

TEACHING VALUES: AN EXPERIENTIAL APPROACH

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ABSTRACT

Teaching values provides a particularly difficult challenge, relative to teaching concepts. We define concepts as the knowledge structures and thought processes by which students classify elements of a situation and identify the patterns of cause and effect. Values are defined as the relative importance students place on their interests and objectives. While it is relatively easy for a teacher to illustrate the importance of concepts to students' interests and objectives, it is much more difficult for teachers to influence the interests and objectives themselves. While concepts are attempts to objectively represent reality, interests and objectives tend to be seen as subjective expressions of each student's unique personality. However, students' interests and objectives can be influenced by education, and some interests and objectives are more desirable than others from the perspective of society, employers, and the students' own well-being. This paper addresses the problem of teaching values from the perspective of motivational theory and Kolb's experiential learning theory. Kolb's theory suggests that the degree of involvement in an experiential exercise will determine the degree to which students internalize the consequences of their decisions, and hence, are motivated to reassess their values.

INTRODUCTION

In Alfred North Whitehead's classic book, *The Aims of Education* (1929), the famous philosopher warned us against "inert ideas." What makes ideas inert? Whitehead suggests that it is a lack of connectedness with other ideas, and ultimately, with people's interests and objective in life. We refer to these interests and objectives as *values*. From an educational perspective, ideas – or what we will refer to as *concepts* – are relatively easy to teach. They are abstract representations of reality; characteristics of the world we live in, arranged into patterns of cause and effect. However they are inert until we

connect them with values, and values are not easy to teach, as they are subjective and unique to each individual. What one person values, another might disdain.

Stating that values are subjective and unique to each individual is not the same as saying all values are equally meritorious from a social, a business, or even a personal perspective. Morality and ethics are systems of values that are important to society, and by extension, to students who want to function as productive, valuable citizens. The values of loyalty, honesty, and productivity are important to business, and by extension to students who want to be successful in their business careers. Hard work, discipline, and self-reliance may run counter to some students' natural inclinations, but valuing these characteristics is not only likely to make students better citizens and employees, but also healthier, happier, and more fulfilled human beings. Difficult or not, as educators, we should not solely be teaching inert concepts. We should also be teaching the values that bring the concepts to life.

This paper will address how to teach values. We will begin by discussing the trends in the marketing of higher education, and particularly education in business schools, that appear to have made teaching values increasingly difficult. We will then discuss the nature of values and how they relate to conceptual learning from a theoretical perspective. Finally, we will return to the treatment of education as a marketing problem, drawing on the concept of service-dominant logic (SDL) from the marketing literature. We will use SDL to develop a theory of service-based education, showing how it can be adapted to teaching values by drawing on theories of intrinsic motivation and experiential learning.

BACKGROUND OF THE PROBLEM

Over the past four decades, higher education has been evolving from a tradition-based to a market-based system (Naidoo, Shankar, & Veer, 2011). Historically, the nature of educational tradition varied widely. Colleges and universities

retained the monopolistic power to accept or reject, retain or dismiss students based on their willingness and ability to intellectually perform and conform. This was most true in countries where higher education was largely governmentally funded and delegated to state-sponsored institutions. However, even in the United States, where higher education was available through a larger variety of state and private institutions, the educational institutions administered financial aid, thus giving them enormous power over their students.

In the broadest sense, the movement toward a market-based system was triggered by the emergence of a knowledge economy and pressures on universities, industry, and government to develop better mechanisms for efficiently creating and disseminating scientific knowledge (Etzkowitz, Webster, Gerhardt, & Terra, 2000). One such mechanism was a change from free to student-funded education and from school-administered financial aid to independently-funded student loans (Naidoo et al., 2011). This movement placed financial decisions more directly in the hands of the students, incentivizing them to pay more attention to the costs and benefits of their education. Students had more power to decide which institutions' education best met their needs. Students' power, in turn, forced colleges and universities to respond to increasing competitive pressure to recruit. In short, colleges and universities were forced to market their educational product (Stachowski, 2011). The effects of the change in the competitive environment are apparent in the emergence of new "for profit" universities (Morey, 2004; Pfeffer & Fong, 2004), an increasing interest in strategic planning and curriculum reform (Chia & Holt, 2008), and an increasing focus on relevance to the objectives and interests of the students (Taylor & Judson, 2011).

Framing higher education as a marketing problem, Judson and Taylor (2014) draw on the concepts of service-dominant logic (SDL) to analyze marketing efforts in higher education. According to SDL, marketers should not see themselves as agents who promote products and services, but rather, as facilitators who provide *operant* resources, knowledge and skills that interact with the *operand* resources of their customers resulting in the co-creation of customer value (Vargo & Lusch, 2004, 2008, 2013, 2014). In other words, SDL frames what marketers have traditionally thought of as products and services as a kind of packaged "service" that helps consumers create satisfying experiences. Applying this to education, colleges and universities should not think of themselves as providing students with an education, but rather, they should be facilitating student learning by providing educational resources with which students can interact as they co-create the desired educational outcomes. Taylor and Judson (Taylor & Judson, 2011; Judson & Taylor, 2014) argue that SDL would increase the quality of education, and conversely, that the failure to espouse an SDL approach has decreased quality, leading colleges and universities to provide educational credentials, while neglecting the underlying educational accomplishments the credentials supposedly represent.

