

TEACHING AND THE QUEST FOR EXCELLENCE

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IN PURSUIT OF TEACHING EXCELLENCE

The goal of our Educational Learning Community, ELC, as stated in its April 29, 2009 proposal document, was “to explore the notion of pedagogy and andragogy in the 21st century, and their potential implications to existing and future programs at TWU” (p. 1). And, as we pursued this goal, a third term began to appear in the research literature on education – *heutagogy*. The literature also indicated significant conceptual differences between *pedagogy*, *andragogy* and *heutagogy* in how individuals are understood/believed to learn and thus, leads, to very different understandings of the objectives and tasks of education and the roles of educator and learner in that process.

The terms noted above were defined and clarified relative to one another within this paper, however, there was an underlying assumption that the ELC’s exploratory journey together was based upon a core belief that academic research and teaching is about *transcendence*, individually and collectively. We believe that to teach transcendentally is to teach to the objective of a learner achieving a higher level of understanding in thinking and knowledge (Kant, 1871). This form of teaching essentially asserts that reaching a new level of understanding influences/improves the cognitive skills and should result in a change in behaviour of both head (content of the course) and heart (relationship with God - the ultimate reality - and with others). Although there are a number of various learning theories such as: experiential learning theory, ELT, (Kolb, 1984); social learning theory, SLT, (Boyer, 2003); and social cognitive theory, SCT, (Bandura, 2001), to name a few, the ELC believe that in order to change/influence behaviour within the classroom there are four overriding steps for transcendence: action/concrete experience, learning involving goal setting and increasing effectiveness (Wegner, 1998); cognition, intra and interpersonal transformation that occurs within and between students (Kegan, 1994); reflection, which is engaging in self-discovery and questioning (Vince, 1998); and experience, how new experiences lead to a greater sense of satisfaction, motivation or development (Heron, 1992; Kolb, 1984). It was also understood that these steps are not necessarily linear, nor can they occur at the same time for each and every student. This perspective highlights how attempting to “transcend” the student, within the classroom, requires specific and intentional learning strategies (Kayes, 2002) and a need to meet the student where they are. As a result, all four elements of learning need to be understood by both the student and the professor which increases the need for the professor to be aware that learning relies on deliberate recognition and resolution of the multiple learning demands. Essentially, concrete experience, reflective observation, abstract conceptualization, and active experimentation represent four interdependent processes (perhaps stages), each of which is required for holistic, integrated learning to transcend the learner. Ethridge and Branscomb (2008), who were the first to conduct a parallel study looking at children and adults, strongly assert “that for a transformation in learning to truly occur, direct experience must be paired with reflection to facilitate and reinforce learning” (p. 406), which is consistent with the assertion of Piaget (1973) who stated, “a parroted truth is only a half truth” (p. 106). The real power of this type of perspective of education is in the integration of the material/content with experience, which is completely congruent with the work of Boyer (2003) who asserts that SLT emphasizes the importance of the contextual environment and the exchanges that occur between the

individual, their surroundings, and other people who have or are experiencing it. Boyer claims that learning is not only tied to the context in which it is embedded, but also to the relationships one has with others. Boyer also claims this is such an important reality that the act of knowing becomes mediated by the competencies that are displayed within the community where the individual resides, which is also supported by Wenger (2000). This highlights the importance of community within learning - the classroom - and is also congruent with our understanding of leadership and its desire to be transforming. The importance of all this can only be further supported by SCT which, as Bandura (2001) outlines, supports that the collective agency exercised through socially coordinated and interdependent effort is of the utmost importance in the development of the individual.

Within the ELC it was also understood that education literature is still, relatively speaking, in its infancy, and it was understood that if we are to claim that we teach to the objective of learner transcendence, first and foremost, we must model that aspiration in research and teaching. In short, transcendence in learning requires transcendence in research and teaching. This epistemology is consistent with Kolberg's (1981) adult development theory and is supported by the inner journey often required for sound leadership (Burns, 1978; Thompson, 2000; & Hall, 1994). We believe it is directly linked to the *essence* of the educational mission of Trinity Western University as laid out in the *Philosophical Guidelines for TWU Four Year Program* document (board of governors approved, 1977) and in the nine desired student outcomes identified by the *Curriculum Review Task Force* (2007/2008). And, we believe, it to be fully congruent with the educational mission and objectives of TWU's Undergraduate and Graduate Affiliates. Excellence in teaching or the pursuit of it has everything to do with engendering transcendent learning.

We came to appreciate early on that this exercise may confirm the way we think about teaching and learning in any number of ways; yet, it may just as easily challenge our own convictions and practices, calling for or nudging us to change. Regardless of the outcome, the process of questioning our thinking and assumptions would be an invaluable experience and would model what most professors desire for all their students - i.e. to be continuous learners who quest for greater *awareness* and who have a commitment to vocational *self-reflection*; to become better at what they do. This called for a process of "parking" our respective content specializations and beginning to ask the most fundamental question, "What is it to teach?" From this first question followed others; among them were: How do I teach? Why do I teach the way I do? How do "the best" teachers teach? How can I truly reach more students? And, do I get in the way of what I am teaching? These questions formed the basis of our enquiry in the first phase of our collective journey.

As the journey progressed, it quickly became apparent that a broader context beyond the classroom was of the utmost importance to our thinking about the tasks of teaching and learning. What are the implications of the answers to the above questions given the context of the 21st century? We live at the intersection of unmatched technological advances changing the very way we work and live, of hyper-competition within a significantly more global economy, and a new collective awareness of inequality of

living standards around the world. However, and importantly, it was Peter Drucker (as cited in Lerner & Johnson, 1997), who stated that the 21st century will be known for a new dawn in understanding of the human condition, and the significance of this will far exceed the technological advances we currently think of as important. Drucker was essentially asserting that technology is the impetus for change and that this will require us to understand the human aspect of the technology even more. This is particularly relevant to teaching and learning in light of the information age. Thus, the role of teaching and learning is dramatically changing.

