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ACCEPTANCE

This dissertation, DESIGN, DEVELOPMENT, AND EVALUATION OF WEB-BASED MOTIVATIONAL STRATEGIES TRAINING: INDIVIDUAL AND SITUATIONAL ASPECTS OF ACADEMIC MOTIVATION by BEVERLEY GHENT TAYLOR was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree Doctor of Philosophy in the College of Education, Georgia State University.



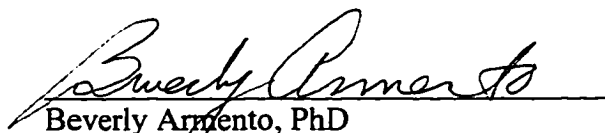
Francis D. Atkinson, PhD
Committee Chair



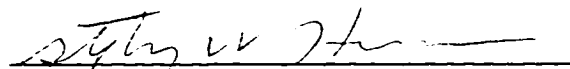
Natacha Akshoomoff, PhD
Committee Member



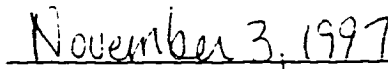
Sheryl Gowen, PhD
Committee Member



Beverly Armento, PhD
Committee Member



Stephen Harmon, PhD
Committee Member



Date

The Dissertation Advisory Committee, the Dean, and the Associate Dean and Director of Graduate Studies and Research of the College of Education, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty.



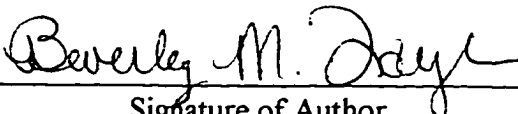
Samuel M. Deitz, PhD
Dean



Karen A. Schultz, PhD
Associate Dean and Director of Graduate Studies and Research

AUTHOR'S STATEMENT

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Signature of Author

VITA
BEVERLEY GHENT TAYLOR

ADDRESS: 1156 Forest Glen Court NW
Acworth, Georgia 30102

EDUCATION:

PhD	1997	Georgia State University Instructional Technology
MEd	1987	University of Southern California Education, Public Administration
BS	1985	University of Maryland Business Management

PROFESSIONAL EXPERIENCE:

1996 to Present:	Georgia State University Graduate Research Assistant
1995 to 1997	Kennesaw State University Faculty & Project Director Classroom Technology Initiative
1989 to 1995	North Metro Technical Institute. Faculty & Director of Media Services.
1986 to 1989	Sylvan Learning Centers Tutor
1981 to 1986	U.S. Navy Information Specialist/Journalist

PROFESSIONAL SOCIETIES AND ORGANIZATIONS:

American Educational Research Association
Association for Educational Communications and Technology
Georgia Association for Instructional Technology
International Society for Technology in Education

PRESENTATIONS:

Taylor, B. & Barnes, S. (1997). A Successful P-16 Technology Grant: Classroom Technology Initiative, Georgia Department of Education Technology Leadership Conference, Athens, Georgia.

Taylor, B. & Whitacre, L. (1997). Technology: Hook, Line, and Sinker, Microcomputers Online in Education, Georgia State University, Atlanta, Georgia.

Taylor, B. & Loomis, K. (1996). Software that Engages Learners, FutureScape, Kennesaw State University, Kennesaw, Georgia.

Taylor, B. (1996). Overview of Distance Learning, Training '96, Atlanta, Georgia.

ABSTRACT

DESIGN, DEVELOPMENT AND EVALUATION OF WEB-BASED MOTIVATIONAL STRATEGIES TRAINING: INDIVIDUAL AND SITUATIONAL ASPECTS OF ACADEMIC MOTIVATION

**by
Beverley Ghent Taylor**

Purpose

This research stemmed from observations and concern for the importance of learner motivation in academic situations. The purpose of this research was to investigate the potential for and process of change in academic motivation of undergraduate students enrolled in Learning Support Program (LSP) courses.

Methods

The Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997) provided the theoretical basis for this research. The Academic Motivation Scale (AMS) was administered as a pre and postassessment. Instructional materials, based on motivational research, were designed and developed. Formative evaluation, construct validity, and pilot testing of the motivational strategies training program (MTV 101) were conducted prior to implementation of this research project.

Subjects

The AMS was administered to a sample population of undergraduate college students enrolled in LSP courses. Two subgroups were identified based on motivation for going to college. Participants were selected from the subsample group of less intrinsically motivated students and were matched on age, gender, and ethnicity. Two students

completed the MTV 101 program as designed, as a seven-week program. These two students and seven additional students participated in End-User Feedback Sessions (EUFS). The EUFS were structured as videotaped talk-aloud protocol as students interacted with the program, thus providing end-user feedback for formative evaluation about the program.

Analysis

Data from the sample population and subsample groups (AMS preassessment scores and demographic information) were analyzed using descriptive, chi-square, and multivariate analysis of variance. Qualitative research methods were used to analyze the EUFS 1) to ascertain the appeal, learnability, and usability of the MTV 101 program, and 2) to examine the individual and situational aspects of academic motivation from the perspective of the Hierarchical Model of Intrinsic and Extrinsic Motivation.

Results

This study found that the majority of students in the study population were high in extrinsic motivation--external regulation. Overall, participants enjoyed the MTV 101 program, learned strategies, or felt it was a useful program. Individual differences and readiness to change emerged as factors that might affect whether participation in MTV 101 would promote improved academic motivation.

**DESIGN, DEVELOPMENT AND EVALUATION OF
WEB-BASED MOTIVATIONAL STRATEGIES TRAINING:
INDIVIDUAL AND SITUATIONAL ASPECTS OF ACADEMIC MOTIVATION**

by

Beverley Ghent Taylor

A Dissertation

**Presented in Partial Fulfillment of
Requirements for the
Degree of
Doctor of Philosophy
in
Instructional Technology
in
the Department of Middle/Secondary Education & Instructional Technology
in
the College of Education
Georgia State University**

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ACKNOWLEDGEMENTS

Teamwork, from an entire cast of characters, helped make this production a success. Everyone who was involved behind the scenes deserves a big round of applause for their performance.

Highlights of the entire production were captured by coproducer Ed and our most prodigious productions—Chelsea and Rachel. They deserve critical acclaim for their supporting roles. The inception of this idea may date back to the day my parents brought me into this world and produced in me a thirst for knowledge, a curious nature, and a desire to share a love for learning with others. Along the way, a supporting cast of friends, educators, and colleagues each contributed something special to this performance. I shall always cherish these relationships. The coproducer of the MTV 101 program, Charles Harmon, deserves an Oscar.

A standing ovation goes to my spectacular Dissertation Advisory Committee who provided much needed scaffolding to make this a higher caliber performance. The exemplary individuals that comprise my committee each contributed from their respective areas of expertise. I applaud my entire committee: Dr. Natacha Akshoomoff, Dr. Beverly Armento (Starfish), Dr. Sheryl Gowen, Dr. Steve Harmon, and most of all, my chair, Dr. “Skip” Atkinson. Each guided me to read more, think more, and sleep less.

Networks of people have touched my life. Although he was not on my committee and we have never met, for the past few years, Dr. Robert J. Vallerand from the University of Montreal has selflessly shared his current research and the theoretical

model upon which this research was based. He also provided access to the Academic Motivation Scale (AMS), the instrument used in assessing academic motivation.

Knowledge Shared Multiplies has been my personal philosophy. The more we share, the more we learn from each other. The creative direction of this dissertation would not have been possible without the input from the directors of the film, Possible Selves. I appreciate their sharing of their thoughts and opinions. The Directors of the MTV 101 program breathed life into this production.

So, as this film comes to a close, there is great hope and ambition to find a way to continue this line of research. Academic motivation is an important topic. Therefore, I am convinced the show must go on.

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ACRONYMS

AM	Amotivation
AMS	Academic Motivation Scale
ARCS	Attention, Relevance, Confidence, and Satisfaction
ATI	Aptitude Treatment Interaction
CBT	Computer Based Training
EM	Extrinsic Motivation
EUFS	End-User Feedback Session(s)
HOPE	Helping Outstanding Pupils Educationally
IM	Intrinsic Motivation
ID	Instructional Design
ISD	Instructional Systems Design
IT	Instructional Technology
LED	Learning Environment Design
LOC	Locus of Control
LSP	Learning Support Programs
MTV 101	Motivational Strategies Training Program
nAch	Need for Achievement
PGA	Predicted Grade Point Average
SRL	Self Regulated Learning
URL	Uniform Resource Locator

CHAPTER 1

NEEDS ASSESSMENT

Motivational research indicates that when external reasons for learning override internal reasons, an individual's desire to learn may diminish. Unfortunately, as students progress through the U.S. education system, they tend to become increasingly extrinsically motivated and decreasingly intrinsically motivated (Lepper & Hodell, 1989). Negative consequences in behavior, affect, and cognition follow when extrinsic motivation supplants intrinsic motivation (Vallerand, 1997). By the time many students graduate from high school, they have not met the standards necessary to attend college. Economists have demonstrated that learning in school and on the job accounts for a great deal of difference in earnings among Americans (Van Horn, 1996). Studies show that persistence in school results in a higher standard of living and that the personal and socioeconomic cost of dropping out of school have dramatically increased over the past few decades (Schwartz, 1996).

Being less educated hurts the individual and the economy as indicated by the following statistics: (a) each year's class of dropouts will cost the country over \$200 billion during their lifetimes in lost earnings and unrealized tax revenue (Catterall, 1985); (b) 82% of America's prisoners are high school dropouts (CDP Newsletter, 1990); (c) students from low-income families are 2.4 times more likely to drop out of school than are children from middle-income families, and 10.5 times more likely than students from high-income families (National Center for Educational Statistics, 1993).

Many students attend college primarily to increase employability and earnings potential (often accompanied by parental pressures for the same reasons). The reasons many individuals pursue a college degree are sociocultural and economic, not intellectual. Yet, the external motivation of long-term financial reward is often insufficient in keeping students at both high school and college levels from dropping out. In 1995, an estimated 78% of Georgia's adults had a high school diploma and 23% had a college degree. According to a U.S. Census Bureau report, high school and college completion rates have remained somewhat stagnant since the mid-1970's (Teegardin, 1996).

Students in Georgia who maintain a 'B' average in high school are eligible for the Helping Outstanding Pupils Educationally (HOPE) scholarship, funding most of their college tuition. However, many capable students do not maintain a 'B' average in high school and are not eligible for HOPE or may lose eligibility by maintaining less than a 'B' average in college. Again, a very viable financial advantage was not sufficient motivation for performing well in school.

Dewey (1938) said that the most important attitude that can be formed is the desire to learn. Research indicates that motivation to learn is an inherent natural capacity (Deci & Ryan, 1985; Deci & Ryan, 1991). At the core, the self is said to have an energizing component termed intrinsic or growth motivation. Yet, many students seem to lose this inner desire to learn. Csikszentmihalyi (1991, p. 83) asserted that the chief impediments to learning are not cognitive but motivational. "It is not that students cannot learn; it is that they do not wish to."

Student Achievement and Motivational Problems

Major research findings support concerns about student inattention and poor effort. Evidence suggests that in the U.S., educational achievements are declining. A

survey of 25,000 eighth graders revealed that many students believe schoolwork is boring. About half claimed they were bored in school half or most of the time. The eighth graders surveyed by Rothman (1990) are now college age. Lack of motivation is considered one of the primary causes of low achievement. More than one-third of the students who enter a school in the University System of the State of Georgia do not meet standards for regular admission (Information Digest, 1994-95). For example, students may have the required SAT score but grade point average from high school is too low resulting in a predicted grade point average (PGA) and acceptance into a college or university on a provisional basis. It is unknown how many may have a motivational problem.

The need for flexible and adaptive workers has grown; however, the supply has not (Capelli et al., 1997). Individuals who are educated and skilled will find themselves more employable and at higher wages. Some individuals lack the ability or opportunity to continue with formal education. Individuals who have the ability and opportunity, but who do not seem to achieve their educational potential are sometimes labeled lazy, unmotivated, underachievers, procrastinators, or other such terms. Individual differences make identifying the reasons quite difficult. Whereas some students drop out of formal education and do not show much motivation for learning or achievement, other students drop out of formal education and demonstrate high motivation for continued learning. There are many examples of famous and enterprising people who have dropped out of formal education and who have been very motivated to succeed in their work. Some students consider such individuals as role models.

I was almost a high school dropout. I cannot even remember a time when I did not dream of dropping out of high school. Even the phrase, "high school dropout," seems cool. Peter Jennings, ABC news anchor, dropped out of high school. So did the highly successful president of Virgin airlines and Virgin records. Even Axl Rose was a high school dropout. I thought

that if these people accomplished their dreams without spending the obligatory four years in high school, then why couldn't I? (Rose, 1997, <http://pages.prodigy.com/MD/zoilus/dropout.html>).

The Learning Environment and Motivation

One perspective for increasing motivation of learners focuses on the learning environment (Ames & Ames, 1992; Reeve, 1996). Instructional technology has attempted to address motivation from an instructional standpoint (Keller, 1983, 1987). Unfortunately, many learning situations were not designed using guidelines from motivational research. In addition, for a variety of reasons, learners are likely to find some instructional situations less motivating than others. People are not uniformly motivated across situations. Motivation may increase or decrease based on an individual's history of success and failure, or the incentives for any particular instance. A situation that works for one individual may not work with another. An individual may find one situation more appealing than another, and may even react differently to similar situations at different times. Most experienced teachers would admit the logistical difficulties of providing an optimal motivational environment for all learners in a classroom. Positively motivated individuals tend to succeed regardless of the environment (McClelland, 1995). For learners and learning across situations, a superior strategy for change would focus on the learner. Schunk and Zimmerman (1994) emphasized self-regulation for learners to become willing and able to learn. While educators should continually try to improve learning environments and instructional materials, educators ought to be as concerned with effecting change so that learners want to learn (Csikszentmihalyi, 1990a).

The Complex Nature of Motivation

This research evolved from personal curiosity. What causes very competent students to act apathetic to learning or to resist success in academic environments? How might technology contribute to helping students improve in personal motivation for learning? Most students at some time or another struggle with academic motivation. Students may lack interest or ability in a subject, dislike the teacher, fail to stay awake at certain times, dislike the amount or type of work, or experience extenuating circumstances. Some students seem to lack confidence in their abilities or are afraid of success. Others exude a rebellious attitude about academics altogether. Some students drop out; other students persist. Research in motivation, underachievement, dropout, retention, and persistence have found numerous discriminating characteristics and factors. Still identification and appropriate treatment for each individual may be difficult. Holistic intervention strategies represent an alternative way of approaching retention and attrition (Brawer, 1996).