Geddes, Cannon, Cannon, and Feinstein (2015) pursue a similar theme, arguing that education, perhaps more than any other industry, requires enormous co-creative effort on the part of the consumer to yield the benefits it seeks to deliver. The authors argue that the most important operant resource educators can supply may not be educational in nature, but rather, the motivation to pursue the learning process. They call the motivational approach *transformational* (as opposed to an *informational*) education. It seeks to increase students' co-creative effort, guiding students not only to utilize the textbooks

and other materials supplied by the university, but also to draw upon the virtually unlimited supply of knowledge available from the Internet, library resources, and interpersonal networking. In the end, transformational education seeks to build students' *absorptive capacity*, enabling them to quickly find, absorb, and apply the information required to succeed in their working environment (Cannon, Geddes, and Feinstein, 2014).

Espousing a *transformational* approach to education begs the question of how to motivate students. Geddes et al. (2015) draw upon Ajzen's (1991) theory of planned behavior, suggesting that motivation, expressed through students' behavioral intentions, will depend on students' attitudes toward the targeted educational behaviors, the subjective norms of the students' social network, and students' beliefs regarding their ability to successfully engage in the targeted behaviors. Ajzen's theory suggests that an educator might increase student motivation by shaping students' attitudes toward their educational activities, supporting subjective norms, and students' beliefs regarding their ability to succeed.

Taylor and Judson's (Taylor & Judson, 2011; Judson & Taylor, 2014) criticism of educational marketing is consistent with Geddes et al.'s (2015) "planned behavior" approach. It simply questions the behaviors that drive student planning. The most salient objective for many students, especially those enrolling in business schools, is to graduate and get a good job (McCabe & Trevino, 1994). Business schools have responded by developing value propositions crafted around their ability to help students secure jobs that deliver security and financial success resulting from business success (Pfeffer & Fong, 2004). Students who seek security and financial success might recognize that business success depends on their acquiring a broad set of business skills and supporting values, not just a degree from a good school. However, this is not always obvious to students. A survey of students from 31 of the most selective universities in the United States indicates that, "Students planning to enter business as a career also distinguished themselves from their peers by placing the least importance on knowledge and understanding, economic and racial justice, and the significance of developing a meaningful philosophy of life" (McCabe & Trevino, 1994, P. 211). The survey indicated that business students were also more likely to cheat on exams and indulge in other forms of academic dishonesty. In other words, focusing on the objectives of graduating and getting a good job appears to have distracted business students from the intervening task of co-creating a rigorous, value-based education.

Educators might motivate students to learn the cognitive aspects of the business school curriculum by developing methods of testing that make cheating more difficult and deny good grades to students who fail to master the required material. However, values are much more difficult to measure. Values involve judgments regarding what is or is not important, desirable or undesirable, good or bad. Students can learn the theory behind the judgments and respond accordingly on exams, but this does not mean the students will internalize the values and use them to guide their behavior in an actual work situation. Certainly values can be measured. For instance, Boyd, Dooley, and Felton (2006) demonstrated an approach using content-analysis with students' reflective writing. Unfortunately, if this approach were used to determine grades which, in return, would provide an incentive for student learning, students would require feedback regarding the grading criteria. The feedback would enable students to "game the system," structuring their writing to provide reflective value

insights without actually accepting the values as a guide their personal behavior.

The premise of this paper is that values cannot be effectively taught through conventional means. It is not sufficient to focus on conceptual material alone. Nor is it feasible to enforce value-based learning through conventional testing. Rather, values are the product of personal experience, a co-creative process in which students test the ideas to which they are exposed against their own sense of what is intuitively right and their own experience with what appears to produce satisfying results in practical decision-making situations (Hyland, 1996). Based on this premise, we suggest the use of experiential learning. Experiential learning involves students in a process of confronting problems, experimenting with solutions, receiving feedback, conceptualizing solutions, then experimenting again, in a continuous cycle (Kolb, 1984; Kolb & Kolb, 2005). To the extent that students expect that the confrontation of problems and resulting feedback reflect those experiences they will confront in the real world, students should come to appreciate and be motivated to engage in the co-creation process of experiential learning.

