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I am submitting herewith a thesis written by Frank Laszlo Jr. entitled "The Identification of Online Learning Motives in Use by Undergraduate Students." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master's of Science, with a major in Human Resource Development.

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THE IDENTIFICATION OF ONLINE LEARNING MOTIVES IN USE BY UNDERGRADUATE STUDENTS

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Frank Laszlo Jr.
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DEDICATION

This thesis is dedicated to my late father

Mr. Frank Laslo Sr.,

my late father-in-law

Mr. Bufford K. Hullender,

and the late Rev. Dr. Hugh Hamilton.

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ABSTRACT

It is generally agreed that the identification of learning motives, and subsequent inclusion of supportive instructional methods and strategies into course design, can contribute to the transfer and retention of course content (Shih & Gamon, 1999; Warschauer, 1996; Wlodkowski, 1999). Online, or web-based instruction is becoming a relatively cost-effective delivery method as many businesses and universities seek to lower costs. However, limited research into online learning motives has occurred. As a result, many online instructors and course designers rely on traditional learning motives derived from classroom research (Warschauer, 1996). Since the development and use of learning motives is considered to be the best predictor of student achievement (Shih & Gamon, 1999) it becomes increasingly important that inquiry into this area would benefit both student and instructor/course designer. As part of the continuous improvement process established by the University of Tennessee's Human Resource Development Department and its Diversified Instructional Modality Systems (DIMS) course development and delivery team, this study was conducted to identify learning motives in use by undergraduate students enrolled in core online courses offered by the Human Resource Development Department during the Spring Semester of 2000. A sixteen item, Likert-type questionnaire was administered to all undergraduate online students. Items were grouped within five primary learning motives derived from a review of learning motive theories characterized by course interest, course relevance, personal feelings and emotions, reinforcement and self-competence. In addition, demographic information

such as gender, marital status, employment status and student status were collected for future correlational analysis.

The highest levels of agreement occurred in responses pertaining to course relevance, reinforcement and self-competence, respectively. Course interest and personal feelings and emotions indicated less agreement among online students. However, individual item agreement levels were highest in receiving frequent instructor feedback, preferring course material that arouses curiosity, completing the course and learning what is being taught, respectively. Least agreement was indicated in thinking about personal emotions and feelings, learning things that were surprising or unexpected, self-praise in the absence of instructor praise, and maintaining attention using a variety of lesson topics.

Based upon the results of this survey, appropriate learning methods and strategies were identified for possible inclusion into current and future online instructional plans.

PREFACE

Prior to teaching at the college level, this author was employed as an operations and maintenance manager at three hydroelectric facilities in East Tennessee. The remote location of these facilities seemed not to influence employee motivation as one might expect. Wages and compensated benefits were determined by classification rather than by merit, and could not be considered a motivating factor. Therefore, other factors were contributing to an employee's motivation to perform. The employee roster included scientists, engineers, consultants, technicians, craft persons and laborers. Each classification brought with them differing educational and experiential backgrounds. As their manager, it became exceedingly difficult to determine which factors drove employees to excel, or not to excel in their fields of expertise.

As a graduate teaching assistant, the opportunity afforded itself to transfer this interest in motivation to teaching. Informal discussions with students enrolled in online courses indicated a variety of demographic and socio-economic groups. Ages varied from young adult to senior adult. External motivators to participate in an online class varied from increased possibilities for promotion to self-interest, including convenience. What were the motives at work that encouraged online learners to complete lessons while most people were asleep? Did all students employ the same motives across gender, marital and employment status lines? Did full-time students employ different learning motives than part-time students? What can we do as course developers and instructors to support their learning motives in our course planning? These questions arose as a result

of analyzing three semesters of instructor and course evaluation comments provided by our online students. This study afforded the author an opportunity to explore a long-standing interest in motives, and to determine those motives that are currently in use, and to implement appropriate instructional strategies that will support our student's learning motives.

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CHAPTER I

INTRODUCTION

Rationale

Online learning is becoming a viable and cost effective method in delivering course materials for many businesses and universities seeking to lower costs. As with any new technology, initial costs of establishing appropriate equipment, network and support contracts are required. However, once established, typical overhead charges incurred by traditional classroom or on-the-job training programs are often minimized or negated using online delivery methods. Using online technologies, program materials may be updated using network connections during non-use times, thus reducing reproduction and mailing costs. An additional benefit is the flexibility afforded by the twenty-four hour access many students have to online materials, thus reducing production impacts and overtime charges incurred when employees are replaced during training. Instructor costs are often reduced as travel to outlying, or remote sites required to give instruction is minimized. The benefits of online learning are well documented in current research and literature.

Statement of the Problem

In the rush to initiate online learning programs, many businesses and universities have relied on learning constructs and motives derived from existing research to support their efforts in the design, development and delivery of course materials. These learning

constructs and research findings are primarily derived from studies performed in traditional classroom settings, or on-the-job, rather than in the relatively new online learning environs (Warschauer, 1996). Applying these findings to online course development and delivery without the benefit of appropriate research findings may not optimize student learning. Parson (1998) and Alexander (1995) agree with this philosophy, and state that educators should evaluate how students learn via new technologies, so they can adjust the curriculum and instructional designs to optimize learning.

It is generally agreed that student achievement is an important indicator of the effectiveness of instructional design and delivery. Ongoing quality initiatives have targeted student achievement as a primary indicator to be tracked and improved through the modification of instructional plans based upon student and instructor feedback. Since the acquisition and use of learning motives is considered to be the best predictor of student achievement, investigation into online learning motives is warranted (Shih & Gamon, 1999).

Definition of Terms

Extrinsic motives – "any acts or things that are openly done for or to someone with the intent of producing a predetermined behavior or change in behavior" (Rogers, Ludington, & Graham, 2000, p. 6).

Intrinsic motives: incentives, or desires to learn that are inherent, or innate, usually derived from one's self.

Learner or student: one who is actively engaged in learning.

Learning motives: those emotions, needs, wants, desires or responses that are acted upon during learning activities.

Learning strategies: mental processes utilized to help learners learn and understand something new.

Online or distance learning: learning activities that occur utilizing a technical media that provides for two way communication and separation of the teacher and student.

Motivation: "those processes that can arouse and instigate behavior, give direction and purpose to behavior, continue to allow behavior to persist, and lead to choosing or preferring a particular behavior" (Wlodkowski, 1985, p. 2).

Motivational strategies: "deliberate instructor actions that enhance a person's motivation to learn" (Wlodkowski, 1999, p. 69).

Self-regulated learning: metacognitive strategies for planning, monitoring and modifying the learner's cognition.

Research Questions

1. What online learning motives are in use by undergraduate students enrolled in core Human Resource Development online courses?
2. What are the perceived levels of agreement placed on different learning motives by online students?

Assumptions

The instructors provided an equal level of student support and opportunities to capitalize on student learning motives. This assumption was based upon accepted design, delivery and training requirements established by the Department of Human Resource Development, the Diversified Instructional Modality Systems (DIMS) team and supplemental resource materials such as Blackboard, the HRD help line, the online instructors' manual and courses offered by the University of Tennessee's Innovative Technology Center. Student motives were not recognized as affected by the mandatory participation of core, online courses at the undergraduate level.

The undergraduate students surveyed in the pilot study and the research study were not biased in their responses due to varied levels of experience as trainers or teachers.

CHAPTER II

REVIEW OF LITERATURE

An Overview of Motivation Theories

Motivation is one of the most overlooked aspects of curriculum design and development. Many learning models have been developed that ensure the understanding and retention of course content. Gagne's Instructional System Design model, (Gagne, Briggs & Wager, 1992) which is widely used throughout the United States military training services and many school systems, is but one example. However, little has been written, or researched into the motives at work that facilitate learning, especially in an online learning environment. Therefore, a review of fundamental motivation theories, learning strategies and learning motive models was required before research into the identification of online learning motives could occur.

Classic Motivation Theories

The study of motivation and learning motives began as early as the ancient Greeks. Epicurus, Horace and Democritus were concerned with the study of human motives (Chung, 1997). Pain and pleasure were considered the only motives to action. Virtue was attained when pain was actively avoided and pleasure was vigorously pursued. Modern scholars have classified this form of motivation as classic hedonism. Many Greek scholars believed the attainment of knowledge was the pursuit of pleasure, and the avoidance of knowledge was to deny pleasure, thus promoting pain. Socrates of

Alopecae believed the pursuit of knowledge was virtuous, and wisdom was attained through knowledge and happiness. Happiness, in a sense, lay in the possession of such knowledge. The Socratic method was an example of the utility of this philosophy, as students were required to participate fully in the learning process, and were constantly motivated to find knowledge from within, rather than from their teachers or the events of the natural world (Copleston, 1993).

Needs Theories

Bentham, Mill and Spencer (Hakim, 1997) theorized several social forms of hedonism during the 19th century. Motivation to learn was either derived from self-interest or societal needs. Knowledge became valuable for its own sake, and for the greater sake of society, which, they each agreed, guaranteed the continued success of Western capitalism. During the early 20th century, Freud and McDougall (Chung, 1997) believed man was motivated to learn by innate instincts; such as gratification, reproduction and survival. Richter and Dashiell (Chung, 1997) argued that physiological needs or drives initiated motives to act. In other words, human beings were driven to acts of behavior as needs arose. By the mid-Twentieth Century, motivation became more individually centered, rather than externally driven by the needs of society, or how meeting those needs satisfied the individual. Maslow (1954) established a hierarchy of individual personal needs based on his work as a humanistic psychologist. Personal needs range from basic biological needs to self-fulfilling psychological needs, as illustrated in Figure 1. Maslow categorized the needs into two groups: deficiency needs

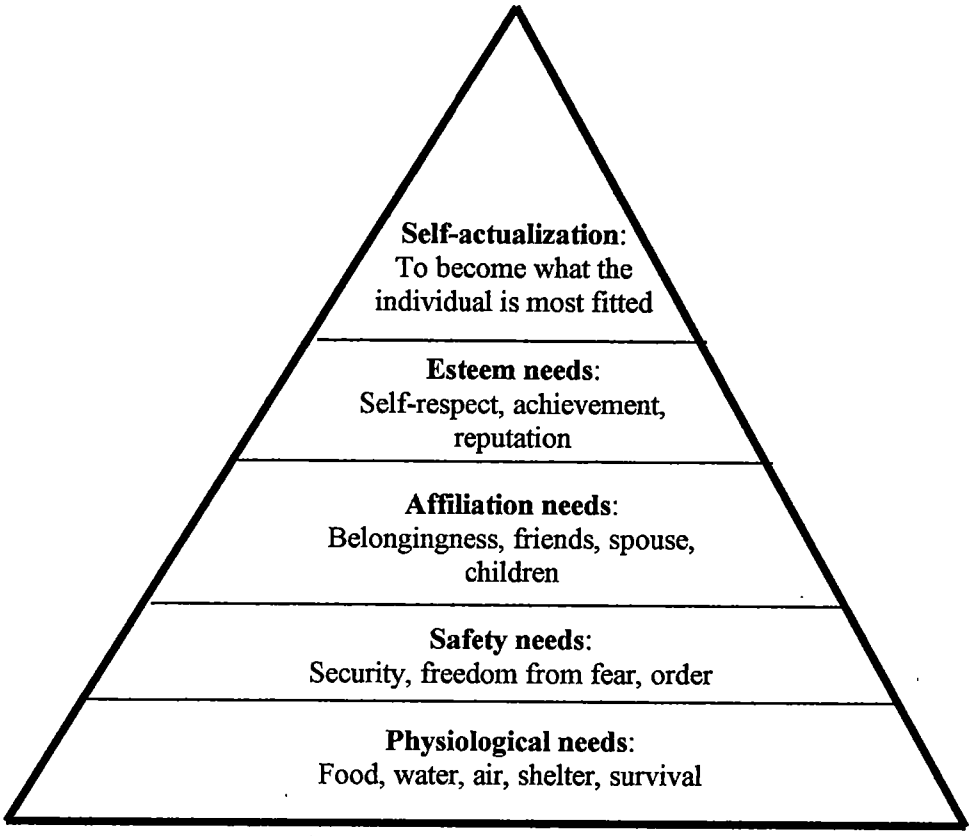

Figure 1. Maslow's Hierarchy of Needs

(physiological or survival, safety, belonging, and self-esteem) and being needs (intellectual achievement, aesthetic appreciation and self-actualization). Maslow reported that when a need is not met, the individual would be motivated to meet that need. Once lower level needs are met on the pyramid, higher level needs can be addressed and the individual is again motivated to meet those needs. If one of the lower needs is suddenly not met, the individual will recognize that need as most important, and will be motivated to meet that need before pursuing higher level needs.

Incentive Theories

Thorndike (1911) believed two laws affected learning: the law of effect (satisfaction strengthens the bond between stimulus and response) and the law of exercise (the frequency of response to a situation is directly proportional to the importance of the situation). The laws were based on past experiences of satisfaction or discomfort, rather than present requirements for pleasure and satisfaction, as previous hedonistic theorists purported. Another theorist, C. L. Hull (1952) developed an incentive theory that states the primary function of incentive is to pull the organism toward the attainment of a goal. As the attainment increases in importance, so does the incentive.

Attribution Theories

Attribution theories (Rathus, 1996) generally state that each individual attempts to explain success or failure by suggesting certain provenances. These attributions may be internal or external and may be under the individual's locus of control, or the locus of others. For instance, motivation may be based on the desire to maintain an individual's image of self-worth. Consequently, one may look for ways to attribute the causes of behavioral outcomes to that which maintains an individual's sense of self-worth. The effects of certain attributions may be heightened levels of self-efficacy, emotional reactions exhibited as shame or pride, enacted traits that lead to future success, and demonstrated efforts to succeed or failure.

Herzberg, Mausner, Snyderman (1959), and Deci (1977) argue that motivation to perform or to learn may be derived from personal satisfaction or reward, known as intrinsic motivation. The same motive may be due to external forces that lead to public recognition, status, or rewards, known as extrinsic motives. Herzberg and Deci also agree that motives may be derived from the influence of both forms.

