ABSTRACT

Learning, and particularly, experiential learning is a process that takes place inside the learner. Teaching is a process that takes place outside of the learner. While the educational literature addresses both processes, it offers very little discussion of the theory connecting the two. How does teaching stimulate learning? This paper addresses the connection between teaching and learning by drawing on the concept of service dominant logic from Marketing, and more specifically consumer co-creation of value. Co-creation posits that consumer value does not come from products or services, but rather, from the dynamic interaction between operant resources (provided by the marketer) on operand resources (provided by the consumer). While viewing educational value as the product of an interaction between teaching inputs and learner responses offers little new insight, exploring the nature of operant (teaching) and operand (learning) resources provides a powerful theoretical tool for understanding the nature of the teacher-student interaction. This paper develops a framework for classifying operant and operand resources. The framework, in turn, offers useful strategic insights for designing experiential learning programs.

INTRODUCTION

Education is essentially a marketing problem (Naidoo, Shankar, & Veer, 2011). That is, we as educators, along with our educational institutions, seek to deliver value to our students (and other stakeholders), if not at a profit, at least within our budgetary constraints. Furthermore, we complete one with another. Our salaries depend on evaluations of our educational effectiveness. The institutions that hire us make these evaluations in order to establish their own competitive advantage, perhaps in the number of students they attract, or expressed in the funding or other support they get from their sponsors. As with any marketing organization, we and our organizations may be motivated by a genuine desire to serve our consumers. However, our ability to do so depends on our ability to address the market pressures to which we are subject.

The point of this introduction is not to discuss educational marketing, but rather, to suggest that marketing theory might offer insights into educational effectiveness. After all, how different is the problem faced by educators from that faced by consultants? Or, for that matter, how different is it from marketing computers, or games, or even automobiles? In every case, success ultimately depends on delivering consumer value. This is not a matter of effective selling, but one of discovering the kind of value consumers want and helping them get it.

If we accept the premise that education is a marketing problem, the next step is to ask how marketing theory would address marketing problems in general, and specifically, how the theory might address the problems of the educational market. To answer the first question, perhaps the best answer comes from the literature on service-dominant logic (SDL). In 2004, Vargo and Lusch introduced service-dominant logic to the marketing literature in a Journal of Marketing article entitled, “Evolving a New Dominant Logic for Marketing.” According to Google Scholar, as of the time of this writing, Vargo and Lusch’s article has been cited more than 5,835 times. (We say “more than” because the citations continue to mount, so the number will be higher to the reader of this paper). Going beyond mere citations, SDL appears to represent the foundation of a new marketing paradigm (Haase & Kleinaltenkamp, 2013).

We can only speculate on why Vargo and Lusch’s article, or more importantly, the concept of service-dominant marketing has made such an impact. However, given the defining
characteristics of Marketing as a discipline (how to effectively and efficiently promote marketing exchanges), we can assume that theorists see SDL as providing a more powerful tool for understanding the drivers of the exchange process, and from there, conceptualizing marketing strategy. The nature of SDL’s contribution is apparent from concept itself. Traditional marketing strategy is built on the premise that marketing success comes from developing and selling products and services that provide consumers with greater value than those developed by the competition. By contrast, SDL views value coming from an interaction of resources provided by the marketer and those provided by the consumer. Consumer value, then, is the product of a co-creative process that makes the type and amount of value unique to each consumer (Vargo & Lusch, 2013). For example, the value provided by an automobile depends on the person who drives it. The value varies by the driver's personality, usage pattern, driving skill, and a host of other individual factors, not the least of which is the way the consumer thinks about the car! Education is even more individualized. The value it provides depends on the student’s personality, the way s/he studies, study skills and motivation, and many other individual factors, including the way the student thinks about his or her education.

The strategic implications are profound: The automobile marketer should not be focused on the car and how to sell it. The focus should be on the role the car will play in the consumer's life, and how it will or might be used in that context. In the case of education, a university should not be focused on promoting the content of the educational program. It should focus on the role education will play in the life of the student and how the students' involvement in the educational process might be shaped to maximize its value. What we teach is not as important as how and what our students learn. Indeed, conventional “teaching” may be a relatively small part of what an effective educator does. Effective education is “facilitated,” not “delivered.” This perspective is similar to, but not synonymous with, the concepts of experiential learning. To be effective, education must be experiential; it must take place within the student, growing out of the student's experience. The missing component in the educational equation is how educators facilitate the experiential learning process.