VALUES VERSUS CONCEPTS

The distinction between values and concepts is not new to the educational literature. In the late 1940s, a group of educational psychologists began formulating a taxonomy of learning objectives. The result came to be known as Bloom's taxonomy, published in the *Taxonomy of Educational*

Objectives – The Classification of Educational Goals, Handbook I: Cognitive Domain (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956). Note that *Handbook I* addresses a “cognitive” domain by identifying concepts and the intellectual skills associated with manipulating them to produce logical and creative conclusions. *Handbook II* addresses an “affective” domain, a hierarchical classification of the way people value various types of information, cognitive processes, and objectives (Krathwohl, Bloom, Bertram, & Masia, 1964). A third taxonomy addresses a “psychomotor” domain, where cognitive processes presumably interact with internalized affective triggers to create spontaneous behavioral responses to various types of situations (Dave, 1970; Harrow, 1972; Simpson, 1974). The distinction among the cognitive, affective, and psychomotor taxonomies is well-established in the literature on experiential learning and simulation. A recent search of *Developments in Business Simulation and Experiential Learning* revealed 130 articles mentioning the cognitive domain, 54 mentioning the affective domain, and 23 mentioning the psychomotor domain.

Exhibit 1 summarizes the hierarchical levels of the three domains. The cognitive hierarchy begins with very simple tasks, such as learning terms and concepts, moving on to more advanced thinking processes, such as applying, analyzing, evaluating, and synthesizing new knowledge structures. The affective and psychomotor hierarchies follow a similar pattern, progressing from simple affective or psychomotor tasks and progressing to more sophisticated levels.

In a revision of the original cognitive hierarchy, Anderson and Krathwohl (2001) distinguish between cognitive processes

EXHIBIT 1: COMPARING THE COGNITIVE, AFFECTIVE, AND PSYCHOMOTOR DOMAINS OF EDUCATIONAL OBJECTIVES

<i>Cognitive Domain</i>	<i>Affective Domain</i>	<i>Psychomotor Domain</i>
Knowledge , or the ability to recall ideas such as facts, concepts and theories	Receiving , or the tendency to recognize and pay attention to important stimuli	Perception , or the ability to sense objects, qualities and relationships via sensory organs
Comprehension , or the ability to understand and make intellectual use of knowledge	Responding , or the tendency to act in appropriate ways as a result of a stimulus	Guided response , or the ability to perform a specific act under the guidance of a teacher
Application , or the ability to map concepts onto actual objects, events or phenomena encountered in the real world	Valuing , or the assignment of importance to various ideas, stimuli, or other environmental phenomena	Complex overt response , or the ability to perform a complex pattern of acts
Analysis , or the ability to break ideas down into their parts and logical premises	Organization , or the arrangement of values into a coherent, stable system	Adaptation , or the ability to alter an act to meet the demands of a new situation
Synthesis , or the ability to develop new ideas from apparently unrelated parts	Characterization by a value , or the use of values to control one's behavior	Origination , or the ability to develop new acts through the application of unrelated skills
Evaluation , or the ability to judge the merit of ideas for given purposes		

and different types of knowledge (Exhibit 2). The cognitive processes correspond to the levels of the original taxonomy – remembering, understanding, applying, analyzing, evaluating, and creating (although the final two are reversed in order, with creating, or synthesizing, representing a higher level than evaluating). The knowledge dimension represents conceptual structures that progress in sophistication from factual to conceptual to procedural to meta-cognitive knowledge. Meta-cognitive knowledge is knowledge about knowledge. For instance, strategies are a type of metacognition (Pintrich, 2002). Strategies explain how different configurations of controllable events are likely to affect other events. Clearly, remembering a particular strategy is easier than creating a new one, or even evaluating how a remembered strategy will apply to a particular situation.

The knowledge dimension includes the objects, or output, of the cognitive processes taken from the original hierarchy. The revised taxonomy attempts to address a perceived flaw in the original cognitive framework, namely the distinction between kinds thinking (verbs) and the things people think about (nouns), as suggested by Krathwohl (2002). To illustrate, imagine that a group of students were assigned a project that involved marketing a new health maintenance organization whose mandate was to base the organization’s compensation on the health of the clients, rather than on the services the organization provides to help achieve the client health objective. One of the first things the students did was to search for *knowledge* that might help them with their task – *factual knowledge* about what kinds of health problems HMOs can typically prevent, the nature of the problems and remedies (*conceptual knowledge*), protocols for working with clients to head off the health problems (*procedural knowledge*), and

strategies used by different companies to capitalize on the strengths and minimize the weaknesses of their expected clientele (*metacognitive knowledge*). This is very different from the problem of mobilizing the group to recall the relevant knowledge they have accumulated (*remembering*), helping group members grasp the significance of the facts (*understanding*), helping them adapt their understanding to the specifics of the HMO problem (*applying*), determining how the different concepts they have applied work together (*analyzing*), weighing the merits of the different possible approaches (*evaluating*), and developing an actual strategic plan that uniquely addresses the new HMO’s situation (*creating*).