Hattie, Biggs, and Purdie (1996) stated that theory may have leapt ahead of evidence. Much controversy surrounds motivational research from the role of rewards and incentives to the construct of motivation as a trait or state. Attempts at modeling intervention programs for enhanced learning lack broadly-based supportive data. Snow and Jackson (1992) pointed out that most of the research on conative constructs (motivational and volitional aspects of human behavior) has been limited to small-scale, isolated, and piecemeal studies. Researchers (Dienstbier & Spaulding; Shapiro, 1996; Snow & Jackson, 1992) recognize the complex nature of motivation; yet, they also recognize that the ability to control cognition, motivation, and volition hold potential for dramatically improving learning. Researchers agree that allowing greater learner control

enhances learner motivation. Metacognition, a strategy that encourages learners to consciously think about their own thinking, has helped learners improve memory, comprehension, problem-solving, and self-control. Certain features of study skills interventions are more likely to lead to success than others (Hattie et al., 1996). General, all-purpose study skills programs help some individuals show slight gains. If combined with metacognitive, self-regulative training, positive results are more likely. Still, training and test tasks need to be closely related for transfer effects. Such training tends to remain situated.

Situated Motivation and Student Autonomy

Situated motivation considers student autonomy as an important goal for an individual's development and education. Situated motivation is a heuristic construct because it emphasizes the person's perception and meaning; it does not reside in the environment or the person alone, but is constructed by people in specific situations (Vallerand, 1997). McCombs and Pope (1994) stated that learners can understand the role of thought and can therefore realize they have the ability to be self-motivated.

This research involved the design, development, implementation, and evaluation of a motivational strategies training program designed for undergraduate college students who were identified as less self-determined (more extrinsically motivated than intrinsically motivated to learn). The design and development of the motivational strategies training program (MTV 101) was based on explicitly sharing motivational strategies with learners who were identified as being less self-determined. In addition, the MTV 101 program was evaluated to provide feedback about its effectiveness in terms of appeal, learnability, and usability.

Research Questions

Learning Support Programs (LSP) are offered at each of the 34 colleges and universities in the University System of Georgia. In fall 1994, more than 20,000 first-time freshmen were eligible for learning support programs (Information Digest 1994-95). Students who need or desire preparation in reading, mathematics, English, or other courses may be enrolled in LSP courses. It is unknown how many of these students might have an academic motivational problem. For this study, academic motivation was assessed using the Academic Motivational Scale (AMS) which has been tested for validity and reliability (Vallerand et al., 1992, 1993). The AMS was administered to more than 240 students enrolled in LSP courses at an urban university in the Spring of 1997. These scores were used to ascertain the academic motivation profile of students enrolled in Learning Support Program courses and as a preassessment measure to select participants for this study.

Based on motivation research, the MTV 101 program was designed and developed as an explicit motivational strategies training program for students whose intrinsic motivation for going to college was low. The first research question concerned the quality of the program.

Question 1. What was the consensus by individuals with expertise in the fields of instructional technology and motivation on construct validity of the motivational strategies training program?

The next question pertained to the sample population of students enrolled in LSP courses.

Question 2. What is the motivational profile of students enrolled in LSP courses who completed the Academic Motivation Scale (AMS) and how did selected demographic variables (age, gender, and ethnicity) affect academic motivational profile?

The final two questions were based on the subsample group of students who would comprise the treatment and control groups for the motivational strategies training program.

Question 3. Was MTV 101, the motivational strategies training program, effective with end users in terms of appeal, learnability, and usability?

Question 4. What is the potential and process of change in academic motivation as a result of learning about and applying motivational strategies in a number of situated learning environments?

Specific Purpose

Learners who are intrinsically motivated tend to be happier, less self-conscious, feel more satisfied about work, experience higher concentration, and may invest more time studying (Csikszentmihalyi & Nakamura, 1989). The purpose of this research was to investigate the potential for and process of change in academic motivation as learners were exposed to the concepts of motivation and were asked to apply these concepts and strategies to their educational experiences. This research concerned itself with the potential effectiveness of motivational strategies training on provisionally-admitted undergraduate college students whose motivational profile was less self-determined.

Significance of Studying Motivation

Without academic motivation, individuals may fail to achieve their human potential. The quality of their lives may suffer as a result. Lack of motivation for academic pursuits may cause individuals to learn less, drop out of courses, opt for easier

courses, and potentially reduce the quality of their lives (Vallerand, 1997). The United States truly is a land of opportunity for those between the ages of 17 and 25 who do very well in school (Lemann, 1994). The intervention designed and developed as part of this research was to apply findings from motivational research and offer an individualized motivational strategies training program that could improve academic motivation for students enrolled in LSP courses. As users interacted with the program, insight into the potential for and limitations of motivational change were also explored.

Assumptions, Limitations, Delimitations

The following general assumptions were made in this study:

1. Participants in the study responded accurately and honestly to questionnaires and other data collection methods.
2. Students would participate voluntarily in the MTV 101 program.
3. Less self-determined students (extrinsic motivation is greater than intrinsic motivation) are more likely to need motivational training.
4. Some subjects will not be open to change; in these cases, qualitative research methods will be more helpful in understanding student perceptions about applying motivational strategies.

The limitations of Aptitude Treatment Interaction (ATI) applied to this study (Tobias, 1987). ATI research has produced inconsistent and ungeneralizable results reducing the feasibility of matching models of instruction to accommodate for different situations. Gagne' (1967) identified conditions of learning and recognized that different learning characteristics, based on different learning conditions, lead to different learning outcomes. Therefore, results of this intervention may not be applicable in other situations or for all individuals. Tobias (1987) outlined how variables and interaction among

variables confounds validity and reliability of measures. These variables and interactions are shown in Figure 1.

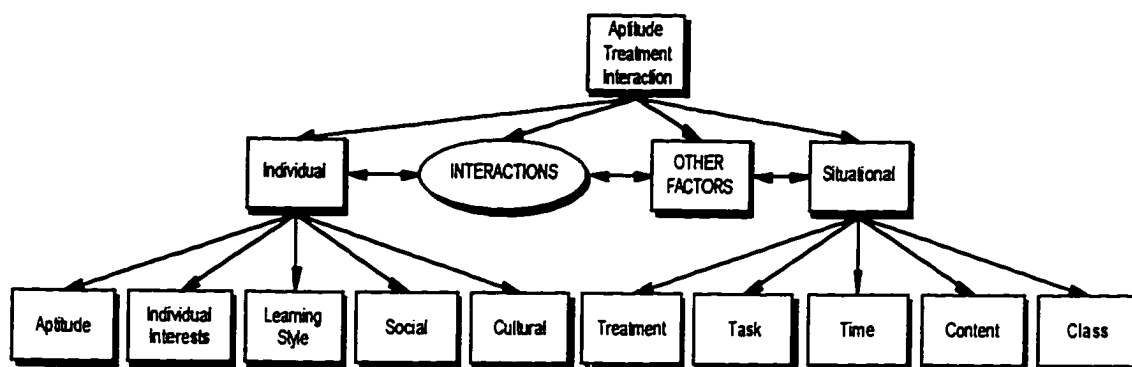


Figure 1. Possible Factors Impacting Aptitude Treatment Interaction

The study was delimited by focusing on a specific group of individuals; in this case, only students enrolled in LSP courses were selected to participate in the MTV 101 program. It was considered preferable to administer a pretest/posttest to a treatment and control group to control for testwiseness since the same instrument was used to measure motivation at the beginning and end of the quarter. In addition, students were expected to be participating in different courses or supplemental activities (mentors, tutors) provided by LSP which could have confounded pinpointing the MTV 101 program as an effective program for change. Qualitative measures were considered necessary and more appropriate for more clearly establishing individual reactions to motivational strategies training.

Definition of Terms

Academic Motivation describes motivation towards learning within the context of an educational environment. There are three subsets of academic motivation: intrinsic, extrinsic, and amotivation.

Intrinsic Motivation (IM) refers to motivation by choice--learners who learn because they want to learn something for no apparent reward other than the activity itself.

Extrinsic Motivation (EM) refers to learners who learn because there are external pressures to do so. Someone who is extrinsically motivated to learn does so because of external factors--because the learner should do this learning activity.

Amotivation (AM) refers to individuals who have become uninterested in learning because of perceived lack of control, incompetence, or other reasons. Someone who is amotivated to learn does not want to, nor does the person feel like he/she should do this learning activity.

Construct validity pertains to whether the program looks valid to individuals with expertise in the area.

End-Users is a term used to indicate those individuals for whom a program has been designed.

Face validity pertains to whether the program looks valid to the subjects who take it, to administrators who decide upon its use, and to other technically untrained observers.

Motivation refers to the internal and external forces that determine behavior; the processes whereby goal-directed activities are begun and sustained.

Needs Assessment, the first stage in the instructional technology process, establishes a need for the program in terms of who needs what content, what delivery system is feasible, and how the program might implemented.

Nontraditional Student in higher education refers to those students who are older than 25 years of age.

Perceived Autonomy relates to an individual's perception of control or choice over one's actions.

Perceived Competence relates to an individual's perception of interacting effectively with the environment.

Perceived Relatedness refers to the feeling of being connected to significant others.

Self-Determined refers to an individual's perception of autonomy and control regarding circumstances and outcomes.

Self-Regulation describes a process students use to activate and sustain cognitions, behaviors, and affects which are systematically oriented towards attainment of goals.

Self-regulated learning describes the ability to control, motivate, and act in a way that creates desired changes in one's education or instructional knowledge.

Traditional Student in higher education refers to those students who are 25 years of age or less.

Transformative Learning refers to personal development from critical self-reflection resulting in revised assumptions, premises, and ways of interpreting experiences or perspectives.

Transformational change occurs when learners' beliefs and schema change. The learner changes because of the learning, not because of exposure to inert knowledge.

Transtheoretical Change Model posits that regardless of the approach used, change involves a series of common stages and a consistent process that includes precontemplation, contemplation, preparation, action, and maintenance (Prochaska, Norcross & DiClemente, 1994).

Overview of Methods

This research project began by identifying academic motivation as a contributing factor to student success. The research was problem-based, involving the design, development, and testing of an applied, practical training program that addressed the problem of academic motivation among provisionally-admitted undergraduate students enrolled in LSP courses at a southeastern urban university. Academic motivation was assessed prior to participation in the program using a valid and reliable instrument, the Academic Motivation Scale (AMS). A 7-week motivational strategies training program (MTV 101) was designed and developed for those students who were identified by the AMS as less self-determined (more amotivated/extrinsically motivated than intrinsically motivated). Such students tend to do poorly in their courses and are at greater risk for being placed on academic probation, failing, or dropping out (Vallerand, 1997). The program was pilot tested with users and evaluated for construct validity by colleagues with experience in the field of instructional technology or research interest in the area of learner motivation. Several others informally evaluated the program for face validity; they assessed the program on a surface level as being a reasonable method for learning motivational strategies.

Revisions were made to the program and implementation took place in Spring, 1997. A quasi-experimental matched pairs procedure was planned, but the program was not implemented as planned. The research design planned for a 7-week intervention; however, the program was not compulsory. Only two students completed the MTV 101 as a 7-week program. Seven additional students, also end-users from the defined subsample group, were recruited to participate in an End-User Feedback Session (EUFS). Therefore, a total of nine participants, representative of the subsample group, were

videotaped as they interacted with the MTV 101 program. During the EUFS, students were encouraged to talk-aloud about the program and their perceptions of academic motivation. Students also completed a questionnaire about the program. All but one participant from the experimental and control group completed the AMS postassessment.

Summary

Conducting a needs assessment is one of the first stages in instructional systems design. This opening chapter indicates that academic motivation is a problem for many undergraduate college students and that a need exists to help undergraduate college students with this problem. Chapter 2 reviews the research on academic motivation and provides a rationale for designing and developing a computer-based motivational strategies training program. Chapter 3 outlines the research plan that establishes how the need for and effectiveness of an academic motivation intervention will be assessed. Chapter 4 discusses the instructional design and development of MTV 101. Chapter 5 presents results of the quantitative research data indicating the motivational profiles of the LSP sample population. Chapter 6 examines End-User Feedback Sessions from the perspective of formative evaluation regarding the program's appeal, learnability, and usability. Chapter 7 explores the individual and situational aspects of participant interactions with the MTV 101. Chapter 8 shares conclusions and reflects on the experience and impact of implementing a computer-based motivational strategies training program designed to build awareness and possibly effect change in academic motivation of provisionally-admitted undergraduate students.

The purpose of this research inquiry was to examine the potential for and process of change in academic motivation of learners involved in a 7-week motivational strategies training program. A motivational strategies training program was designed, developed,

implemented, and evaluated to determine its effectiveness with undergraduate students who were identified as having less self-determined motivational profiles. The method of research was revised from a quasi-experimental matched pairs treatment/control group to one that involved fewer participants but included closer observation of learners' interactions with and responses to the motivational strategies training program.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The emphasis in this review of literature is on academic motivation and the potential for and process of change in developing greater intrinsic motivation for learning. The blame for lack of learning is often placed on the schools, family, teachers, or someone external to the learner. To counteract alarming trends in American education, researchers have advocated change in the learning environment to autonomy-supportive, student-centered approaches rather than teacher-controlled environments (Ames & Ames, 1992; McLellan, 1996; Raffini, 1994; Reeve, 1996). As Reeve (1996) pointed out, however, “motivation addresses more than just problems with students’ low effort, disaffection, and disengagement. Motivation is also about fostering psychological growth and healthy development (p. xiii).”

Academic motivation is a difficult field to review. Bong (1996) referred to researchers’ attempts to make a coherent whole out of the relevant literature a “conceptual mess.” To further obfuscate the literature, there are many terms that have been assigned to similar, yet slightly different aspects relating to academic achievement, self-regulation, self-direction, and academic motivation. Vallerand (1997) designed the Hierarchical Model of Intrinsic and Extrinsic Motivation as a framework for organizing and understanding the basic mechanisms underlying intrinsic and extrinsic motivational processes. Using this model, the focus of this study involved the analysis of individual

and situational aspects of academic motivation as learners interacted with a motivational strategies training program. Therefore, the review of research will be structured using the Hierarchical Model as it relates to undergraduate students and aspects of academic motivation. The postulates of the Hierarchical Model of Intrinsic and Extrinsic Motivation are described, accompanied by research and implications that relate to this study.