The purpose of this paper is to address the missing component in the educational equation. It will draw on the concepts of SDL, and specifically those of consumer value co-creation, to conceptualize the dimensions of teacher-student interactions. The understanding of these dimensions may be harnessed to facilitate effective experiential learning.

**SERVICE-DOMINANT LOGIC AND ITS IMPLICATIONS FOR EDUCATIONAL EFFICIENCY**

Before launching into a discussion of the technical aspects of teacher-student interactions, we will offer a brief discussion of SDL to set the conceptual stage. The original tenants of SDL have evolved over time (Vargo & Lusch, 2004, 2008, 2013, 2014). While the tenants are somewhat complex, Vargo and Lusch (2014) have summarized them in the form of four fundamental axioms from which all the other propositions of SDL can be derived. (See Exhibit 1).

The key to the SDL approach rests in the concepts of operant and operand resources. Operant resources (knowledge and skills) act upon operand resources to produce value, as suggested in Axiom 2. For instance, a student comes to a university, or in our case, a business school with previous knowledge and skills (resources). These are operant with respect to problems the student already knows how to solve. However, they are not sufficient to address the problems employers will ultimately want her to solve. The task of the business school will be to supply a service consisting of access to the knowledge and skills that interact with what the student already knows to create greater levels of competency, as suggested in Axiom 1 and 2.

SDL does not discount the importance of traditional products and services, but merely puts them in a new

---

**EXHIBIT 1**

**FUNDAMENTAL AXIOMS OF SERVICE-DOMINANT LOGIC**

<table>
<thead>
<tr>
<th>Axioms</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Service is the fundamental basis of exchange</td>
<td>Service is the application of operand resources (knowledge and skills) that unlock operand resources and enable exchange partners, or actors, to create value</td>
</tr>
<tr>
<td>2. The consumer is always a co-creator of value</td>
<td>Consumer value is defined as the product of the interaction between operand and operand resources, to address unmet needs or wants</td>
</tr>
<tr>
<td>3. All economic and social actors are resource integrators</td>
<td>While marketers speak of marketing as a value-producing exchange between a marketer and a consumer, it can involve any number of actors in any number of roles. In a sense, each actor is a consumer, or resource integrator, acting within a network of other resource integrators, each seeking to create value from the integrative process</td>
</tr>
<tr>
<td>4. Value is always uniquely and phenomenologically determined by the beneficiary</td>
<td>In any given marketing exchange, the goals of each actor and their use of interacting resources to fulfill them are unique, thus making value idiosyncratic, experiential, contextual, and meaning laden to the actor</td>
</tr>
</tbody>
</table>

perspective. It sees them as the embodiment of a marketer's knowledge and skills. This is true even of physical goods, such as a computer. A computer is the product of a company that has the knowledge and skills to mobilize the resources necessary to design and construct the computer. These mobilized resources also consist of knowledge and skills. Indeed, the knowledge/skills principle carries back through the value chain, even to the point of extracting the raw resources needs for production. A mining company is one that has the knowledge and skills necessary to extract and refine minerals. In the case of educational marketing, most of the “products” consist of intellectual property, so the connection with knowledge and skills is much easier to grasp.

At the simplest level, the process of creating educational value may rest in simply helping a student “connect the dots.” For instance, the student may already understand the principles of algebra, money, and interest, but may not understand the time value of money. The application of an operant resource might consist of walking the student through the process of constructing and applying a simple formula for calculating the future value of money. This would consist of sharing knowledge of the pattern and application of a simple geometric progression to account for the effect of interest on principal, compounded over time. The operant resource (knowledge of the time value of money) activates the student's prior knowledge of algebra, money, and interest (operand resources) to create a new level of problem-solving ability, or educational value.

Of course, the actual value created by the educational experience varies by student, as suggested in Axiom 4. Consider three examples: First, imagine a student who is very quick in understanding when concepts are explained and who has a firm grasp of the underlying mathematical principles needed to understand the time value of money. She has money to manage and is anxious to learn how. The educational task is quite simple: The teacher need only feed the student the desired knowledge in the most efficient way possible, perhaps with a single short lecture.