From a pedagogical perspective, the teacher who assigned the HMO project would presumably have mapped out a set of objectives specifying the things s/he expected the students to learn (and be tested on when debriefing the team members on their project experience). These objectives would fit into various cells of the matrix shown in Exhibit 2 (Krathwohl, 2002; Cannon & Feinstein, 2005; Ben-Zvi & Carton, 2008). For instance, the teacher might ask team members to describe the various strategies used by existing HMOs (type *s* objectives) and the methods used for carrying them out (type *m*). S/he might then ask them to compare and contrast them (types *t* and *n*), critiquing their strengths and weaknesses (types *w* and *q*), ultimately explaining the group’s own proposal for the new HMO (types *x* and *r*), along with their supporting rationale (types *w* and *q*).

Bloom et al.’s (1956) cognitive taxonomy and, more recently, Anderson and Krathwohl’s (2001) revised taxonomy have drawn more attention than the Krathwohl et. al.’s (1964) affective taxonomy. Focusing specifically on business applications, the knowledge and conceptual skills from the

**EXHIBIT 2:
A REVISED COGNITIVE TAXONOMY OF EDUCATIONAL OBJECTIVES**

THE KNOWLEDGE DIMENSION	THE COGNITIVE PROCESS DIMENSION					
	1 <u>Remembering</u>	2 Understanding	3 Applying	4 <u>Analyzing</u>	5 <u>Evaluating</u>	6 Creating
A. Factual	a	b	c	d	e	c
B. Conceptual	g	h	i	j	k	l
C. Procedural	m	n	o	p	q	r
D. Meta-cognitive	s	t	u	v	w	x

cognitive taxonomy provide a basis for practical business problem-solving capabilities. Cannon, Geddes, and Feinstein (2014) provide a detailed discussion of how both the cognitive processes and knowledge components addressed by Anderson and Krathwohl (2001) fit into different levels of business problem-solving and the ability to quickly develop new problem-solving capabilities.

Turning to the affective taxonomy, the hierarchy of objectives – *receiving, responding, valuing, organization, and characterization by value* – appear to be implicit in the cognitive hierarchy. How can a student *remember, understand, apply, analyze, evaluate, and/or create* knowledge without knowing what is important to *receive* (recognize or pay attention to)? What good is it to recognize knowledge and know how to remember, understand, apply, analyze, evaluate, and create it without using the knowledge to *respond* in appropriate ways and assign *value* to the various parts of the experience?

The same principle applies to *organization and characterization by value*, the final two levels of the affective hierarchy. Students of business will have a very difficult time keeping all the values they are acquiring straight without an overall value *organization* for putting them into a coherent, stable system. For instance, economic theory explains the virtues of perfect competition, but corporate strategy counsels students to seek competitive advantage, which is to say, create a monopolistic position that will enable them to charge higher prices for their goods and services. The reconciliation of these two apparently conflicting objectives (values) requires an understanding of competitive dynamics: the monopolistic profits of firms who achieve a competitive advantage spur competing firms to offer the same benefits to consumers at a lower price. This, in turn, stimulates more innovation as companies look for ways to offer even better value to their consumers in an effort to create competitive advantage (Cannon, Yaprak, & Mokra, 1999; Cannon, Cannon, Köksal, & Johnson, 2014). *Characterization by value* is even more demanding than *organization*, because it requires students to use their system of values to formulate moral behaviors that address the potentially conflicting pressures they experience from people with different, strongly held value perspectives.

The final two levels of the affective hierarchy provide a useful place from which to begin addressing the paradoxical relationship between concepts and values. We have established that values (as conceptualized through the affective hierarchy) are driven by their contribution to effective decision-making, utilizing the intellectual tools embodied in the cognitive hierarchy. The paradoxical relationship between values and concepts arises from the fact that many students fail to see the connection between learning values and being successful in business, whereas concepts can be viewed as tools that might come in handy at some point.

Organization of values into a coherent, stable system can be a demanding task, as illustrated by our example of reconciling the motivations to pursue the concepts of perfect competition and competitive advantage that drive modern marketing strategy. From the perspective of an inexperienced student, the motivations to promote perfect or imperfect competition are not only abstract and difficult to understand, but they also have little obvious relevance to the practical issues of getting a well-compensating job.

Characterization by value requires students to develop an internalized moral philosophy that enables them to use values to guide behavior in the face of potentially conflicting moral demands. To be effective, a moral philosophy must recognize the values that are driving each of the conflicting demands

impinging on the firm and provide a convincing path to reconciliation. An inexperienced student, who has never felt the impact that conflicting values have on practical business decisions, might again see the sophisticated analysis as abstract and irrelevant to the practical issue of getting a job. Without a salient linkage, the student has little motivation to invest in developing a complex moral philosophy, much less engaging in the soul-searching activities necessary to internalize it as a basis for making behavioral decisions.