Motivation Research

The definition of motivation cannot be simply expressed. Quinones (1997) said “motivation involves a choice by an individual to expend energy toward one particular set of behaviors over another” (p. 183). However, seemingly irrational actions are difficult to explain. What would be the motivation that causes an individual to act in a self-defeating manner? The complexities of motivation in human beings have been researched extensively resulting in integrated views of motivation, cognition, and volition (Snow & Jackson, 1992). Yet the field of academic motivation research “suffers from a lack of comprehensive models capable of capturing the full dynamics of observed behaviors” (Bong, 1996, p. 149). Furthermore, there are varying terms that refer to the same and slightly different areas of academic motivation or academic achievement motivation.

A Hierarchical Model of Motivation

Bong (1996) expressed the need for a comprehensive model of academic motivation that incorporates the varying theoretical orientations among researchers. The Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997) shows integration at three levels of motivation. This model provides a perspective for studying intrinsic and extrinsic motivational processes and incorporates social factors and mediators that impact at different levels, and the consequences that may result.

Sociological and environmental factors (culture, family background, age, opportunity) would be expected to affect all levels of motivation. Global motivation concerns an individual's general motivation towards life. Contextual motivation refers to an individual's motivation towards areas of life such as education, interpersonal relations, and leisure. Situational motivation deals with an individual's motivation in specific situations. The Hierarchical Model is shown in Figure 2.

At each level, motivational determinants will affect an individual's motivation, resulting in positive or negative consequences in affect, cognition, and behavior. The interactions of the environment and social factors will be mediated by individual perceptions of competence, autonomy, and relatedness. Individuals perceive environmental and social factors and these perceptions impact motivation. Social factors at each level are mediated by perceptions of competence, autonomy, and relatedness. In academic situations, for instance, students may react quite differently to a math class than to a literature class based on their perceived competence about the subject matter, their ability to control the situation, and the relationship they have with others in the situation.

Postulate 1.

A complete analysis of motivation must include

intrinsic and extrinsic motivation and amotivation

Motivation can be distinguished by motive into the dimensions of intrinsic, extrinsic, or amotivation. Individuals have dimensions of all three and these dimensions would be expected to vary based on global, contextual, and situational aspects. The level of motivation is based on a self-determination continuum.

The Hierarchical Model of Intrinsic and Extrinsic Motivation

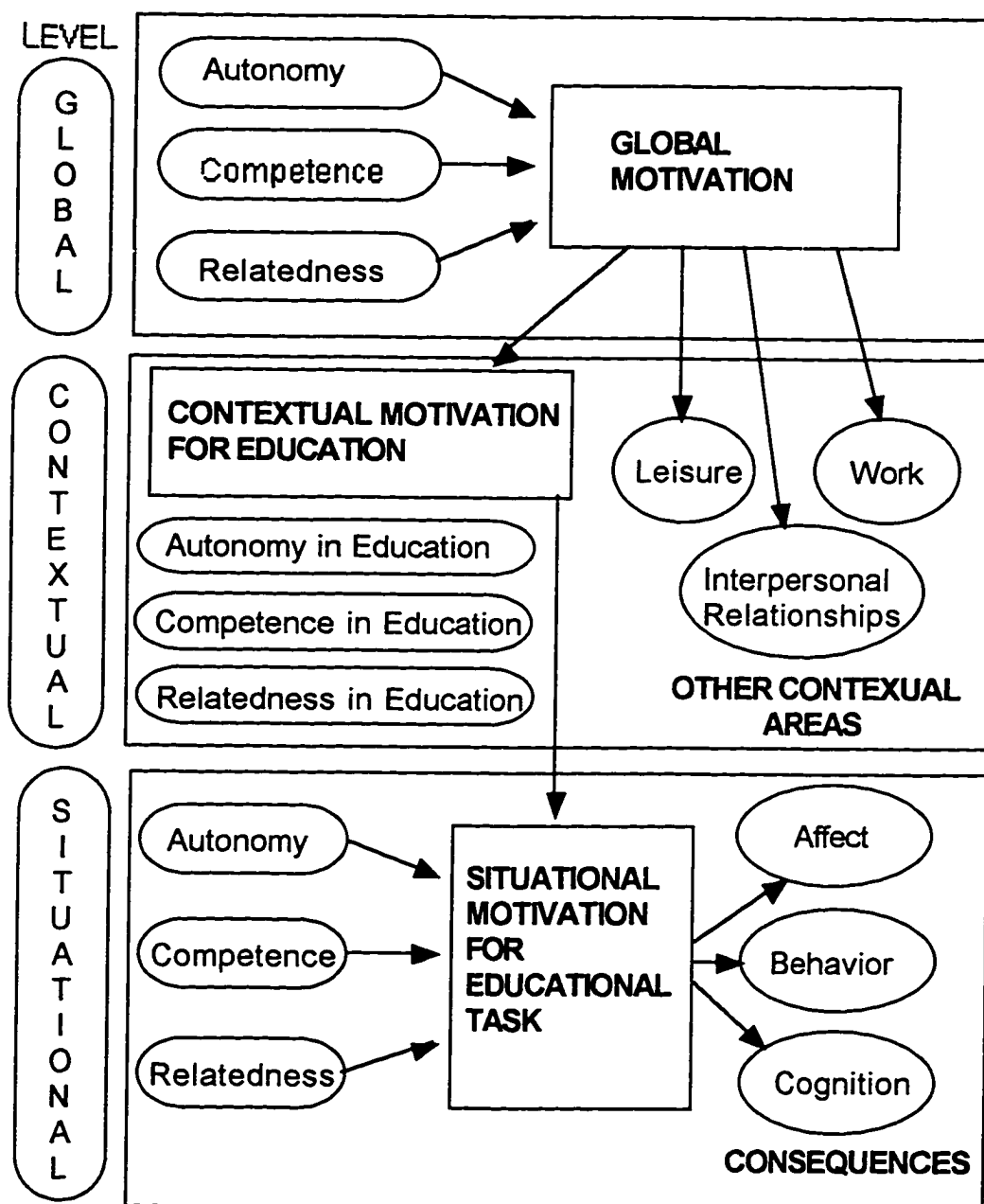


Figure 2. The Hierarchical Model of Intrinsic and Extrinsic Motivation. Modified and used with permission (Vallerand, 1997).

Self Determination

An important determinant of motivation is self-determination (Deci & Ryan, 1985, 1991). Theories that focus on goals and outcomes may not address the question of why certain outcomes are desired. Self-determination theory (Deci, Vallerand, Pelletier, & Ryan, 1991) links the energization of behavior with basic psychological needs: the need for competence, relatedness, and autonomy. Self-determination and perceived competence are associated with enhanced psychological functioning. Contextual conditions that provide opportunities for satisfying one of these three innate needs will facilitate motivation, performance, and development. Motivation is believed to lie on a continuum of high-to-low self-determination (Vallerand et al., 1993) as shown in Figure 3.

In the educational context, self-determination theory concerns students' interest in and valuing of learning and includes the factor of confidence in their capacities and attributes for learning. Motivation can range from lower to higher levels of self-determination. The perception of self-determination affects the qualities of experiences and subsequent behaviors (Deci et al., 1991).

When a behavior is self-determined, the person perceives the locus of causality is internal to his or her self, whereas when it is controlled, the perceived locus of causality is external to self. The important point in this distinction is that both self-determined and controlled behaviors are motivated or intentional but their regulatory processes are very different (p. 327).

When behavior is self-determined, the regulatory process is choice. When it is controlled, the regulatory process is compliance (or possibly defiance). Research supports the basic premises that as one progresses from amotivation to intrinsic motivation increasingly positive consequences would result.

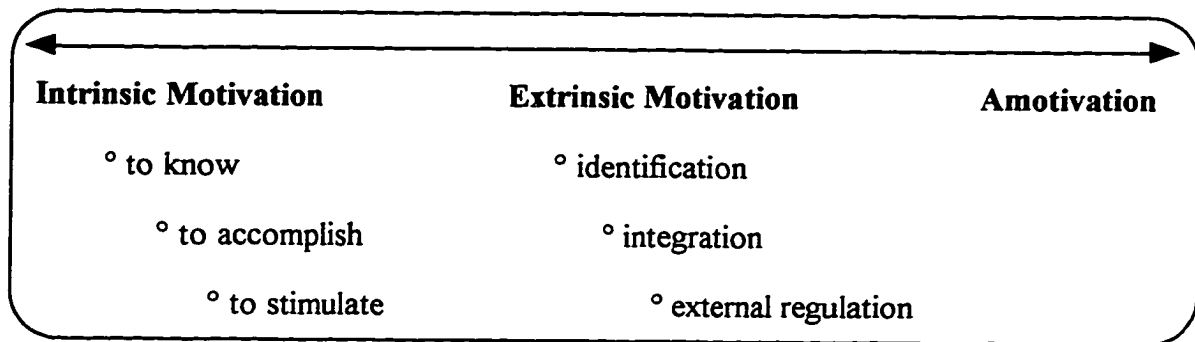


Figure 3. Continuum of Intrinsic, Extrinsic Motivation and Amotivation

Intrinsic motivation (IM)

In the context of education, intrinsic motivation refers to learners who learn by choice--because they want to learn something for no apparent reward other than the activity itself. Intrinsic motivation is defined as doing something for the sole pleasure derived from the activity (Deci, 1975). Three areas of intrinsic motivation have been identified: to stimulate, to know, and to accomplish.

Intrinsic enjoyment of learning appears to be associated with greater creativity and higher school achievement. Intrinsic motivation has consistently been positively associated with educational outcomes primarily because learners use deep rather than surface approaches to learning (Ainley, 1993; Entwistle, 1991). Intrinsically motivated learners tend to be happier, less self-conscious, feel more satisfied about work, experience higher concentration, and be likely to invest more time in studying (Csikszentmihalyi & Nakamura, 1989). Intrinsic motivation has also been shown to have a positive impact on academic performance and enhances conceptual learning and recall of material learned. The apex of the intrinsic continuum would be what Csikszentmihalyi termed "flow," when an individual becomes so absorbed that stimuli outside the activity itself (e.g., time, hunger,

other people) are unnoticed. Evidence suggests that while in flow, an individual is functioning at its fullest capacity (Csikszentmihalyi, 1990b).

Csikszentmihalyi's (1990b) flow phenomenon consists of four main characteristics: (a) concrete goals and manageable rules, (b) flexible opportunities for action based on personal capabilities, (c) clear information about how the individual is doing, and (d) an environment that allows concentrated effort.

Extrinsic Motivation (EM)

In the context of education, extrinsic motivation refers to learners who learn because there are external pressures to do so. Someone who is extrinsically motivated to learn does so because of external factors--because the learner should do this learning activity. Extrinsic motivation is defined as behaviors that take place when an externally-controlled variable can be readily identified. Extrinsically motivated learning tends to be characterized by pressure and tension, lowered self-esteem, and heightened anxiety (Deci & Ryan, 1985). Within the context of education, self-determined forms of extrinsic motivation, namely integration and identification, can be effective when performed in a relatively free and unconstrained situation. Identified regulation occurs when behavior is valued by the individual and perceived as being chosen by oneself. This form of extrinsic was not differentiated as a subscale on the Academic Motivation Scale. Integrated regulation involves willing behavior consistent with the individual's self-concept. Although they may not be intrinsically motivated by the subject matter, the learners understand the need and relevance for learning and will invest the time and effort to do so. Internally controlling forms of self-regulation seem to lead to high levels of task engagement during free choice (Koestner & Zuckerman, 1994). Introjected regulation allows for internalization of reason, but it is not truly self-determined. Nonintrinsic forms

of motivation may also impel an individual to continue on a task. However, extrinsic motivation in the context of education may be negative, less rewarding, and perhaps somewhat self-defeating. A self-determination continuum would suggest that events that lead to increases of IM would necessarily decrease EM; events that undermine feelings of self-determination or competence will lead to loss of IM (Vallerand, 1997). The most negative form of extrinsic motivation, external regulation, attaches rewards or constraints to the learning process, which may cause the learner to feel less autonomous about the learning process and less motivated to learn the material.

Amotivation

When individuals become less interested in learning because of perceived lack of control, incompetence, or other reasons, they may become amotivated or nonmotivated. Once triggered, such moods become self-confirming. Perceptions in information processing may become biased. Someone who is amotivated to learn does not want to, nor does the person feel like he/she should do this learning activity.

Postulate 2.

Intrinsic and Extrinsic Motivation and Amotivation Exist at

Three Levels of Generality: The Global, Contextual, and Situational Levels

Motivation leads to qualitatively different outcomes. Whereas positive consequences are produced by intrinsic motivation, negative consequences are produced by certain types of extrinsic motivation (particularly external regulation) and amotivation. This research studied individuals with the more negative motivational dispositions at the context level of education. Outcomes were observed based on the recursive relationship of this model.

The Global Level

Research that focuses on the global level of motivation would be most prevalent in fields such as cognitive science, genetics, neuroscience, biology, psychology, sociology, and systems theory. Individual differences are investigated and explained at this level by biological, genetic, and personality traits. The motivational and volitional aspects of human behavior are defined as conative constructs, involving affective and cognitive aspects of an individual's personality and intelligence (Snow & Jackson, 1992). Conative constructs include achievement motivation, self-regulation, interests and styles in learning, self-related concepts, and other individual constructs. Human emotions also impact learning and motivation. Sylwester (1994) described the human emotion system as complex, widely distributed, and error-prone. Yet it defines basic personality early in life, and is quite resistant to change. Research in the area of cognitive science and emotions have important implications for learning and motivation. Learning experiences can be positive or negative, stimulating, boring, or stressful. Internal chemical responses in students make them more or less apt to learn. The brain and limbic system regulate emotional states. When a learner is emotionally stressed, for instance, attention and the ability to learn are reduced.

The research paradigm for studying motivation has moved from a study of needs and drives to a study of perceptions, thoughts, and beliefs (Anderman & Maehr, 1994). Individuals bring genetic and personality traits that predispose them to be more motivated to achieve and to feel more in control of the learning situation. For instance, individuals may have a strong Need for Achievement (nAch). A strong task or goal orientation and an obsession with a job or a task to be done describes people with high nAch. Individuals with high nAch desire personal responsibility for performing a task, set more challenging

goals, and desire performance feedback. Locus of Control (LOC) describes a person's beliefs about control over life events and is considered an important variable when considering individual differences and predicting behavior. Internal LOC people feel personally responsible for the things that happen to them. External LOC feel events are determined by forces beyond their control.