Extrinsic and intrinsic motives are derived from expectancy theory tenets of performance and rewards. Each motive may influence the other, depending upon the strength each is perceived to have by the learner. For example, extrinsic motives, such as completing a task within certain time limits, may outweigh the joy one experiences in performing the task. Intrinsic motives, such as enrolling in a course for personal enrichment, may outweigh the importance of graduating on time and within one's budget. In summary, Figure 2 illustrates the motivation to act process in light of the extrinsic and intrinsic motives and the motivation theories discussed thus far. Although many motivation theories recognize the importance of extrinsic and intrinsic motivation, the theories discussed thus far generally place greater importance on one type or the other. However, it is important to note that intrinsic and extrinsic motives may be at play due to circumstances surrounding the decision to act, and the individual's level of self-confidence in reaching the desired goal. The needs theories of Chung and Maslow are primarily derived from the physiological, social and psychological desires and needs an individual perceives in the attainment of personal goals. Since these needs are self-derived, intrinsic motives provide the primary motivation to act. Conversely, the

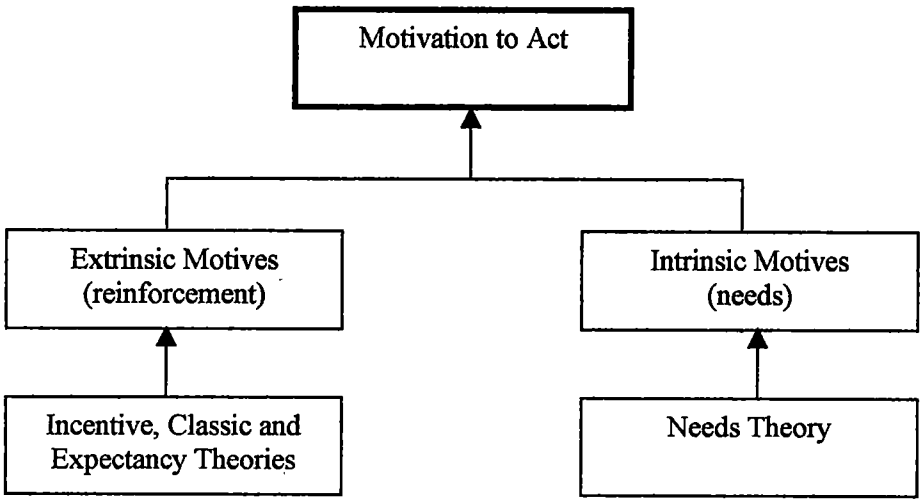

Figure 2. Theory-Based Motivation to Act

incentive, classic and expectancy theories of Thorndike, Vroom and Herzberg are based on the individual meeting societal needs while attaining personal goals. Therefore, extrinsic motives become the primary force to act. Whether extrinsic or intrinsic motives are at work, individuals will usually derive motivation from within themselves and from without, as determined by the circumstances surrounding their desire to act (Deci, 1995).

The previous motivational theories have provided the reader a general overview of biological, sociologic, psychological and altruistic needs or drives that lead an individual to act, or to behave in a certain manner. These drives were found to be either intrinsic or extrinsic in nature. In other words, an individual may be directed to act based upon the needs and desires derived from self-interests or from the interests of others, or by a combination of sources.

Motivation Theories Leading to Instructional Learning Strategies

For the purposes of this study, the following motivating learning theories and strategies were selected as supporting tenets for the development of a test instrument used in this study and the required research necessary to further understand learner motives. The following motivation theories are supportive of present online instruction planning methods, and are applicable for comparing theory-based learning motives with those identified in this study.

Vroom's Expectancy Theory

Unlike the incentives and rewards theories proposed by Thorndike and Hull, Vroom (1964) and Pajares & Miller (1994) alleged that motivation is a function of the learner's expectancy for success at a particular task, and the value that task has for the learner. Pajares & Miller state that some expectancies are predictions about what will follow various stimuli or signs, known as stimulus-outcome relations. Other expectancies may involve what will happen if one follows certain behaviors, known as behavior-outcome relations. Still other expectancies are self-efficacy expectations. Vroom's expectancy theory was based upon four basic premises:

- People have preferences for various outcomes or incentives that are available to them.
- People have expectations about their performance levels.
- People understand that certain behaviors will be followed by desirable outcomes or incentive rewards.

- The action a person takes (motivation) is determined by their expectations or reservations.

The motivation to learn begins with a desire to obtain a preferred outcome or incentive reward. If a person perceives a barrier to learning, he or she will exert an extra effort to overcome the barrier if the rewards or outcomes are sufficiently desirable. In mathematical form, Vroom's theory may be expressed as:

Motivation Forces = Expectancy * Instrumentality * Valence

where motivational forces that results in an action or a behavior is a function of three beliefs: expectancy, instrumentality and valence. Expectancy is the belief that an individual's effort will result in the attainment of desired performance goals. This belief is based on past experience in realizing goals, levels of self-confidence, and the difficulty placed on reaching performance goals. Instrumentality refers to the premise that rewards will be gained if performance goals are met. Valence refers to the value an individual places on the rewards. This is a function of an individual's goals, values and needs. Since the formula states that three factors are to be multiplied, a low value in either factor will result in a low motivation force. Therefore, all must be present in order for motivation to occur. Figure 3 illustrates the expectancy theory as a function of task value and expectancy for success. Individual goals are assigned task values that constitute an appropriate level of motivation, often times commensurate with the importance placed on attaining the selected goal. Challenges faced by the individual or the usefulness of attaining the goal is also given value based on the task values assigned by the individual. Individuals may weigh the value of each motive, and select the greater as the prime

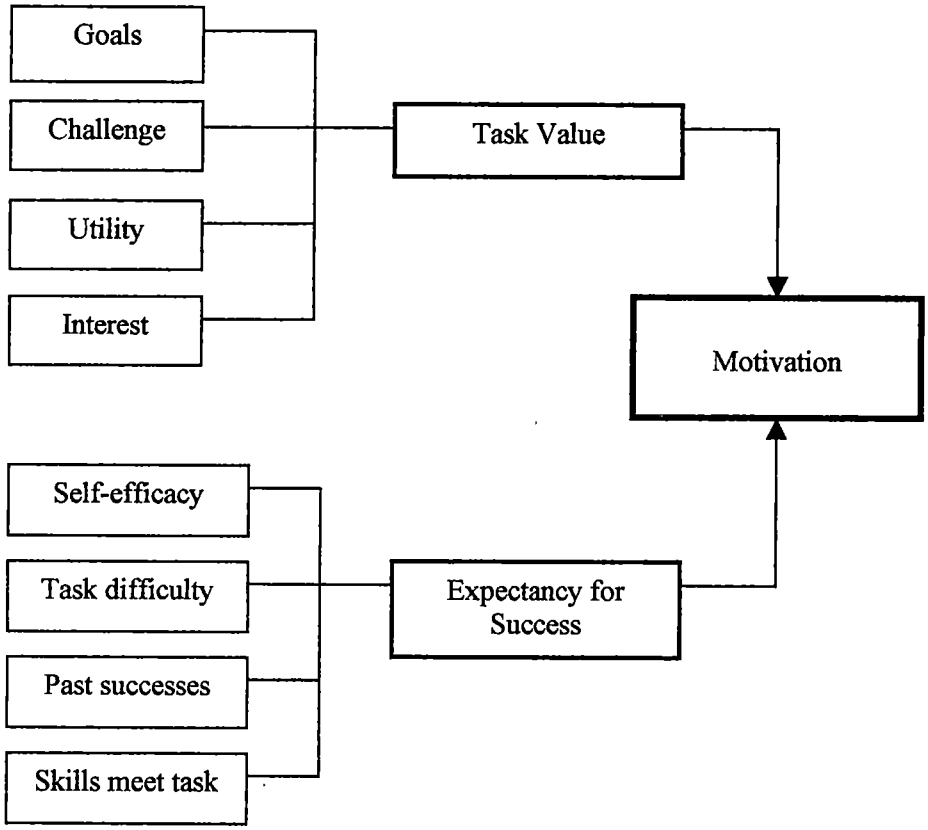

Figure 3. Expectancy Theory

mover to action. The selection process may be driven by situational circumstances, or personal preferences. Similar to Pajares & Miller's expectancy model, the individual may be motivated to goal attainment by another route, that of expectancy to succeed. The expectancy for success may be generated by an individual's belief that the goal can be attained, the degree of difficulty the individual perceives in attaining the goal, the success one has achieved in attaining similar goals, or whether the individual has the skills required to attain the desired goal.

Keller's ARCS Model of Motivational Design

Approximately twenty-five years ago, John Keller, of Florida State University began research into learning motives and the mechanics of incorporating motivation into instructional design. From his findings, Keller deduced that effort is the primary, measurable motivational outcome. Like Vroom, Keller believed that for effort to occur, the learner must value the task, and must believe he or she can succeed. Therefore, the task should be presented in a way that is engaging and relevant, and in a way that promotes positive expectations for the successful achievement of the learning objectives (Small, 1997). Consequently, Keller (1983) developed the ARCS Model of Motivational Design that provided a useful framework for both the design and improvement of the motivational quality of instructional materials. The model is not a standalone model, but should be combined with other instructional models, such as Gagne's Instructional System Design model (Gagne, Briggs & Wagner, 1992) to design instruction materials that are both instructionally sound and motivational. The following describes Keller's ARCS model, its components and appropriate instructional strategies that can be incorporated into online instruction plans.

- Attention: strategies that arouse and maintain curiosity and interest. Keller categorizes attention strategies into three categories: perception, inquiry and variability. Perception includes questions that probe a learner's understanding. Inquiry may include problem-solving activities. Variability provides a variety of instructional delivery methods to be used to maintain interest.

- Relevance: learning strategies that support learners' needs, interests and motives. Goal orientation is considered an important aspect of relevance. Clearly stated learning objectives and purpose statements will ensure relevance for the learner. Matching the objectives with the student's learning styles and preferences using concrete language will increase the chances that learning will occur. Familiarity with course content would be achieved by presenting the content in familiar ways that are understandable and relate to the learner's experiences and values.
- Confidence: learning requirements should be stated clearly and early in the coursework, thus reducing the amount of unknowns and increasing the chances that students will perform as soon as possible. Performance requirements and assessment criteria should be discussed with the learner at the onset of the course. Success opportunities should be afforded through assimilation of content from a variety of sources. Personal responsibilities are afforded by linking learning success to the learner's personal effort and ability using multiple achievement goals and setting personal achievement standards.
- Satisfaction: the learner should be encouraged to find ways in which learning can be intrinsically enjoyable. Feedback and reinforcement should be afforded that will sustain the desired performance. Maintaining consistent standards and consequences for success will ensure equity.

Malone's Theory of Intrinsically Motivating Instruction

Thomas W. Malone (1981) presented a theoretical framework for intrinsic motivation in the context of designing instructional computer games. Malone believed extrinsic motives, such as achieving high scores, receiving praise from an instructor, or completing work on time, was not sufficient for true learning to occur. Only intrinsic motivators were believed to provide the necessary drive to consistently perform to above minimum standards. Challenge, feedback and clearly stated criteria for performance were deemed as forms of intrinsic motivators, whereas in the past, these initiators were deemed primarily extrinsic in nature. Malone further argued that intrinsic motivation could be created by three qualities: challenge, fantasy and curiosity. Later, Malone (Malone & Lepper, 1987) collaborated to include a fourth motive, that of control. According to Duchastel, " Malone's CFC model provides interesting dimensions to consider in better understanding why WBI (web based instruction) can be intrinsically motivating and in seeking to enhance this aspect in the design of WBI" (1997, p. 182). A brief description of Malone's CFC model is provided:

- Challenge depends on activities that involve uncertain outcomes due to variable levels of expected performance, hidden information or randomness. Challenge techniques that are too easy or too difficult are not motivating to the learner. However, tasks that are moderately difficult provide a challenge to the learner, and due to their unpredictable outcomes, can become motivators when appropriate levels of instructor feedback are forthcoming. Therefore, instructional activities should provide moderate levels of risk and

possibilities for uncertain outcomes. Issroff (1997) believed that these levels should be based on the learners' abilities and degrees of self-efficacy. Self-esteem is subsequently established by meeting established learning goals and mastering moderately difficult tasks.

- Fantasy may become a motivator as learners master the intricacies of problem solving and navigating through simulated learning environments as found in many computer learning games. Presenting problems in a genre that arouses curiosity and interest may increase the amount of learner knowledge gained. Computer generated learning games provide an opportunity to arouse curiosity through audio and video presentations, interaction with the course content on a sensory level, and learner guided knowledge sequencing within the limits of the course plan.
- Control in selecting topics for study is limited only to minor choices in the sequence of topic presentation. Incorrect, or out-of-sequence topic selections are denied to the student through alternative mapping routes, which, unfortunately, may contribute to the learners' sense of being out-of-control. Incorrect choices are thus limited, rather than denied. Control is maintained, however, through the directive use of pointing devices, such as a computer mouse or keyboard.

Wlodkowski's Motivational Framework for Culturally Responsive Teaching

In 1985, Raymond Wlodkowski's designed a model that incorporated learner motivation, primarily intrinsic, and cultural influences into the instructional planning process. Known as the Motivational Framework for Culturally Responsive Teaching, this approach to instructional design provides specific motivational conditions and strategies (see Appendix A) structured as teaching methods that are designed to increase learner's motivation to learn. The framework can be superimposed onto existing instructional plans, or can become the source, or foundation for future instructional plans. Wlodkowski bases his framework on two assumptions: "if something can be learned, it can be learned in a motivating manner" and "every instructional plan also needs to be a motivational plan" (1999, p. 22-23).