Now, consider a similar student, but one who has no money and little interest in managing it. A lecture on the time value of money, while easy for the student to understand, is likely to have little value. In fact, the student would likely sleep through it. A more effective approach would be to focus on helping the student appreciate the benefits money management skills, and particularly, the time value of money would have for him.

Third, consider a student who has both money and a desire to manage it, but little understanding of algebra and limited experience with the abstract reasoning required to apply it in a financial context. However, the student has money and wants to learn how to manage it. Here, the mere exposure to the future value formula might inspire the student to seek out additional resources to address his mathematical and conceptual weaknesses. Given the limited time the teacher has to work with the student on an individual basis, the time the teacher has might be best spent showing the student how to access and use supplementary sources of financial expertise, potentially leading to the mastery of a large set of financial skills. In the end, a simple, but well placed, inspirational resource might have substantially more value than a much more rigorous, conceptually detailed one, drawing on the logic of Axiom 3.

The power of the second and third examples rest in the application of two principles: (a) the teacher's selection of the most effective operant resource to address the student's problem; and (b) the effect of additional operant resources available from networks that the teacher does not directly control. This observation is crucial to the educational problem, because traditional education typically discounts both of these principles. The natural instinct of most teachers is to deliver the knowledge they consider to be most relevant to academic content of their course, irrespective of the operand resources available to the students. They also tend to rely on the resources they control most directly, ignoring the vast networking resources available through the Internet, friends, and other social media.

One of the SDL propositions derived from the axioms in Exhibit 1 is that “Operant resources are the fundamental source of competitive advantage” (Vargo & Lusch, 2008, p. 7). This represents a change from the initial proposition that “Knowledge is the fundamental source of competitive advantage” (Vargo & Lusch, 2004, p. 9).

While knowledge is an operant resource, differential advantage depends on finding an operant resource that activates more value-producing co-creation than those employed by competing institutions. Again, traditional education tends to focus on providing knowledge, but not necessarily the kind of knowledge that will unlock students' ability to use their operand resources effectively. A teacher that is driven by an “I have to cover the material” mentality will have a hard time competing with a teacher whose approach is “Can you imagine what will happen when you face this kind of problem? Here are some places you might look for a solution. Why don't you give them a try, and we'll discuss your experience in the next class.”

FORMALIZING THE THEORY

As a first step in formalizing the theory embodied in SDL we will develop a mathematical representation, first to encompass the four axioms in Exhibit 1, and later including additional concepts. By abstracting the concepts in the form of specific variables and relationships, we can more easily see the points at which a teacher might influence the learning process. Furthermore, the mathematical representation will show the key response variables and the parameters that influence their values. These parameters, in turn, determine the conditions under which one approach is likely to be superior to another. For example, returning to our three finance students, the first one would have high values for relevant prior (operand) knowledge as well as high motivation to use this knowledge to master course material. The second would have high relevant prior knowledge, but little motivation. The third would have high motivation, but little relevant prior knowledge. We could imagine yet another student with low prior knowledge and low motivation. In the case of high prior knowledge and motivation, a traditional “content-knowledge-oriented” strategy involving a straightforward explanation of the principles of effective money management would likely be very effective. In cases where motivation is lacking, an effective approach would include a stronger focus on the benefits of money management, perhaps demonstrating what kind of current savings are necessary to enjoy an early retirement with sufficient funds to travel and...
enjoy exotic places. Where prior knowledge is weak, the teacher's focus would include more discussion of how to find helpful resources for applying algebra, money, and time concepts to tie in value problems. In cases where both the motivation and prior knowledge are weak, the teacher would have to focus first on motivation, and then on how to network in order to find helpful resources. Exhibit 2 summarizes these contingencies.

The mathematical development of the theory begins with a simple representation of Vargo and Lusch's (2014) Axiom 1 from Exhibit 1. Axiom 1 states that service is the basis for value-producing exchange, where service is the action of marketer-provided operant resources on consumer-provided operand resources. While Vargo and Lusch (2014) posit value as a function of a marketer's operant and the consumer's operand resources, the actual value comes from some kind of need-meeting consumption behavior, or what Grönroos (2011) calls value-in-use. This is embodied in what Vargo and Lusch (2014) refer to as a value proposition. Vargo and Lusch offer the example of an automobile. On a very general level, the automobile manufacturer's value proposition is that buying an automobile will provide an operant resource that, when combined with the consumer's operand resources (ability to drive, knowledge of desired destinations, and access to the various other resources necessary to care for and operate the automobile), will meet the consumer's need for transportation. The value-in-use is realized when the consumer uses the car to meet her transportation needs. The same principle holds for education. A generalized value proposition for a college business program might be an education that prepares the student for an attractive job. The value-in-use comes from the behaviors involved in the educational process, and ultimately, from performing the job.

