

# Emotions and the Internet: A Model of Learning

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*This conceptual paper examines the link between emotion and surface-deep learning in the context of the international business curriculum. We propose that 1) emotion and learning have a curvilinear relationship, and 2) the reflective abilities and attitude transformations related to deep-level learning can only arise if the student is emotionally engaged; otherwise, the student will only learn superficially or at the surface-level. We extend the model to take into account the effect of the Internet and related computing technologies. If the student is amenable to the use of the Internet as a learning tool, we argue that it can facilitate deep learning; however, the Internet can create feelings (e.g., isolation, depression, or false confidence) that are counterproductive to in-depth learning. As the business world becomes increasingly complex and diverse, university business school programs will need to develop the critical thinking skills and empathy reflected in deep learning that students need to thrive in this environment. Recognizing the impact that emotion has on learning may bridge the gap between surface and deep learning.*

## INTRODUCTION

In recent years, the business world has been redefined by advances in technology and the increase in globalization. Business education curriculum has also changed in response to these developments through the American Assembly of Collegiate Schools of Business (AACSB) which has placed an emphasis on developing student skills that will be useful in today's work environment and in particular international studies and computer usage (Fugate & Jefferson, 2001; Natesan & Smith, 1998). One common critique is that the university business programs are adept at transferring knowledge to students but are lacking when it comes to developing reflective skills and attitude changes associated with deeper levels of learning.

In this paper, we will take a closer look at this disconnect and offer a possible explanation for it. More specifically, we will examine the often overlooked link between emotion and surface-deep learning. We will look at this link in the context of the contemporary learning environment by extending it to take into account the effect that the Internet may have on the emotion-learning relationship in the international business curriculum.

Academic implementation of an international curriculum has varied in terms of commitment and participation. At one end, some programs have used the infusion method which adds global content to required courses. Other programs offer specific international courses within the majors or specialized coursework. At the most involved levels, immersion approaches have been offered which entail the students engaging in

experiential learning programs such as foreign exchange, foreign study tours, international internships, and study abroad programs.

Unfortunately, not every school or student can afford the time, money, or resources to participate in an immersion approach. The Internet and other computing technologies are being used to bring the world to the students instead. Options include a variety of assignments that uses the Internet to access marketing information, e-mail to communicate with foreign experts, and bulletin boards to facilitate group discussions (Siegel, 1996). Natesan & Smith (1998) further advocate the Internet for analysis and problem-solving, mentoring and career-networking, and career promotions. These Internet-based activities benefit students because the Internet is a dynamic multimedia format that is not bounded by time or space, and it provides a vast array of interconnections for a relatively low cost (Atwong & Hugstad, 1997). Another proposed benefit from using the Internet and related technologies is its potential to bridge the gap in developing students' reflective, analytical, and critical thinking skills.

Much of the research into Internet uses for international business learning has found it to be positive or, at least, not harmful. Perhaps one reason for these affirmative results can be found in the emotional link that learners develop with and through the Internet and related computing technologies. In the following sections, we will present a brief review of the literature on emotion and learning. Subsequently, we will build a model and develop propositions about the interconnections among emotions, the Internet, and learning to better understand the impact that emotions and the Internet can have on an individual's development.

## **LITERATURE REVIEW**

### **Emotion**

Emotion has been conceptualized in three distinct ways (Antonacopoulou & Gabriel, 2001; de Rivera, 1977). It can be a psychological state (e.g., frustration or joy), a value judgment in response to a situation (e.g., fear to a perceived threat or joy for a reward), or a transformation or enlightenment from an experience. Regardless of its embodiment, emotions are generally viewed as a motivation for human endeavors.

Researchers in the management arena typically discuss emotion from one of two perspectives: the psychoanalytic school (Gabriel, 1999; Hopfl & Linstead, 1997) or the social constructionist view (Fineman, 1993; Harre, 1986). The psychoanalytic approach, which takes its foundation from the works of Freud, views emotion as an intrapersonal phenomenon that is in conflict with rationality. Not only do multiple emotional states coexist, but they are a dynamic force changing in both state and intensity as the person reconciles or copes with the vagaries of life. As a result, an individual may feel simultaneously envy and fascination, love and hate, anger and guilt. A person may also feel mild disappointment which can grow into bitter resentment under certain circumstances, or it can be overcome, neutralized or repressed by a stronger emotion.