Inclusion, attitude, meaning, and competence must be present in every learning experience before a student's motivation to learn is realized. Establishing inclusion determines the degree to which a learning sequence provides an atmosphere of respect and connectedness. Affect, or emotional reactions to content or classmates, is an important aspect of the inclusion motive. Inclusion activities usually occur at the beginning of the learning activity, and may consist of shared reactions to an assignment, brief introductions, personal experiences related to the course materials, description of the learning goals and objectives, or short brainstorming and small group activities designed to foster respect for individual opinions. Developing attitudinal activities may relate personal relevance and learner choice with favorable attitudes toward learning. These activities and strategies are also found at the beginning of the learning activity, and

may consist of small group discussions, student presentations that promote classroom discussions, question and answer periods, sharing personal success stories that contribute to the content, and instructor experiences that lend credence to the material. Engaging and challenging learning experiences that include learner perspectives and values may also promote enhanced meaning. Meaningful activities are usually designed into the body, or content area(s) of the learning experience, and may consist of whole group discussions, identifying learner assumptions about the course content, comparing and contrasting activities that identify similarities or differences with past knowledge, critical assessments, hands-on practicing of new acquired skills, student presentations of content materials, and mini-lectures designed to support unit fundamentals as they relate to lesson content. Requiring competence as a learning objective ensures that students have effectively learned something they value and can demonstrate the newly acquired skills or knowledge to others. Wlodkowski believes that competence is "the most powerful of all the motivational conditions for adults" (1999, p. 240). Therefore, avenues for learners to check for competence should be included throughout the learning process. Competency standards may be derived from external sources, such as standardized test standards, or may be found within one's sense of achievement. Self-derived standards may differ from those established by others, therefore, learning activities should be designed where both are recognized and rewarded. Competence activities usually occur at the end of the learning activity to check for the degree to which learning occurred, but may be included throughout where appropriate. Activities may include oral, written, or performance tests, student-generated summaries, or action plans generated for future use.

Theory and Application-Based Learning Motives Selected for Study

The identification of theory-based learning motives in Vroom's Expectancy Theory, Keller's ARCS Model of Motivational Design, Malone's Theory of Intrinsically Motivating Instruction, and Wlodkowski's Motivational Framework for Culturally Responsive Teaching provides a useful theoretical framework by which learning motives identified in this study can be associated with, and appropriate learning strategies selected. These learning strategies can then be recommended for inclusion into existing online curriculum, or may become the foundation for future online course development. Since each model or theory reflects similar, yet different learning motives, it may be beneficial to utilize a unified approach by combining like learning motives.

Table 1 provides a brief comparison of learning motives among theory-based learning motive models described in this study, and proposed learning motives selected for study.[1] The learning motives proposed by this author recognizes the importance of the learner's personal feelings and emotions, degree of course interest, level of self-competence, degree of course relevance and need for reinforcement as an online learner, as learning motives that are supported by those models described in this study. Emotions, such as self-doubt, anxiety, embarrassment, joy and achievement may be negative or positive. Providing appropriate supportive learning strategies may minimize negative feelings while not distracting from the course content (Keller, 1983). Task enjoyment, personal growth, a sense of belonging and acceptance are also considered part

Footnote 1. All tables referred to in this thesis are located in Appendix B.

of the affective domain. Interest may be in the form of curiosity, intellectual or sensory stimulation, challenging assignments, personal interest in the subject and maintaining heightened attention while performing lesson requirements (Keller, 1983; Vroom, 1964; Wlodkowski, 1999). Relevance includes value and importance placed on the course, the subject or the materials covered. Although value and importance may be intrinsically or extrinsically derived, relevance is none-the-less an important learning motive (Keller, 1983; Malone, 1981; Wlodkowski, 1999). Reinforcement may be in the form of formal or informal evaluations, such as tests or quizzes, feedback from peers and instructors, self-praise, feelings of self-competence, or external sources such as posting grades (Keller, 1983; Malone, 1981). These learning motives have been selected as those that best represent theory-based motives and this author's personal experience as an online instructor.

Learning Strategies and Motives

Since learning motives are considered an integral part of learning strategies by many educators and educational psychologists (Puca & Schmalt, 1999; Shih & Gamon, 1999; Spooner, Jordon, Algozzine & Spooner, 1999), a thorough investigation of learning strategies is required prior to the selection of appropriate learning strategies based on this study's findings.

Research-Based Learning Strategies

Learning strategies may be thought in terms of how the student learns, whereas learning motives may describe why the student learns. While strategies have been widely

researched and identified, learning motives are less known. Behavioral psychologists such as Bandura, Watson and Thorndike (Somuncuoglu & Yildirim, 1999) identified learning motives that contributed to desired behaviors of animals and humans. Psychologists such as Atkinson, Blackwood and Deci (Puca & Schmalt, 1999; Spooner, Jordan, Algozzine & Spooner, 1999) identified a variety of motives that contributed to the success of learners. Their studies encompassed an even wider variety of learning environments and delivery methods.

Somuncuoglu and Yildirim identify learning strategies as "mental processes that learners can deliberately recruit to help themselves learn and understand something new" (1999, p. 267). Learning strategies may include methods, plans, tools, techniques, procedural skills, or behaviors that facilitates learning, aids in problem solving, or accomplishes a task undertaken by the learner. In other words, strategies provide a carefully sequenced plan of student behaviors designed to result in successful task completion and learning. Effective strategy use involves not only knowledge about the particular strategy, but also when to use the strategy, how to monitor its use, and how to mediate the complex interaction among the three (Pressley & Levin, 1987).

Somuncuoglu and Yildirim also found that students who enroll in online courses tend to be achievement oriented, and have developed useful learning strategies prior to enrolling. Students may develop collaborative learning social skills based upon peer and familial discourse and support. Motives derived from this area include ego-centered social skills related to social acceptance, peer acceptance, and other extrinsic motives contributing to academic success. Work avoidance orientations, however, lead to the

unsuccessful development of cognitive skills. Negative motives include peer pressure to fail, low self-esteem, fear of failure, and a negative Pygmalion effect, i.e., a self-fulfilling prophecy to fail. The Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich, Smith & Garcia, 1993) was used to capture students' achievement goal orientations and applicable learning motives in use by the sample population. The purpose of the Somuncuoglu and Yildirim study was to determine any relationship between students' achievement goal orientations and the learning strategies in use in a specific course. Achievement levels were compared with each student's achievement goal orientations. Correlations were then determined. However, the proposed study will differ from the Somuncuoglu and Yildirim study as learning motives will be identified without correlation to achievement goal orientations. Rather than a specific course, all online undergraduate core course enrollees will be surveyed during a single semester.

Recent studies indicate motives are closely tied to psychological desires, and are derived or inferred from personal or professional needs (Somuncuoglu & Yildirim, 1999). Often, learning motives are developed or acquired due to external forces acting upon the learner. External motivators may include the acquisition of skills, knowledge and attitudes to secure personal safety and health, to provide for family needs, or to maintain personal status or position. Internal motivators may include the need to learn throughout one's life for personal satisfaction and growth. The motive used is selected due to its applicability in meeting specific drives or pressures (Mackeracher, 1996).

The majority of research conducted in the area of student motivation has identified learning strategies that are effective in meeting learning motives. Therefore, a

brief summary of learning strategies models may assist the reader in understanding the role motives play in the learning process.

Learning Strategy Models

Wlodkowski (1999) provides an extensive list of motivation strategies contained within the Motivational Framework for Culturally Responsive Teaching model previously described in this study. Refer to Appendix A for a complete list of Wlodkowski's summary of motivational strategies. The list contains motivational purposes and appropriate motivational strategies based upon his four major motivational conditions (or motives), i.e., inclusion, attitude, meaning, and competence. Wlodkowski's learning strategies that are based on specific learning motives are considered one of the most comprehensive models available to the curriculum designer or instructor, and is therefore worth mentioning.

David Kolb has identified four major strategies or styles published in his Learning Style Inventory (Davis & Davis, 1998) and are worth considering as models for online learning strategies.

- Convergent – includes problem-solving, decision making, finding a single correct answer or solution.
- Divergent – organizes many relationships into a meaningful whole, brainstorming.
- Assimilative – reasoning, creating theoretical models, working with ideas and concepts.

- Accommodating – doing things, taking action, fitting theory to facts.

The Muskingum College Center for Advancement of Learning (Anonymous, 1999) suggests the following learning strategies that may be used by students of all ages:

- Attention and listening – the ability to concentrate, observe carefully and to respond to what is heard.
- Encoding and retrieval – the processes of moving information to and from short-term memory and long-term memory.
- Group and cooperative learning – inter-group socialization and contribution, includes strategic game and role-playing.
- Memory – skills and techniques to improve one's ability to memorize and recall.
- Monitoring – thoughtful assessment and self-regulation of one's behavior.
- Motivation - to develop or to trigger an inner desire for beginning or completing an activity. These may include the use of fear, praise, structure, recognizing goals and achievements, anticipation, the instructor as role model, establishing a sense of control through time management, organization and monitoring, satisfying health and safety needs, ensuring the value of the learned materials, instructor's tone of voice, sharing the instructor's attitudes with the student, providing support systems – such as family, community and peers, providing novelty, variety, relevance, active use of the knowledge,

collaborating with others, and establishing personal goals, attitudes and a desire to learn.

- Note taking - to determine what to record when taking notes, how to record the information, and what to do with the notes.
- Organization - how to best utilize the study space and study materials.
- Problem solving and critical thinking – based upon logic and the scientific method.
- Questioning - the ability to formulate and respond to questions about situations, objects, concepts, and ideas.
- Reading comprehension - the ability to read for understanding, to restate the read materials in the student's own words, and to apply what was read.
- Test anxiety - a complex of physiological and emotional responses to tension or stress resulting from apprehension for upcoming exams.
- Test preparation - strategies that help students use study time as effectively and efficiently as possible.
- Test taking - strategies designed to improve student performance on exams.
- Time management - to provide structure to one's life and, in turn, piece of mind.
- Writing and proofing - to improve performance on all types of written tasks.

Research-Based Learning Strategies and Motives

Shih and Gamon (1999) investigated the relationships between motivation and a student's learning styles and strategies. By dividing students into field-dependent and field-independent learner types, the researchers were able to identify key motives that contributed to each student's success as an online learner. Motives for field-dependent (FD) students were found to be ego-social in nature and collaborative learning strategies were in use. The students understood new course materials using a more global approach, and tended to rely on past learning experiences and knowledge to gain better understand of new materials. Field-dependent learners also tended to be more extrinsically motivated, and relied on acceptance, praise, or posted grades as motivators. Field-independent (FI) students tended to be more analytical and relied on self-structured learning strategies. Field-independent students utilized intrinsic motivators to assist them in learning new material, i.e., self-praise, determining personal growth by reviewing past efforts, and maintaining a focus on goals for success. As supported by the findings of Somuncuoglu and Yildirim (1999), learning motives were found to be somewhat universal, as the learning environment, e.g. online delivery vs. traditional classroom delivery did not influence the efficacy of the students' learning strategies. Students became motivated if their intrinsic and/or extrinsic motivation requirements were met. For the FD students, competition and high expectations where identified as extrinsic motives. For the FI students, personal challenges and goal achievement was found to be dominant intrinsic motives.

Delivery Method

To further support the application of learning strategies and motives across course delivery methods, Spooner, Jordan, Algozzine and Spooner (1999) found there were no significant differences in cognate or learning motive applications for online participants when compared to those enrolled in courses using more traditional delivery methods. Sixteen studies designed to determine whether adjustments to learning strategies and motives were necessary for online learning were reviewed. No significant differences occurred in the amount of material learned, the teaching abilities of online instructors as opposed to classroom instructors, the effectiveness of the courses, the students' performance on term papers, or the efficacy of student-teacher interactions. The Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich, Smith & Garcia, 1993) was used to determine that graduate students were not required to adjust their extrinsic or intrinsic motives solely due to the delivery method. Cross-utilization of pre-existing learning motives was found to be effective in both online and in-resident courses. Although the study parallels that of this study, the MSLQ was not selected as the primary instrument due to low reliability alphas of many instrument items. The study differs from this study in the academic levels of the population. Each participant had attained at least a baccalaureate degree. Most participants had attained an undergraduate teaching license in special education and many were employed as full-time teachers of persons with severe disabilities.

Perceived Teacher Support

Karabenick and Sharma (1994) examined the motivational tendencies and learning strategies known to enhance academic performance. They tested the prediction that highly motivated, self-regulating college students perceive their teachers as more supportive than do their less motivated and self-regulated peers; and the prediction that students who perceive their teachers as more supportive are more likely to ask questions in the classroom. They found that most students in small to moderate-sized classes perceive their teachers as being very supportive of student questioning while the teacher is presenting the material. Those who perceived greater support also reported being more motivated and active in the learning process, and tended to use strategies that characterized self-regulated learning. Those who use negative learning motives and self-regulating strategies that result in less favorable academic achievement levels may take positive and supportive comments from the instructors negatively. However, Karabenick and Sharma suggest that instructors allot more time to question and answer periods.

Competence Feedback

Puca and Schmalt (1999) focused their studies on the effect of task enjoyment as a mediator on performance and motivation types with and without competence feedback. Students were identified as approach-oriented (APO), having high success motives; or avoidance-oriented (AVO), having fear of failure motives. A positive relationship was found between the amount of competence feedback given through the course and task enjoyment. Approach-oriented learners demonstrated greater success motivation while

AVO learners exhibited lower fear of failure motivation when competence feedback was provided.

Collaborative Learning

Another important aspect of learning motives is the ability to collaborate with peers and contemporaries. Peer collaboration becomes an important extrinsic motivator when students are confronted with new technologies, or new learning environments. Klemm and Snell (1996) provide research findings that indicate the importance of a well-integrated communication system that utilizes collaborative learning methods as an integral part of an online course delivery program. Traditional threaded discussions found in most computer-based courseware have proven to be cumbersome for group collaboration efforts, tend to be asynchronous, and are not sufficiently interactive to stimulate thought or discussion. Klemm and Snell piloted a study to determine whether group facilitation and individual learning can be improved, while utilizing the students' pre-existing motives and learning strategies within a group setting. Through the use of embedded links, call-down windows, and navigation maps, students maintained a sense of direction and were able to determine at what level group or individual discussions were occurring. Web-surfing and online discussions were more focused and effective, as students were able to investigate supportive information while maintaining their online discussion connection. Student accountability for group work was realized by assigning specific responsibilities that contributed to the success of the group. Each individual response was mapped, providing an opportunity for individual grading within the group

context. Collaborative learning, as a learning motive, was enhanced by the use of these types of group assignments. Discussions were lead by group leaders, and each group member became an active participant in the online discussions through their assigned responsibilities.