The relevance of making value contingent on consumption behavior is that consumers, and certainly students, do not always engage in the behaviors made possible by the marketer/teacher's operant resources. A consumer may buy a car and never drive it in the way s/he intended; a student may enroll in college and never study in the intended manner. To address this, we posit a behavioral intention (BI) that moderates the effect of the operant-operand interaction on consumer value. Conceptually, we may think of behavioral intention as the conditional probability that the student will engage in a given educational behavior, given that the behavior has been enabled by the application of operand resources. With the addition of the moderating behavioral intention, Axiom 1 is expressed in Equation (1).

\[ V = f(R_p, R_c) \times BI \]  

where

- \( V \) = Value to the student of planning to engage in the educational behavior
- \( R_p \) = A relevant system of operant resources provided by one or more providers
- \( R_c \) = A relevant system of operand resources possessed by the student
- \( BI \) = Behavioral intention, or the degree to which the student intends to participate in the educational behavior

For the sake of simplicity, we will talk as if student value

---

**EXHIBIT 2**

**HOW DIFFERENT SITUATIONS CALL FOR DIFFERENT TYPES OF OPERANT RESOURCES**

<table>
<thead>
<tr>
<th>Level of Operand Resources Available</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motivation to Engage in Learning Behaviors</strong></td>
<td><strong>High</strong></td>
<td><strong>Low</strong></td>
</tr>
<tr>
<td>Focus on operant resources designed to address the “content” knowledge and skills directly related to the subject of the course</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Dedicate increased attention to operant resources designed to expand student access to knowledge and skills by enhancing their networking ability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dedicate increased attention first to operant resources designed to enhance student motivation, then to enhance networking ability</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
results from a single exchange, involving a single operant resource, provided by a single provider to a student, and resulting in a single educational consumption behavior. In reality, resources seldom come in such simple forms. The simple construction works because, as Madhavaram and Hunt (2008) point out, operant resources can be grouped into hierarchical categories, thus encompassing multiple resources in a single resource construct. Furthermore, the resources do not need to come from a single provider. A single hierarchical group of resources can come from a complex network of providers, as suggested by Axiom 3. Behaviors can also be conceived as hierarchical, where a single high-level goal-seeking behavior encompasses a complex interaction of many lower-level behaviors (Bagozzi & Dholakia, 1999).

Note that we have used the term “provider” rather than “marketer,” or “teacher,” to represent the source of operand resources. We use the term “marketer” in a semi-technical way to represent the provider that is promoting a particular marketing exchange, and “teacher” to represent an educator who is tasked with facilitating a student's educational experience. However, consumers/students may also initiate educationally relevant exchanges, or the exchanges may simply take place through natural interactions without a particular facilitator. In practice, most transactions involve a combination of various patterns, where teacher promotes an educational experience and provides facilitating operant resources, but the complete process of educational co-creation will involve a host of other operand resource providers, offering or responding to requests for their knowledge and skills. Furthermore, the nature of exchanges is not simply a donation of resources, but a transfer. In order to create value for both parties, the consumer/student receiving operand resources provides operand resources in return, thus making the provider a consumer as well. The compensating resources may consist of money (as with a paid tutor), social benefits (as with a friend), educational benefits (as with a fellow student in a study group), or indirect monetary compensation (as with Google or some other commercial, internet-based information service).

By addressing value in the manner described above, Equation (1) represents all four of Vargo and Lusch's (2014) axioms described in Exhibit 1 (suggesting that axioms 2-4 are actually corollaries of Axiom 1). If consumer value always represented by the action of a provider's operand resources acting on the consumer's operand resources, as denoted by \( f \) (Rp,Rc), this is by definition value co-creation, thus addressing Axiom 2: “The consumer is always a co-creator of value.” If Rp can represent networks of operand resource providers, each of whom is a “consumer” with respect to what they get in exchange, everyone is involved in the resource-integrating value-producing process, thus meeting the requirements of Axiom 3: “All economic and social actors are resource integrators.” Finally, the fact that Rc represents a unique set of operand resources possessed by a particular consumer implies that \( f(Rp,Rc) \) will yield a unique set of benefits to each consumer, thus meeting the requirements of Axiom 4: “Value is always uniquely and phenomenologically determined by the beneficiary.”