Our collective journey has resulted in this paper, the purpose of which is to describe our shared experiences from different perspectives (student, professor, librarian, and administrator) of what it means, as educators to be seeking excellence in teaching. We begin with a consideration of three key terms - pedagogy, andragogy, and heutagogy - reviewing the literature that discusses them and marking the different understandings reflected in each of the objectives and tasks of education and the roles of educator and learner. (Lachlan Whatley) Next, is a very personal and thoughtful consideration of “the best” and “the worst” from ‘the other side’ of the professor’s lectern – the lens of the student. (Kathleen Han) Do the convictions and priorities of heutagogy equate to “the best” in recent educational literature? We tested this by a review of Ken Bain’s *What the Best College Teachers Do* (2004). (Brian Rapske) What can be said of the ever new challenges to the teaching and learning task presented by the explosion of information technologies and the democratization of information publishing; how will those striving for excellence as educators respond? (Bill Badke) Finally, we briefly draw together the themes of each contribution and summarize the significantly important implications for professors, administrators and all educators who are involved in the quest for teaching excellence. (Lachlan Whatley)

PEDAGOGY, ANDRAGOGY, AND HEUTAGOGY

What they mean

At a basic level, pedagogy is often associated with the teaching of the young learner, and andragogy is associated with teaching the adult learner. Yet this categorization is an oversimplification of the differences as it is not a matter of age; rather it is a matter of experiences and competencies. This position is supported by the father of andragogy, Knowles (1970, 1984), who identified at least five specific elements that distinguish andragogy from pedagogy methods: self-concept, the student shifts from being dependent to independent; experience, the student’s history is a critical resource for learning; readiness to learn, the student desires to develop himself or herself; orientation to learn, the student’s interest shifts from subject to problem solving; and motivation to learn, the student’s motivation to learn is internal not external. Thus, age may be an indication, but on the other hand, it could also be possible to have an older student who has not yet internalized all five aspects, while a younger person may have achieved this. Knowles also went on to identify four essential assumptions that distinguish adult learning from childhood learning:

(1) as a person matures the self concepts move from dependence toward self-direction; (2) maturity brings an accumulating reservoir of experience that becomes an increasing resource for learning; (3) as the person matures, readiness to learn is increasingly orientated towards the person's social roles; and (4) as the person matures the orientation towards learning becomes less subject-centered and increasingly problem-centered. (p. 39)

McKenzie (1977) posed a most interesting question when he asked, "does the distinction between pedagogy and andragogy provide a point of departure for clarifying and amplifying the complex concept of adult education?" (p. 225) He went on to assert that the differences in the answer to this question arise less in relation to the practical realities of the classroom and more in relation to the philosophical orientations of the educators. Do children and adults learn differently? And, if so, how are their learning styles different? Answers to questions such as these will provide valuable information about the roles and importance of pedagogy and andragogy.

Yonge (1985) asserts that it is the difference between adult teaching child and adult teaching adult that is of the utmost importance when looking at the differences between pedagogy and andragogy, since the same teaching strategy can be used for children and adults, and these main differences stem from the relationship between the teacher and the student. Pedagogy has more of an authority, while andragogy has less. This places the context as an essential component to learning and, therefore, meeting the students at their individual levels of learning, based on their learning competencies, as essential. Yonge goes on to conclude that educators should not get too distracted by the terminology since it is essentially designed to highlight the important distinction between teaching for children, as compared with adults.

Heutagogy is a term first coined and used by Hase and Kenyon (2000) and, essentially, focuses on self-learning. Thus, it could be considered a natural progression from andragogy and pedagogy. Hase and Kenyon stress that heutagogy should not be confused with *Self Directed Learning*, which was promulgated during the sixties, since heutagogy takes into account intuition and is based on action, reflection, context awareness, and the value of experience with others as integral parts within the learning process. In essence, Hase and Kenyon assert that heutagogy "looks to the future in which knowing how to learn will be a fundamental skill given the pace of innovation and the changing structure of communities and workplaces" (p. 3).

How They are Different

This paper highlights that the differences in pedagogy, andragogy, and heutagogy are based on differences in the worldviews of educators. These differences stem from epistemic belief systems that may never be resolved and is highlighted in the discussion below.

The pedagogical conception of learning begins with the assumption that the learner comes to the educational context as an absolute novice - a Lockean "blank slate" (Hase & Kenyon, 2000) - confused and largely incompetent. The learner's individual experiences

are deemed to be either inadequate or irrelevant to his or her learning. Teaching is viewed in largely transmissional terms - information is transferred from the expert to the novice. Success is accordingly measured by testing the degree to which a narrow range of teacher-generated information can be replicated by the learner; emphasis is decidedly upon memory and repetition. One demonstrates one's learning by 'getting the right answers.' Success beyond the classroom consists in a demonstration of knowledge and skills/competencies in familiar or known situations. The learner is entirely dependent upon the teacher to be led through a highly regimented and closely disciplined process to literacy and knowledge. The model is teacher-driven and teacher-focused. The teacher is responsible for the 'what' and the 'how' of the curriculum. Teacher perspective and experience holds primacy.

Andragogy is an advance on pedagogy, typically because the learner concerned is recognized to be an adult, and so, more sophisticated, motivated, and engaged. As such, a certain amount of self-direction is permitted by the teacher. Notwithstanding, curriculum is still very teacher-focused and there is little opportunity for learner input (Hase & Keyon 2007, p. 112). The teacher's task is to inform and motivate regarding the relevance of the curriculum, to move through course content, prescribing the learning activities and processes, to relate that content to the experience of the learner, and to help the learner overcome inhibitions or resistance that hinder learning (McNickle, 2003). The teaching focus of classroom activity is still very much to the development of competency within a narrow range—i.e., the acquisition of knowledge and skills for effective function in specific work contexts (Hass & Keyon 2007, p. 114).