Given the difficulties the highest two levels of the affective hierarchy present, we will focus our attention on them, with particular attention to *characterization by value*. Cannon, Cannon, Köksal, and Verma (2013) take this perspective when addressing the problem of economic externalities and corporate social responsibility. They argue that students are intrinsically motivated to behave in a manner that is consistent with their own moral values. Harnessing this motivation gives companies a powerful tool for addressing the conflicting demands of stakeholders with different value perspectives. However, for the tool to work, the students the companies hire must have internalized a system that is capable of reconciling a broad range of apparently conflicting values.

The question we propose to address is how to help students develop the kind of internalized moral philosophy that enables them to characterize the value of conflicting demands, enabling them to meet the needs of their potential employers. Cannon et al. (2013) suggest several experiential exercises that might be used to help in this process. Our task here will be to elaborate on the underlying theory that determines the effectiveness of such exercises.

A SERVICE-BASED THEORY OF VALUE EDUCATION

Having established that service-dominant logic offers a particularly useful framework for addressing the problems of educational marketing, SDL provides a useful starting point for our discussion of theory (Geddes et al., 2015). The key element of SDL is the co-creative process through which educators interact with students to produce a quality education. The amount of co-creative effort required to achieve a quality education is extremely high, thus requiring a correspondingly high level of student motivation.

Geddes et al. (2015) developed a mathematical representation of the co-creative educational process, represented here as Equation 1.

$$V = f(R_p, R_c) \cdot BI \tag{1}$$

Where

- V Value to the student of planning to engage in the educational behavior
- R_p A relevant system of operant resources provided by educators
- R_c A relevant system of operant resources possessed by the student
- BI Behavioral intention, or the degree to which the student intends to participate in the educational behavior

Geddes et al. discuss the characteristics of the resources addressed in the equation. They refer to three general categories of operant resources: (1) those designed to address the “content” or subject matter of the course, drawing primarily on the cognitive domain from Exhibit 1; (2) those designed to expand students’ access to basic knowledge and skills through networking; and (3) those designed to motivate students. They address the relative allocation of these resources through a simple figure, represented here as Exhibit 3.

When viewed in light of Exhibit 3, we see that Equation 1 is an over-simplification. R_p and R_c represent systems of operant and operand resources brought to the co-creative process by the teacher and the student, respectively. However, the exhibit refers to three types of operant resources: (1) those addressing the knowledge and skills relating directly to the content of a particular class k (R_{pk}); (2) those that address student motivation m (R_{pm}); and (3) those that relate to expanding a student's resource base through networking n (R_{pn}).

$$BI = \sum B_i E_i + \sum N_j M_j + \sum C_k P_k \tag{2}$$

Where

- BI Behavioral intention, or the degree to which the student intends to participate in the educational behavior
- B_i Belief strength, or the student's belief regarding the likelihood that salient outcome i will result from the behavior
- E_i Outcome evaluation, or the degree to which the student values outcome i of the behavior
- N_j Normative belief, or the student's belief regarding the likelihood that significant person j will judge the student's behavior positively or negatively
- M_j Motivation to comply, or the degree to which the student feels motivated to comply with significant person j 's judgment of the student's behavior
- C_k Control belief, or the student's belief regarding the likelihood of the presence of resource or opportunity k that contributes to the completion of the student's behavior

EXHIBIT 3: ALLOCATING OPERANT RESOURCES TO ADDRESS VARYING STUDENT NEEDS

		Level of Operand Resources Available	
		High	Low
Motivation to Engage in Learning Behaviors	High	Focus on operant resources designed to address the “content” knowledge and skills directly related to the subject of the course ①	Dedicate increased attention to operant resources designed to expand student access to knowledge and skills by enhancing their networking ability ②
	Low	Dedicate increased attention to operant resources designed to enhance student motivation ③	Dedicate increased attention first to operant resources designed to enhance motivation, then to enhance networking ability ④

Source: Bryon C. Geddes, Hugh M. Cannon, James N. Cannon, and Andrew H. Feinstein (2015). “Developing educational strategies for experiential learning: An application of service dominant logic from marketing.” *Developments in Simulation and Experiential Learning*, 42 (March), p. 229.

P_k Perceived power, or the student's belief regarding the power of resource or opportunity k to facilitate or inhibit the student's behavior

The motivational component (R_{pm}) operates through its impact on a student's behavioral intention (BI), or the degree to which the student intends to participate in the co-creative educational process. Following Ajzen's (1991) theory of planned behavior, BI is driven by three factors: behavioral attitudes, subjective norms, and perceived behavioral control, as formulated in Equation 2.

Geddes et al. (2015) discuss ways in which an educator might motivate students to participate in a particular educational behavior, increasing the level of operand resources that interact in the co-creative process, by increasing BI . These include:

- persuade students to consider a particular educational behavior seriously enough to evaluate it as a possible option;
- strengthening beliefs regarding the positive outcomes of the behavior (B_i);
- increasing the value the student places on various educational outcomes (E_i) resulting from the behavior;
- strengthening the positive and weakening the negative normative beliefs regarding social expectations relating to the behavior (N_j);
- strengthening the motivation to comply with positive and weakening the motivation to comply with negative social expectations (M_j);
- strengthening beliefs regarding the likelihood that the student will encounter a given resource or opportunity that would affect her ability to engage in the educational behavior (C_k); and
- strengthening beliefs regarding the level of positive impact these resources or opportunities would have on the successful engagement in the behavior (P_k).