A positive relationship between academic performance and achievement motivation has been consistently reported (McClelland, 1995). The association of need for achievement (nACH) and locus of control (LOC) are supported by theories of intrinsic motivation (Deci & Ryan, 1991). However, history is replete with examples of students who disliked school or college and perhaps dropped out but went on to become highly successful in their careers. When compared to those with a lower work orientation, students with a high work orientation were likely to study more and tended to be less self-conscious while doing school work (Wong & Csikszentmihalyi, 1991). They were not necessarily more motivated or happier while studying. Being self-conscious appears to prevent individuals from focusing on task-relevant information and problem-solving strategies. Intrinsic motivation did not have a significant effect on grades, but predicted students pursuing advanced academic pursuits. It is enjoyment that motivates students to pursue knowledge beyond minimum requirements. Helping students become absorbed in challenging tasks and allowing them to take the initiative in learning may help them find out that learning can be as enjoyable as any leisure activity. Commitment, enthusiasm, determination and persistence are some of the qualities found in successful, creative, and gifted individuals. Controlling for ability, Wong and Csikszentmihalyi (1991) found that work orientation was a better predictor of grades than experience. Two kinds of academic motivation were considered. Intrinsic motivation refers to rewards of ongoing experience,

enjoyment of an activity for itself. Motivation for long-term rewards such as career or accomplishment can be extrinsic or intrinsic. If the individual autonomously chooses the long-term goal, then attainment would be positively motivating.

Csikszentmihalyi and Nakamura (1989) hypothesized that there is a set of factors that influence the capacity to find enjoyment in whatever domain one enters. Such individuals have a capacity to structure interactions with the environment in ways that facilitate flow. Individuals who acquire certain “metaskills” might be less at the mercy of the environment for opportunities to experience flow. The development of such capacities empower students in a double sense: by fostering intrinsic enjoyment of learning and by increasing the likelihood of deriving experiential rewards from pursuits outside of the classroom. Individual differences such as cognitive ability, motivation, self-efficacy, attributions, and attitudes affect learning outcomes.

Studies have found that aptitude and motivational level were found to be the most consistent predictors of trainee performance--even greater than course content variables. Whereas ability is a somewhat stable attribute, other variables are more malleable, including motivation to learn, self-efficacy, and fairness perceptions. Motivation affects whether someone will participate in a learning situation, the amount of effort, and whether what is learned will be applied (Quinones, 1997).

The Contextual Level

Contextual levels of motivation refer to general areas of life such as work, education, interpersonal relationships, leisure and sports, and religion. Individuals differ in motivation towards general life contexts. Global motivation will act as a natural driving force for being interested in a few, many, or all contextual areas. Academic motivation might well be considered a subset of the educational context. Some individuals may have

motivation towards learning, but may prefer not to experience this motivational drive within the realm of traditional education. Some individuals disparage formal education, preferring to learn on their own. They might be engaged with educational programs, read books, interact with others who are more knowledgeable, and explore on their own. These individuals would be considered very motivated, in contrast with some students who show little or no interest in learning inside or outside the academic environment.

The Situational Level

Individuals find some situations more motivating than others and this holds true for instructional situations. For example, the individual may have a lack of interest in the subject matter, dislike the instructor, find the coursework too difficult or too easy, or feel uncomfortable with the social aspects. Any change in the learning situation may constitute a change in learner motivation. The relationship between the situational and contextual levels is considered recursive. Studies indicate that during early adolescence motivation towards education tends to decline. During the middle grades, students often exhibit a disturbing downturn in motivation (Anderman & Maehr, 1994). The shifts in engagement that occur can have serious and enduring effects.

Postulate 3.

Motivation is determined by social factors and top down effects

from motivation to the next level up in the Hierarchy

Contrasting or opposing motives can exist at the same (Boshier, 1985; Houle, 1961). The complexities involved in human motivation are enormous. External factors interact with internal motivational predispositions from genetic, personality, and environmental contributions. Reality and perceptions of reality will differ from person to person, from one context to another, and within contexts from situation to situation.

Situational factors interact with individual genetic and personality traits that affect motivation. Instructional situations have been researched extensively. Broad theories based on such research have resulted in helping educators understand how to make instructional situations more motivating to learners. The concept of human needs and self-determination theory provide a basis for specifying conditions that facilitate motivation and performance (Deci & Ryan, 1991). Individuals thrive when psychological needs for competence, relatedness, and autonomy are satisfied.

Social Factors. The relationship between social motives and social goals with motivation and achievement in school are complex. Social guidance and cooperation are now recognized as fundamental for motivation. Social cognitive theory (Bandura, 1986) refers to the self-system that enables individuals to exercise control over their thoughts, feelings, and actions. Self-efficacy involves the learners' belief in the ability to do something, regardless of whether or not this belief matches reality. Self-efficacy refers to personal beliefs about the capability and control over the course of action. Self-efficacy beliefs are sensitive to contextual and situational factors (Pajeres, 1996). Furthermore, research shows direct links to SRL and academic achievement (Garcia & Pintrich, 1994; Pintrich, Brown, & Weinstein, 1994; Schunk & Zimmerman, 1994).

Possible Selves refers to aspects of the self-concept that represent what individuals would like to become, could become, or are afraid of becoming. As a link between cognition and motivation, possible selves can have a powerful influence on motivational behaviors (Anderman & Maehr, 1994; Schunk & Zimmerman, 1996). Human modeling can offer learners a set of external conditions for altering or establishing attitudes (Bandura, 1986; Gagne', 1985). Learners modified expectations of themselves after observing the behavior of models with whom they could identify. Social interaction can

pique curiosity and encourage further exploration. Attention to other perspectives and lateral thinking occur. Peers provide models that others can emulate. Peers provide benchmarks for monitoring accomplishment. Standards and feedback provided by peers are often more powerful than influential others (family, instructors). Persistence can be enhanced when working with others. Productive social interaction promotes positive concepts about an activity and increase effort. The purpose of a social goal focuses more on intentions or personal commitment rather than ability and may be differentiated based on orientation--for social responsibility or for social interaction. An iterative process of peer influence seems to exist and the overall effect may be positive or negative (Urdu, 1997). When social goals interact with achievement goals, they will either converge or cause conflict for the student. This conflict may increase with age as conformity with peers becomes more important during adolescence. A variety of factors may affect the social goal orientations that students develop and pursue. The interface of antecedents and consequences is likely to be dynamic and recursive. Social components must be considered integral to any theory designed to explain academic achievement motivation and behavior of (Bandura, 1986; Pajeres, 1996; Urdu & Maehr, 1995).

Attribution. Attribution research is related to self efficacy and LOC in that it seeks to understand individuals' perceptions of their own effectiveness, abilities, and competence. It doesn't fit neatly at one of the hierarchical levels, but rather relates to perceived competence at each level. Some individuals hold onto negative attributions even when they have had positive experiences. It is believed that some individuals are prone to strategies of self-handicap. Students may purposely, yet subconsciously, set up difficulties (time constraints, situational problems) as a precaution to provide an "excuse" other than their own failure.

Related to LOC, attributions describe how the individual perceives personal competence and control. Lack of effort is considered under the control of the learner and specific, whereas lack of ability is considered uncontrollable and stable/global (Weiner, 1994). Weiner depicted a bidirectional interplay between social and personal theories of achievement. For instance, teachers may subconsciously consider functional goals of evaluation and personal motivation. Where goal attainment seems unlikely, the teacher may respond in a sympathetic manner, which may lead to a response of shame, and perhaps less effort on the part of the student. Inferences of responsibility require that the person being judged had some control over the aspect being judged. If students fail because of lack of effort, rather than lack of ability, the response towards those students will be that they were personally responsible. Individuals with ability will be treated differently than those without ability and will react differently. Lack of effort attributions may increase performance, whereas lack of ability attributions may decrease performance. Choice leads to commitment, deep involvement and strategic thinking with tasks. When learners are allowed to pursue personal goals, interest will be promoted. Students tend to exhibit increased motivation in open activities. Heckhausen (1991) explained that the fundamental issue in attribution research is how people explain events and circumstances.

Competence. Aptitude is a broad multivariate concept that encompasses intellectual abilities, personality characteristics, and cognitive styles. Learners' perceived competence plays a central role in feeling capable and having control over outcomes in a situation. Outcome expectations must be met for learners to continue willingness to expend effort on a learning task (Driscoll, 1994). Self-efficacy (Bandura, 1986) involves a learner's belief in his/her own ability to do something, regardless of whether or not it is true. Self-efficacy can be improved through performance accomplishments, vicarious

experiences, verbal persuasion and physiological states. Still, situations can be perceived as unmotivating to competent learners who feel they are being controlled or externally regulated (Deci & Ryan, 1991).

A study of more than 6,000 students (McCall, Evahn, & Kratzer, 1992) compared whether underachievers were different than comparison groups on a large number of variables measured during high school. In summary, underachievers were dramatically less likely to attend a college or university, and, if they did attend, they were much more likely to drop out before graduation than students of comparable mental ability who earned high school grades. It was also found that underachievers had lower opinions of their abilities, took fewer academic subjects, participated in fewer activities, held fewer offices in extracurricular activities, and had lower educational and occupational desires and expectations. An attempt to define different qualitative syndromes of underachievement was unsuccessful. A common thread for underachievers at a strictly behavioral level was a failure to persist in the face of challenge and adversity. Underachievers did not persist in completing college, sustaining a marriage, or retaining a job as long as others with either the same mental ability or the same grades. They seem to lack perseverance.

Underachievers (Barkowski, Carr, Rellinger, & Pressley, 1990) and educationally disadvantaged adults (Kerka, 1988) tend to lack self-confidence and self-esteem, and may have developed "learned helplessness." They may have negative attitudes toward education. They often need basic skills. They may not believe that their knowledge, skills, and experiences are the product of their own ability and effort.

Goals. In the Hierarchical Model, the dimension of motivation indicates the type of goal. Mastery or learning goals would be considered intrinsic; whereas, performance goals would be considered extrinsic motivation. Ames and Ames (1992) posited three

motivational systems related to classroom structures. Goal structures influence the relevance of performance information cues, the affective value of success and failure, and the perception of individual differences. A competitive goals structure promoted egoistic or social comparative consequences. A cooperative structure elicited moral orientation. An individualistic structure evoked an achievement-mastery orientation. Mastery goals are associated with a wide range of motivation-related variables that promote positive achievement activities. Performance goals, on the other hand, threaten self-concept of ability when effort does not lead to success. Ames and Ames (1992) advocated the design of tasks and learning activities, evaluation practices, use of rewards, and distribution of authority or responsibility that lead to mastery goal orientation. Effort and outcome should covary for mastery goals in order for achievement-directed behavior to continue over time.

For some learners, achievement goals may enhance interest. Two studies were conducted to examine performance and mastery achievement goals for students playing pinball. Harackiewicz and Elliot (1993) predicted that performance and mastery goals would moderate effects of achievement goals on intrinsic motivation; that achievement-oriented individuals would enjoy activities performed in performance goal situations emphasizing ability assessment, while individuals low in achievement orientation would enjoy the mastery goal orientation. Some were assigned a mastery goal (learn to play and improve) and others a performance goal (to be compared with others). A control group was instructed to just try out the game and see what they thought. Achievement goals did not differentially affect intrinsic motivation. Effects were moderated by individual differences in achievement orientation. Those low in achievement preferred mastery goals, while the performance goals raised interest for achievement-oriented individuals.

Koestner and Zuckerman (1994) showed the similarity of these two motivational frameworks in accounting for individual differences in achievement behavior. They found that autonomous college students are likely to adopt learning goals and report high confidence in their academic abilities much like the mastery-oriented individuals described by the social-cognitive theory. Controlled students tend to adopt performance goals and report high levels of confidence in their ability. Intent on proving they are competent, controlled individuals may respond to negative feedback with higher motivation. Impersonal students are more likely to possess the classic helpless pattern of performance goals and low confidence in their academic abilities.

The strength of association between need for achievement and locus of control (nAch and LOC) discussed previously does not hold true in educational settings (Riipinen, 1994). One possible explanation for this inconsistency is that situational cues may control achievement-striving behavior. Other factors such as gender, age, race, or other needs of the individual may mediate nAch and LOC. A study by Riipinen (1994) tested the strength of extrinsic needs on perceived LOC. The need for security, the external need used in the study, was a more important and independent predictor of LOC than were intrinsic needs. Occupation and age were important moderators of the association between needs and LOC. Results indicated that the association between an intrinsic need and LOC cannot be comprehended without considering extrinsic needs as moderators of the association. LOC may be distorted by situational factors.

Looking at attribution theory and perception of the locus-of-causality as internal or external to the action, deCharms (1968) predicted a paradoxical effect of extrinsic reinforcer on an intrinsically motivated action. The logic was based on if an action were freely initiated by choice, then discovered by someone else who desires the actor to do

the action so much that the person would be rewarded for doing it, then the actor may lose the feeling of freedom, ownership, and choice. This hypothesis has been given dramatic support, an apparent contradiction to strict reinforcement theory. The curvilinear hypothesis looks at the relationship between classroom structure and pupil motivation. The right amount of structure should enhance motivation; too structured, or too unstructured, and motivation will be inhibited. Having fun is not the only reason students voluntarily engage in tasks; students also voluntarily engage in tasks that are important to them. Understanding the perceived importance of a task—its value, meaningfulness, and utility to the person—is at the heart of facilitating identified regulation in others (Reeve, 1996, p. 51).

Ainley (1993) researched students' differing styles of engagement with learning resulting from the combination of student beliefs and goals. The interdependence of the goals that guide learners and the set of beliefs they have about themselves as learners are intertwined. Students simultaneously hold beliefs about many aspects of learning—the usefulness of pursuing ideas, the value of spending time on homework vs. social or sports activities. Deep, achieving, and surface approaches were distinguished using the Learning Process Questionnaire; the students' general construction of goals in learning was assessed. Ainley compared the deep and achieving approaches to mastery and performance orientations. At a different level of task specificity, these approaches resemble task mastery, ego/social, and work avoidant goals described in other research. Ainley predicted groups of students with similar ability levels (using a measure of general ability) would display different styles of engagement with learning that would result in achievement differences (measured by final grades awarded in 11th and 12th grades). A cluster analysis was conducted on the research sample ($n=137$), and six styles of

engagement, deep or surface approaches to learning, were tied to students' beliefs and goals.