Self-regulated Learning

Pintrich and DeGroot (1990) conducted a study to test a generalized expectancy-value model of motivation developed by John Eccles. The model proposed three motivational components that may be linked to the three different components of self-regulated learning:

- an expectancy component that includes a student's belief about their ability to perform a task,
- a value component that includes a student's goals and beliefs about the importance and interest of the task, and
- an affective component that includes a student's emotional reaction to the task.

Pintrich and DeGroot found self-efficacy, or a person's sense of competence, was positively related to a student's engagement in the learning process and a student's performance level. Students who believed they were competent were more likely to report the use of cognitive strategies, to be more self-regulated, and to persist more often at difficult or uninteresting academic tasks. Student involvement in self-regulated learning was found to be closely related to a student's sense of self-efficacy and to their

beliefs that these tasks are interesting and worth learning. However, these beliefs are not enough, as students need to have both skill and the will to be successful.

Summary of Related Literature

Research indicated a variety of learning motive models and theories that support online learning strategies. Learning motives generally fell into five major categories: personal feelings and emotions, degree of course interest, level of self-competence, degree of course relevance and need for reinforcement as an online learner. These motives were found to be intrinsic and/ or extrinsic in nature, and are supported through active competence feedback.

Learning strategies were found to be as varied as the learning environments in which they were used. Learning strategies may include problem solving, brainstorming, reasoning and taking action, collaborative learning skills and techniques, and strategies based upon certain motivational conditions. They may be ego-social, self-structured or perceived, as in the case of teacher support. Self-regulated learning strategies have become increasingly important in an online environment, as time management skills and greater levels of self-study are required. The use of previously acquired knowledge to facilitate the learning of new materials, self-structured learning strategies, self-praise, focusing on achievable goals, and determining personal growth based upon past efforts are also important contributors. Competence feedback received from test scores, peer support or varying degrees of self-efficacy may also be utilized. Those students who were supported by their peers or instructors, and had a high level of self-efficacy, were

more apt to achieve. When teachers appeared to be supportive, students tended to ask questions. The answers became another form of competence feedback, thus contributing to the extrinsic motives described above.

The delivery system was not shown to be a factor in student achievement levels, cognate abilities, learning strategies or motives used. This finding appears quite often in the literature. Therefore, the online delivery method may not contribute to, nor distract from a student's ability to learn and apply what is learned.

CHAPTER III

METHODOLOGY

In order to identify the learning motives in use by students enrolled in online courses, a survey was developed and made available as an online, web-based document. The instrument was the first research instrument used by the Human Resource Department that was available to students online. Without extra credit granted for completing the survey, and the faculty and this researcher was more than satisfied with the return rate. The basis for the survey instrument was founded upon currently available instruments widely used in the identification of learning motives in both traditional and non-traditional classroom settings. Several referenced instruments have been used successfully as web-based learning motive instruments, while others are primarily for traditional classroom settings. (see Appendix C for a description of the development process used to create the questionnaire)

Procedure

Permission was requested from the Diversified Instructional Modality Systems (DIMS) team and all online course instructors to conduct the survey. A Certification for Exemption from IRB Review for Research Involving Human Subjects Form A was submitted to the College of Human Ecology research review committee for the purposes of requesting exemption from university review for the study of human subjects and approved. Upon approval on April 24 2000, a pilot study of the instrument was

conducted outside the Human Resource Development Department to determine whether duplication of item content occurred. This was deemed important, as the pilot and final questionnaires consisted of items from several learning motive instruments, and several self-generated items required to fulfill the purpose of this study. (see Appendix D for a review of the development of the pilot questionnaire based upon a review of learning motive instruments) Items that indicated a duplication of content outside the learning motive group of items, i.e. those items whose positive correlation coefficients were > r = .70 were omitted from the final questionnaire. All Human Resource Development instructors involved with teaching online undergraduate courses were asked to include the finalized survey within their respective courses approximately two weeks prior to the end of the Spring 2000 semester.

A letter of request to all online instructors (see Appendix E) was sent via personal e-mail. A subsequent letter of request to online students (see Appendix F) was posted within the announcement page of each online course and personal e-mail explaining the purpose of the study and expected benefits. Students completed the survey at a secured, external website which required a password and identification number for access. The website was not connected in any way with the University of Tennessee or the Department of Human Resource Development. Every effort was made to ensure anonymity, as identification marks, tags, or numbers were not to be assigned to the surveys or their results. If an identification mark, number, or tag was automatically assigned to a response as a result of electronic submission (such as an IP address), it/they were removed prior to analysis by a neutral party. There was no effort made to identify

the origins of such automatic tags, or any other electronic marks or numbers by this researcher from system administrators or network managers who may have access to the locators. Once the completed surveys were received, the surveys were accessed by this researcher and forwarded to this researcher's personal e-mail account. The raw data was transferred to this researcher's non-networked personal computer for analysis. To ensure a reasonable response rate of 80%, a reminder message was sent via the online course assignment page during two weekly intervals until the end of the semester, as research indicates that after the second reminder, response rates are drastically reduced.

Development of the Instrument

A thorough investigation of learning motives and strategies led to reviews of learning motivation models and theories, and learning motive instruments. Certain instrument items were applicable to this study, while others were not. Items were deemed unacceptable due to low item reliability indications during initial and subsequent testing of the instrument, or the inappropriateness of its purpose. Therefore, it became necessary to create a hybrid instrument that met the investigative requirements of this study, i.e., the identification of online learning motives and meeting statistically acceptable item reliabilities. Items, or questions were selected from the instruments under review having a minimum item reliability alpha of .79 based upon generally accepted statistical standards. The questionnaire (see Appendix G) was then piloted to determine item duplication.

Review of Learning Motive Instruments

The following list identifies the learning motive instruments currently used by educators and researchers in determining learning motives in educational settings. Each instrument was thoroughly reviewed for its applicability and statistical reliability for possible use in this study:

- Educational Participation Scale
- Instructional Material Motivation Survey
- Motivated Skills Card Sort
- Motivated Strategies for Learning Questionnaire
- Multi-Motive Grid
- Productivity Environmental Preference Survey

Educational Participation Scale

The Educational Participation Scale (EPS), designed by Roger W. Boshier (1971), was successfully administered to determine extrinsic motives used by students participating in continuing education activities. Of primary concern was the influence society and employers have on a learner's decision to return to school for further training. Boshier defines a seven-factor structure of motivation to participants: communication improvement, social contact, educational preparation, professional advancement, family togetherness, social stimulation and cognitive interest in a particular subject. Overall, a reliability alpha for the EPS scale was .92. Fujita-Starck (1996) used the EPS to investigate the motivations and characteristics of adult students. Although the categories

were applicable to this study, the direction of influence was not appropriate, as this study was concerned with the reliability of Boshier's most recent findings concerning the factor stability of the revised EPS utilizing a different population and a relatively large sample. In addition, the motives that were identified applied to workplace, family and social factors. Therefore, the EPS was not selected in its entirety.

Instructional Materials Motivation Survey

John Keller (1987), of the University of Florida developed the Instructional Materials Motivation Survey (IMMS) as a tool for assessing the motivational quality of instructional settings. The IMMS asks students to rate thirty-six ARCS-related statements in relation to the instructional materials they have just used. Questions asked in the areas of attention, relevance, confidence and satisfaction are analyzed for motivational significance and degrees of importance. The IMMS appears to primarily test the interaction between the student and instructional materials rather than student-to-student or student to instructor social interactions, emotions or feelings. Although several items were included on the pilot instrument, the IMMS was not selected in its entirety.

Motivated Skills Card Sort

The Motivated Skills Card Sort, designed by Knowdell (1981), identified skills that were central to personal and career satisfaction and success by rank ordering skills on two dimensions: competency and motivation. The delivery system requires an

interviewer and an examiner to work together, face-to-face. Therefore, it is not conducive to online surveying.

Motivated Strategies for Learning Questionnaire

The Motivated Strategies for Learning Questionnaire (MSLQ), developed by Pintrich, Smith, Garcia and McKeachie (1993), was designed to assess college students' motivational orientations and their use of different learning strategies for a college course. The MSLQ is quite possibly one of the most widely used learning motive instruments currently available (Somuncuoglu & Yildirim, 1999). Thirty-one motivation items were tested to see how well they fit into six correlated factors:

- intrinsic goal orientation
- extrinsic goal orientation
- task value
- control beliefs about learning
- self-efficacy for learning and performance
- test anxiety

Motivational scale items had an overall item reliability alpha of .78 and the learning strategy scale items' overall alpha was .71, with an average of .75, which is significantly below the Educational Participation Scale. Subgroup reliability scores ranged from .52 to .93, averaging .71. Therefore, the MSLQ was not selected in its entirety due to these low reliability scores.

Productivity Environmental Preference Survey

The Productivity Environmental Preference Survey (PEPS), designed by Price, Dunn & Dunn in 1979, identified adult preferences to learning in their occupational or educational activities through the investigation of visual, auditory and kinesthetic means, time of day, and environmental conditions. A very small portion of the instrument deals with learning motives. Therefore, the PEPS was not selected.

Pilot Instrument

Based upon the learning motives derived from a review of literature and the learning motive instruments previously described, the following key learning motives were identified for use in this study: personal feelings and emotions, course interest, self-competence, course relevance and reinforcement. Sixteen items were selected from the Educational Participation Scale (Boshier, 1971), the Instructional Materials Motivation Survey (Keller, 1987), and the Motivated Strategies for Learning Questionnaire (Pintrich, Smith & Garcia, 1993) having item reliability alphas of .79 or greater, and five items were generated or modified by this researcher. Appendix D indicates the pilot instrument item number, the instrument of origin or whether it was self-generated, the instrument of origin item number, and its applicable learning motive to be tested. Appendix G contains the pilot instrument used in this study. Responses were provided using an anchored, five-point Likert-type scale ranging from (1) I Strongly Disagree, to (2) I Disagree, (3), I Somewhat Agree, (4) I Agree, and (5) I Strongly Agree. Each item was grouped into one of the five key learning motive groups identified for use in this study, i.e., personal

feelings and emotions, course interest, self-competence, course relevance and reinforcement. In addition to the twenty-one items, four demographic questions were included to determine gender, marital status, student status and employment status for use in further studies by this researcher. Table 2 indicates each pilot questionnaire item and its associated learning motives.

Pilot Population

An online health and safety undergraduate class was selected to pilot the instrument during the Spring 2000 semester. This class was selected to prevent prior knowledge of the instrument by Human Resource Department students. One hundred percent of the online class members, or eleven students responded to the survey. The population was made up of 82% females and 18% males. Married students made up 82% of the population, while 18% were single. Only 2 students classified themselves as single parents. Part-time students made up 82% of the population, with 18% full-time. Eighty-two percent were employed on a full-time basis, while 18% were employed part-time.

Pilot Data Collection

Data was collected from Aril 26 2000 to May 10 2000. The pilot questionnaire was made available online utilizing Blackboard, the administrative program used to delivery online courses at the University of Tennessee (UT). Two weekly reminder notices were posted via the announcement page of each online course. Completed

questionnaires were automatically sent to a secure file on the UT server and re-directed to this researcher's e-mail account for analysis. SPSS Ver. 10 was used to analyze the data.

Pilot Data Analysis

Since the purpose of this study was to identify learning motives, not to test the learning motive instrument, it was deemed appropriate to investigate whether item content was duplicated among the five learning motive groups selected for this study Pearson's r correlational analysis was used to determine inter and intra item correlations. A generally accepted positive correlation coefficient of > r = .70 between items within different learning motive groups was deemed suspect as possible duplication of item content. Overall inter- and intra-learning motive group correlations were found to be below r = .70, except for the following items. See Table 3 for a complete item correlation analysis.

- Item 1 and Item 12 (.716)
- Item 2 and Item 7 (.803)
- Item 3 and Item 11 (.706)
- Item 6 and Item 10 (.774)
- Item 7 and Items 8 (.731) and 11 (.851)
- Item 8 and Item 11 (.774)
- Item 12 and Item 17 (.717)
- Item 16 and Items 18 (.818) and 19 (.832)
- Item 18 and Items 19 (.853) and 20 (.829)

- Item 20 and Item 21 (.780)

Further analysis of the items with strong, positive correlations revealed that duplication or misinterpretation of content might have occurred. Item 1 was determined to indicate a possible motivation for student enrollment in a class, rather than providing a motive to learn. Items 7, 11, 16 and 19 indicated positive correlations with other items of similar content, and it was believed that Items 8, 18 and 20 provided a more succinct description of learning motives. Therefore, Items 1, 7, 11, 16, and 19 were omitted from the final questionnaire due to their positive correlations and strong possibilities of content duplication with other items.

Table 4 illustrates a descriptive analysis of the pilot data, indicating the highest mean responses (above 4.5) occurred on Items 4, 5, 9, 13, 16, and 17. The lowest mean responses (below 4.0) occurred on Items 1, 6, 8, 10, 11, and 15. The greatest range occurred in Item 10 "I often thought about my emotions and feelings while taking this course." and Item 11 "I enjoyed this course so much that I would like to know more about this topic." which are within the Personal Feelings and Emotions learning motive group, while the least range occurring in Item 4 "Completing this course is important to me." Item 5 "I prefer course material that arouses my curiosity." Item 9 "I prefer course work that is challenging so I can learn new things." and Item 13 "It is important to know that I can voice my opinions without fear of embarrassing comments."

Table 5 reflects the pilot item and learning motive group response averages. Highest motive response averages occurred in the reinforcement items (4.341) and course

interest (4.309) items, followed by self-competence, (4.250) course relevance, (4.205) and personal feelings and emotions (3.705).