The recently-coined term heutagogy comes from the Greek word for "self" (*autos/heautos*). It is not so much a departure from andragogy as it is an extension of it (Hase & Keyon 2007). It essentially valorizes a conception of learning that affirms and facilitates the learner's capacity and determination to self-educate. According to Hase and Kenyon (2000, n.p.), self-direction sees "individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing learning strategies, and evaluating learning outcomes." Thus, heutagogy presses beyond expectations of content regurgitation, skills competency and problem-solving within a narrow range to the goal of a student becoming a capable learner. The capable learner is an activist self-educator, taking advantage and becoming aware of the learning process itself for a more personalized, experientially relevant educational result. They engage in deep reflection and are open to the challenge of personal theories in use. Beyond mastery of content, the capable learner is able to creatively contextualize skills and knowledge for innovation to novel environments. Learning is hence holistic, real world, and not strictly compartmentalized or theoretical. Heutagogy places a high value on interactive learning and collaboration. The teacher in heutagogy is every bit as active as in pedagogy and andragogy, but in different ways. The urge to kindle for capability lifts the learner relative to the teacher. The teacher is more attentive to cooperate with the student for capability, creating a decided shift to a learner- over a teacher-centered focus in the educational task. The teacher - learner relationship undergoes a change. The literature describes the teacher as moving from expert to coach and facilitator, or even relating as a

colleague, peer and fellow learner. Consequently, the learning environment is more egalitarian, relaxed, flexible, informal and exploratory and interactions are more contextually and experientially relevant to the student. The teacher is much more invested in helping the learner see educational values and works as Hase and Kenyon (2007, p.112) observe, "Learning is an integrative experience where a change in behaviour, knowledge, or understanding is incorporated into the person's existing repertoire of behaviour and schema (values, attitudes and beliefs)." This requires the teacher to be more attuned to undercutting the dynamic of personal resistance to learning without threat to the learner. Learning tasks created by the teacher are authentic, global, varied, constructive and negotiable; learning resources are open, non-linear, flexible and negotiable, all of which McNickle (2003) asserts is heutagogical. Assessment is more integrated, looking for capability; it does not exact penalties for chasing false leads. In heutagogy, the teacher understands that learning is far more in the hands of the learner.

What is clear from the research is that it is from the context of the classroom that professors need to consider the skills, experiences and abilities of the students, regardless of age, in order to develop appropriate teaching/learning, examination strategies, and meaningful feedback mechanisms to best optimize the desired learning outcomes.

THE OTHER SIDE OF THE LECTERN - THE GOOD THE BAD AND THE UGLY

When asked to consider the modern student experience with teaching, one of the most dominant themes which surfaced was that of communication: transmitting or conveying information. This is, in essence, the role and world of the professor. In an educational environment, a rubric is often used to establish standards of performance, in the case of written communications. When, however, considering the experience of the student within a classroom, whether virtual or physical, communication is a much more complex task, and may not be assessed quite so simply. Nonetheless, for sake of simplicity, a parallel is evident. The dominant needs within a common rubric can be applied to those requirements of the modern student experience: the need for clarity of purpose, understanding of the subject, and, on a more personal level, creating a thought-provoking environment. The following is a presentation of anecdotes and observations which may share but a glimpse of a modern student experience.

Student Motivation and Time

Four years ago, an English instructor once imparted the knowledge to my Freshman English class that education is like a buffet: everyone would be presented with it over time and each individual should make the best of it by continually going to "*fill your plate*". While I have found there to be much truth to this statement, the fact remains that many students do not take up the charge to fill their plates. Part of this would seem to be a different motive or incentive for their education. Some students take their time in college for granted, taking courses to pass the time or to appease parents, developing a sense of apathy and survival, rather than seeing the value in it. However, for those who do not possess this sense of entitlement, the anticipation of opportunity, obtaining expert experience, and developing skill provides substantial incentive. Clearly, the life

experience and situation of each student will affect his or her motivation and purpose for education. The implications of this are quite evident, as motivations determine actions, and how students use their time.

Students are concerned about time and, although the student mind harbours big-picture concerns like, “what am I going to do with my life?” and “when is real life finally going to start?” requirements to continually produce and meet deadlines leads to questions in the short-term, such as, “am I going to have time for the rest of my life after my class and assignments are finished tonight?” It should be noted that few students possess the willingness to dedicate most of their entire life to academia, unlike their professors. Hence, for an assignment to have value, it must be something which will produce a foreseeable benefit to students, whether in the form of knowledge, experience, or ideas. In any case, a student “trades in” a small portion of his or her life in order to produce these pieces of work, regardless of the quality of the final product. Although professors also place their time and effort into the student’s works, students do not typically consider this aspect. Therefore, an assignment without discernable purpose, poses a frustrating challenge to a time-constrained student with an already burdensome workload

The Purpose-Driven Assignment

When students feel that their time is not being used on purpose, frustrations in the course will become more apparent and instantly amplified. In this regard, one series of assignments for a particular class serve as the epitome for the need for purpose. The most obvious evidence to this was the extravagant work put into weekly numerical and written analyses, of which each student in the class was rewarded by a checkmark. Students would receive papers back with a checkmark for completion, no grade, and no feedback. The professor would instead hand back the assignments, and then place an overhead sheet showing the final answer. The overhead was then all too quickly removed, never to be seen again. Despite requests from students, the answer key was to be “preserved” for the integrity of future classes. It was a rarity for students to ever see a common answer between peers, most of the student calculations were incorrect, thus leading to an elevated level of frustration.