Several recent research studies with high school and college-level students have begun to look at various variables that may impact academic motivation of high school and college-level students. High school math students were researched from a multiple goals perspective, including learning goals, future consequences, and pleasing others (Miller, Green, Montalvo, Ravindran, & Nichols, 1996). They looked at engagement of learners to determine whether goals besides learning and performance interacted with perceived ability. This research confirmed that learning goals and perceived ability contribute to more self-regulatory learning but two other goal variable--pleasing the teacher and future consequences--also explained unique sources of variation in self-regulation. Perceived ability, effort, and future consequences accounted for 40% of variance in achievement.

Interest. Interest and motivation are inseparable (Tobias, 1994). Instructional situations will be more or less motivating simply because of individual interest in the subject. There is a substantial linear relationship between interest and prior knowledge; the construct of interest is often confounded with prior knowledge. Little is known about the specific cognitive processes engaged by affective variables; however, working on interesting materials may engage deeper cognitive processing, arouse a wider, more emotional, and more personal associative network, and employ more imagery. Situational interest, elicited by aspects of a situation, such as novelty or intensity, or by the presence of a variety of human interest factors contribute to the attractiveness of different types of content.

1. Interest and intrinsic motivation are virtually synonymous.

2. Interest seems to be stable and long lasting among adults. Therefore, adapting instruction to student's interests may have positive motivational characteristics for long periods of time.

3. Interests are ubiquitous. Everyone is interested in something.

4. Investigations of interest have face validity; it has long been assumed people work harder and learn more on tasks related to their interests than on others.

5. Studies of interest help establish a much needed link between motivational research and cognitive processing.

Curiosity. The relationship of curiosity, motivation, and flow (Csikszentmihalyi, 1990b) was explored by Rotto (1994) who found a linear relationship between uncertainty and curiosity. Subjects, for instance, tended to remember the most difficult words on a recognition test. Human beings are innately attracted to tasks that possess an optimal level of uncertainty and unpredictability; however, large discrepancies may arouse anxiety. People also adapt rather quickly to surprising events. Curiosity must be sustained to remain motivational. Problem-based situations, for instance, can provide for a deeper level of curiosity which can be resolved only by knowledge-seeking behavior. The successful video-based lessons created by the Cognition and Technology Group at Vanderbilt (CTGV) were predicated on students' finding solutions to complex and realistic problems (Driscoll, 1994).

Challenge. People will be more engaged in activities when challenges are in balance with skills or abilities to respond. When challenges exceed ability, the result will usually be frustration, worry or anxiety. Studies on goals and effect on motivation indicate that challenging, proximal goals contribute most to motivation and performance (Driscoll, 1994).

Postulate 4.

There is a recursive bottom/up relationship between motivation at a given level and motivation at the next level in the hierarchy.

The hierarchical model depicts a top-down effect from motivation (global affects contextual; contextual affects situational). However, the model indicates a fourth recursive relationship among the levels. It is expected that situational motivation on a longitudinal basis can produce recursive effects on the related contextual motivation. Vallerand (1997) posited that global motivational disposition may have positive or negative affect on contextual motivation. Continued positive or negative experiences across contextual levels may also have recursive effects on global motivation. Contextual motivation may be reflected as positive or negative affect at the situational level. Likewise, recursive effects may take place at contextual levels as a result of exposure to positive or negative situational experiences. The original design of this study was to provide repeated situational experiences and evaluate the possibility of change in academic motivation. The notion of context has become more prominent in the field of cognition. Real-world actions are situated and, some would argue, understandable only in relation to the context in which they are embedded.

Postulate 5.

Motivation leads to important consequences

Motivation brings cognitive, affective, and behavioral consequences that can be positive or negative in nature. Positive cognitive consequences might include improved memory, performance, or transfer of learning. Affective consequences from academic motivation might translate into happier, more satisfied learners. Behavioral consequences of academic motivation might include improved attendance and attention. Positive

academic situations will result in positive consequences. Conversely, negative academic situations will likely result in negative consequences. Postulate 4 indicates that the process will tend to be somewhat cyclical and that repeated situations can affect the contextual level of academic motivation as indicated by the following studies.

A study of 321 adult male undergraduates aged 25 or (Brown & Robinson, 1988) examined the differences between adult males who continued in postsecondary enrollment and those who dropped out. Subjects were interviewed 2 years after a target enrollment semester. Guided by a retention model, data was gathered to describe subjects' characteristics, perception of goal commitment, institutional commitment, academic integration, social integration, and role conflict. Cross-tabulation and principal components analysis produced factors which were used in discriminant analysis. This analysis found that goal commitment, academic integration, and social integration were significant factors, predicting 81.4% of the cases who continued rather than dropping out.

Academic procrastination may be related to situations involving external regulation of learning. Mulry, Flemin, and Gottschalk (1994) studied 84 undergraduate procrastinators who were provided with either paradoxical or self-control treatments. Students with low situational reactance showed reduced procrastination; whereas, students who perceived a greater loss or threat to one's freedom reacted with efforts to restore lost freedom and to resist externally imposed limitations. Reactance is considered a dispositional attribute and a situation-specific response. The trait phenomenon of reactance varies among individuals. Some individuals exhibit reactant behaviors across many situations, resisting outside help. Paradoxical techniques (similar to reverse psychology) may be more effective with individuals who resist suggestions that a problem is controllable.

To examine the relation between experience while doing schoolwork and scholastic achievement in natural settings, Csikszentmihalyi, Rathunde, and Whalen (1992) gathered data from teenagers who carried an electronic pager and answered questions about thoughts, activities and moods whenever they were signaled. The research indicated that studying and schoolwork in general were among adolescents least rewarding activities. When in class or doing homework, subjects reported low intrinsic motivation and negative experience. Previous studies showed high achievers enjoying schoolwork 40% of the time compared with low achievers who reported 15% of the time. High achievers were anxious about 30% of the time compared with low achievers who were anxious more than 50% of the time. Adolescents and young adults with high need for achievement (nAch) are not always above average in academic work. Their interest and skills are often found in mechanical and constructional.

Individual and Situational Aspects of Academic Motivation

Many studies focus on existing motivational style and effect on performance. Researchers have begun to find motivational styles that predispose individuals to engage in activities with a given orientation. Personal motivation is different in different situations (Paris & Turner, 1994). Motivation is contextualized because of the unique cognitive interpretations individuals bring in terms of events, goals, and possibilities for each situation. Learners may conceptualize or misconstrue meanings of classroom activities. These conceptualizations will influence their motivation to learn. For example, individuals may react differently to a competitive vs. a non-competitive event. Competing motives, sometimes based on extenuating circumstances, may also impact the learner's performance in a specific context (Ames & Ames, 1992; Harackiewicz & Elliot, 1993).

Reward, Reinforcement, and Feedback

It is important to understand the role of reward, reinforcement, and feedback and its impact on learning and motivation. The use of incentives are often used in educational situations (Reeve, 1996). A meta-analysis on the effects of reinforcement and reward on intrinsic motivation (Cameron & Pierce, 1994, 1996; Pierce, 1994) and the responses to this meta-analysis (Kohn, 1996; Lepper, Keavney, & Drake, 1996; Ryan & Deci, 1996) demonstrate the conflict in this field of research. The issue lies with the role of reinforcement which may have varied effects based on the individual and situation surrounding their administration. Cameron and Pierce (1996) argued that the meta-analysis indicated rewards for completing work, solving problems successfully, or attaining a certain level of performance are effective. Rewards would be perceived as negative only under a highly specific set of conditions.

From another perspective, reward may be viewed as serving three distinct functions--an instrumental or incentive function, an evaluation or feedback function, and a constraint or social control (Lepper et al., 1996). Reward may change how an individual perceives an activity. The effect of reward becomes contingent on what the reward is, how it is delivered, and how it is perceived. The reward may influence an individual's expectation for continued reward for engaging in the activity. The reward may impact an individual's sense of personal competence and mastery. The reward may effect an individual's attributions of personal control versus extrinsic constraint. Overreliance on outer motivational resources regulates behavior rather than considering the needs, cognitions, and emotions of each student.

Strategies in which one person tries to trick, force, make, coerce, pressure, or otherwise manipulate others into doing what they would otherwise have no interest in

doing has little to do with motivation. Motivating others is not about control, manipulation, or putting students on the right track (Reeve, 1996, p. 220).

Although cognitive evaluation theory (Ryan & Deci, 1996) goes beyond a theory of rewards, it addresses the complexity of factors affecting perceived competence and perceived autonomy. Expected tangible or task-contingent rewards may decrease intrinsic motivation; unexpected tangible or task-noncontingent rewards may not. Verbal rewards may increase intrinsic motivation if not perceived as manipulative. Crossover effects may occur based on individual differences in aptitude or gender, or because of other variables such as teacher effectiveness.

Potential for Change in Motivation

Change is a tricky business. In spite of overwhelming data about health-related topics, many people continue to smoke, eat and drink less nutritious substances, and fail to exercise. Some individuals may be sufficiently motivated to change their behaviors, while others are not. These examples are provided to indicate that change in academic motivation may be similar. For instance, most students are certainly aware that they should study, attend class, and stay awake; yet, they find it difficult to find the motivation to do so. Pajeres (1996) recommended that research strategies beyond survey type investigations are needed to provide practical, relevant, and theoretical insights, particularly in exploring choice, persistence, and perseverance.

The well-known Hawthorne effect is the only generalization about change that is readily accepted (McClelland, 1995). A tendency exists for those who know they are on trial or part of a new experiment to work harder or learn more. Positive findings often result from programs headed by an enthusiastic person concerned to try something that

will be effective, who is convinced that an approach will work. This may represent an external influence on learner motivation.

According to deCharms (1968), motivation cannot be trained or taught; specific methods do not work. But, teachers can enhance motivation by going a step beyond teaching facts, by doing something that involves thinking and doing. deCharms calls this "Personal Causation," intentionally producing a change by incorporating habits so that they can be used in action. Knowledge is learned so that it can be used to guide action. Agency is the reasonable use of knowledge and habits (learned responses) to produce desirable changes. Agency, or knowledgeable doing, combines habit and knowledge. Motivation plays a key role; the agent must feel he or she caused the desired change; otherwise, the person will feel like a "pawn."

Students may not become more interested in an activity or become intrinsically motivated, but may internalize the value of learning, achievement, and accomplishment (Deci & Ryan, 1991) and become more willing to invest effort because of its personal value. The concepts of extrinsically motivated behavior have been treated as individual difference variables. Little work has been done on developmental aspects of these styles; development of readiness may be part of a developmental sequence. Although McClelland (1995) believes motivation to be a trait with dimensions of the personality driving behavior and experience, he continues to work with people to change internal psychological needs.

Hancock (1994) investigated the conceptual levels of 63 West Point students with type of teachers' instruction patterns in a course entitled, "Motivation and Performance in Organizations." Neither conceptual levels nor teaching strategies alone accounted for variations in students' motivation to learn in the classroom. Low-conceptual-level

students preferred direct instruction while high-conceptual-level students were more motivated when teaching methods were low in structure.

The feasibility of identifying and placing students in classes that might be preferred by them may be considered more student-centered, but is also somewhat unrealistic. In addition, even if educators were able to develop and implement strategies that are best suited for individual learners, such accommodation may not be in the best interests of the learner. Rather than matching instruction to learner traits, Messick (1976) proposed that learners be challenged to apply methods that may not fit their preferred or most efficient style. Challenge-matching would require learners to adapt to instruction, rather than having the instruction adapted to the learner, thereby acquiring important life skills. Just as learners may have different learning styles or multiple intelligences, it makes great sense that learners should have varying degrees of intrinsic motivators for different subject areas. People differ in what activities give them enjoyment and in how often they get intrinsic rewards from what they do. The issue of enjoyable activities tends to be framed in terms of explaining individual differences in the intrinsic motivation to engage in specific, societally-valued pursuits such as work. Csikszentmihalyi (1992) recognized that society demonstrates its values when sports feats are given far more recognition than intellectual or artistic talents.

Metacognition. Motivating hard-to-reach students in the classroom can be frustrating to teachers who must deal with time constraints, increasing numbers of students in the classroom, individual learning and emotional needs, and heavy accountability demands from others (McCombs & Pope, 1994). Teachers may not be aware of the nature of motivation or how they might help students develop or enhance motivation. Learners benefit from a greater sense of personal control by engaging higher

levels of self awareness or consciousness through higher level processes such as metacognition (ability to think about one's own thinking). Individuals can be taught to understand and control their thinking, rather than be controlled unconsciously. Winert and Kluwe (1987) pointed out the similarity of variables in metacognitive and motivation research. Connections between research on cognition, metacognition, procedural skills, and motivational factors are necessary to explain individual differences, determinants of learning activities by task types, and learning by doing or doing in order to learn. Knowledge and control over thinking has been termed metacognition. Metacognition is considered a second-order cognition: thoughts about thoughts, knowledge about knowledge, or reflection about actions. Metacognition is the management of one's own thinking processes to allow for an increase in learning. Metacognition is "thinking about thinking" and figuring out what one knows and what one needs to know to solve a problem. Metacognitive strategies include connecting new concepts to previous knowledge, purposefully selecting thinking strategies to meet the learning task at hand, and monitoring and evaluating one's own thinking processes. Metacognition is often regarded as referring to general and flexible knowledge that is not content specific (Winert & Kluwe, 1987).

Effective learners operate best when they understand their own strengths and weaknesses and are able to assess the best choices from a variety of strategies for learning. Metacognitive skills are most helpful when habitual responses are not successful. To begin using metacognition in academic situations, students must first become aware of how academic situations affect motivation. The strategy of metacognition as applied to motivation would facilitate internalization of this process. Guidance in recognizing and practicing metacognitive strategies help students learn how to solve problems throughout

their lives. Metacognitive strategies are essential for the 21st Century as they enable students to successfully cope with new situations.

Schunk and Zimmerman (1994) pointed out that there is a need for multiple experiences in live social settings for self-regulatory processes to be acquired and internalized. Self-regulation may be acquired in stages through a process referred to as internalization; individuals gradually adopt or internalize a value or regulation (Reeve, 1996).