Pilot Survey Results

Online undergraduate students indicated that materials that arouse curiosity (5.000) completing the course (4.909), and voicing one's opinions without fear of embarrassment (4.818) are the most important learning motives, followed by challenging course work (4.545), receiving an "A" when appropriate (4.545), and knowing that peer support is available (4.545). Generally speaking, online students believed that the course would not lead to a better job, learning unexpected or surprising things was not important, a variety of topics or assignments would not keep their attention, thinking of personal emotions and feelings was not a motivator, and an interesting course design were not important learning motives for the majority of respondents. These findings are corroborated by the research efforts of Deci (1995) who states that intrinsically motivated actions, focused on learning, is undertaken out of interest. Malone's (1981) ARCS Model, Keller's (1983) Motivational Design Model, Vroom's (1964) Expectancy Theory, and Wlodkowski's (1999) Motivational Framework for Culturally Responsive Teaching also support these findings, as each model recognizes the importance of interest, relevance, affect, competence and reinforcement as learning motives.

Students had varying opinions as to whether they thought about their feelings and emotions while taking an online course. Their degrees of response may be due to varying degrees of self-competence, their self-image, and their inter-relational skills that may

have psychological and sociological undertones that are not addressed in this research effort. Opinions also varied as to whether additional, voluntary research into the topics under study would occur while taking an online course. Innate interests in the particular topic, time constraints, and other issues may play a role in these responses. Overall, students had the strongest positive responses in the completion of the course and preferring course materials that arouse their curiosities. The need to complete an online course, although positively strong, was not strongly correlated with getting a better job (correlation coefficient = .130), or any other item on the pilot survey.

Although demographic information was collected by this study, it was not included as part of the pilot study results due to the preponderance of female students over males. Nine of the eleven respondents were females, equating to 82%. A cursory overview of the demographic data did not result in a strong positive or strong negative correlation with item content based upon marital, employment or student status.

Survey Instrument

The survey instrument consisted of a questionnaire (see Appendix H) developed as a result of the pilot study findings. Five items were rejected due to their propensity for misinterpretation of content, or item content duplication as indicated by positive item correlation coefficients > r = .70. Refer to Table 3 for the correlation coefficients between each item. Subsequently, the final questionnaire consisted of sixteen item, each having a five-point anchored Likert-type scale ranging from (1) I Strongly Disagree, to (2) I Disagree, (3), I Somewhat Agree, (4) I Agree, and (5) I Strongly Agree. Each item

was grouped into one of the five learning motive groups developed for this study, i.e., personal feelings and emotions, course interest, self-competence, course relevance and reinforcement. In addition to the sixteen items, four demographic questions were included to determine gender, marital status, student status and employment status for use in further studies by this researcher.

Administration of the Research Study

Upon approval via e-mail response from all Human Resource Development online course instructors and the DIMS team members, the questionnaire was administered to all undergraduate students; totaling one hundred and twenty two students enrolled in online Human Resource Development core classes during the Spring 2000 semester. Blackboard was again used to deliver the questionnaire to each student. Identical electronic data gathering procedures and precautionary measures as used during the pilot study were used to ensure confidentiality and anonymity of the responders. Responses were transmitted to this researchers e-mail account for analysis using SPSS, Version 10.

Survey Population

The population consisted of forty-five respondents enrolled in Human Resource Development online courses during the Spring 2000 semester. The response rate was approximately thirty-six percent. The relatively low response rate may due to the fact that this survey was the first online survey taken by undergraduate students in support of a Master's thesis. Since then, response rates have risen for similar surveys. Thirty-three

percent were males, while sixty-six percent were females. Approximately forty-eight percent were married, forty-seven percent were single, and five percent were single parents. Sixty percent of the respondents were full-time students, while forty percent were part-time. Approximately forty-nine percent were fully employed, forty percent were part-time employed, and eleven percent was not employed. Refer to Tables 6-9 for questionnaire demographic frequencies responses.

Survey Data Collection

The questionnaire was made available online utilizing Blackboard, the administrative program used to delivery online courses at the University of Tennessee (UT). All questionnaires were collected by May 10 2000. The results of each questionnaire were transmitted automatically through the "Submit" button found at the end of each online questionnaire to a University of Tennessee server. The University of Tennessee Information Technology Center translated the data using .cgi and pearl scripting methods. The data, in comma-deleted form, was then re-directed to this researcher's e-mail account for analysis. SPSS Ver. 10 was used to analyze the data.

CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this study was to identify learning motives that are currently in use by undergraduate students enrolled in online Human Resource Development core courses. Students' perceived levels of agreement concerning each learning motive was identified through the use of a Likert-type questionnaire. Five primary learning motives, represented by sixteen items, were selected based upon a thorough review of literature and learning motive instruments currently in use. It was believed that the research and theory based learning motives selected for this study were indicative of primary motives recognized by researchers in the field. The five learning motives to be surveyed were:

- course interest
- course relevance
- personal feelings and emotions
- reinforcement
- self-competence

In addition, four demographic items were included which indicated respondent's gender, marital status, student status and employment status.

Survey Data Analysis

In order to determine the motives and their relevant importance to the learner, an analysis of data was conducted using descriptive statistical methods, such as response

means, frequency rates, and standard deviations of the responses. Demographic information was provided by the research survey, and analyzed for population makeup, rather than correlation with certain learning motives. This effort will occur at a future time, utilizing the data provided by this survey and others. Table 10 provides a descriptive analysis of the survey data in terms of mean, median, mode, standard deviation, variance and range for each item. Refer to Table 11 for a detailed account of learning motive group frequency responses and average levels of agreement.

Item ranges varied from 1 to 4, with Item 4 having the least range of 1. Items 7 and 11 had a range of 2, and Items 10, 12, and 14 had a range of 3. All remaining items indicated a range of 4. Smallest ranges were found within the course interest and relevance learning motive groups.

The greatest variance in responses occurred in Items 6, 9 and 10. These items referred to maintaining attention using a variety of lesson topics, completing the lessons resulting in a satisfying feeling of accomplishment, and voicing one's opinion without fear of embarrassment. The least variance occurred in Items 4 and 12, referring to course material that arouses curiosity and praising one's self in the absence of instructor praise.

The greatest agreement among online students occurred in responses concerning the receiving of frequent instructor feedback (Item 11), preferring course material that arouses curiosity (Item 4), completing the course (Item 3), and learning what is being taught (Item 2). Least agreement was found in thinking about personal feelings and emotions (Item 8), learning things that were surprising or unexpected (Item 5), praising

one's self for work well done in the absence of instructor praise (Item 12) and maintaining attention using a variety of lesson topics (Item 6). Refer to Tables 12-27 for a detailed account of item response frequencies and cumulative percentages.

Survey Results

As a learning motive group, course relevance was found to have the highest level of agreement as a learning motive among online learners, as indicated by 88% of the respondents. Within the course relevance learning motive group of items, learning what was being taught (Item 2) and completing the course (Item 3) resulted in agreement levels greater than 90%. Usefulness of the course content (Item 1) followed with 82%.

Reinforcement and self-competence as learning motive groups followed in overall agreement with an average agreement level of 83%. Within the reinforcement group, receiving frequent instructor feedback (Item 11) received the highest item agreement level of 96%. Student support (Item 13) and self-praise in the absence of instructor praise (Item 12) indicated agreement levels of 80% and 72% respectively. Within the self-competence learning motive group of items, learning the material using appropriate study habits (Item 16) had the highest agreement level of 86%, followed by an assurance of doing an excellent job on course assignments (Item 14) with 84% of the respondents agreeing, and understanding course content (Item 15) with 80%.

Course interest as a learning motive group followed with an 81% average level of agreement. Within the course interest learning motive group of items, preferring course material that arouses curiosity (Item 4) indicated a 96% level of agreement. Preferring

course work that is challenging so that new things could be learned (Item 7) received an 85% level of agreement among respondents. A variety of lesson topics and assignments to maintain interest (Item 6) and learning something surprising or unexpected (Item 5) followed with agreement levels below 70%. Although students indicated a high level of agreement in course materials that arouses curiosity (Item 4 at 96% agreement), a variety of lesson topics and assignments (Item 6 at 73% agreement) and the anticipation of learning something that was surprising or unexpected (Item 5 at 70% agreement) were not shown to be supportive of curiosity as a learning motive.

Personal feelings and emotions was shown to have the least levels of agreement as a learning motive group (75%). Voicing one's opinions without fear of embarrassment (Item 10) was shown to have the highest level of agreement within the group at 85%, followed by completing lessons results in a satisfying feeling of accomplishment (Item 9) and thinking about one's emotions and feelings while taking the course (Item 8) at 79% and 61% respectively.

Discussion

Survey findings did not always agree with the motivation theorists described in this study. Bentham, Mill and Spencer (Hakim, 1997) theorized that motivation to learn was derived primarily from self-interest. However, the findings of this study did not support course interest as a leading learning motive. Maslow (1954) may have argued that once self-actualized, the learning process would be optimized. If becoming self-actualized enables one to become what one is most suited for, then these findings support

Maslow's Hierarchy of Needs model. The relevance of course materials appear to contribute to the process of becoming self-actualized. Thorndike's (1911) incentive theories are also supported by the students' agreement levels in course relevance as a learning motive, as the utilitarian nature of course content may lead to professional and personal rewards. Intrinsic motivation supporters, such as Rathus (1996), Herzberg (1959) and Deci (1972) may not agree that relevance is a learning motive, as they believed personal satisfaction (Item 9), which scored 79% agreement among respondents, was a prime motive to learn. However, Herzberg and Deci agreed that both intrinsic and extrinsic motives might be at work.

Keller's (1983) ARCS model was highly supported by the findings of this study. Attention, in the form of course interest indicated up to 96% levels of agreement. In this study, relevance, in the form of course relevance was determined to be a learning motive, with 88% of the respondents in agreement. Confidence, in the form of self-competence was supported as a learning motive with 83% agreement levels and satisfaction, in the form of reinforcement and feedback was also supported as a learning motive, with 96 % levels of agreement.

Malone's (1981) Theory of Intrinsically Motivating Instruction was not generally supported by these findings. Although learning new things by offering challenging course work (85%) was in agreement with Malone's premise of intrinsic motivation as a primary source, fantasy or a sense of surprise was not, at only 70% agreement.

Wlodkowski's (1985) Motivational Framework for Culturally Responsive Teaching identified inclusion, attitude, meaning and competence as primary learning

motives. The findings of this study supported each of Wlodkowski's motives except the inclusion motive as indicated by the personal feelings and emotions items offered in this study. Online students did not believe personal feelings and emotions were learning motives, as indicated by comparatively low levels of agreement. The items included in the personal feelings and emotions learning motive group were designed to ask students whether they thought about their feelings while completing coursework (Item 8), whether feelings of accomplishment (Item 9), or voicing one's opinion without fear of embarrassment were motives to learn (Item 10). Only Item 10 received agreement levels above 80%. Items 8 and 9 received agreement levels less than 79%.

Relevance has played an ever-increasing role in the design and delivery of course materials. Business communities require more cost/benefit analyses of existing and future training programs than ever before. Academic institutions, under strict budgetary controls and administrative oversight have reevaluated their course offerings to ensure that what is being taught, is needed and is useful. The findings of this study support these tenets. Online students agreed that course relevancy was definitely a learning motive. Learning what was being taught, and the usefulness of the course were also identified as learning motives. Students want to believe that if they enroll in a course, their acquired knowledge and skills can, and will be put to use. Students also believed that useful and relevant knowledge and skills are not primary drivers to getting a better job. Perhaps the knowledge gained in a course will be useful in the future, rather than in the present, or the employee market for positions has placed the worker in a position of choice, and upward mobility is not an issue when choosing employment.

Nearly all, online students preferred course work that was challenging so they could learn new things. Perhaps the challenge of completing a college degree, or meeting the everyday challenges of learning new things excites students sufficiently to prefer this type of learning. Others may be influenced by current trends of thinking, such as thinking outside the box, finding new and innovative ways of solving problems, and looking for opportunities rather than problems. Providing cognitive challenges is generally thought to be closely related to satisfying curiosity. This link may be indicated in the findings of this study, as those students responding to the survey deemed challenge and curiosity as learning motives.

Unexpectedly, 96% of the population surveyed preferred course material that aroused their curiosity. This may be due, in part, to the rich learning environment offered by online learning. The Internet provides a wealth of opportunities to be curious, and to have that curiosity satisfied in a very short time period (Duchastel, 1997). Surfing, or web browsing has become an issue with online course developers and instructors. Not only is time and attention taken away from the task at hand, but also, browsing can become an addiction for many online learners. The impulse to browse can become heighten when students are required to visit certain websites related to an assignment, or project that are rich with information. The findings of this study might infer that if the course content or delivery mechanisms are not sufficiently stimulating, the student may discover, quite surreptitiously, other, more interesting sites that satisfying their curiosity on the subject being studied. However, when asked if the anticipation of learning something surprising, or having a variety of lesson topics and assignments was a learning

motive, the responses were unexpectedly low. Perhaps lesson structure, with mechanisms in place to satisfy individual curiosities remains to be a primary learning motive. Students would be informed as to course requirements and lesson assignments in advance, while providing guided website visits to satisfy certain interests related to content.

Online students believed that instructor feedback was a learning motive. One reason may be partly due to the ethereal-like learning environment online students find themselves in. Online teaching has certain psychological barriers that must be overcome by students and instructors alike before effective communication can be established. Students may require a greater amount of instructor-student communication and feedback since the instructor is not available for one-on-one conferences as in more traditional classroom settings. Although electronic methods of communication are available to the online student, many believe that one-on-one discussions are more productive (Issroff, 1997).

Student emotions and feelings were, by far, indicated the least level of agreement of all learning motives, at 75%. Presumably, online students would have more of an opportunity to think about their feelings and emotions as they complete lessons, as many work at their lessons after hours. Often, family members are sleeping while online students are completing lessons, as indicated by informal student comments provided to this instructor. However, this study indicated that thinking about one's feelings and emotions, and the ability to voice opinions without fear of embarrassment was not as relevant to learning as instructor feedback and curiosity. Perhaps a certain level of

autonomy is being developed by online students who are becoming less concerned about others' personal opinions and more concerned about doing well in an online course, and exercising the skills and knowledge learned.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

Summary

The review of literature indicated that research efforts into online learning motives depended heavily on traditional classroom surveys to determine motives at use. This is partly due to the recent use of distance learning as a major vehicle for delivering course materials, and current research into various delivery methods as learning strategies. A recent meta-analysis of delivery methods revealed that a student's ability to learn was not effected by the method of delivery (Spooner, Jordan, Algozzine & Spooner, 1999). Therefore, research may indicate that there is little distinction between learning motives in use by online students, and those used by more traditional classroom students.