Note that an educator wishes to motivate educational behaviors through which the co-creative learning process takes place, not to achieve a particular cognitive, affective, or psychomotor objective. This wish is consistent with the theme of Geddes et al.'s paper, which was to recommend a *transformational* as opposed to an *informational* educational strategy. An informational strategy focuses on the course content (R_{pk}) the students should master, while a transformational strategy focuses on motivating students (R_{pm}), increasing BI so that students will put more effort into the co-creative process, drawing on books, the Internet, and other independent study materials in cases where the student have high levels of operand resources and networking support (R_{pn}) in cases where students' level of operand resources is low (see Exhibit 3).

The discussion thus far does not address the nature of the co-creative process and how it addresses different types of educational objectives. An inspection of Exhibit 1 suggests that the co-creative process might vary with the type of objective. Cognitive objectives, and particularly those on the lower levels of the hierarchy, lend themselves to conventional methods of study, including memorization and feedback through objective testing. Higher levels of the cognitive hierarchy require more practice, but they still lend themselves to objective testing and feedback. However, the affective and psychomotor hierarchies, where the learning involves the internalization and application of subjective principles, do not lend themselves to conventional

methods of study, assessment, and feedback. This is especially true of the higher level affective objectives, where learning not only involves the internalization of values, but the values are part of a system that is both complex and ultimately unique to each individual.

The fact that value-based learning involves subjective judgments does not preclude conventional learning through study and examinations. Education has a long tradition of experienced educator/mentors providing subjective feedback as students struggle to develop and internalize individual values. Nevertheless, value-based learning raises two problems. One is that the amount of required feedback tends to be high, giving students an opportunity to sort out common-accepted value principles from the "noise" created by graders' subjectivity. The high degree of feedback puts a tremendous burden of effort on the educator, thus increasing the cost of education.

The second problem is more subtle, but potentially more problematic. It arises from the difference between *extrinsic* and *intrinsic* motivation. *Extrinsic* motivation involves external incentives for academic performance while *intrinsic* motivation involves students in learning for learning's sake. Cerasoli and Nicklin (2014) conducted a meta-analysis of research regarding the effects of *extrinsic* versus *intrinsic* rewards in education covering a 40-year period, including nine previous meta-analyses. They found that *extrinsic* rewards tend to produce a higher quantity of results, while intrinsic motivation produced a higher quality. A game-theoretic interpretation would suggest that extrinsically motivated students optimize their satisfaction by investing the minimum effort required to get a high grade, freeing up their time and energy for garnering additional external rewards. By contrast, intrinsically motivated people maximize their satisfaction by making the investment necessary in the projects they undertake to feel pride in their work. This is consistent with Herzberg's (Herzberg, Mausner, & Snyderman, 1959) two-factor theory of motivation that suggests extrinsic motivations experience rapidly diminishing returns, while the returns on intrinsic motivation are much more enduring.

In addition, Cerasoli and Nicklin's (2014) meta-analysis shows that immediate extrinsic rewards tend to crowd out intrinsic motivation. Thinking is constrained by limited cognitive capacity (Sweller, 1988). Focusing on salient extrinsic rewards leaves less capacity for experiencing the benefits of intrinsic motivation. The short-term nature and crowding out effects of extrinsic rewards are problematic in value-based learning because developing a coherent, stable value system and internalizing it as a basis for governing complex behavior requires an enormous investment in time and energy, an investment that would conceivably pay out handsomely in intrinsic satisfaction but which would not likely deliver sufficient extrinsic rewards to justify the initial investment.

A third finding from Cerasoli and Nicklin is that, while immediate extrinsic rewards tended to crowd out intrinsic motivation, this is not true of indirect extrinsic rewards, where the rewards result from performance, but they do not become apparent until some later point in time. Ajzen's (1991) theory of planned behavior derives its estimates of BI from the anticipated value of extrinsic rewards. However, in the case of participating in an educational program, the rewards come in the form of useful knowledge and skills, along with the credentials that might open doors to better employment. These benefits accrue at a point in time after the educational experience has taken place. This is quite different from the immediate rewards of a good grade and the recognition that comes from performance on specific assignments.

Ajzen's (1991) theory of planned behavior provides a

powerful tool for both predicting involvement in co-creative educational activities and for strategically developing curriculum. However, the foregoing discussion implies that intrinsic motivation will likely be more effective in facilitating learning, particularly in the affective and psychomotor domains. We should be encouraged that indirect extrinsic motives of getting a job or having the tools to succeed once the job has been obtained do not preclude intrinsic motivation in the learning process.

