., *Do You Speak Ignatian? A Glossary of Terms used in Ignatian and Jesuit Circles* (12th ed.)(Cincinnati, OH: Xavier University, 2012).

[6] Ibid., 182.

[7] Ibid., 183.

[8] Ibid.

[9] Ibid., 11.

[10] Malcolm S. Knowles, *The Modern Practice of Adult Education: From Pedagogy to Andragogy* (Chicago: Follett Publishing Company, 1970).

[11] Ibid.

[12] Thomas L. Friedman, *The World is Flat 3.0: A Brief History of the Twenty-First Century* (New York: Picador, 2007).

[13] Edward L. Thorndike, *Adult Learning* (New York: The Macmillan Company, 1928).

[14] Robert J. Havighurst, *Developmental Tasks and Education* (Chicago: University of Chicago Press, 1948).

[15] Cyril O. Houle, *The Inquiring Mind: A Study of the Adult Who Continues to Learn* (Madison, WI: University of Wisconsin Press, 1963).

[16] Knowles, *The Modern Practice of Adult Education.*

[17] Thorndike, *Adult Learning.*

[18] Houle, *The Inquiring Mind.*

[19] Cited in Knowles, *The Modern Practice of Adult Education.*

[20] Ibid.

[21] Ibid., 29.

[22] Ibid., 14.

[23] John Elias and Sharan Merriam, *Philosophical Foundations of Adult Education* (3rd ed.)(Malabar, Florida: Krieger Publishing, 2005), 5.

[24] Knowles, *The Modern Practice of Adult Education.*

[25] Jack Mesirow, "Transformative Learning: Theory to Practice," In *Transformative Learning in Action: Insights from Practice (New directions for adult and continuing education,* 74), ed. P. Cranton (San Francisco: Jossey-Bass, 1997), 5-12.

26 Ibid., 7.

27 Stuart Hase and Chris Kenyon, "From Andragogy to Heutagogy," *ultiBASE* 5, no. 3 (2001). http://ultibase.rmit.edu.au/Articles/dec00/hase1.pdf.

28 Ibid.

29 William Purkey and John Novak, *Fundamentals of Invitational Education* (Kennesaw, GA: The International Alliance for Invitational Education, 2008).

30 Ibid., vii.

31 Thorndike, *Adult Learning.*

32 Havighurst, *Developmental Tasks and Education.*

33 Thorndike, *Adult Learning.*

34 Knowles, *The Modern Practice of Adult Education,* 50.

35 Ibid., 51.

36 Quoted in Knowles, *The Modern Practice of Adult Education.*

37 Knowles, *The Modern Practice of Adult Education,* 37.

Bibliography

Bowen, Howard and Schuster, Jack. *American Professors: A National Resource Imperiled.* New York: Oxford University Press, 1986.

Elias, John and Merriam, Sharan. *Philosophical Foundations of Adult Education* (3rd ed.). Malabar, Florida: Krieger Publishing, 2005.

Friedman, Thomas. L. *The World is Flat 3.0: A Brief History of the Twenty-First Century.* (New York: Picador, 2007).

Hase, Stuart and Kenyon, Chris. "From Andragogy to Heutagogy." *ultiBASE* 5, no. 3 (2001). http://ultibase.rmit.edu.au/Articles/dec00/hase1.pdf.

Havighurst, Robert J. *Developmental Tasks and Education.* Chicago: University of Chicago Press, 1948.

Houle, Cyril.O. *The Inquiring Mind: A Study of the Adult Who Continues to Learn.* Madison, WI: University of Wisconsin Press, 1963.

Knowles, Malcolm S. *The Modern Practice of Adult Education: From Pedagogy to Andragogy.* Chicago: Follett Publishing Company, 1970.

Mezirow, Jack. "Transformative Learning: Theory to Practice." In *Transformative Learning in Action: Insights from Practice (New directions for adult and continuing education,* 74), edited by P. Cranton, 5-12. San Francisco: Jossey-Bass, 1997.

National Student Clearinghouse. (2012). *More Than One-Third of College Students are Over 25* [Press release]. http://www.studentclearinghouse.org/about/media_center/press_releases/files/release_2012-04-19.pdf.

O'Brien, George D. "The University as a Place of Learning." *Liberal Education* 72, no. 2 (1986): 139-44.

Purkey, William and & Novak, John. *Fundamentals of Invitational Education.* Kennesaw, GA: The International Alliance for Invitational Education, 2008.

The Society of Jesus. "Communal Reflection on the Jesuit Mission in Higher Education: A Way of Proceeding." In *A Jesuit Education Reader,* edited by G.W. Traub, S.J., 177-188. Chicago: Loyola Press. 2008.

Thorndike, Edward L. *Adult Learning.* New York: The Macmillan Company, 1928.

Traub, George W., S.J. *Do You Speak Ignatian? A Glossary of Terms used in Ignatian and Jesuit Circles* (12th ed.). Cincinnati, OH: Xavier University, 2012.

U.S. Advisory Committee on Student Financial Assistance. (2012). *Pathways to Success: Integrating Learning with Life and Work to Increase National College Completion. A Report to the US Congress and Secretary of Education.* (ERIC Document Reproduction Service No. ED 529 485)