The purpose of this study was to identify online learning motives in use by undergraduate students. To that end, this study identified five major learning motives derived from research and application models applied to both online and traditional classroom settings:

- course interest
- course relevance
- self-competence
- reinforcement
- personal feelings and emotions

These learning motives proved to be somewhat accurate. Data analysis revealed online students agreed using frequent instructor feedback and course materials that arouse curiosity, followed by completing the course, and learning what is being taught as learning motives. Course relevance, reinforcement and self-competence were identified as primary learning motives when item responses within the group were averaged for levels of agreement. Course interest and personal feelings and emotions were deemed secondary motives. Personal feelings and emotions were deemed the least relevant learning motive, as indicated by student responses to the following question: "I often thought about my emotions and feelings while taking this course." Sixty one percent of the population surveyed agreed with this statement. Feelings of accomplishment (79%) and voicing opinions without fear of embarrassment (85%) scored somewhat higher. This is in contrast to those theorists, such as Deci, Herzberg, Rathus and Malone who believed that learning motives were based upon intrinsic motivation factors. It appears that extrinsic motives may play a more dominant role in establishing reasons to learn in an online environment. Of the learning motive models reviewed in this study, Keller's ARCS model (1983) predicted online learning models more accurately than the others. In almost every instance, the findings of this study were coincidental with the Keller's learning motives, i.e., attention - in the forms of curiosity and interest, relevance, confidence and satisfaction – in the forms of feedback and reinforcement. On that basis, Keller's ARCS model may be one of the most effective learning motive models available to the online curriculum designer and developer.

Recommendations and Implications

Although the learning motives and strategies contained in this study are primarily based on traditional research, online applications are easily derived. According to Duchastel (1997), Keller's ARCS model can easily be transferred from the developing of traditionally delivered course materials to online delivery. Learner attention is easily maintained due to the preponderance of information and visual stimulation offered on the Web. An issue of concern may be that this preponderance of stimulation may actually cause the student to become distracted. Therefore, maintaining appropriate levels to maintain student interest will be the challenge for future Web course designers. Relevance is valued as an extrinsic or intrinsic motive, and is closely aligned with the learner's personal interests, usefulness, or long-time goals. The Web has the ability to transfer the relevance from extrinsic to intrinsic as the learner "surfs" the Web for additional information. A bridging effect may occur where the line between extrinsic and intrinsic motives becomes blurred in the future. Confidence and satisfaction relate to learner perceptions about achieving success and feelings about the achieved outcomes. All these motives are usually sequentially maintained over a period of time, and not conducive to Web delivery, the sense of learner-control offered by the Web has definite benefits for the curious student. The down side may be that Web browsing becomes counterproductive as time is consumed without tangible evidence of progress. Software manufacturers are developing learning products that track learner progress, and adjust the difficulty of assignments or content accordingly. Obviously, this approach may be

prohibitive in a traditional classroom setting. The Web offers an appropriate platform for this type of learner controlled delivery systems.

Wlodkowski (1999) provides the most complete set of learning strategies based upon applicable learning motives reviewed in this study. See Appendix A for a complete list of major motive conditions, motivational purposes and appropriate motivational strategies that are designed to improve the learning process of students. Although the selection of appropriate learning strategies was not a research question in this study, it is deemed an important aspect for recommending appropriate strategies based upon the learning motives identified in this study. Therefore, based upon Wlodkowski's work in this area, the following strategies are recommended for use by curriculum designers and developers.

Strategies to Support Course Relevance

An instructor or course designer may:

- give a rationale when issuing mandatory assignments or training requirements.
- use relevant models to demonstrate expected learning.
- use brainstorming webs to develop and link new information.
- relate learning to adult interest, concerns and values.
- when possible, clearly state or demonstrate the benefits that will result from the learning activity.
- use relevant problems to facilitate learning.
- use an intriguing problem to make instructional material meaningful.

- use simulations and role-playing to enhance meaning with a more realistic context.
- use invention, artistry, imagination and enactment to render meaning and emotion in learning.
- emphasize the human purpose of what is being learned and its relationship to the learner's personal lives and contemporary situations.

Strategies to Support Reinforcement

An instructor or course designer may:

- provide an opportunity for multidimensional sharing.
- concretely indicate your cooperative intentions to help adults learn.
- clearly identify the learning objectives and goals for instruction.
- explicitly introduce important norms and participation guidelines.
- ensure successful learning with mastery learning conditions.
- make the criteria of assessment as fair and clear as possible.
- announce the expected amount of time needed for study and practice for successful learning.
- use goal-setting methods.
- use contracting methods.
- provide frequent response opportunities to all learners on an equitable basis.
- help learners realize their accountability for what they are learning.
- provide effective feedback.

- avoid cultural bias in assessment procedures.
- make assessment tasks and criteria known to learners.
- use authentic performance tasks to enable learners to know that they can proficiently apply what they are learning to their real lives.
- provide opportunities for learners to demonstrate their learning in ways that reflect their strengths and multiple sources of knowing.
- when using rubrics, make sure they assess the essential features of performance and are fair, valid and sufficiently clear so that learners can accurately self-assess.
- use self-assessment methods to improve learning and to provide learners with the opportunity to construct relevant insights and connections.
- when necessary, use constructive criticism.
- effectively praise and reward learning.
- acknowledge and affirm the learners' responsibility and any significant actions or characteristics that contributed to individual or group learning.
- use incentives to develop and maintain learner motivation in learning activities that are initially unappealing, but personally valued.
- when learning has natural consequences, help learners to be aware of them and of their impact.

Strategies to Support Self-competence

An instructor or course designer may:

- concretely indicate your cooperative intentions to help adults learn.
- share something of value with your learner.
- use collaborative and cooperative learning techniques.
- introduce the concepts of comfort zones and learning edges to help learners accommodate more intense emotions during episodes of new learning.
- to the degree authentically possible, reflect the language, perspective and attitudes of learners.
- acknowledge different ways of knowing, different languages, and different levels of knowledge or skill to engender a safe learning environment.
- encourage the learner.
- promote the learner's personal control of the context of learning.
- when learning tasks are suitable to learners' capabilities, help learners understand that effort and knowledge can overcome their failures.
- help learners accurately attribute their success to their capability, effort and knowledge.

Strategies to Support Course Interest

An instructor or course designer should:

- eliminate or minimize any negative conditions that surround the subject.

- positively confront the erroneous beliefs, expectations, and assumptions that may underlie a negative learner attitude.
- use collaborative and cooperative learning.
- promote the learner's personal control of the context of learning.
- make the learning activity an irresistible invitation to learn.
- use brainstorming webs to develop and link new information.
- provide variety in personal presentation style, modes of instruction and learning materials.
- introduce, connect and end learning activities attractively and clearly.
- selectively use breaks, physical exercises and energizers.
- relate learning to adult interest, concerns and values.
- while instructing, use humor liberally and frequently.
- selectively induce parenthetical emotions.
- selectively use examples, analogies, metaphors and stories.
- use uncertainty, anticipation and prediction to the degree that learners enjoy them with a sense of security.
- use critical questions to stimulate learner engagement and challenge.
- use invention, artistry, imagination and enactment to render meaning and emotion in learning.
- assess learner's current expectations and needs and their previous experiences as it relates to your course or training.

Strategies to Support Personal Feelings and Emotions

An instructor or course designer may:

- provide an opportunity for multidimensional sharing among learners.
- share something of value with your learner.
- introduce the concepts of comfort zones and learning edges to help learners accommodate more intense emotions during episodes of new learning.
- positively confront the erroneous beliefs, expectations and assumptions that may underlie a negative learner attitude.

The strategies listed above are provided as a framework by which Web course designers and developers can select from, or modify to meet the learning needs of their students. By no means are these strategies inclusive in nature, nor are the learning motives described in this study. They are discussed in this research effort to help explain the learning motives at work by online students and to assist the efforts of online course instructors, developers and designers to more effectively design course ware that challenges, yet satisfies the students' need for knowledge.

Traditionally, online instructors are recruited from existing pools of teachers and trainers. Learning motives and learning strategies are, as this study purports, derived from decades of research and practice in traditional classroom settings. Online learning motives identified in this study may be indicative of motives utilized on a grander scale. Therefore, study in this area, or personal research may shed light on the motives at work in the classrooms of the future, i.e., the Web. Instructors cannot rely on the accuracy of

these traditional motive tenets, as indicated by the results of this study. Therefore, keeping abreast of current online learning motives and strategies research will ensure efficacy of content learned. Flexibility to change learning strategies based upon the learning motives and learning needs of the student will also be required. The face of education is changing at a rapid pace, and we, as educators must keep up, or fall behind at the expense of our students.

Future Research

Due to the relatively short history of Web delivered curriculum, it is recommended that further research into the efficacy of various learning strategies occur. Demographic research and subsequent correlative analysis of learning motives and the efficacy of various online learning strategies should also be conducted. Continued research into the learning motives in use by online students should occur on a frequent and regular basis, as online learning motives appear to be morphizing from traditional classroom skills without proper documentation or analysis.

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APPENDICES

APPENDIX A

Wlodkowski's Summary of Motivational Strategies

Major Motivational Condition	**Motivational Purpose**	**Motivational Strategy**
Inclusion	To engender an awareness and feeling of connection among adults.	1. Allow for introductions. 2. Provide an opportunity for multidimensional sharing. 3. Concretely indicate your cooperative intentions to help adults to learn. 4. Share something of value with your adult learners. 5. Use collaborative and cooperative learning. 6. Clearly identify the learning objectives and goals for instruction. 7. Emphasize the human purpose of what is being learned and its relationship to the learners' personal lives and contemporary situations.
	To create a climate of respect among adults.	8. Assess learners' current expectations and needs, and their previous experience as it relates to your course or training. 9. Explicitly introduce important norms and participation guidelines. 10. When issuing mandatory assignments or training requirements, give your rationale for these stipulations. 11. To the degree authentically possible, reflect the language, perspective and attitudes of adult learners. 12. Introduce the concepts of comfort zones and learning edges to help learners accommodate more intense emotions during episodes of new learning. 13. Acknowledge different ways of knowing, different languages, and different levels of knowledge or skill to engender a safe learning environment.

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Wlodkowski's Summary of Motivational Strategies

Major Motivational Condition	**Motivational Purpose**	**Motivational Strategy**
Attitude	To build a positive attitude toward the subject.	14. Eliminate or minimize any negative conditions that surround the subject. 15. Ensure successful learning with mastery learning conditions. 16. Positively confront the erroneous beliefs, expectations and assumptions that may underlie a negative learner attitude. 17. Use assisted learning to scaffold complex learning.
	To develop positive self-concepts for learning.	18. Encourage the learner. 19. Promote the learner's personal control of the context of learning. 20. Help learners accurately attribute their success to their capability, effort, and knowledge. 21. When learning tasks are suitable to learners' capability, help learners understand that effort and knowledge can overcome their failures.
	To establish expectancy for success.	22. Make the criteria of assessment as fair and clear as possible. 23. Use relevant models to demonstrate expected learning. 24. Announce the expected amount of time needed for study and practice for successful learning. 25. Use goal-setting methods. 26. Use contracting methods.

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Wlodkowski's Summary of Motivational Strategies

Major Motivational Condition	Motivational Purpose	Motivational Strategy
	To create relevant learning experiences.	27. Use the five entry points (narrational, logical-quantitative, foundational, esthetic and experiential) suggested by multiple intelligences research as ways of learning about a topic or concept. 28. Make the learning activity an irresistible invitation to learn. 29. Use the K-W-L (what adults know about a topic, what adults want to learn about a topic, and what the learner has learned about a topic) strategy to introduce new topics and concepts. 30. Use brainstorming webs to develop and link new information.
Meaning	To maintain learners' attention.	31. Provide frequent response opportunities to all learners on an equitable basis. 32. Help learners realize their accountability for what they are learning. 33. Provide variety in personal presentation style, modes of instruction, and learning materials. 34. Introduce, connect and end learning activities attractively and clearly. 35. Selectively use breaks, physical exercises and energizers.
	To invite and evoke learners' interest.	36. Relate learning to adult interests, concerns and values. 37. When possible, clearly state or demonstrate the benefits that will result from the learning activity. 38. While instructing, use humor liberally and frequently.

APPENDIX A

Wlodkowski's Summary of Motivational Strategies

Major Motivational Condition	**Motivational Purpose**	**Motivational Strategy**
		39. Selectively induce parapathic emotions.
		40. Selectively use examples, analogies, metaphors and stories.
		41. Use uncertainty, anticipation and prediction to the degree that learners enjoy them with a sense of security.
	To develop engagement and challenge with adult learners.	42. Use critical questions to stimulate learner engagement and challenge.
		43. Use relevant problems to facilitate learning.
		44. Use an intriguing problem to make instructional material meaningful.
		45. Use case study methods to enhance meaning.
		46. Use simulations and role-playing to enhance meaning with a more realistic context.
		47. Use invention, artistry, imagination and enactment to render meaning and emotion in learning.
Competence	To engender competence with assessment.	48. Provide effective feedback.
		49. Avoid cultural bias in assessment procedures.
		50. Make assessment tasks and criteria known to learners.
		51. Use authentic performance tasks to enable adults to know that they can proficiently apply what they are learning to their real lives.
		52. Provide opportunities for adults to demonstrate their learning in ways that reflect their strengths and multiple sources of knowledge.

APPENDIX A

Wlodkowski's Summary of Motivational Strategies

Major Motivational Condition	Motivational Purpose	Motivational Strategy
		53. When using rubrics, make sure they assess the essential features of performance and are fair, valid, and sufficiently clear so that learners can accurately self-assess. 54. Use self-assessment methods to improve learning and to provide learners with the opportunity to construct relevant insights and connections.
	To engender competence with communication.	55. When necessary, use constructive criticism. 56. Effectively praise and reward learning. 57. Acknowledge and affirm the learners' responsibility and any significant actions or characteristics that contribute to individual or group learning. 58. Use incentives to develop and maintain adult motivation in learning activities that are initially unappealing but personally valued. 59. When learning has natural consequences, help learners to be aware of them and of their impact. 60. Provide positive closure at the end of significant units of learning.