Transformative Learning

Transformative learning has been defined as the “development of revised assumptions, premises, ways of interpreting experience or perspectives on the world by means of critical self-reflection” (Cranton, 1994, p. xii). Transformative learning has been described as a painful process (Mezirow, 1991). Learning is described as being threatening or anxiety-provoking for adults. To avoid anxiety or fear of change, some individuals may resist and remain in what Prochaska, Norcross and DiClemente (1994) called the precontemplation stage of a transtheoretical change model. Others may move through stages of change, but may not reach a level of permanent change. Wlodkowski (1989) observed that a cognitive shift can take place when adult students take a course or participate in a required training program. They may begin with resistance but may begin to accept and actually begin to value learning.

Self-Regulation and Self-Direction

Individuals who possess generalized skills for approaching problems and for monitoring performance have been classified as self-regulated (Gagne' & Glaser, 1987). These generalized skills include metacognition, sense of priorities and time, ability to sense organization or inconsistencies among resources. Self-regulation depends on

individuals knowing where they are in relation to where they want to be. The personal attributes of SRL are often described in terms of knowledge base, adaptive motivational beliefs, and appropriate use of cognitive and metacognitive strategies for learning. These attributes are usually assumed to apply across all disciplines and contexts but this is an area of continued research. Driscoll (1994) pointed out that in order for attitudes to be learned and expressed, learners must possess a variety of related concepts and information. Learners must explicitly understand how and why motivation works so that they are able to internalize the reasons for applying motivational strategies. Reeve (1996) emphasized that for beliefs and regulations to be internalized learners must understand and value the significance, purpose, and utility of thinking or acting in a particular way within that social context.

Piaget (1971) referred to life as a continuous self-regulatory process and conceptualized the Theory of Regulation to account for the influence of both conscious and unconscious regulatory functions:

1. Autonomous regulation refers to any “knowing act.” Learners continually regulate their performance, fine-tuning, and modulating actions.
2. Active regulation is more like trial and error where the learner constructs and tests “theories in action.”
3. Conscious regulation involves the mental formulation of hypotheses capable of being tested via imaginary confirmatory evidence or counterexamples.

Possible Selves refers to an explicit strategy for viewing aspects of the self-concept that represent what individuals would like to become, could become, or are afraid of becoming. As a link between cognition and motivation, possible selves can have a powerful influence on motivational behaviors as individuals become aware of similarities

and differences between the present situation and present self and a possible situation and possible self (Anderman & Maehr, 1994; Pintrich et al., 1994; Schunk & Zimmerman, 1994). Vanderstoep, Pintrich, and Fagerlin (1996) studied the attributes of college students and SRL. Students who did well in a course were found to have adaptive motivational beliefs, were high in self efficacy and task value beliefs and reported using more cognitive and metacognitive strategies.

Transtheoretical Change Model

Phenomenologists would describe the way people live their lives as a natural attitude, a rather “taken for granted” state of being (Marton, 1997). Unless something occurs that causes reflection on some aspect of reality, the natural attitude will continue.

Prochaska et al. (1994) noted a consistency in psychotherapy and intervention strategies. Regardless of the strategy, a pattern existed in the change process. The Transtheoretical Change Model classified five consistent stages of change:

1. Precontemplative precedes conscious awareness of the need for change or factors associated with how to change.
2. Contemplative is the stage where awareness and consideration of change occurs.
3. Preparation for change takes place.
4. Action to initiate change occurs.

Maintenance of the change is monitored to prevent remission--actively at first and less often over time. Individuals move through stages sequentially, but may “backslide.” While many people have successfully changed as a result of being exposed to this change process, some individuals are unable. Prochaska referred to those who could not change as Unables. Some appeared limited by their ability to understand; they had perceptual

blindness. Some are unable to move from contemplation to preparation or from preparation to action. They might try to rationalize that the change wouldn't work for them. Some were unable to comply; they were unable to translate awareness into sustained action. Others are unsuccessful in the first and perhaps subsequent attempts to change, but eventually succeed in reaching and maintaining the changed behavior. Baumeister, Heatherton, and Tice (1994) identified three components of self-management:

1. Standards. The presence of short or long-term standards (short and long-term goals) appear necessary. Misregulation may occur when individuals lack or set inappropriate or unrealistic standards. Others may have conflicting standards which may reduce the ability to control impulsiveness.

2. Monitoring. Individuals must be able to monitor; that is, they must be able to compare their performance with standards. Self-regulation may break down when individuals fail to monitor their own behavior.

3. Strength. Individuals may fail to override actions or desires due to tiredness, stress, endurance, or emotional distress.

Student academic stress may be reduced and controlled through effective time management and study techniques. Unfortunately, even when students know these techniques, they often ignore them and find themselves in great distress before exams. Study and social activities have quite different consequences (Brown, 1991). SRL demonstrates effective strategy use and control of motivation. The complexity of this area of research is equally complex. Zimmerman (1994) pointed out that SRL is very complex. In addition to metacognitive knowledge and skill, SRL also involves a sense of perceived control to regulate other sources of personal influence. Examples of this include

emotional, behavioral, and social-environmental sources of influence. SRL tends to be a long-term, social development process (Pressley, 1994).

Impact of Motivational Research on Instructional Technology

The field of instructional technology has recognized the importance of motivation in developing instructional materials. The Attention-Relevance-Confidence-Satisfaction (ARCS) Model (Keller, 1983, 1987) promoted motivational considerations in the instructional design process. The ARCS model of ensuring motivation in instructional design included the following components: acquiring the learner's Attention, making instruction Relevant, boosting Confidence, and achieving Satisfaction for learning. Research studies such as the one conducted by Suzuki (1993) have shown positive results when the ARCS model has been applied in the design of instruction.

Rezabek (1994) conceptually integrated Keller's ARCS model and Csikszentmihalyi's flow theory, with intrinsic motivation as a subset of motivation, as shown in Figure 4. Keller identified three major categories which form the backbone of his motivational theory as it relates to instruction: effort, performance, and consequences.

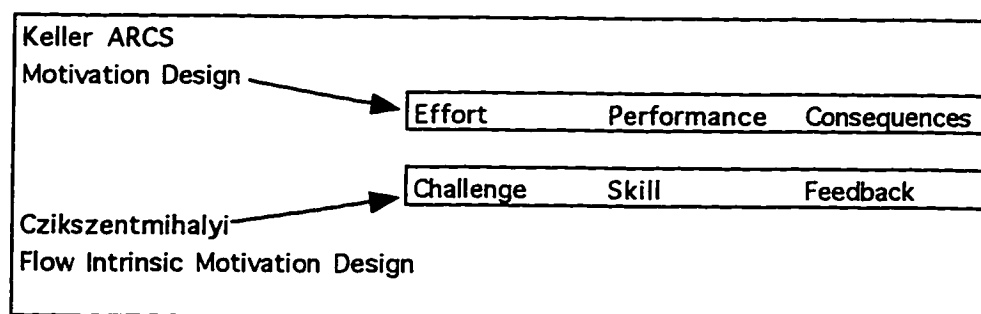


Figure 4.

Conceptual Fit Between Keller's ARCS Model and Csikszentmihalyi's Flow Model

Challenge. Goals, means and boundaries of the activity are clearly identified. Once the challenge has been set, learners should be given the maximum amount of freedom to explore within the boundaries of the activity. Goals for final outcomes should be clearly defined. The process, however, should be managed by the individual, not micro-managed externally.

Means. In addition to individual skill development, a supportive, information-rich environment will promote intrinsic motivation. Strategies that give the learner a greater sense of personal control and achievement will encourage individual initiative.

Feedback. General and specific strategies that enhance perceived competence (positive, not negative) occur naturally.

Instructional strategies that incorporate these prescriptions include hypermedia applications, simulations and games, and adaptive instructional systems. Rezabek (1994) envisioned an adaptive system that not only considered individual differences, but also accurately adjusted difficulty levels of instruction for a particular learner to maintain the optimal level of challenge. This could be accomplished by querying the emotional state of the learner (bored, anxious, etc.), or by analyzing content-centered responses to gain information about the user's motivational state.

Wlodkowski (1989) described the Time Continuum Model of Motivation that included six factors: attitude, need, stimulation, affect, competence, and reinforcement. Instructional designers would include motivational strategies and appropriate learning activities within the instructional plan in each sequence of instruction (beginning, concurrent, and ending).

Jonassen and Grabowski (1993) pointed out the major limitations of matching instruction and individual differences for a classroom of learners. Very few educational

settings would provide the extensive resources and sensitive instruction needed to match instruction to the specific needs of each individual. Instructional design and development that considers all of the possible individual differences and best match of instruction projected for all of the goals and objectives, even in a single course, would be highly impractical in terms of cost and may not be in the best interest of the learner.

Duchastel (1994) conceptualized a design process, Learning Environment Design (LED), that favors an approach of making opportunities for learning available and allowing the learner to take charge. LED involves four requirements: (a) access to information, (b) interest, (c) structure through mapping, and (d) regulation through assessment. Regulation would mediate the learning process so that interaction remains optimal. Duchastel mentioned that as yet LED has little substantial practical experience to support its potential.

Tessmer and Wedman (1995) stressed that the success of an instructional design effort will depend on the instructional context and design context. Together, these contexts influence the extent of success for desired change in performance. Richey (1995) advocated instructional systems design become more holistic to accommodate factors in a given situation. An iterative cyclical approach would better reflect the dynamic, unpredictable aspects of the learning process. Need assessment should move beyond determining requisite skills. The experiential background, attitudes, and interests of the learner should be considered as well as perceptions of the environment. A contextual analysis will help to determine essential physical and psychosocial factors at the pre-instructional, instructional, and post-instructional stages. This analysis would be used to make decisions regarding delivery, feedback, guidance, and management of instruction (Richey, 1995).

Rationale for Individualized Motivational Strategies Training

New methods of delivery have been devised and implemented based on research. Billions of dollars have been allocated for computers and educational software designed to make learning more enjoyable. More teachers have espoused constructivist learning approaches that provide students with choices, learning projects, and hands-on learning activities. However, educational change takes place slowly. For the most part, the educational environment has not changed significantly. Most classroom environments continue to use what Reeve (1996) referred to as outer motivational resources. These short-term inducements provide the performance results teachers (and faculty) need to demonstrate classroom management and to assign grades. These short-term solutions may benefit teachers in getting students to perform; but in the long-term, such tactics may shortchange students. Students may not become self-regulated because they have not been expected to tap into their own inner motivational resources.

The majority of educational and training environments have not been designed to satisfy innate psychology needs. The high cost and feasibility of matching models of instruction to accommodate for individual differences in training and educational settings is well recognized. Learners are conditioned by social and cultural influences to become more extrinsically motivated. As learners progress through school, they become accustomed to being told what is expected by teachers, parents, and employers. Learners are rewarded or punished for their efforts by grades, monetary or physical rewards, and external feedback. Many learners are poorly equipped with the attributes needed in a less-structured learning environment. When learners are exposed to more open, goal-based learning environments, many express concern about meeting others' expectations. Learners

want clarification on exactly what the instructor wants them to do and specifics on what might be tested or graded.

Based on a metaanalysis of research studies on study strategies, Hattie et al. (1996) found that self-directed programs resulted in more effective outcomes in performance, study skills, and affect than those directed by teachers. These effects were more marked on affect than on performance. Results improved when strategy training was used metacognitively, with appropriate motivational and contextual support. It was recommended that training be in context, using tasks within the same domain as the target content, to promote a high degree of learner activity and metacognitive awareness. Strategy training should be taught with understanding the conditions under which the strategy works. Directly addressing study skills seemed less effective than addressing performance directly. When the aim is to change students' attributions for success or failure, the importance of feedback on use of strategies will influence attributions more so than feedback on ability or effort.

A study that taught motivation explicitly, rather than trying to make instruction motivational, was designed to find out whether students could be trained to make instruction where they had little or no interest more relevant to themselves (Klein & Freitag, 1992). Students were trained to use relevance-enhancing strategies of experience, present-worth, and future usefulness. During the first week, 64 subjects were randomly assigned to a treatment or control group. Each group was provided with an instructional booklet. The treatment group completed a unit of instruction on self-motivation. The control group was provided with an instructional booklet on educational measurement. One week later, both groups completed a one-hour instructional booklet on accounting

concepts. Both groups completed an Instructional Materials Motivational Scale (IMMS). Results indicated students who were given self-motivational instructional task scenarios found more relevance than students not given this training. This study, however, included no pretesting. Students in the treatment group may have been more aware of what the researcher was looking for when posttested. In addition, there were differences in the immediate and delayed test results.

Scenario

Realistically, academic situations will not be conducive to all learners all of the time. Motivation to learn impacts the quality of learning that takes place. When students encounter less positive academic situations, those who are equipped with strategies to self-motivate will be more likely to react in ways that will make the situation and subsequent consequences more positive. When students enter college, those who have not learned to self-regulate will be at greater risk of dropping out or making poor grades. The ability to self-monitor and regulate motivation in academic settings is one aspect of self-regulation. This ability is also needed and desired in the workplace.

The motivational strategies training program (MTV 101) was designed for this research using a scenario approach. The complete program has been printed and is available in Appendix C. Each participant was hired by MTV 101 Studios to direct a film called Possible Selves. The script focused on the academic lives of two undergraduate students who were enrolled in a particularly difficult course. The main character, Chris, is introduced as a student who has problems with motivation. Throughout the film, Chris must make choices and deal with the consequences of those choices. In each scene, Chris faces temptations and demands that many students face. A supportive friend, Torrey,

wants to help Chris and shares motivational strategies. As the director, each participant was asked to think about what Chris would be thinking. Finally, participants read research-based motivational strategies and were asked to apply these strategies in their academic situations. The purpose for this research was to examine the potential for and process of change in academic motivation for undergraduate students who were identified as being less intrinsically motivated for going to college.

CHAPTER 3

FRONT END ANALYSIS

This chapter describes the research that was conducted to explore academic motivation for students enrolled in courses offered as part of Learning Support Programs (LSP) at a large urban university in the southeastern part of the United States. The research process consisted of: (a) ascertaining the motivational profile of the sample population of students enrolled in LSP courses; (b) identifying a subsample group of students whose motivation profile indicated intrinsic motivation for going to college was less than extrinsic motivation; (c) videotaping students from the subsample group as they interacted with the motivational strategies training program, MTV 101; (d) analyzing students' interactions with the program to determine the effectiveness of the MTV 101 program for appeal, learnability, and usability; and (e) analyzing students' interactions with the program from the perspective of the Hierarchical Model of Intrinsic and Extrinsic Motivation.