An important aspect of any assignment is the feedback on whether proposed student solutions are legitimate, viable, or correct. Yet, these assignments had no feedback, or visible purpose to students. . In the end, students were discouraged from creating something of value, given that the only motivation for completing work was to receive a checkmark. The lack of classroom discussion was stifling and provided little incentive to provide in-depth analysis or constructive thought. While feedback in itself is an invaluable contribution to the student experience, the purpose of an assignment, project, or task must have a clearly stated purpose consistent with the objectives of the course.

A is for Effort

Students have a great appreciation for the professors who take the time to invest into their students, and give feedback, which is never a wasted effort. One primary example of this was the work of my first year English professor, in community college. Although there were multiple first year sections totalling more than 60 students, for every paper

submitted, the professor wrote a full-page of individual feedback, as a matter of principle. The page consisted of praise, constructive criticism, and the basis for the assigned grade, in addition to recommendations for improvement. There were helpful aids according to each student's level, from forming a basic sentence, to constructing abstract writing ideas. Those who made use of it, were assured an improvement in English and written skills, of which the professor was correct. The professor's consideration and thoughts may not have been evident in a physical classroom, but their actions helped to grow the skills and abilities which the class sought to develop. By addressing each student individually, the professor provided the students with the opportunity to reconstruct individual thoughts and ideas, through the professor's personalized advice. This professor guided students towards a single standard; however, at the same time was focused on individual improvement and development, which was consistent with the explicit purpose of the course.

Explicit Purpose of Professor

The purpose of a professor is a key element which influences the student learning experience - not only in terms of acting as a guide for determining an instructor's class habits and assignments but, secondly, for influencing the instructor's expectation of students. As well, the professor functions as a foundation for future course improvement. The lack of such a simple statement, or even failing to make it explicit, may cause difficulties for students.

When the intention of an professor is not defined, on an assignment-level, it creates tension as to what the expected result should be. For professors to be explicit about the conclusion of an assignment, whether as an open-ended analysis, or for reaching a particular conclusion, allows students the knowledge of whether they have the freedom to play. Students then may pursue memorized/cookie-cutter answers, or personal interpretation through application. In this way students will work either to concentrate their findings in a specific area, or leave them open-ended as they pursue their own learning. On another note, if a project is meant to be "open" and creative, the marking scheme should be reflective of this, and be expressed to the student, not based on a restrictive marking system, such as having a particular keyword present in an answer.

At times, I will speak to a professor after an assignment has been returned, and am given the response, "What I was looking for you to tell me was..." and then know that the professor had a pre-conceived notion of what the conclusion of the assignment was to be, but yet, I never understood (or failed miserably at carrying out) what the intent was. The larger issue is when this discussion is not held on an individual level, but occurs on a class-wide level, when a professor states that no one in the class was able to communicate the conclusion that he or she desired. In this instance, it would seem that either the entire class is incompetent, or the professor did not adequately communicate what they were looking for, because absolutely no one told them what they wanted to hear which was reflected in student responses and in the resulting marks. Clearly, if these expectations are not communicated, it can frustrate both student and professor.

Classroom Environment

Regardless of whether students are able to give their personal thoughts on the material presented, they still require approachable leadership in the classroom, whether it is a physical or virtual environment. For the amount of tuition and effort which is (typically) put into a course, students appreciate having guidance: that is, knowing that their professor is passionate *and* talented about his or her subject matter, and that they are willing to share their views with the class. Professors who praise the conclusions and opinions of the class, although temporarily inspiring, do not add to the overall value of the class if they do not add to the conversation. Sharing something as small as a contradictory point or an anecdote on the application of the subject is enough to whet the (right) student's appetite, to create a more balanced discussion, and hopefully inject some truth, when incorrect assertions have been made. Conversely, leadership must be approachable, in that fear-driven environments are often counterproductive to inquisitive minds. For the introverted and awkward 18-year old freshman who tries to approach a doctorate-possessing professor for the first time, fear is a definite issue. In fact, some students will resort to e-mails over in-person discussions to avoid embarrassment, in hopes that the professor will forget the student's name, inexperience and clumsy exchange prior to the next class. (This is especially the case for professors who have not made it clear that their intent or purpose is to teach and impart knowledge to others.) However, having said this, there comes a time where learning takes greater priority over reputation and the possibility of embarrassment. The stage of being terrified and potentially thought of as a fool has passed, because for one thing, students by this point have reaffirmed their capabilities, not to mention the realization that the professor's intent has hopefully been made clear, as one who does not intend to harm, but to guide.

In conclusion, the need for clarity of purpose, in terms of the worth of an assignment, and the intent of the professor, strike a resounding chord with students. Knowing that a course environment, whether physical or virtual, is constructed to aid, and not to hinder, a student is encouraging, and creates trust in the teacher and more incentive for success. Considering the individual circumstances of each student, specifically, time-management issues between life and other burdens, on top of general apathy, it is necessary to establish the pertinence of assignments. Although students may not recognize the effort that professors put into their classes, clearly communicating, whether on a person or class-wide level, and emphasizing the value of assignments demonstrates a regard for the student, as a whole person, not to mention his or her future. Without adequate communication, there is little hope for progression and improvement between students and professors.

HEUTAGOGY AND BAIN'S, *What the Best College Teachers Do*

Does Heutagogy Match to "The Best"?