APPENDIX B

Tables

Table 1. Comparison of Learning Motives Among Theory-Based Learning Motive Models

Vroom's Learning Motives	**Keller's Learning Motives**	**Malone's Learning Motives**	**Wlodkowski's Learning Motives**	**Proposed Learning Motives**
Valence	Satisfaction	Challenge Curiosity Fantasy	Inclusion	Personal Feelings and Emotions
	Attention		Attitude	Course Interest
Expectancy	Confidence		Competence	Self-Competence
	Relevance	Control	Meaning	Course Relevance
Instrumentality				Reinforcement

Table 2. Pilot Instrument Items and Associated Learning Motives

Item No.	**Item Description**	**Learning Motive**
1	I believe this course will help me to get a better job.	Course Relevance
2	The content of this course will be useful to me.	Course Relevance
3	It is important for me to learn what is being taught in this course.	Course Relevance
4	Completing this course is important to me.	Course Relevance
5	I prefer course material that arouses my curiosity	Course Interest
6	I learned some things that were surprising or unexpected in this course.	Course Interest
7	I think that what we are learning in this course is interesting.	Course Interest
8	The variety of lesson topics and assignments helped keep my attention.	Course Interest

APPENDIX B

Tables

Table 2. Continued

Item No.	Item Description	Learning Motive
9	I prefer course work that is challenging so I can learn new things.	Course Interest
10	I often thought about my emotions and feelings while taking this course.	Personal Feelings and Emotions
11	I enjoyed this course so much that I would like to know more about this topic.	Personal Feelings and Emotions
12	Completing the lessons in this course gave me a satisfying feeling of accomplishment.	Personal Feelings and Emotions
13	It is important to know that I can voice my opinions without fear of embarrassing comments.	Personal Feelings and Emotions
14	Receiving frequent instructor feedback is important to me.	Reinforcement
15	I praise myself for work I have done well in the absence of instructor praise.	Reinforcement
16	When I do extra well on an assignment, I expect to receive an "A" for my efforts.	Reinforcement
17	Knowing that I can ask fellow students for help in this course is important to me.	Reinforcement
18	I am sure I can do an excellent job on the assignments for this course.	Self-Competence
19	Compared with other students in this course, I expect to do well.	Self-Competence
20	I am certain I can understand the ideas taught in this course.	Self-Competence
21	If I study appropriately, I can learn the material in this course.	Self-Competence

APPENDIX B

Tables

Table 3. Pilot Item Correlation Analysis (Pearson's r)

Item	1	2	3	4	5	6	7	8	9	10
1	1.000									
2	.468	1.000								
3	.109	.511	1.000							
4	.130	-.267	-.267	1.000						
5	-.000	-.000	-.000	-.000	1.000					
6	.209	.206	.477	-.296	-.000	1.000				
7	.472	**.803**	.656	-.361	-.000	.565	1.000			
8	.500	.618	.500	.319	-.000	.339	**.731**	1.000		
9	.377	-.346	-.135	-.289	-.000	.242	-.023	-.295	1.000	
10	.368	.509	.439	-.229	-.000	**.774**	.691	.464	-.055	1.000
11	.494	.606	**.706**	.000	-.000	.598	**.851**	**.774**	.000	.694
12	**.716**	.115	-.201	.043	-.000	.128	.156	.165	.671	.008
13	.194	-.398	-.124	-.149	-.000	-.239	-.210	-.310	.516	-.185
14	.268	-.117	-.117	.440	-.000	-.051	.165	.450	-.034	.208
15	.348	-.183	-.500	.289	-.000	.150	-.232	-.111	.100	.358
16	.240	-.221	-.490	.625	-.000	-.445	-.177	.200	.170	-.421
17	.443	.219	-.263	-.219	-.000	.065	.370	.238	.481	-.042
18	.121	-.124	-.124	.371	-.000	-.275	.000	.237	.214	-.425
19	.125	-.256	-.396	.537	-.000	-.492	-.262	.171	.089	-.542
20	.408	.149	-.015	.179	-.000	-.320	.251	.371	.232	-.342
21	.569	-.015	-.343	.179	-.000	-.199	.054	.057	.516	-.248

Table 3. Continued

Item	11	12	13	14	15	16	17	18	19	20	21
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11	1.000										
12	.130	1.000									
13	-.226	.064	1.000								
14	.267	-.051	.416	1.000							
15	-.087	.149	.194	.314	1.000						
16	.000	.427	.027	.453	.064	1.000					
17	.133	**.717**	.033	.116	-.063	.484	1.000				
18	.204	.319	.000	.218	-.214	**.818**	.488	1.000			
19	-.116	.314	.171	.360	.033	**.832**	.437	**.853**	1.000		
20	.271	.346	.267	.368	-.232	.690	.608	**.829**	**.737**	1.000	
21	.135	.558	.267	.223	.194	.690	.608	.663	.549	**.780**	1.000

Note: Correlation coefficients >.70 were deemed suspect, and highlighted.

APPENDIX B

Tables

Table 4. Descriptive Analysis of Pilot Data

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7
Mean	3.364	4.273	4.273	4.909	5.000	3.909	4.182
Standard Error	0.279	0.273	0.273	0.091	0.000	0.368	0.226
Median	3	5	5	5	5	4	4
Mode	3	5	5	5	5	5	4
Standard Deviation	0.924	0.905	0.905	0.302	0.000	1.221	0.751
Sample Variance	0.855	0.818	0.818	0.091	0.000	1.491	0.564
Range	3	2	2	1	0	3	2
Minimum	2	3	3	4	5	2	3
Maximum	5	5	5	5	5	5	5
Sum	37	47	47	54	55	43	46
Count	11	11	11	11	11	11	11
Confidence Level (95%)	.621	.608	.608	.203	.000	.820	.504

Table 4. Continued

	Item 8	Item 9	Item 10	Item11	Item 12	Item 13	Item 14
Mean	3.909	4.545	2.909	3.000	4.091	4.818	4.364
Standard Error	.285	.157	.476	.330	.211	.122	.310
Median	4	5	2	3	4	5	5
Mode	4	5	2	3	4	5	5
Standard Deviation	.944	.522	1.578	1.095	.701	.405	1.027
Sample Variance	.891	.273	2.491	1.200	.491	.164	1.055
Range	3	1	4	4	2	1	3
Minimum	2	4	1	1	3	4	2
Maximum	5	5	5	5	5	5	5
Sum	43	50	32	33	45	53	48
Count	11	11	11	11	11	11	11
Confidence Level (95%)	.634	.351	1.060	.736	.471	.272	.690

APPENDIX B

Tables

Table 4. Continued

	Item 15	Item 16	Item 17	Item 18	Item 19	Item 20	Item 21
Mean	3.909	4.545	4.545	4.000	4.273	4.364	4.364
Standard Error	.315	.247	.207	.270	.237	.203	.203
Median	4	5	5	4	4	4	4
Mode	5	5	5	4	5	5	5
Standard Deviation	1.044	.820	.688	.894	.786	.674	.674
Sample Variance	1.091	.673	.473	.800	.618	.455	.455
Range	3	2	2	3	2	2	2
Minimum	2	3	3	2	3	3	3
Maximum	5	5	5	5	5	5	5
Sum	43	50	50	44	47	48	48
Count	11	11	11	11	11	11	11
Confidence Level (95%)	.702	.551	.462	.601	.528	.453	.453

Table 5. Pilot Item & Learning Motive Group Response Averages

Item	Learning Motive	Response Average	Learning Motive Group Average
1	Course Relevance	3.364	4.205
2	Course Relevance	4.273	
3	Course Relevance	4.273	
4	Course Relevance	4.909	
5	Course Interest	5.000	4.309
6	Course Interest	3.909	
7	Course Interest	4.182	
8	Course Interest	3.909	
9	Course Interest	4.545	
10	Feelings and Emotions	2.909	3.705
11	Feelings and Emotions	3.000	
12	Feelings and Emotions	4.091	
13	Feelings and Emotions	4.818	
14	Reinforcement	4.364	4.341
15	Reinforcement	3.909	
16	Reinforcement	4.545	
17	Reinforcement	4.545	
18	Self-competence	4.000	4.341
19	Self-competence	4.273	
20	Self-competence	4.364	
21	Self-competence	4.364	

APPENDIX B

Tables

Table 6. Survey Frequencies of Gender

Gender	Frequency	Percent
Male	15	33.3
Female	30	66.7
Total	45	100.0

Table 7. Survey Frequencies of Marital Status

Marital Status	Frequency	Percent
Married	22	48.9
Single	21	46.7
Single Parent	2	4.4
Total	45	100.0

Table 8. Survey Frequencies of Student Status

Status	Frequency	Percent
Full-Time	27	60.0
Part-Time	18	40.0
Total	45	100.0

Table 9. Survey Frequencies of Employment Status

Status	Frequency	Percent
Full-Time	22	48.9
Part-Time	18	40.0
Not Employed	5	11.1
Total	45	100.0

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Tables

Table 10. Descriptive Analysis of Survey Data

	Item1	Item 2	Item 3	Item4	Item 5	Item 6	Item 7
Mean	4.11	4.49	4.58	4.80	3.49	3.67	4.24
Median	4.00	5.00	5.00	5.00	4.00	4.00	4.00
Mode	5	5	5	5	4	4	4
Std. Dev.	1.11	.82	.92	.40	1.06	1.21	.65
Variance	1.24	.66	.84	.16	1.12	1.45	.42
Range	4	4	4	1	4	4	2

Table 10. Continued

	Item 8	Item 9	Item 10	Item11	Item 12	Item 13	Item 14
Mean	3.04	3.96	4.27	4.80	3.58	4.02	4.18
Median	3.00	4.00	5.00	5.00	4.00	4.00	4.00
Mode	2	5	5	5	3	5	4
Std. Dev.	1.31	1.35	.96	.50	1.01	1.10	.81
Variance	.42	1.73	1.82	.93	.25	1.02	1.20
Range	4	4	3	2	3	4	3

Table 10. Continued

	Item 15	Item 16
Mean	4.00	4.31
Median	4.00	5.00
Mode	5	5
Std. Dev.	1.11	.97
Variance	1.23	.95
Range	4	4

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Tables

Table 11. Learning Motive Group Frequency Responses and Average Levels of Agreement

Item	SD	D	SWA	A	SA	Response Average	Group Average (in Percent)
Course Relevance	5	3	8	37	82	4.39	88
Reinforcement	1	12	22	33	57	4.10	83
Self-competence	2	7	13	32	63	4.16	83
Course Interest	6	8	29	65	72	4.05	81
Personal Feelings & Emotions	10	18	23	28	56	3.76	75

Note: SD=Strongly Disagree, D=Disagree, SWA=Strongly Disagree, A=Agree, and SA=Strongly Agree.

Table 12. Frequency of Response for Item 1: "The content of this course will be useful to me."

Response	Frequency	Percent
Strongly Disagree	3	6.7
Disagree	1	2.2
Somewhat Agree	4	8.9
Agree	17	37.8
Strongly Agree	20	44.4
Total	45	100.0

Table 13. Frequency of Response for Item 2: "It is important for me to learn what is being taught in this course."

Response	Frequency	Percent
Strongly Disagree	1	2.2
Somewhat Agree	3	6.7
Agree	13	28.9
Strongly Agree	28	62.2
Total	45	100.0

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Tables

Table 14. Frequency of Response for Item 3: "Completing this course is important to me."

Response	Frequency	Percent
Strongly Disagree	1	2.2
Disagree	2	4.4
Somewhat Agree	1	2.2
Agree	7	15.6
Strongly Agree	34	75.6
Total	45	100.0

Table 15. Frequency of Response for Item 4: "I prefer course material that arouses my curiosity."

Response	Frequency	Percent
Agree	9	20.0
Strongly Agree	36	80.0
Total	45	100.0

Table 16. Frequency of Response for Item 5: "I learned some things that were surprising or unexpected in this course."

Response	Frequency	Percent
Strongly Disagree	3	6.7
Disagree	3	6.7
Somewhat Agree	15	33.3
Agree	17	37.8
Strongly Agree	7	15.6
Total	45	100.0

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Table 17. Frequency of Response for Item 6: "The variety of lesson topics and assignments helped keep my attention."

Response	Frequency	Percent
Strongly Disagree	3	6.7
Disagree	5	11.1
Somewhat Agree	9	20.0
Agree	15	33.3
Strongly Agree	13	28.9
Total	45	100.0

Table 18. Frequency of Response for Item 7: "I prefer course work that is challenging so I can learn new things."

Response	Frequency	Percent
Somewhat Agree	5	11.1
Agree	24	53.3
Strongly Agree	16	35.6
Total	45	100.0

Table 19. Frequency of Response for Item 8: "I often thought about my emotions and feelings while taking this course."

Response	Frequency	Percent
Strongly Disagree	5	11.1
Disagree	13	28.9
Somewhat Agree	11	24.4
Agree	7	15.6
Strongly Agree	9	20.0
Total	45	100.0

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Table 20. Frequency of Response for Item 9: "Completing the lessons in this course gave me a satisfying feeling of accomplishment."

Response	Frequency	Percent
Strongly Disagree	5	11.1
Disagree	2	4.4
Somewhat Agree	5	11.1
Agree	11	24.4
Strongly Agree	22	48.9
Total	45	100.0

Table 21. Frequency of Response for Item 10: It is important to know that I can voice my opinions without fear of embarrassing comments."

Response	Frequency	Percent
Disagree	3	6.7
Somewhat Agree	7	15.6
Agree	10	22.2
Strongly Agree	25	55.6
Total	45	100.0

Table 22. Frequency of Response for Item 11: "Receiving frequent instructor feedback is important to me."

Response	Frequency	Percent
Somewhat Agree	2	4.4
Agree	5	11.1
Strongly Agree	38	84.4
Total	45	100.0

APPENDIX B

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Table 23. Frequency of Response for Item 12: "I praise myself for work I have done well in the absence of instructor praise."