Separate sections address the purpose, the research questions, the construct validity of the MTV 101 program, the pilot study, and the study sample population. The research design, instruments, procedures, and plan for data analysis were formulated based on the research purpose, questions, and the study sample population. A final section addresses modifications to the proposed research plan that became necessary.

Purpose

The primary purpose of this research was to explore the potential for and process of change in academic motivation. Change begins with awareness; therefore, this research included the design, development, implementation, and evaluation of a motivational intervention, a computer-based motivational strategies training program (MTV 101). The program was designed for undergraduate students whose academic motivation profile indicated a less self-determined motivational profile (more extrinsically than intrinsically motivated). The fundamental research question for this study was: "Can academic motivation change as a result of learning about and applying motivational strategies in situated learning environments?"

Research Questions

Based on motivation research, the MTV 101 program was designed and developed as an explicit motivational strategies training program for students whose intrinsic motivations for going to college were lower than extrinsic motivations. The first research question concerned the quality of the program.

Question 1. What was the consensus by individuals with expertise in the fields of instructional technology and motivation on construct validity of the motivational strategies training program?

The next question pertained to the sample population of students. Prior to this research, the motivational profile of students enrolled in LSP courses was unknown.

Question 2. What was the motivational profile of students enrolled in LSP courses who completed the Academic Motivation Scale (AMS) and how did selected demographic variables (age, gender, or ethnicity) affect academic motivational profile?

The final two questions were based on the subsample group of students who would comprise the treatment/control groups for the motivational strategies training program.

Question 3. Was MTV 101, the motivational strategies training program, effective with end users in terms of appeal, learnability, and usability?

Question 4. What was the potential for and process of change in academic motivation as a result of learning about and applying motivational strategies in a number of situated learning environments?

Evaluation

End users of a program provide useful feedback about instructional products. Experts, however, may be more qualified at assessing content and technical quality. Therefore, formative evaluation input from both experts and end users is recommended as part of the instructional technology process. Reeves (1983) recognized that “instructional design is as much an art as a science.” Furthermore, Reeves stated, “Evaluation cannot prove anything--it can only support or not support human conclusions and decisions” (p. 158). The human component further complicates evaluation as there are usually external influences affecting the decision-making process. The purpose of including evaluation in the instructional technology process is to provide timely, accurate feedback that will help to improve, continue, or expand instructional products through informed decision-making (Reeves, 1983).

Formative Evaluation--Construct Validity

Formative evaluation--construct validity (also called connoisseur-based studies) refers to feedback on a product by experts in given fields who examine developing materials from their particular area of expertise. Instructional products should be

evaluated and revised during the developmental stages to improve effectiveness and increase the likelihood the product will meet its goals (Flagg, 1990). Formative evaluation seeks to provide information about how the product, delivery method, or instructional design process might be improved. Formative evaluation activities are concerned with the accuracy and appropriateness of the content, the technical quality of the product, and the “learnability” of the instructional materials.

Guba (1971) succinctly stated that the purpose of evaluation is not to prove but to improve. Formative evaluation does not prove the program is the best solution. It does, however, provide feedback designed to improve the program. Construct validity of the MTV 101 program was conducted by individuals with experience in instructional design and development and from individuals with research interest in the area of learner motivation. Feedback on the formative evaluation form was also obtained. The form was revised to include open-ended text box areas to allow evaluators to make specific comments about the program. In addition, since the form had also been designed, evaluators were invited to comment on the form they were using to evaluate the program.

Results of Formative Evaluation—Construct Validity

More than 30 experts in the fields of instructional technology or researchers with interest in motivation were asked to conduct a formative evaluation of the MTV 101 program. It was recognized that such experts might not have time to do this, but that they or their colleagues might be interested in having students or a class conduct a formative evaluation of an educational product available online. Evaluators from around the world were able to access and evaluate the program remotely. While this was very handy, it was still difficult from the evaluator’s perspective. Evaluators were given an overview of what the program was about, its intended audience, how to access the program, and

instructions for downloading offline materials. Still, there were questions about how materials would be used by students or the scope of offline activities for students. One evaluator did not log-on and did not receive the personalized approach intended. Another evaluator expected the film metaphor to be more obvious. After completing the evaluation form, two of the evaluators continued e-mail dialog to further discuss the program. In addition to the four individuals who completed the online formative evaluation form, several others who were unable to complete the entire program or the form, were able to access the program and provided informal feedback (via e-mail) about the program. An undergraduate education student carefully proofread the program and offered suggestions about the dialog.

The four individuals who completed formal courseware evaluation of the MTV 101 program included:

1. An instructional technology faculty member from Australia.
2. An instructional technology PhD student from the University of Florida with interest in motivation and instructional design. His immediate professor, Dr. John Keller, has been cited in this dissertation. Keller's ARCS Model incorporates motivational considerations in the design of instruction.

3. An instructional technology PhD student from South Africa.
4. An education PhD student with interest in motivation and gender issues.

The time frame for conducting construct validity was limited to the time when the prototype of the program was ready and the beginning of the study itself. There is no doubt that more respondents were needed, particularly from the area of motivational research. A request for evaluators was made to a motivational listserv a month in advance. There were two responses to the message. One completed the evaluation; another had

planned to involve a class of students. This faculty person later communicated that the class had been unable to find class time afterall. Because there were so few respondents, it was difficult to establish consensus from formative feedback. There were varying opinions in several areas. For example:

1. Evaluation form. One commented that he liked the formative evaluation form, “IT is GOOD!” Another said, “This form is awkward to use.”

2. Appearance. One evaluator said that the background was “too much on home page;” however, another evaluator specifically mentioned “colour--attractive, graphics--good, screen layout--good.” Another informal comment on the background was that it was “psychedelic.” For one person this was cool; for another, it was distracting.

3. Course Design. Most agreed that course design was based on solid learning theory and principles and that activities provided sufficient practice (but were not so clear on feedback). The evaluators disagreed on whether “Navigation and functioning were user-friendly,” which included 1-Strongly Disagree to 5-Strongly Agree. They did not think the program’s form of delivery was superior; alternative instruction might be more effective. All seemed to recognize the internet provided an economical delivery method, however.

4. Copyright. The animated “director” received attention. One said, “animated character distracting.” Another said, “The animated ‘spot’ is cute, but do you have copyright clearance?” There were other informal comments on copyright for the animated dot which looked like it could be from 7-Up or M&M. Research on its ownership, including e-mail to both companies, indicated it could be a bootleg but it was not a copyrighted animation.

5. Learnability. Comments about the lack of explicitly stated instructional objectives were made by more than one evaluator. Responses on whether the difficulty level was appropriate, the breadth and depth of the content, or whether the target audience would have prerequisite skills all varied from 2-disagree to 5-strongly agree. Most seemed to find the scenario of scenes about college students an appealing method, but in some areas the dialog was criticized as somewhat stilted. Complete evaluations, including evaluators' comments are included in Appendix A.

Summary of Formative Evaluation—Construct Validity

The purpose of conducting construct validity of the MTV 101 program was to establish credibility of its educational value in terms of content and instructional design. The responses to the question "What did you like about MTV 101?" indicate that while there were differing opinions about the design of the program, it has educational value.

"I particularly liked the topic of motivational strategies," one evaluator stated. "There is a need for young adults to have assistance in this area."

One evaluator said he liked, "The underlying idea of motivating attention to the activities by empathising with similar characters," and even suggested, "Give the evil professor some lines."

Two evaluators mentioned the metaphor of "making a film" as appealing. The program is further described in Chapter 4 and a printed version of the program has been included in Appendix B. An informal evaluator commented on the method of using role playing. She said it was an excellent strategy that could be also be used in traditional classes, rather than passively listening to an instructor lecture about the need for motivation.

Construct validity of the MTV 101 program was conducted to provide timely feedback from individuals with expertise in the fields of instructional technology and motivation about the potential of the program prior to implementation. Construct validity was limited by the number of evaluation responses. Although unfortunate, it is not unrealistic as evaluation continues to be one of the most difficult stages in the ID process. Reeves (1992) recognized the design of the user interface and the motivation and expertise of users as two factors impacting the effectiveness of interactive multimedia. These constraints make it "difficult and probably futile to evaluate IMM outside the context of its use" (p. 47). Furthermore, Reeves pointed out, "individual differences among users with respect to aptitude, knowledge, skills, attitude, personality characteristics, previous experience, motivation, etc. must be accounted for in any evaluation" (p. 47). Construct validity provided useful information feedback; however, end-user feedback, as advocated by Reeves, provided the major focus for evaluation, analyzing interactions among individual differences, appeal of the program, content and learnability of the program, and the user interface.

Pilot Study

A pilot study was planned to evaluate the procedures and materials used in this research. In 1997, between winter and spring quarters, the pilot study was conducted. The pilot study consisted of the planned research sequence, squeezed into a shorter period of time. An attempt was made to use LSP students in the pilot study. The AMS was administered as the preassessment to more than 20 undergraduate students. Two students were identified as potential subjects based on results of the preassessment (extrinsic motivation was greater than intrinsic motivation). One of these students agreed to participate in the pilot study but did not show up for the appointment. The other

student was never reached (the telephone line was disconnected). Subsequent attempts to reach either student were unsuccessful.

The pilot study was conducted with three high school students, two females and one male. The AMS preassessment indicated these students were more intrinsically than extrinsically motivated. They would not have met the criteria as participants in the subsample for the planned study. All, however, expressed that academic motivation was sometimes a problem. Each pilot study participant was shown how to access the program using a web browser. Each was provided an overview of the program, was shown how to log on, and completed the first scene. All three high school students completed all seven MTV 101 modules within 4 to 5 weeks. Intervention took place when students had not logged on for more than one week. All three were contacted because of a period of inactivity. Each had reasons for not working on the program. One had interviewed for her first job, accepted the position, and began working. Another student had a lot of schoolwork such as final papers that were due. The other student was involved in sports activities. All finished prior to spring break. When all seven sessions were completed, students took the AMS as a postassessment. The two female students were interviewed after they had completed the program. The male student was unwilling to be interviewed.

Modifications Based on the Pilot Study

The pilot was very beneficial and provided a great deal of feedback. Corrections and slight modifications were made to the MTV 101 program and the proposed research design prior to the study. Improvements, based on the pilot study and from feedback by evaluators of the program, were implemented. As the pilot concluded at the beginning of Spring Quarter 1997, the Academic Motivation Scale (AMS) was being administered as a preassessment of students enrolled in LSP courses to identify the subsample group of

less intrinsically motivated students. Based on the pilot, slight modifications were proposed and approved for the actual study. These modifications were identified and implemented as follows:

Administer the AMS as a preassessment. It became apparent that it would be far less disruptive and more expedient to bring the instrument into the classroom than to logistically change the locations of several classes to meet for 30 minutes in a computer lab to take the AMS online. This would result in more than 20 hours of data entry; however, scheduling computer labs and moving classes was far less feasible.

Random sampling. The pilot did not include random sampling procedures. However, random sampling of matched pairs was planned for the study. The procedure for the study was to (a) identify potential subjects from combined scores for AMS subscales for extrinsic motivation--external motivation and amotivation compared with combined scores for AMS subscales for intrinsic motivation--to know, and intrinsic motivation--to accomplish; (b) match on age (traditional students 25 years of age and younger or nontraditional students over 25 years of age), gender, and ethnicity (African-American, Caucasian, and Other); and (c) compare representativeness of participants with the subsample group of less self-determined students in terms of age, gender, ethnicity, and if possible socioeconomic background.

Contact individuals. Each participant was contacted individually and an individual orientation was scheduled. Orientations were conducted by the researcher. The matched pairs selection process is included in Appendix C.

Schedule orientation. Orientations for MTV 101 were conducted in a conveniently located, state-of-the-art, internet-connected lab. Participants were shown how to access the program using an internet browser using the Uniform Resource Locator (URL).

Participants were shown how to set a bookmark and how to return to the program using a bookmark. The lab was located adjacent to the researcher's office so participants would be in close proximity if they experienced difficulties. Participants were shown where to turn in Weekly Progress Reports. They were also shown alternative labs in the building where they could work on the program. Students reviewed how to access the main page using an internet browser and the uniform resource locator (URL) rather than bookmarks. Students completed Scene 1 as part of the orientation to reinforce the orientation, to make sure they had no questions, and to review future planned activity.

Learner Control of Subsequent Sessions. During the pilot, two of the students completed 2 or 3 scenes at a time. This did not pose a problem, but they were less focused on applying a particular motivational strategy during the week. Participants were encouraged to try to complete one scene per week. If they were not on schedule and needed to catch up, however, they could do more than one scene.

Facilitation. One of the pilot students wanted a review of what to do at the beginning of each session. It was beneficial in terms of end-user feedback, receiving immediate opinions on any part of the program that might be confusing or unclear. She recommended I change "flunked out" to "failed," as that was "an '80's term." She also exclaimed "Oh that is SO true" a few times when she related to the content. Since the other two subjects in the pilot study did not request ongoing attention, this was not perceived as a potential problem for the study. The study had been designed to minimize the possibility of an enthusiastic researcher. Participants were told that the researcher/facilitator was available if needed and each participant was given alternative ways of reaching the researcher/facilitator. It was considered an interesting aspect to evaluate each individual's ability to be self-directed about participation, to consider individual

differences in the need or desire for social support, particularly when the person is less intrinsically motivated. The research included documentation of interactions with students. It had been expected that some of the interaction might be initiated by students.

Monitor motivational strategies training. During the pilot study, when a period of inactivity (more than one week) occurred, the researcher inquired about progress. In two of the pilot cases, the participants were personal acquaintances. One student started to have problems with time. She was involved in a school play, and then interviewed for and got her first job. She was quite busy and quite excited. After a few weeks, she was able to continue with the program. Another pilot participant completed the entire program from a distance. He was quite sporadic and had to be coaxed into finishing the program before Spring Break.

Offline Materials. The students in the pilot study were not very disciplined about completing or turning in off-line materials. In particular, one student pointed out that the Pro's and Con's were stupid--they weren't going to change from week to week, so why did she have to keep doing them? For the study, the Pro's/Con's requirement was reduced from weekly to three times--once at the beginning, once during Week 4, and once at the end. The offline materials were not expected to provide statistical measures. In fact, most of the offline materials were designed to encourage participants to continue thinking about and applying motivational strategies throughout the week.