In contrast, social constructionists consider emotion as a socially created phenomenon that allows the individual to appraise social contexts and respond to them accordingly. Emotions exist as a response to an external environment and through interpersonal interactions. They are shaped by culture, the specifics of a situation, and learned behavior and can only change in response to changes in the context or changes in

the individual's interaction with the environment. Influenced by social rules, emotions are expressed through language and scripted in front of an audience.

These two views reflect the ongoing debate about the relative impact of the external (i.e. social constructionist) versus internal (i.e. psychoanalytic) environment on the individual. Ultimately, both are invaluable and contributory to understanding human emotions and as such will be used as underpinnings to understanding emotion and its connection to learning in this research.

## **Learning**

The learning literature is quite extensive and draws its roots from such areas as psychology, sociology, and biology, to name a few. It has been conceptualized as a process, the product of the process, as an expression of individuality, and as a reflection of a culture. It is shaped by biological, psychological, and social factors such as individual differences, cultural norms, and the situational context. Researchers have explored its methods, components, motivation, inducers and inhibitors, and content as well as its effect on the learner. Models have been created to understand it as an experience, action, evaluation, reflection, and revelation (Brown, 2000).

One prevalent model of learning found in the higher education literature is "surface-deep" learning (Gibbs, 1992; Holt, 1965). "Deep" learning occurs when the student attempts to understand the subject matter or can construct his or her own meaning from a learning experience. Deep learners will question the facts and opinions in order to gain a new, individually-developed perspective of a phenomenon. On the other hand, "surface" learners interpret learning as an additive product where facts and processes are memorized, recalled, and repeated. Surface learners learn in order to do well enough on the test and may even be able to apply their learning to another context, but they take their learning at face value and do not question the underlying structures or causality of what they are learning.

## **MODEL BUILDING**

### **The Learning-Emotion Link**

Despite the vast research conducted on learning, and surface-deep learning in particular, relatively less work has focused on the connection between emotion and learning (Fineman, 1997). Much of the literature on learning, in particular management and adult learning, has been dominated by the rational-cognitive approach which has tended to view emotion as an instrument of cognition when it was not viewed as an impediment to reason or ignored entirely (Ashkanasy, Hartel, & Daus, 2002; Imel, 2003).

One possible explanation for this bias is that some researchers would argue that emotions, such as anxiety, fear, and stress, interfere with learning (Argyris, 1990; Beech, 1978). These negative emotions may lead to one of two polar responses that are both counterproductive to the individual's development. First, fear, stress, anxiety and other emotions like them may overwhelm the individual and create perceived inadequacies to the extent that the person becomes incapacitated and shuts down altogether. At the other extreme, these negative emotions may trigger a strong defense mechanism in which the individual distorts reality to the point that s/he feels perfect as is, if not at least sufficient, and sees no need for further development.

However, not all people will have these extreme reactions to negative emotions. Some people recognize that their feelings may stem from ignorance, and as a result, these emotions will move or guide the person to learn more about that which provokes their negative emotions (Vince, 2001). Learning becomes a defense against these negative feelings so that through knowledge, the individual can alleviate or eliminate any negative emotions or perceived threats.

Of course, positive emotions can inhibit or engender learning as well as negative emotions. For some, the love of “truth” is a strong motivation for learning (Freud, 1988; Piaget, 1981). In others, love, admiration or respect for the teacher can drive a student toward further development (Gabriel, 1983). Emotional health, like physical health, is key to personal development. If the student feels overconfident or complacent, these emotions may lead to learning myopia or a narcissistic and false sense of accomplishment that could prevent further development (Levinthal & March, 1993). However, if a student feels a low level of liking, or hate even, for the subject or instructor, this, too, may inhibit any educational endeavors since the student may disengage because of the high level of disaffection.