Response	Frequency	Percent
Disagree	7	15.6
Somewhat Agree	15	33.3
Agree	13	28.9
Strongly Agree	10	22.2
Total	45	100.0

Table 24. Frequency of Response for Item 13: "Knowing that I can ask fellow students for help in this course is important to me."

Response	Frequency	Percent
Strongly Disagree	1	2.2
Disagree	5	11.1
Somewhat Agree	5	11.1
Agree	15	33.3
Strongly Agree	19	42.2
Total	45	100.0

Table 25. Frequency of Response for Item 14: "I as sure I can do an excellent job on the assignments for this course."

Response	Frequency	Percent
Disagree	1	2.2
Somewhat Agree	8	17.8
Agree	18	40.0
Strongly Agree	18	40.0
Total	45	100.0

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Tables

Table 26. Frequency of Response for Item 15: "I am certain I can understand the ideas taught in this course."

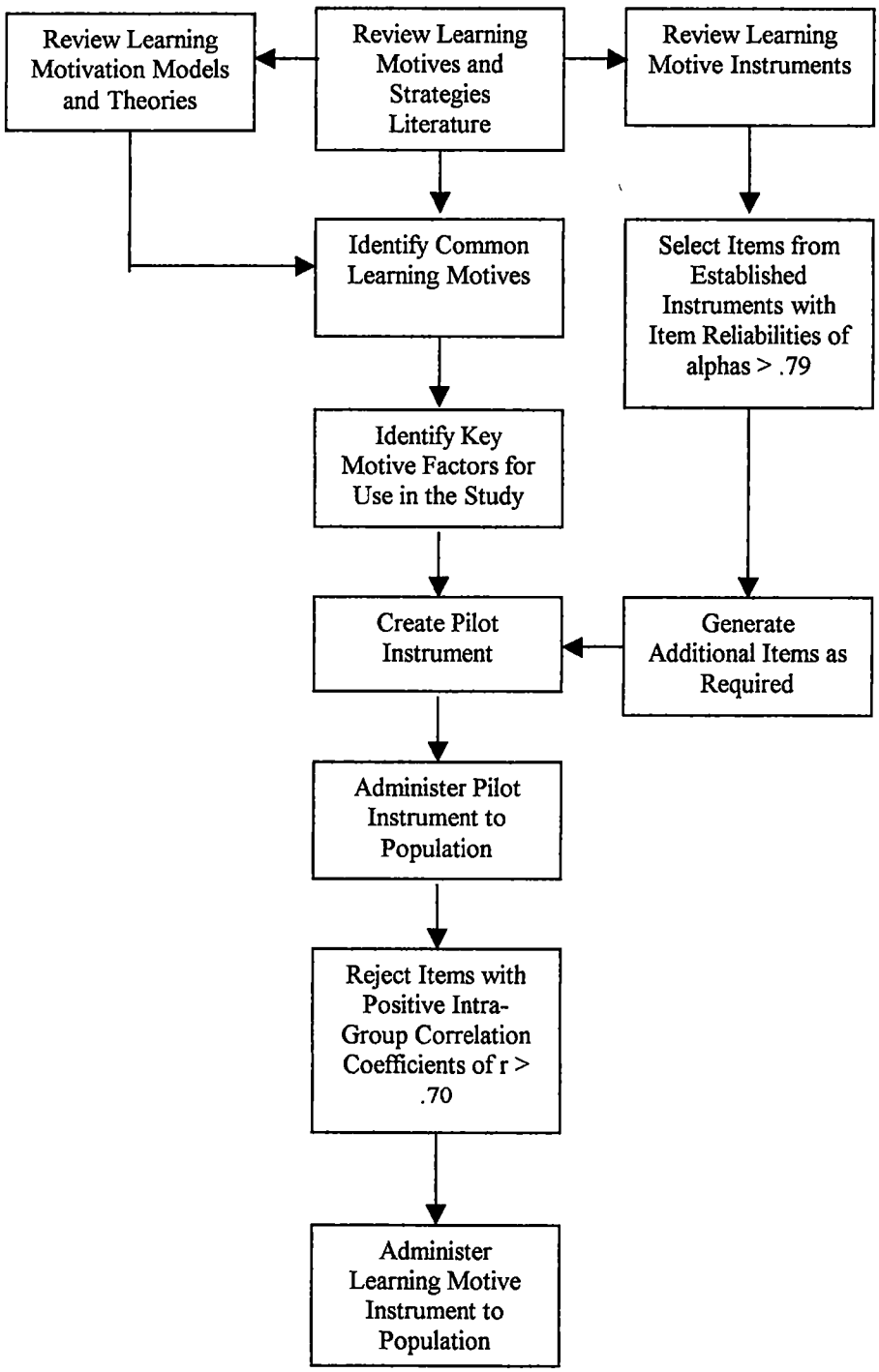
Response	Frequency	Percent
Strongly Disagree	1	2.2
Disagree	5	11.1
Somewhat Agree	6	13.3
Agree	14	31.1
Strongly Agree	19	42.2
Total	45	100.0

Table 27. Frequency of Response for Item 16: "If I study appropriately, I can learn the material in this course."

Response	Frequency	Percent
Strongly Disagree	1	2.2
Disagree	1	2.2
Somewhat Agree	7	15.6
Agree	10	22.2
Strongly Agree	26	57.8
Total	45	100.0

APPENDIX C

Online Learning Motive Questionnaire Development Process



APPENDIX D

Development of the Pilot Instrument Based upon a Review of Learning Motive Instruments

Pilot Instrument Item Number	Instrument of Origin	Instrument of Origin Item Number	Applicable Learning Motive
1	EPS	32	Course Relevance
2	IMMS	33	Course Relevance
3	MSLQ	5	Course Relevance
4	IMMS	10	Course Relevance
5	MSLQ	4	Course Interest
6	IMMS	24	Course Interest
7	MSLQ	21	Course Interest
8	IMMS	28	Course Interest
9	MSLQ	1	Course Interest
10	MSLQ	7	Personal Feelings and Emotions
11	IMMS	14	Personal Feelings and Emotions
12	IMMS	5	Personal Feelings and Emotions
13	Self-Generated	-	Personal Feelings and Emotions
14	Self-Generated	-	Reinforcement
15	Self-Generated	-	Reinforcement
16	Self-Generated	-	Reinforcement
17	Self-Generated	-	Reinforcement
18	MSLQ	13	Self-Competence
19	MSLQ	2	Self-Competence
20	MSLQ	15	Self-Competence
21	MSLQ	3	Self-Competence

Note: Instrument Title Abbreviations are as follows

Educational Participation Scale (EPS)
Instructional Materials Motivation Survey (IMMS)
Motivated Strategies for Learning Questionnaire (MSLQ)

APPENDIX E

Letter of Request (E-Mail Message) to Online Instructors

15 March 2000

To all online instructors:

As you may know, I plan to conduct research during the Spring Semester of 2000 in fulfillment of my Master's degree in HRD. Therefore, I would like your permissions to survey your online undergraduate students using a 10-12 item Likert-type questionnaire designed to identify their online learning motives. I plan to test the questionnaire in Dr. Lim's HRD 455 online class during the next two weeks.

The questionnaire may be accessible via a hypertext link found in the "Assignment" page or "Course Information" page of your online courses. The questionnaire will not take longer than 10 minutes to complete, and will be of great benefit to my research efforts.

In order that I may keep on-track with my research schedule, please respond using e-mail or a personal comment no later than 31 March 00. I can also be reached via my home phone: xxx-xxxx. Please feel free to discuss any concerns or issues with me at your leisure.

Thank you for your continued support of graduate research activities with our department.

Sincerely,

Frank Laszlo Jr.
Graduate Teaching Assistant
Human Resource Development
College of Human Ecology

APPENDIX F

Letter of Request (E-Mail Message) to Online Students

18 March 2000 (Pilot), 26 April 2000 (Research Study)

To all online students:

Hello everyone,

I am conducting a survey to identify learning motives used by online students. Your input is very important to this study. You may access the survey at the following URL: http://web.utk.edu/~davidh/frankresearch.htm

The survey will take approximately 10 minutes to complete. Your participation is voluntary, and greatly appreciated. Steps have been taken to ensure confidentiality and anonymity. This survey is not part of any previous survey request you may have received this semester.

Thank you for your time and interest in this important effort. Your responses will contribute to the knowledge base of online learning motives and to the continuous improvement efforts underway in this department.

Sincerely,

Frank Laszlo Jr.
Graduate Student

APPENDIX G

Online Learning Motives Pilot Instrument

Understanding learning motives is an important component of curriculum design and development. Research studies have identified a variety of learning motives in use in traditional classroom settings. However, little research exists on the motives used by students in non-traditional learning environments. Therefore, the following questionnaire is designed to partially fulfill the requirements of a Master's thesis whose purpose is to identify online learning motives, to determine if there are additional motives that may be unique to this learning mode, and to generally contribute to the research knowledge of online learning motives. Participation is voluntary. If you elect to participate, you must be at least 18 years of age.

Select the one response that best describes your thoughts or feelings related to each statement using the scale provided.

(1) Strongly Disagree, (2) Disagree, (3) Somewhat Agree, (4) Agree, (5) Strongly Agree

The following statements refer to course relevancy:

1. I believe this course will help me to get a better job.
2. The content of this course will be useful to me.
3. It is important for me to learn what is being taught in this course.
4. Completing this course is important to me.

The following statements refer to course interest:

5. I prefer course material that arouses my curiosity.
6. I learned some things that were surprising or unexpected in this course.
7. I think that what we are learning in this course is interesting.
8. The variety of lesson topics and assignments helped keep my attention.
9. I prefer course work that is challenging so I can learn new things.

APPENDIX G

Online Learning Motives Pilot Instrument

The following statements refer to personal feelings and emotions:

10. I often thought about my emotions and feelings while taking this course.
11. I enjoyed this course so much that I would like to know more about this topic.
12. Completing the lessons in this course gave me a satisfying feeling of accomplishment.
13. It is important to know that I can voice my opinions without fear of embarrassing comments.

The following statements refer to reinforcement:

14. Receiving frequent instructor feedback is important to me.
15. I praise myself for work I have done well in the absence of instructor praise.
16. When I do extra well on an assignment, I expect to receive an "A" for my efforts.
17. Knowing that I can ask fellow students for help in this course is important to me.

The following statements refer to self-competence:

18. I am sure I can do an excellent job on the assignments for this course.
19. Compared with other students in this course, I expect to do well.
20. I am certain I can understand the ideas taught in this course.
21. If I study appropriately, I can learn the material in this course.

Demographic Items:

Gender	Male, Female
Marital Status	Married, Single, Single Parent
Student Status	Full-Time, Part-Time
Employment Status	Full-Time, Part-Time, Not Employed

APPENDIX H

Online Learning Motives Survey

Understanding learning motives is an important component of curriculum design and development. Research studies have identified a variety of learning motives in use in traditional classroom settings. However, little research exists on the motives used by students in non-traditional learning environments. Therefore, the following questionnaire is designed to partially fulfill the requirements of a Master's thesis whose purpose is to identify online learning motives, to determine if there are additional motives that may be unique to this learning mode, and to generally contribute to the research knowledge of online learning motives. Participation is voluntary. If you elect to participate, you must be at least 18 years of age.

Select the course number that you are currently enrolled in. If you are enrolled in more than one online course, select the course number that is applicable to this questionnaire:

HRD 320, HRD 325, HRD 330, HRD 452, HRD 455.

Select the one response that best describes your thoughts or feelings related to each statement using the scale provided.

(1) Strongly Disagree, (2) Disagree, (3) Somewhat Agree, (4) Agree, (5) Strongly Agree

The following statements refer to course relevancy:

1. The content of this course will be useful to me.
2. It is important for me to learn what is being taught in this course.
3. Completing this course is important to me.

The following statements refer to course interest:

4. I prefer course material that arouses my curiosity.
5. I learned some things that were surprising or unexpected in this course.

APPENDIX H

Online Learning Motives Survey

6. The variety of lesson topics and assignments helped keep my attention.
7. I prefer course work that is challenging so I can learn new things.

The following statements refer to personal feelings and emotions:

8. I often thought about my emotions and feelings while taking this course.
9. Competing the lessons in this course gave me a satisfying feeling of accomplishment.
10. It is important to know that I can voice my opinions without fear of embarrassing comments.

The following statements refer to reinforcement:

11. Receiving frequent instructor feedback is important to me.
12. I praise myself for work I have done well in the absence of instructor praise.
13. Knowing that I can ask fellow students for help in this course is important to me.

The following statements refer to self-competence:

14. I am sure I can do an excellent job on the assignments for this course.
15. I am certain I can understand the ideas taught in this course.
16. If I study appropriately, I can learn the material in this course.

Demographic Items

Gender	Male, Female
Marital Status	Married, Single, Single Parent
Student Status	Full-Time, Part-Time
Employment Status	Full-Time, Part-Time, Not Employed

VITA

Frank Laszlo was born in Coraopolis, Pennsylvania on July 26, 1951, the first child of Frank Laslo and Ann Marie. He attended public schools in Pennsylvania, California and Florida, graduating from Titusville High School in 1969.

Shortly after graduation, Frank enlisted in the United States Air Force, and served tours of duty in the United States and West Germany. While on active duty, he served as a Social Actions Instructor, teaching drug and alcohol abuse prevention and equal opportunity rules and regulations to enlisted airman and non-commissioned officers. While serving in the Tennessee Air National Guard some years later, Frank served as a radar technician and instructor.

During his career with the Tennessee Valley Authority as an operations and maintenance manager, Frank also served as a corporate trainer in areas of organization development, management training, and Total Quality Management. Retiring after twenty years of service, Frank earned a Bachelor of Science Degree in Human Resource Development, summa cum laude, in 1998. As a graduate student, Frank has taught an online undergraduate course for six semesters and an in-residence class for two semesters. He is a member Phi Kappa Phi and The Golden Key national honor societies.

Frank is married to Martha Ann Laszlo, and they have two sons. Martha is a quilting department manager, Nicholas has graduated from the University of Tennessee with a Bachelor of Science degree in Botany and is currently seeking employment, and Jason has graduated from Pellissippi State Technical College and is employed by Airport Cadillac as an automobile computer and body electronics technician.