The earlier summaries and discussion of pedagogy, andragogy and heutagogy demonstrate very strong contrasts in conception, educational priorities and tasks, and a divergence in the respective roles of the teacher and learner in each. We wondered whether "non-heutagogical" discussion in the literature on teaching excellence might be elaborated in terms congenial with heutagogy. We explored this by doing a review of Ken Bain's volume entitled *What the Best College Teachers Do* (2004) which is based

upon an extensive study of acknowledged master educators in post-secondary institutions across the United States. We also kept an eye to another text: Parker J. Palmer's *The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life* (1998; rev. 2007). The reader is encouraged to 'flip back' to the brief earlier summaries for resonances to the insights, priorities and practices of master teachers identified in Bain and what he chooses to warn against. The reader will find that the degree of alignment between heutagogical imperatives and what Bain identifies as "the best" is particularly striking. Palmer's work also shows a striking affinity to both heutagogy and Bain's work.

The Review of Bain

The chapters of Bain's volume gather the extensive results of his study around seven large questions: 1) What does the study mean by "the best" teachers? 2) What do 'the best' know about how we learn? 3) How do they prepare to teach? 4) What do they expect of their students? 5) How do they conduct class? 6) How do they treat their students? and 7) How do they evaluate their students and themselves? In his epilogue, Bain asks what can be learned from them.

Given the range of individuals, styles of education and disciplines under consideration in the study, what marked out the best teachers in Bain's study was not as difficult to specify as might at first have been thought: "All the professors we chose to put under our pedagogical microscope had achieved remarkable success in helping their students learn in ways that made a sustained, substantial, and positive influence on how those students think, act, and feel" and, in our opinion, identical to the notion of transcendence discussed in the introduction to the paper. (2004, p. 5: hereafter Bain is noted simply by page number in brackets) The focus was not upon educational means or volume of material covered, but the achievement of results, which Bain repeatedly calls "deep learning." (Cf. Palmer, 2007, p. 124 who speaks of preferring to teach "holographically" over simply "dumping".) There were two acid tests for inclusion in the study as master teachers: a) that "most of their students were highly satisfied with the teaching and inspired by it to continue to learn," (7) and b) that their students "learned," meaning that they met worthy and substantial learning objectives in ways that won the respect of colleagues in their disciplines and in the broader academic community (8). Bain describes deep learning in terms of student understanding, personal transformation, independent thought and reflection, integration, intellectual hunger for more, perspective shift, and a preparation that had an impact far beyond the classroom. (10) The best educators, in short, facilitate student excellence in the attainment of worthy learning outcomes that have a broad and lasting impact.

What do 'the best' know about how we learn? Bain summarizes that they know their discipline extremely well; not only its fundamental principles, organizing concepts and the history of its developments, but also how people can best learn it and where they are likely to face difficulties. (24-26) 'The best' can simplify and clarify its complexity, furnishing the means to its mastery. Bain writes: "While others, for example, talk about transmitting knowledge and building a storehouse of information in the students' brains, our subjects talk about helping learners grapple with ideas and information to construct their understanding." (16) Subjects of the study had at least an intuitive grasp of current

learning theory and a good number had read the literature. Far from being a mere receptacle that receives and memorizes knowledge, these master teachers held that each learner brings to the classroom a complex of accumulated paradigms by which she or he has made sense of new information in the past. “Because they believe that students must use their existing mental models to interpret what they encounter, they think about what they do as stimulating construction, not ‘transmitting knowledge.’” (27) Some mental models are helpful to new learning; others are not. Consequently, deep learning will call for the professor to create “expectation failure” (28) where faulty mental models can be tested and shown wanting in a meaningful crisis, and where insight and transformation of those models can be facilitated in the asking and answering of important questions. It is more than telling someone they are ‘wrong’ and giving them the ‘right’ answer. Bain’s ‘best’ are committed to the heutagogical conviction that knowing facts and learning to think about them are not separable operations; they are inextricably intertwined. The best teachers have given thought to what motivates and what discourages such learning. Invariably, they utilize intrinsic over extrinsic motivators, preferring, out of respect for their students, enthusiastically to persuade them by invoking “the subject, the questions it raises, and the promises it makes to any learner.” (36) They possess an absolute commitment to *every* learner’s capacity (without dividing them into “sheep” and “goats”) with collaboration and cooperation to attain the highest standard and grades. (35) Outstanding teachers typically utilize the first lecture strategically to announce the above using the vocabulary of promise instead of demand. (36f.) In a bid to demonstrate the connection of course content to real life, the best teachers create syllabi that have flexibility to integrate student interests to curriculum. (39) They know the value of intellectual challenges and so use all their creativity to intrigue and fascinate their students. They are also aware that there are different categories of learners and convictions in learners concerning knowledge. Some learners want to maximize the opportunity (“deep learners”), others to learn to the test (“strategic learners”), and still others to ‘surface’ learn for survival and to avoid failure (“performance-avoiders”). (40; cf. Craig Nelson cited in Bain, 2004, 40, who calls those who learn to the test “bulimic learners.”) Learners are also committed to a range of conceptions of knowing: “received knowing” (knowledge is right answers to be memorized); “subjective knowing” (knowledge is opinion); “procedural knowing” (knowledge is mastery of ‘the game’ of the discipline); and “commitment” (knowledge is ideas and ways of thinking that can be consciously and consistently used). (42f.) Outstanding teachers know that their classes will contain all categories of learners and all conceptions of knowing and that individual students may be composites of different types depending upon the course or discipline. As a result, their teaching appeals across *all* learner categories and convictions in a bid to ‘shift learning/knowing upward’ in each case. (43f.) Master teachers know that this educational strategy must be undertaken because ‘one size *does not* fit all.’ (45)

Bain indicates that exceptional teachers prepare to teach by treating “lectures, discussion sections, problem-based sessions, and other elements of teaching as serious intellectual endeavors as intellectually demanding and important as their research and scholarship.” (17) He notes that the “two powerful notions—that teaching is fostering learning and that it requires serious intellectual work—appear quite clearly in a baker’s dozen of specific planning questions” (49) frequently heard from outstanding teachers:

1. What big questions will my course help students answer, or what skills, abilities, or qualities will it help them develop, and how will I encourage my students' interest in these questions and abilities?
2. What reasoning abilities must students have or develop to answer the questions that the course raises?
3. What mental models are students likely to bring with them that I will want them to challenge? How can I help them construct that intellectual challenge?
4. What information will my students need to understand in order to answer the important questions of the course and challenge their assumptions? How will they best obtain that information?
5. How will I help students who have difficulty understanding the questions and using evidence and reason to answer them?
6. How will I confront my students with conflicting problems (maybe even conflicting claims about the truth) and encourage them to grapple (perhaps collaboratively) with the issues?
7. How will I find out what they know already and what they expect from the course, and how will I reconcile any differences between my expectations and theirs?
8. How will I help students learn to learn, to examine and assess their own learning and thinking, and to read more effectively, analytically, and actively?
9. How will I find out how students are learning before assessing them, and how will I provide feedback before—and separate from—any assessment of them?
10. How will I communicate with students in a way that will keep them thinking?
11. How will I spell out the intellectual and professional standards I will be using in assessing students' work, and why do I use those standards? How will I help students learn to assess their own work using those standards?
12. How will the students and I best understand the nature, progress, and quality of their learning?
13. How will I create a natural critical learning environment in which I embed the skills and information I wish to teach in assignments (questions and tasks) that students will find fascinating—authentic tasks that will arouse curiosity, challenge students to rethink their assumptions and examine their mental models of reality? How will I create a safe environment in which students can try, fail, receive feedback, and try again? (50-60 *passim*)

In answer to the question, “What do they expect of their students?” Bain states quite simply, they expect “more” (17). They “tended to look for and appreciate the individual value of each student” and they “had great faith in students’ ability to achieve.” (72) Their pact with students is expressed in terms of “trust, rejection of power, and setting standards that represented authentic goals rather than schoolwork....” (74) While they actively search for ‘diamonds in the rough’ and take seriously and respect all their students, they are realistic about some students not being able to achieve and offer advice based upon good data and reasoning rather than resorting to ill-considered assessment or rough prejudice. Problems in class are a driver to improve themselves and their courses rather than an excuse to blame their students. (78) It is a base conviction of ‘the best’ that

“people can change, and those changes—not just the accumulation of information—represent true learning.” (83) They invest themselves deeply in kindling the reasoning abilities and habits of mind of each student. As one master teacher averred, “You don’t teach a class. You teach a student.” (Paul Baker cited in Bain, 2004, p. 97)

When it comes to conducting classes, outstanding teachers are distinguished not so much by different methods as by certain underlying principles that energize their teaching and a few techniques that propel their application. (99) First, they create a natural critical learning environment where “the challenge and permission for students to tackle authentic and intriguing questions and tasks [= ‘natural’], to make decisions, to defend their choices, to come up short, to receive feedback on their efforts, and to try again [= ‘critical’]” (100) are maximized. Second, great effort is exerted to capture the learner’s attention and keep it. (109) Vital to this is, third, to start with the student in mind rather than the discipline or, even less, the instructor. ‘The best’ are student-centered, building from what students care about to the discipline. (110-112) Fourth, exceptional teachers acknowledge the empowered status of learners and seek commitments from them. (112-114) Fifth, they foster learning outside of class. (114) They want, sixth, to engage students in disciplinary thinking (114f.) and, finally, construct diverse learning experiences because diversity creates the hunger to learn. (116) These underlying principles inspire ‘the best’ to press for the highest quality of communication and interaction in their classrooms. (*Cf.* Palmer, 2007, pp. 76f. on the design of a classroom session and how it resonates to Bain’s priorities.)

Given their commitment to a student- rather than teacher- or discipline-centered educational approach, outstanding teachers show a high regard for their students. They express strong trust in their students, believing that they want to learn, assuming that they can, and displaying personal openness to them. (18; *cf.* Palmer, 2007, p. 42 advises that “the way we diagnose our students’ condition will determine the kind of remedy we offer.”) They create an interactive, collegial atmosphere in which their role is not “expert” or “high priest” but “fellow learner” or “fellow traveler” and “fellow human being” with their students; the educational demeanor is characterized by a sense of awe, curiosity and humility. (142; *cf.* Palmer, 2007, p. 201 who speaks of the learning community accountable to the subject.) They revel in the common bond they have with their students and also how much they don’t know because it is the prelude to reaching new levels of understanding. (143) Neither the capacity to learn nor to teach are fixed; each can be developed and so ‘the best’ are deeply committed to learn to teach better and to teach for best learning.

So, how do they evaluate their students and themselves? Testing and grading “are not incidental acts that come at the end of teaching but powerful aspects of education that have an enormous influence on the entire enterprise of helping and encouraging students to learn.” (150) Assignments and exams can actually confound learning; but they are also potentially powerful tools to comprehend progress and further help students learn if they are designed for congruity to the stated learning objectives of the course. It is assumed in the evaluation tools of ‘the best’ “that learning is a developmental process rather than only a question of acquisition” and that grading is “not a means to rank but a way to

communicate with students.” (153) The emphasis is on learning rather than performance. (155) Learning-based assessment creates urgency for outstanding teachers “to find out as much as possible about their students” (157) so as to make sense of the learning implications of assignment results in each case. Bain notes a variety of means that outstanding teachers employ to obtain this information. (*Cf.* Palmer, 2007, p. 141 on evaluating students.) Outstanding teachers are also as critically interested in how effective their teaching is in facilitating student learning as they are in assessing that student learning. By a variety of means *through* the course and not just at its end, master teachers solicit feedback of various kinds to discover whether their instruction is making a “sustained, substantial and positive difference in the way ... [students] ... think, act, or feel—without doing them any major harm”. (163) They are also interested in gathering data for more summative self-assessments through the use of such instruments as teaching portfolios which incorporate student ratings, syllabi, student work, and the assessment of colleagues. Aware of both the strengths and weaknesses of each kind of data, (*cf.* Palmer, 2007, pp. 147-149) the object they have in view is to ‘make a scholarly case’ in the portfolio for increased teaching excellence from a learning perspective. (166-168)