From the prior discussion, it would appear that emotions and learning share a complex relationship. Both positive and negative emotions influence learning in both constructive and destructive ways. This would suggest that learning is dependent not so much on a positive or a negative feeling, but more on the degree or strength of that emotion. Too little or too much love, respect, fear, anxiety, or stress may actually restrict or inhibit the learner, but some degree of these emotions will lead to individual development. As depicted in Figure 1, we propose that:

**P1:** Emotions, both positive and negative, have a curvilinear, inverted U-shaped, relationship with learning in general.

What degree of emotion is required for learning to occur will vary from person to person because of individual differences in perceptions and emotional tolerance levels. As a result, a quantitatively defined emotional threshold point that is generalizable to the population may be difficult to establish. Perhaps, it is more relevant to recognize that an individual’s emotional state must lead to a desire or need to learn before the individual can experience growth.

Not all learning is equal, certainly. The question of whether a student learns deeply or at the surface level may be related to their emotional state. Recently, neurologists have found a strong physiological link between emotion and reason that indicates that emotions and memories are processed in the same areas of the brain (Weiss, 2000). This finding indicates that learning experiences are encoded in the emotional context at the time of the learning event. These emotions serve as a screening function through which new information may or may not be acknowledged, and they provide a context for organizing and processing newly acknowledged information. These functions are important to learning because new information cannot be processed for learning unless it has been recognized emotionally. In other words, if a person does not attach an emotion to an experience, that experience will not be retained long-term or added to the person’s knowledge base.

What the neurologists have found further substantiates previous research into the linkages between emotion and cognition by psychologists, sociologists, and other social scientists. Some researchers go so far as to say that learning and emotion are inseparable (Brown, 2000; Fineman, 1997). The different feelings an individual experiences (e.g., love, hate, anger, resentment) provides focus and justification for his or her thoughts, and the learning that s/he experiences cannot be understood outside its socio-emotional context. In other words, people have feelings about their thoughts, and thoughts about what they feel (de Sousa, 1987; Gallois, 1993; Kemper, 1993). Brown's (2000) study of MBA students show that this link is so strong yet so subtle that her students take the connection for granted. Brown suggests that the emotions felt by the students are expressed through the reflection and appraisal process. The students' contemplation and evaluation of the content of their learning and themselves revealed that emotion was used to help them reach a deeper level of understanding of both the topic and themselves. Conversely, what the students feel about the subject may also lead them to think and question more about what they have learned. Because the students are emotionally connected to the subject matter, the instructor, or themselves, they may become more involved with the topic and continue the learning process long after the class has ended. They will mull over what they have learned outside of the classroom until they have reached some satisfactory conclusion, that is, until they *feel good* about what they have learned because they care about the outcome. It is through these reflections and appraisals that deep learning is achieved. Therefore, we make the following proposition depicted in Figure 2.

**P2:** Students who are emotionally engaged will experience deep learning.

The next question is then can students learn without emotional attachment? The answer seems certainly given the number of zombie-like faces found in some class sections. These individuals may be motivated by factors other than a feeling (e.g., love, fear, respect, or resentment) toward the topic, instructor, or themselves. They may enroll in a course of study because of parental or socio-cultural mandate. They take a certain course because it is a degree requirement for which they see no future value. For these students, learning is not the primary goal, but meeting an environmentally imposed demand is. They will do the minimum necessary to get the grade they need or they may even do well on certain type of assignments, but they do not feel the importance of what they are learning. Like a sea sponge, they soak up new knowledge, and when pressed, they regurgitate the facts and information they have absorbed. To further the analogy, the individuals have not been transformed or changed in any significant way and the information they have attained is still in its original form, without having undergone reinterpretation, reflection or evaluation. Because they are not emotionally connected to what they are learning, they do not dig deeper, and because they do not look for deeper meaning in what they are doing, they do not become emotionally engaged. If pushed by the teacher to go beneath the surface, they may not even have the ability to do so. Consequently,

**P3:** Students who are not emotionally engaged will experience only surface learning.

In the next section, we will examine how the connection between emotion and learning is shaped by Internet and related technologies.