We have yet to address two key questions: How do we intrinsically motivate our students? And, what kind of co-creative educational activities should we design to deliver the curriculum, especially the portion that addresses the affective and psychomotor domains?

Addressing the question of intrinsic motivation, Deci (1972) offers some useful insights. Deci draws on cognitive evaluation theory to suggest that people measure the value of their effort based on the types of rewards that are associated with the activity they engage in. To illustrate, offering grades or other tangible rewards for performance suggests to students that the achievement of these rewards is the justification for their effort. Deci found this to be true with monetary rewards, where being paid appeared to cause people to use money to measure the value of their effort, thus reducing intrinsic motivation. However, he found that verbal encouragement – certainly a kind of extrinsic reward – had the opposite effect. Verbal encouragement appeared to help people frame their efforts as being intrinsically motivating.

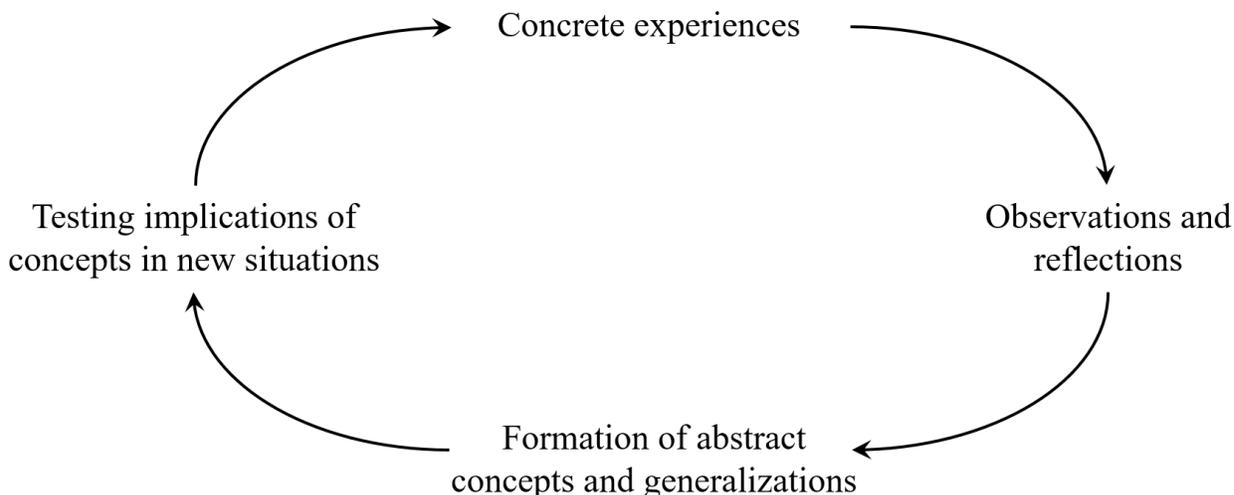
An answer to the question of intrinsic motivation, then, might be as simple as positive coaching, verbally encouraging students to rejoice in delivering their best work. Drawing on self-determination theory, Ryan & Deci (2000) argue that intrinsic motivation is driven by three inherent human needs: a feeling of competence, autonomy, and relatedness. Competence is the ability to succeed, autonomy the ability to direct one's own behavior, and relatedness the ability to connect meaningfully with other people. A coach, or in our case, a teacher who is administering an experiential exercise can play a key role in helping students address all three of these needs, helping them interpret their experience in a manner that enhances their sense of competence, autonomy, and relatedness.

This is consistent with the transformational education approach advocated by Geddes et al. (2015). Cast in the framework of SDL, a teacher should offer useful content (R_{pk}) and direction to useful sources of expertise (R_{pm}), particularly in the form of feedback to help students recognize and interpret the successes and failures in their learning process, thus reinforcing the students' sense of competence. In similar fashion, s/he empowers the students to learn (as opposed to being taught) from the exercise, thus enhancing their sense of autonomy. Finally, s/he works with the group to build a sense of trust and identity, where the students are comfortable interacting in a positive and emotionally safe group environment. This not only facilitates feedback and group support, but also addresses student needs for relatedness. In other words, the manner in which the experiential exercise is administered provides is the operant resources (R_{pm}) to intrinsically motivate the students' participation.

Turning to the question of co-creative activities, we have already noted that conventional study, memorization, and testing can be very useful for addressing lower elements of the cognitive hierarchy of objectives. These educational techniques include remembering and understanding not only factual knowledge, but also conceptual, procedural, and meta-cognitive knowledge (referring to Exhibit 2). The larger and more challenging task, however, is learning how to motivate students to apply, or value the knowledge. This motivation comes from using knowledge to solve problems, applying, analyzing, evaluating, and creating new knowledge. In other words, motivation comes through a process of experiential learning. Note the subtle distinction between the motivation to participate in the experiential exercise, discussed in the previous paragraph, and the students' motivation to value the things they are learning. This motivation comes from the experiential exercise itself.