Excellence in Learning is Heutagogy

It can be readily seen that Bain’s volume consistently and repeatedly resonates to the conceptions, priorities and practices that are embodied in heutagogy, incorporating and pressing for these over the agendas and conceptions of pedagogy and andragogy. In the epilogue of his volume, Bain writes:

If you ask many academics how they define teaching, they will often talk about “transmitting” knowledge, as if teaching is telling. That’s a comforting way of thinking about it because it leaves us completely in control; if we tell them, we’ve taught them. To benefit from what the best teachers do, however, we must embrace a different model. One in which teaching occurs only when learning takes place. Most fundamentally, teaching in this conception is creating those conditions in which most—if not all—of our students will realize their potential to learn. That sounds like hard work, and it is a little scary because we don’t have complete control over who we are, but it is highly rewarding and obtainable. (173)

‘The best’ are convinced that teaching ability is a learned and improvable skill rather than an implanted and immutable gift or a cluster of techniques. As such, they are restless to do all in their power to create the ideal conditions of heutagogy for best learning.

THE IMPLICATION OF TECHNOLOGY ON LEARNING AND TEACHING

Heutagogy rests upon the effective handling of information. In a pedagogical environment, the teacher can assimilate, synthesize, and massage the data so that the information that is disseminated in the classroom has had its rough edges removed. When heutagogy is used as an educational method, the acquiring and assimilation of information is placed much more into the hands of the students as they discover and

analyze data under the guidance of the professor, thus doing a great deal of their own work in making sense of the subject matter.

Heutagogy thus rests on two assumptions, first that the information world in which the student operates is understandable, not just in content but in origin, format and reliability; second, that students have reasonable skills to identify informational problems, acquire the data needed to address those problems, and evaluate the information acquired so that it can be used effectively. Unfortunately, neither of these two assumptions are supported by existing educational patterns.

Since the creation of the Worldwide Web (WWW) in 1989, a revolution in the world of information, unprecedented in human history, has overtaken academic life. The information technology revolution has led to several rather astounding challenges:

Firstly, academics have an impressive array of new tools available to them, from PowerPoint, to Video, to projected Internet feeds, to online instructional tools, to complex information databases, to collaboration tools (blogs, wikis), to mobile delivery of education via podcasts, messaging and so on. The major related challenges are the following:

- a. It is extremely difficult for professors to keep up with technological changes, both in areas with which their students are already familiar (WWW, media, mobile devices) and in areas with which neither many professors nor students have significant familiarity (databases, collaboration tools).
- b. A large percentage of professors have incorporated only a few of the new tools (primarily PowerPoint and courseware) into the educational process (Selwyn, 2007).
- c. Many students equate being technologically savvy with being good researcher and skilled handlers of information. A large body of research shows, however, that this equation absolutely cannot be made. Able use of technology is not at all the same as able handling of information (Jenson, 2004; Katz and Macklin, 2007; Head, 2008; University College London (UCL) CIBER Group, 2008).

Secondly, the very nature of what we call "information" has changed, as has its subset, "academic information." Prior to the WWW, most publishing was done through a process of gatekeeping. That is, manuscripts were vetted by experts for quality and marketability before being allowed into the publication stream. Many proffered manuscripts were thus never published. While gatekeeping continues, the WWW has opened the opportunity for anyone to publish without any form of gatekeeping at all. What is more, such publication is virtually free to both producer and user, and our common search engines have no way of distinguishing between a reasoned piece of high quality academic writing and something less rigorous. When Wikipedia and Google become the primary sources for university student information, with libraries and academic databases becoming third and fourth choices (Head & Eisenberg, 2009), the task of gatekeeping falls on the students, who often do not know they have been given

such a task and who lack the skills to evaluate the information they are encountering (Wang & Artero, 2005).

Thirdly, the world of information itself has become exceedingly complex. For the average scholar (professor or student), beyond the traditional books and journals are e-books, e-journals, academic websites, open-access self-publishing venues (e.g. Scribd), open-access journals, academic blogs, pre-review academic articles, podcasts, videos and so on. Collaborative academic wikis publish works in progress, with the full intention that they will be revised over time by a whole team of scholars (Patil and Siegel, 2009). It is thus becoming increasingly easy to miss cutting edge information, especially if scholars searching for it in the new environment keep their scope of exploration narrow.

Fourthly, the tools for information acquisition are complex. Journal databases require significant training to maximize, and even seemingly simple tools like Google Scholar are almost prohibitively challenging when trying to make sense of search results.

In the face of what is now a dramatically new era in education, technology cannot be seen as a mere adjunct tool. Rather, it needs to become a deeply integrated component within the educational task. Not only do professors need new information technology skills, but students need a great deal of guidance to learn how to evaluate the information they are confronted with and how to maximize the use of all the high quality resources they are finding. The mere presence of technology does not create skilled information handlers. Thus a good deal of effort must be applied to helping students to understand their information environment and to develop the skills they need to handle information well.

This is where heutagogy places a high demand, both on professor and student. It is becoming increasingly clear that information in itself has become a cheap commodity, obtainable anywhere, often for free. To see a professor standing at the front of a classroom, PowerPoint loaded and lecture ready to be delivered, is, for most students, an anachronism (Badke, 2008). Why would students take an hour to hear a professor provide an information dump that the average person could have acquired from Wikipedia in half the time? Why value the conveying of information from one brain to another, when mere information is so plentiful and so cheap?