### **The Internet, Learning, and Emotion**

Prior research has shown the efficacy of the Internet in the international business and international marketing curricula. For example, Greene & Zimmer (2003) surveyed students who used the Internet to conduct research for a global marketing project and found that the students developed an increase in country knowledge and research skills as well as an increased interest in pursuing a career or further studies in international business. Lawson, White, & Dimitriadis (1998) examined the benefits of using Internet-based assignments with varying levels of technology and intercultural interaction. Students reported that they did gain knowledge of another country, a better understanding of cultural differences, and intercultural communication skills. These types of studies show that the Internet can engender deeper learning. The reason for these positive results may lie in the context, content, and connections provided by the Internet.

At deeper levels, learning can entail a significant change in individuals' values, ideas, beliefs and habits about themselves and/or their world that can create self-doubts. The novel experience of learning combined with these self-doubts can create anxieties that would trigger defensive mechanisms that could impede learning. As a result, some researchers propose that learning occurs best in a "holding environment" where the anxiety is managed and there is room to explore without too many threats or restrictions (Winnicott, 1962).

For some, the Internet can provide that safe environment that is free from judgment or debilitating pressures that may be found in a classroom setting. It can produce a feeling of space between the instructor and the learner. It can create a perception of anonymity for the student so that s/he feels free to make mistakes without the fear of repercussions or the pressure to meet expectations. The content and linkages provided by the worldwide web can increase a student's confidence in his or her ability to find information which is the first step in any type of learning. In addition, the richness and variety of the content on the web can arouse a student's curiosity and desire to question, reflect on, and evaluate what s/he has learned, especially if the content contradicts what s/he has learned previously.

However, the benefits of the Internet are predicated on the assumption that the student is open to the idea of using the web for learning purposes. If the student enjoys or likes the Internet, then it becomes a valuable development tool, but if the student dislikes, fears, or finds no value in it, then s/he will want to minimize the amount of time or level of interaction with it, disabling deeper learning. Fear of the Internet could lead to self-defeating behaviors and cause the student to feel frustrated or incompetent and to prematurely give up on an assignment. It can also lead to dissatisfaction with oneself, the Internet, the instructor, or the topic, to name a few.

These feelings, though, do not necessarily predict all future interactions. An early study into the emotional results of cognitive difficulties in using the Internet indicated that learners who had initial problems were able to overcome them through learning new vocabulary and user techniques that enabled them to become more successful in completing their tasks (op. cit. Nahl, 1998). As a result, the initial negative affective

reactions transformed into positive affects as the students experienced more success with their assignments. Through these insights, we make the following two propositions depicted in Figure 3.

**P4:** Students who feel positively toward the Internet may experience deep learning.

**P5:** Unless the student can overcome his or her negative feelings toward the Internet, the student will not experience deep learning.

As a learning instrument, the Internet can be a double-edged sword. The same qualities that can enhance one student's learning may de-motivate or hamper another student's development. The anonymity and distance that the web provides can isolate, dissocialize, or emotionally disengage an individual (Sharma & Maleyeff, 2003). Higher levels of depression and loneliness have been directly linked to the amount of time spent online (Kraut et al., 1988). Furthermore, without socialization, either through interpersonal contact directly or indirectly through chat rooms, bulletin boards, etc., the transformative quality of learning is decreased. Combined with the speed at which information can be downloaded, the emotional distance inherent in being online can lead to unethical behaviors such as plagiarism or the use of online paper mills. As a result, the student does not receive the exposure necessary for deep learning.

Moreover, much of the content found on the web is often speculative or just spurious, but users may develop a false sense of its credibility because of the aesthetic appeal of the websites or the quick availability of the information. Over time, students may view the internet as the source of all information or the only source for information without checking more reliable sources. By accepting the Internet as the primary or only source of information, they will cease to question the authenticity of the information or critically reflect on its content. Students will develop a false sense of accomplishment or a misplaced confidence in the Internet and themselves which will hamper in-depth learning. In these instances, the Internet can create an adverse emotional response which leads to the following proposition.