Equation (1) establishes a critical link in understanding how a marketing exchange establishes value. That is, it provides the resources necessary to engage in the need-meeting consumption behavior. However, returning to Exhibit 2, operant educational resources come in at least three different varieties: those addressing the knowledge and skills relating directly to the content of a particular class (what we might refer to as Rp_k); those that address student motivation (Rpm); and those that relate to expanding a student's resource base through networking (Rp_n).

Of the three types of operant resources, Rpm is especially important because it addresses behavioral intention (BI) which, in turn, plays such a direct role in the formation of student value creation, as suggested by Equation (1). To address this we will draw on application of Ajzen's (1991) theory of planned behavior.

The theory of planned behavior was specifically formulated to explain the development of behavioral intentions. Building on his earlier work with Fishbein on the theory of reasoned action (Fishbein & Ajzen, 1975), Ajzen posits that behavior is driven by plans that, in turn, are driven by attitude toward the behavior, subjective norms, and perceived behavioral control. Applying the theory to students, attitude toward learning is a function of the sum of the perceived consequences of some educational behavior, weighted by their importance to the student. Subjective norms are similarly quantified as the sum of the normative expectations regarding the behavior, weighted by their importance to the student. Finally, perceived behavioral control represents the degree to which the student believes that s/he can successfully engage in the behavior given the situation. The analysis of the situation consists of her beliefs about whether she will have access to various resources and opportunities that might be relevant to her success, weighted by the relative impact each one is likely to have. These factors are expressed in Equation (2).

\[
BI_h = \sum_i \sum_j \sum_k \sum_l \sum_m \sum_n \sum_p \sum Q \sum R \sum S \sum T \sum U \sum V \sum W \sum X \sum Y \sum Z \sum [\sum B_i \sum E_j \sum M_k \sum C_l \sum P_m]
\]

where

- \( BI_h \) = Behavioral intention, or the degree to which the student intends to participate in the educational behavior
- \( B_{ij} \) = Belief strength, or the student's belief regarding the likelihood that salient outcome \( i \) will result from the behavior
- \( E_{ij} \) = Outcome evaluation, or the degree to which the student values outcome \( i \) of the behavior
- \( N_{ik} \) = Normative belief, or the student's belief regarding the likelihood that significant person \( j \) will judge behavior \( h \) positively or negatively
- \( M_{ij} \) = Motivation to comply, or the degree to which the student feels motivated to comply with the judgment of significant person \( j \) with respect to the behavior
- \( C_{ik} \) = 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 behavior
- \( P_{ik} \) = Perceived power, or the student's belief regarding the power of resource or opportunity \( k \) to facilitate or inhibit the behavior

Equation (2) is a utilitarian framework. That is, it seeks to explain how a student selects behaviors that s/he believes will
result in the most utility, or value. However, it is a model based on perceptions, not objective reality. It addresses plans, or intentions, that reflect the student's expectations of what will happen if s/he attempts to engage in a particular educational behavior. If student’s expectations are not favorable, they will result in a low behavioral intention (BI). As Equation (1) suggests, this can counteract the effect of an otherwise highly effective educational program, which is to say, one that focuses on delivering a high level of content-knowledge and skills (Rpk).

The variables in Equation (2) suggest seven points of influence for increasing BI. These include: (1) persuading students to consider a particular educational behavior seriously enough to even evaluate it; (2) strengthening beliefs regarding the positive outcomes of the behavior (Bi); (3) increasing the value the student places on various educational outcomes (Ei) resulting from the behavior; (4) strengthening the positive and weakening the negative normative beliefs regarding social expectations relating to the behavior (Nj); (5) strengthening the motivation to comply with positive and weakening the motivation to comply with negative social expectations (Mj); (6) 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 (Ck); and (7) strengthening beliefs regarding the level of positive impact these resources or opportunities would have on the successful engagement in the behavior (Pk).