The new information era professor will be someone who is keenly aware of the tools and resources of his/her discipline, will have a strong disciplinary sense of methodology, and will guide students as they acquire knowledge and skills through largely self learning. What sort of guidance is required? It will be the kind that separates wheat from chaff, enables students to develop the skills of critical evaluation and use of evidence, and provides a critique of student work that will enable students to become skilled disciplinary navigators. To be sure, there will be knowledge that needs to be learned as factual information, but other means than valuable classroom time will be devoted to that task. The classroom or online forum will be the place where students learn how to “do” their subjects, navigating through the sea of information, most of it digital, while learning how to solve problems and address issues. The result will be graduates who know what they are doing, despite the complexities of the demands placed upon them by the

workplaces in which they find themselves. All of this represents the foundation of heutagogy in which students construct meaning through discovery, using the skills of research to make sense of the subject matter within its larger contexts.

The new information era student will have a high expectancy of becoming deeply involved in the educational process, doing a good deal of research personally, using a wide range of complex technological tools, interacting with the professor about key issues and skill sets, and receiving significant critique of work done along with an opportunity to revise it. The image of the passively absorbing student will be replaced by that of the student actively seeking, evaluating and making good use of information under the guidance of a skilled disciplinary expert, the professor. This is a sure path to a genuine heutagogy.

A PATH FORWARD

The context of education has never been static and the speed of change to many appears dramatic, thus it challenges all who are involved within education: students; professors; and administrators, alike. As educators, we have always known that knowledge alone is not the purpose and that, in fact, a future change in behaviour, attitude, beliefs, and actions of the individual is the sole purpose of education - a higher level of cognitive thinking, ultimately, leading to an erudite person; an individual who has transcended. This places the “humanist” element of education - how we teach - at the forefront and the content as a secondary concern. This shift mirrors the shift from being teacher centered to being student centered or from anadragogy to heutagogy and has significant themes for educators to consider individually and collectively.

As Professors

Individually as professor

Conceptually, the individual professor needs to have a greater awareness of one’s “being” within the classroom and question exactly what is being modeled? Professors, individually, need to review their epistemological assumptions about learning and the nature of learning – an inner journey, of sorts.

Within the course design, professors need to become more familiar with the educational literature and specific teaching strategies, techniques, and ideas since being a content expert is no longer enough, particularly, in light of the onslaught of information available from the internet, regardless of its reliability or validity. The professor of the 21st century is one who is familiar with the notion of transcending the student, which requires meeting the student where they are. Courses need to be designed such that the learning outcomes are clearly identified and matched to evaluation method and rubric, thus linking student motivation and satisfaction. A clear catalyst to student success is appropriate student centered feedback. Additionally, courses can no longer be designed in isolation and they need to link and integrate to other courses more purposefully in content and to overall student development.

Collectively within community

First, educators need to ensure that entire programs, not individual classes, are aligned and integrated to develop the students' epistemology, intrapersonal (metacognition) and interpersonal. This theme places program design at the forefront of education and that it renders the importance of individual classes most truly calculable only as part of the educational aggregate—i.e., in terms not only of its actual content, but how well it builds upon its pre-requisites and prepares for next levels. This is also the point at which technology and its application within a program needs to be considered. As a result, the focus is student centered on the sequencing of courses, the type of learners, the instructional processes and resources, assessment methods, student sensitive feedback, and the appropriate use and integration of technology.

Second, there needs to be significantly more dialogue across disciplines to promote broader and more holistic perspectives. It is not that there is a dis-connection on the values, but, more than likely, it is the principles - the way we act out these values – where there is misunderstanding. It is believed that this type of dialogue is central to the refinement of one's own epistemological beliefs, as discussed previously. Additionally, this theme would and should produce more inter-disciplinary courses that would link well to other programs.

Thirdly, and most importantly, professors and programs collectively need to demonstrate transcendence or double loop learning: a systematic process where courses and programs are assessed based on the students' experiences and which become the process through which enhancements are made. There should be a deliberate attempt to record and report the learning that is occurring by the professors within the classroom instruction, such as course portfolios, and also program portfolios. And, there should be action plans developed to improve courses or series of courses on a continuing basis.

Administrators

Although somewhat outside of the general scope of this paper, it also became apparent that the significant fundamental shifts occurring within the educational environment have resulted in changing needs and desires of all students. It is of the utmost importance that Universities change and adapt and this will require additional resources. Additional resources need to be allocated toward faculty development specific to teaching and delivery methods, and, additionally, time allowed for performing the necessary changes and enhancement to programs. Resources for appropriate use of online delivery and alternative classroom strategies are needed so that learning can become more student focused.

Additionally, instructional structures and systems have to adjust since the very nature of the way we transcend students has changed. We can not expect a 19th century structure to work in the 21st century. The traditional structural approach to universities (administration and academic divisions) has to change and also, within the academic division, the complete focus on disciplines within that structure has to change. The very nature, context, and requirements of students has changed, and therefore institutional structures have to change to reflect the changes in the learning demands and objectives of its constituents, the students, or else become redundant.

The current context has significant implications for all who are genuinely concerned about transcendence within education and the role and purpose of the 21st century professor. The western world has journeyed through the agrarian age, progressing to the industrial age, and we are at the beginnings of the information age. Information is everywhere and it is free. The future skill of the utmost importance will be the ability to evaluate, understand, and reflect on multiple levels and types of information. This only highlights the important role that Universities can and have to step into, although this places new demands and requires both individual and intuitional changes. There is much work to be done, and much of it at an individual level, however, unless there is a desire at a community level, an individual's ability will always be limited. In the case of Universities, pursuing research excellence has always been a requirement and will continue to be a quality indicator, yet, there is now an additional requirement to pursue teaching excellence. When we speak of transcendence, it is less important that we master it and more important that we model it - and attempt to pursue it - for what we model to those we claim to transcend is more important than what we say we do.

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