**P6:** The Internet may create feelings (either positive or negative) in the student that would hinder deep learning.

## **SUMMARY AND CONCLUSION**

This research attempted to highlight the importance of recognizing the emotional component of learning and its subsequent impact on how well the student will learn. First, we examined the relationship between emotion and surface-deep learning and proposed that what the student feels is not as relevant as the intensity of those emotions. Both positive (e.g., love, respect, or joy) and negative (e.g., hate, fear, or resentment) feelings can lead to deep learning if they are at a sufficient level. Without emotions, however, deep learning cannot be attained.

Second, we explored the impact of an intermediary force on this relationship. More specifically, we looked at the influence of the Internet and concluded that, in this

case, what the student feels toward the Internet will have an influence. That is, students need either to feel positively or overcome any negative feelings toward the Internet in order for the Internet to be a useful tool for engaging students in deep learning. Conversely, because of the emotional dynamics involved, the Internet can create feelings (e.g., isolation, depression, over-confidence) that would dampen in-depth learning.

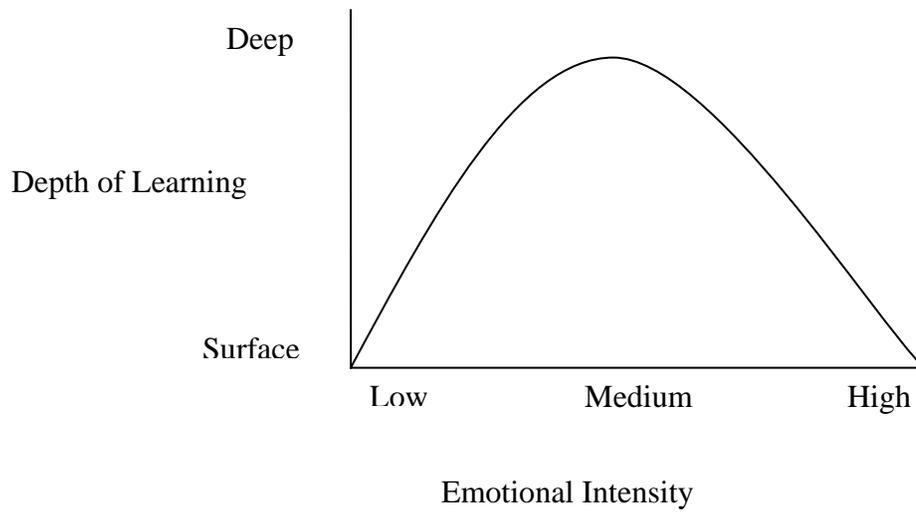
Ironically, the Internet was intended to bring people closer, but it may actually have the opposite effect that the business curriculum needs to correct. The increased rate of globalization and diversity in the workplace underscores the need for business people to be more socially aware and empathetic to those from different backgrounds (Ashkanasy et al., 2002). As a training ground for future business leaders, higher education needs to acknowledge and better understand the emotional component of learning in order to better prepare students for the modern workplace.