The resources required for the teacher to affect changes in the planned behavior model, Equation (2), involve changing perceptions (Bi, Nj, Ck, Pk) and preferences (Bi, Ei, Mj). Discussing the technical distinctions between perceptions and preferences and how to address one versus the other is not important at this point. The relevance of the two concepts here rests in the distinction between the perceptual- and preference-change tasks (Rpm) versus the more conventional educational task of content-oriented education (Rpk). We will discuss this distinction in the next section.

DEVELOPING EDUCATIONAL STRATEGIES

Our previous discussion suggests two basic educational strategies. The first is what we have referred to as the “traditional” educational approach. From this point forward, we will refer to it as the informational educational strategy. It assumes that the primary role of the teacher is to deliver content-oriented information (Rpk) to the student. That is, it seeks to deliver the knowledge and skills necessary to engage in value-producing educational, and ultimately, professional behaviors. The strategy assumes that the value of the behavior comes from the attractiveness of the outcomes, as expressed by Ei in Equation (1). If we let 0i represent a behavioral outcome enabled by the action of Rpk, the total value of the educational behavior would be \( 0i \times Ei \). The premises of the informational strategy, then, are portrayed in Equation (3).

In essence, Equation (3) is a special case of Equation (1), where BI is equal to 1.0 and Rp is limited to Rpk. These, of course, are extreme assumptions, and the strategy they represent is rarely carried out in its extreme form.

However, it does roughly characterize the teaching approach used by many, if not most, business schools today.

The second strategy is what we will refer to as transformational educational strategy. As with informational strategy, it recognizes the importance of the student mastering content-oriented knowledge and skills. This requires students to engage in educational behaviors that combine content-oriented operant and operand resources, as expressed by f(Rpk, R). However, consistent with our earlier discussion, it recognizes that students may not be sufficiently motivated to engage in these behaviors. In other words, it puts considerable weight on behavioral Intentions (BI), allocating additional resources to motivational activities (Rpm), as suggested by Exhibit 2.

Recognizing that contact time with the teacher is a scarce resource, this necessarily detracts from the depth of the content-oriented resources that the teacher can deliver. To compensate, transformational strategy leverages on high levels of motivation to direct students toward outside resources, drawing on the principle of networking (Rpn) addressed in Axiom 3 in Exhibit 1, and discussed in conjunction with Exhibit 2. Philosophically, it draws on the SDL concept of consumer co-creation of value, assuming that education does not come from the teacher, but rather, is created inside the student as a result of the empowering operand resources the teacher provides. The role of the teacher is to help transform the student into an efficient learner, drawing on the notion of individual absorptive capacity. Cannon, Geddes, and Feinstein (2014) provide a model of what constitutes individual absorptive capacity and how educational behaviors might be structured to achieve it.

SUMMARY AND CONCLUSIONS

The purpose of this paper was to contrast two prototypic educational strategies from the perspective of service-dominant logic (SDL) from the Marketing literature. We have contrasted informational and transformational strategies for management education. Informational strategy focuses on the teacher delivering high-quality knowledge and skills to the student, while transformational strategy seeks to inspire (motivate) the student to seek out information from a broad variety of sources under the teacher's guidance. Transformational strategy is most consistent with SDL theory, in that it draws on the student’s inherent capacity for co-creation of educational value. However, as Exhibit 2 suggests, some kinds of situations call for a more directive, informational approach (i.e. when students are both highly capable and highly motivated, ready to aggressively pursue the teacher's knowledge).
Not only is this situation unusual, the side effects of the informational approach can be dangerous. They can create expectations that the teacher will provide knowledge rather than guidance, thus encouraging the students to become more dependent and less educationally self-sufficient. While mining a knowledgeable teacher for information can be very efficient for the student, it may be shortsighted for its failure to nurture the broader absorptive skills needed to excel in the world of business.

Looking to the future, we need to explore these premises, drawing on empirical research. At the same time, we need more conceptual work in the area of teaching effectiveness and efficiency. How do we better leverage motivation and networking to achieve greater academic excellence? In concept, we reason that value co-creation opens the door for much greater productivity than can be achieved by simply delivering educational products and services to students. This paper has sought to develop the underlying theory. We have now to explore its implications in greater depth.

REFERENCES