Exhibit 4 portrays the learning process. It captures Kolb's (1984) interpretation of Kurt Lewin's principle of action research as a model for experiential learning, the continuous cycle through which people adapt and learn from their environment. In fact, it is basically the same process we associate with the scientific method. Students begin with a salient experience; they observe and reflect; they formulate

EXHIBIT 4: THE LEWINIAN EXPERIENTIAL LEARNING MODEL



Source: David A. Kolb (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice Hall, p. 21.

abstract concepts and generalizations (develop theories); they test the implications in new situations (formulate and test hypotheses); and they begin the cycle again with a new salient experience. The overall effect is to continually refine a student's understanding, adjusting it as necessary to changes in the environment. The feedback from each cycle provides positive or negative reinforcement for the usefulness of the concepts the students apply, building the value orientations that inform them what they should pay attention to, when they should respond with a given type of action, the value they should assign to various ideas and phenomena, how the values they have assimilated fit into a coherent system, and ultimately, how they should use the system to control their behavior.

We will not attempt to describe the specific kinds of experiential activities one might use to facilitate students' action learning cycle. However, we might illustrate with a few of the more common models proposed by ABSEL scholars. One of the most obvious is computer-based simulations and experiential exercises. Here, the key is to develop a simulation that addresses, and hence, provides meaningful feedback regarding the environmental phenomena and associated decisions the students are likely to encounter following graduation. Given the limitations of any educational program, there is no way to address environmental phenomena in any comprehensive manner. It is possible, however, to conceptualize and prepare students to recognize patterns and learn how to acquire the knowledge, skills, and value-orientations they need to address them, what Cannon et. al. (2014) characterize as individual absorptive capacity.

SUMMARY AND CONCLUSIONS

The forgoing discussion supports an emphasis on experiential learning that is central to ABSEL's mission as an organization. However, it suggests a different rationale. As we have noted, conceptual knowledge and thinking processes, as portrayed in Bloom's cognitive taxonomy (Bloom et al., 1954) and the revised taxonomy (Anderson & Krathwohl, 2001) have commanded much more attention among ABSEL scholars than the affective (Krathwohl et al., 1964) and psychomotor (Dave, 1970; Harrow, 1972; Simpson, 1974) taxonomies. However, as Geddes et al. (2015) suggest, motivation might be more important than educational content in the learning process because it provides the key to students' co-creation of benefits that plays such a prominent role in service dominant logic. Motivation relates to the affective taxonomy.

We have looked at motivation from two perspectives. First, we considered the motivation to learn, or to participate in educational co-creation. We addressed this by drawing on

Geddes et al.'s (2015) adaptation of Ajzen's (1991) theory of planned behavior. The ABSEL literature addresses other approaches as well, such as the work of Burns, Gentry, and their colleagues based on Loewenstein's (1994) theory of curiosity (Burns & Gentry, 1998; Gentry, Burns, Putrevu, Chun, Honyan, Williams, Bare, & Gentry, 2001; Gentry, Burns, Dickenson, Putrevu, Chun, Honyan, Williams, Bare, & Gentry, 2002; Gentry & McInnis, 2008) and Yakonich, Cannon, and Ternan's (1997) adaptation of Lawler's (1971) integrative expectancy value model. These represent dramatically different approaches, both of which address the same basic question of how to motivate student co-creative effort. If we accept the key role of motivation in the learning process, as posited by Geddes et al.'s theory of transformational versus education, the student motivation to engage in the co-creative educational process deserves much more attention.

Our second perspective on motivation is equally important. Whereas our first perspective addresses the educational process in general, the second focuses specifically on the problems of teaching values. While the ABSEL literature acknowledges the importance of affective (values) learning, it offers very little theory to explain how this learning might be accomplished. We have argued that the key is in stimulating intrinsic motivation, suggesting that experiential learning provides a particularly useful tool for developing intrinsic motivation. Specifically, the experiential approach should focus on activities that provide realistic feedback regarding the concepts for which students should develop a value orientation. This provides a rationale for developing algorithms that can be incorporated into simulation games to reward students for such things as developing a positive and coherent corporate reputation (Cannon & Schwaiger, 2005a, b) and for focusing on lifetime customer value as opposed to short-term profits (Cannon, Cannon, & Schwaiger, 2010, 2012).

As a final note, we should acknowledge the profound implications of Deci's (1972) application of cognitive evaluation theory to fostering intrinsic motivation. Cognitive evaluation theory maintains that intrinsic motivation can be influenced by the way students frame the learning experience. This suggests that coaching students to think of their education as co-creation, an expression of their competence and autonomy, and as a quest they are sharing with other people who care about them, can play a major role in developing intrinsic motivation. Once this association has been established, the experiential learning cycle portrayed in Exhibit 4 can be applied to any number of educational activities, including lectures or classroom discussions, as long as it provides an opportunity for experimentation and feedback and students see it as part of their experiential quest for knowledge.

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