## REFERENCES

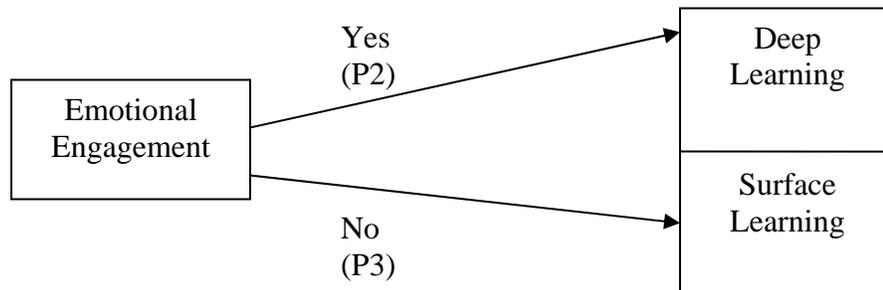
- Antonacopoulou, E. P., & Gabriel, Y. (2001). Emotion, learning and organizational change: Towards an integration of psychoanalytic and other perspectives. *Journal of Organizational Change Management, 14*(5), 435.
- Argyris, C. (1990). *Overcoming organizational defenses*. Boston, MA: Allyn and Bacon.
- Ashkanasy, N. M., Hartel, C. E. J., & Daus, C. S. (2002). Diversity and emotion: The new frontiers in organizational behavior research. *Journal of Management, 28*(3), 307.
- Atwong, C. T., & Hugstad, P. S. (1997). Internet technology and the future of marketing education. *Journal of Marketing Education, 19*, 44-55.
- Beech, H. R. (1978). Learning: Cause or cure. In C. L. Cooper & R. Payne (Eds.), *Stress at work*. Chichester: Wiley.
- Brown, R. B. (2000). Contemplating the emotional component of learning: The emotions and feelings involved when undertaking an MBA. *Management Learning, 31*(3), 275-293.
- de Rivera, J. (1977). *A structural theory of the emotions*. New York, NY: International Universities Press.
- de Sousa, R. (1987). *The rationality of emotion*. Cambridge, MA: MIT Press.
- Fineman, S. (1993). Organizations as emotional arenas. In S. Fineman (Ed.), *Emotion in organizations* (pp. 9-35). London: Sage.
- Fineman, S. (1997). Emotion and management learning. *Management Learning, 28*(1), 13-25.
- Freud, S. (1988). *New introductory lectures on psychoanalysis*. Harmondsworth: Pelican Freud Library.
- Fugate, D., & Jefferson, R. (2001). Preparing for globalization - Do we need structural change for our academic programs? *Journal of Education for Business, 76*, 160-166.
- Gabriel, Y. (1983). *Freud and society*. London: Routledge.
- Gabriel, Y. (1999). *Organizations in depth: The psychoanalysis of organizations*. London: Sage.
- Gallois, C. (1993). The language and communication of emotion: Universal, interpersonal, or intergroup? *American Behavioral Scientist, 36*(3), 309-338.

- Gibbs, G. (1992). *Improving the quality of student learning*. Bristol: Technical and Educational Services, Ltd.
- Harre, R. (1986). *The social construction of emotions*. Oxford: Blackwell.
- Holt, J. (1965). *How children fail*. London: Pitman.
- Hopfl, H., & Linstead, S. (1997). Learning to feel and feeling to learn: Emotion and learning in organizations. *Management Learning*, 28(1), 5-12.
- Imel, S. (2003). Effects of Emotions on Learning in Adult, Career and Career-Technical Education. Trends and Issues Alert.
- Kemper, T. D. (1993). Reasons in emotions or emotions in reason. *Rationality and Society*, 5(3), 275-282.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1988). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53(9), 1017-1031.
- Levinthal, D. A., & March, J. G. (1993). The myopia of learning. *Strategic Management Journal*, 14, 95-112.
- Nahl, D. (1998). Learning the Internet and the structure of information behavior. *Journal of the American Society for Information Science*, 49(11), 1017-1023.
- Natesan, N. C., & Smith, K. H. (1998). The Internet educational tool in the global marketing classroom. *Journal of Marketing Education*, 20(2), 149-160.
- Piaget, J. (1981). *Intelligence and affectivity*. CA: Annual Reviews.
- Sharma, P., & Maleyeff, J. (2003). Internet education: Potential problems and solutions. *The International Journal of Educational Management*, 17(1), 19.
- Siegel, C. F. (1996). Using computer network (intranet and internet) to enhance your students' marketing skills. *Journal of Marketing Education*, 18, 14-24.
- Vince, R. (2001). Power and emotion in organizational learning. *Human Relations*, 54, 1325-1351.
- Weiss, R. P. (2000). Emotion and learning. *Training & Development*, 54(11), 45-48.
- Winnicott, D. (1962). *The maturational process and facilitating environment*. London: Hogarth Press.

**Figure 1. Curvilinear Effect of Emotion on Learning**



**Figure 2. A Model of the Emotion-Learning Link**



**Figure 3. Internet Effects on the Emotion-Learning Link**