Intervention. The pilot study indicated that subjects might need intervention. It was recognized that this study might be difficult to carry out without a facilitator. The students being selected were the least academically motivated. To prevent drop-outs, a structured system for intervention was implemented. Intervention took place on an as-needed basis and were documented. For example, an individual would not be contacted

unless he/she had not completed a scene for 10 days. The frequency of such interventions would be documented for each individual.

STEP 1: Call and inquire if there is any difficulty with the program or access.

STEP 2: Confirm the student is still participating. If not, find out why.

STEP 3: Find out when he/she intends to complete the next scene.

STEP 4: Call and inquire if the individual has not completed the next scene beyond 3 days of the intended date/time.

Incentive. The study was designed without external reasons for participating. In the pilot study and initially in the research study, no incentive was offered for participating in the program. The reluctance to attach an extrinsic reward for participating was eventually reconsidered and will be explained later in this chapter.

AMS Postassessment. It was planned that one week after participants completed the program, a postassessment would be given using the same instrument (the AMS) as the preassessment. The matched pair would also be asked to retake the AMS. It was planned that all AMS postassessments would take place prior to interviews to reduce the potential effect on AMS postassessment due to factors other than the MTV 101 program.

Interviews. Individual and group interviews were planned to take place after the program and the AMS postassessments were completed. Individuals who participated in the pilot study were interviewed after completing the program and the interviews were informative. The students who were interviewed had not heard of metacognition prior to this program, nor had they used the strategy to monitor motivation for academic work. One of the participants said she had begun using strategies from the program and was finding them to be helpful. She shared a story where she and a friend were supposed to go

to the library but her friend tried to talk her into going shopping instead. They compromised and did go shopping (they studied at the library the next day). Still, she recognized she was making a choice and had probably made the wrong choice. The program helped her realize that this friend often pulled her away from doing academic activities and that she allowed this to happen. Group interviews were also planned, but because of modifications to the study (explained later), these did not take place.

Summary of Modifications Based on Pilot. The changes planned and approved as a result of the pilot included: (a) minor improvements were made to the MTV 101 program, (b) intervention was anticipated and procedures outlined, (c) closer proximity to a facilitator was arranged, (d) amount of offline materials to be completed was reduced.

Study Population

Subjects were undergraduate students enrolled in Learning Support Program (LSP) courses at an urban university in the southeastern area of the United States. Students were heterogeneous with respect to age, culture, academic major, and socioeconomic background. LSP courses serve three groups of students: (a) students required to take LSP courses because they did not meet standards for regular admission, (b) students who are above system minimum requirements but are required by the institution to take LSP courses or other courses, and (c) students who volunteer to take LSP courses to prepare for regular college courses (Information Digest 1994-95).

Procedures

Academic motivation for students taking LSP courses was measured using the Academic Motivation Scale (AMS), a 28-item Likert-scale instrument measuring seven motivational constructs of intrinsic, extrinsic, and amotivation. In Spring 1997, 250 students enrolled in 12 sections of LSP courses completed the demographic information

page and the AMS preassessment. Each student was assigned a unique number that would be used to identify and later match AMS postassessment scores. Prior to filling out the information page and AMS, the purpose of the study was explained to students. Students were also asked to sign a Consent Form. The AMS, information sheet, and consent form are included in Appendix C.

Academic Motivation Scale: Reliability and Validity

In 1992, Vallerand et al. reported that prior to development of the Academic Motivation Scale (AMS), scales assessing motivation toward education did not assess all constructs and most were aimed at elementary and beginning high school students. The AMS addressed the need for a scale that measured motivation in postsecondary studies within the present theoretical framework. The AMS is based on self-determination theory and is comprised of 28 items that measure seven constructs of motivation. Three subscales measure intrinsic motivation (intrinsic motivation--to know, intrinsic motivation--to accomplish, intrinsic motivation--to experience stimulation. Three subscales measure extrinsic motivation (extrinsic motivation--identified, extrinsic motivation--introjected, and extrinsic motivation--external regulation). The seventh subscale measures amotivation.

The AMS has been tested for validity and reliability (Vallerand et al., 1992, 1993). Using appropriate cross-cultural procedures, the AMS was translated into English from the Echelle de Motivation en Education (EME), an instrument that had been developed and validated in 1989 in France. The translated version replicated the seven-factor structure of the scale and was assessed for reliability through confirmatory factor analysis. Results revealed satisfactory levels of internal consistency for the seven subscales. The fit indices for the final measurement model confirmed the seven-factor

structure of the AMS. Internal consistency of the subscales (Cronbach alpha) was assessed with values varying from .83 to .86 except the Identification subscale which had an alpha of .62 mean (also similar to results of the French version EME). Temporal stability over a one-month period was assessed with test-retest scores ranging from .71 to .83. The identification subscale values were .72 and .78 at the pretest and posttest, respectively. Factor analysis using LISREL confirmed the seven-factor structure of the AMS. Gender differences obtained with the EME were replicated with the AMS. Since its development, the AMS has been used in several studies, showing the impact of academic motivation on persistence in college courses (Vallerand & Bissonnette, 1992) and as a predictor of high school dropouts (Vallerand, Fortier & Guay, 1996).

Subject Selection

Scores from the AMS preassessment were used to identify a subsample group of the students enrolled in LSP courses. Combined scores for two subscales of the AMS (intrinsic motivation--to know plus intrinsic motivation--to accomplish) were compared with combined scores for two other subscales of the AMS (extrinsic motivation--external regulation plus amotivation). The subsample group consisted of those students whose combined extrinsic motivation/amotivation score was higher than the combined intrinsic scores as shown in Table 1. Those who were higher in extrinsic motivation than intrinsic motivation were considered the "less self-determined" subsample group of students enrolled in LSP courses from which subjects for the treatment and control group would be selected.

Experimental Design

The research was designed to test the theory that repeated positive situational motivation experiences would impact academic motivation at the contextual level. An

Table 1

Subject Selection Procedures

LSP Sample Population	
Combined Scores from AMS for Subscale of Intrinsic Motivation	Combined Scores from AMS for Subscale of Extrinsic Motivation
• to know	• external regulation
and Subscale of Intrinsic Motivation	and Subscale of
• to accomplish	• amotivation
If Combined Score for Intrinsic is Greater	If Combined Score for Extrinsic—External Regulation + Amotivation is Greater
• Subsample Group/Non Participants	• Subsample Group/Matched Pairs
	• Subsample Group/Experimental
	• Subsample Group/Control

experimental and control group design included the intervention of a seven-week motivational strategies training program (MTV 101). The research was theoretically based on the Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997), described and shown in chapter 2. Postulate 4 states that repeated positive situational motivation should lead to improved academic motivation at the contextual level. From a theoretical perspective, the Academic Motivation Scale (AMS) would provide a quantitative overarching measure of change in the contextual level of academic motivation. It was believed that participation in the MTV 101 program would have a positive effect on learner perspectives in academic situations. Designed as a quarter-long program, with

seven computer-based sessions of about 30 minutes each, students would learn about motivational strategies by completing one scene each week. Offline, students would apply motivational strategies in their regular academic situations. Students would self-report on how motivational strategies were used in their day-to-day academic lives. It was expected that repeated positive experiences would impact academic motivation at the contextual level, resulting in AMS post-assessment scores that reflected a more self-determined profile. Affective change takes time (Flagg, 1990; Ghodsian, Bjork & Benjamin, 1997; Prochaska et al., 1994). Initially, the study was conducted without knowledge of the length of time needed to effect change in academic motivation. It was anticipated that the one-quarter time frame would not be adequate for all students. The research would focus on the individuals and the potential for and process of change in academic motivation as students participated in a 7-week motivational strategies intervention.

Threats to validity were addressed. For instance, to discount the influence of intact groups or effects due to subjects' involvement in another course, students were selected randomly and asked to participate in an individualized computer-based-training program. To minimize the effect of individual differences, the research included randomized matching of treatment and control groups and consideration of subsample group representation. McClelland (1995) pointed out the large effect an enthusiastic experimenter or instructor might have on subjects. This research attempted to control for experimenter influence by using a more impersonal computer-based training (CBT) method. It was believed CBT would provide greater consistency. The quantitative data was designed to distinguish who "changed" with who did not "change" with little or no interaction with the experimenter until the intervention and postassessment were

completed. It was anticipated that some students would not change. Interviews after the intervention and postassessment that would allow more indepth focus on individuals to allow for further investigation into the differences between individuals who were able and those who were not able to change.

Data Collection and Analyses

Data for the formative evaluation--construct validity were analyzed using responses from the forms collected from experts in the field of instructional technology and learner motivation and more informal e-mail and communication responses. Demographic data and AMS scores were collected from 250 students enrolled in an LS course. Missing data were handled by deleting those subjects from the sample population, resulting in a total of 236 students in the LS sample population. A total of 39 students were identified for the subsample group of less self-determined students. Students were matched on the variables of age (traditional students--25 years of age or less or nontraditional student--over 25 years), gender (male/female), and ethnicity (African American, Caucasian, and other (included Asian/Pacific Islander, Hispanic, Native American, and others who had self-identified). A total of 18 matched pairs were identified.

Each research question and the method of analysis are described below:

Question 1. What was the consensus by individuals with expertise in the fields of instructional technology and motivation on construct validity of the motivational strategies training program?

More than 30 well-known researchers in the area of learner motivation and researchers and practitioners in the field of instructional technology were asked to evaluate the MTV 101 program and fill out an online formative evaluation form. The

results of this formative evaluation--construct validity have been discussed previously in this chapter. The completed formative evaluations and informal feedback are included in Appendix A.

The next question pertained to the sample population of students from which students were selected and comparisons between subsample groups (more and less self-determined). Prior to this research, the motivational profile of students enrolled in LSP courses was unknown.

Question 2. What is the motivational profile of students enrolled in LS courses who completed the Academic Motivation Scale (AMS) and how did selected demographic variables (age, gender, ethnicity) affect academic motivational profile?

Descriptive statistics addressed the overall academic motivation profile of the LSP sample population. Multivariate analysis of variance (MANOVA) assessed differences between the two groups (independent variable) on the seven subscales of the AMS (dependent variables). In addition, three factors--age, gender, and ethnicity--were examined by Chi-square to determine if these factors were significant suggesting differences in the more and less self-determined subsample groups. Significant findings have been found in previous motivational research for these three factors and for socioeconomic background. Matching of students was limited and prevented exploration beyond three factors.

The next two questions were based on the subsample group of less self-determined students who would comprise the treatment/control groups for the motivational strategies training program.

Question 3. Was MTV 101, the motivational strategies training program effective with end users in terms of appeal, learnability, and usability?

Qualitative analysis of feedback regarding the program was obtained from individual interviews as they interacted with the program. Data were analyzed to determine how effective the program was with end users.

Question 4. What is the potential for and process of change in academic motivation as a result of learning about and applying motivational strategies in a number of situated learning environments?

Quantitative and qualitative data analyses were designed to determine the potential and process of change in academic motivation. Quantitative measures were planned that included the AMS pre- and postassessment scores for each participant and matched pair. A significant change in profile would indicate whether academic motivation at the contextual level had changed. All seven subscales (rather than the combined intrinsic and extrinsic/amotivation scores) were used since change might be indicated by significant change in other subscales. For example, the process of change might begin with increased extrinsic motivation--identification or introjection. The comparison of change in treatment and control groups would indicate the potential for change and the effectiveness of the motivational strategies training in affecting change. Qualitative analysis of interviews with individuals in the treatment group and a group interview were planned that would provide additional insight into the potential for and resistance to change in academic motivation. Since the program and research design were not implemented as planned, quantitative data were no longer valid as described in the next section.

Research Design Modification

During the first few weeks of spring quarter 1997, research data on 250 students from the sample population were collected and the subsample groups were identified. A randomized matched pairs process (included in Appendix C) was completed and

appointments with several students were set. From the less self-determined subsample group ($n=39$), 18 potential matched pairs were identified. Pairs were matched on age (traditional/ nontraditional students), gender, and ethnicity. A coin toss determined which of the pair would be experimental and which would be control. The calling procedure resulted in 12 appointments being set within a one-week period. However, as new appointments were being set, students who had set appointments had not shown up as scheduled. In fact, 7 students of the 12 who set up an appointment did not make their appointment and did not call to cancel or reschedule. One initiated a call to reschedule. Students were called back, and a few rescheduled. Others never returned telephone calls or were no longer interested. A total of seven students attended the overview, signed the consent form, and completed the first week's session. All indicated they would return, but only two students returned the following week for a second session.

The pilot study had indicated that voluntary participation might be a problem. Intervention strategies were expected (calling to ask if they needed assistance, etc.) to keep students involved and on track with the program. When students did not show up a second time, they were contacted as outlined in an intervention plan. One student had dropped all of her courses and was no longer enrolled in school. A few others expressed their regret but said they could not commit the time to a 7-week program. It became apparent that only two subjects were continuing to complete MTV 101 as a 7-week strategies training program. The potential for and process of change was the primary interest in conducting this study; however, it became obvious that the study would have to be implemented differently. A "captive audience" would be needed to ensure continued participation of sufficient quantity.

Trochim (1986) asserted that program-versus-comparison group studies with pre- and post measures do not account for the role of human judgment in research and the distinction between process and outcome evaluation. Therefore, research has changed. Rather than rigid synthetic designs that try to control for the many threats to validity, research that integrates appropriate approaches in natural surroundings has become accepted practice.

It was recognized that the research, as modified, would focus on process rather than outcome. The modified research would be unable to quantitatively test the theory of repeated positive situational motivation and the potential for change at the contextual level of academic motivation. A decision was made that evaluation of the MTV 101 program and research on less self-determined students in this sample population would contribute to further research. The research design was restructured to interview students as they interacted with the program rather than after they completed a 7-week program. The focus of the study changed. While this study could no longer evaluate the potential and process of change using a controlled quasi-experimental methodology, it could continue to examine the need for and effectiveness of a motivational strategies training program with end users for whom the program had been designed and developed.

The research study, as designed, would have reached summative evaluation with a quantitative answer about the program's effectiveness with individuals from the subsample group. The revised study, however, provided far more informative feedback about the program--what students knew or did not know that was included in the program, what they liked or didn't like, what they learned, how it made them feel, and how they reacted to learning about academic motivation.

End-User Feedback Sessions

End-user feedback of the MTV 101 program followed construct validity. The End-User Feedback Sessions (EUFS) could be referred to as a cognitive evaluation plan, an end-user formative evaluation, or a think-aloud protocol. Sessions with each participant were based on a structure but remained open-ended as end-users used a think-aloud protocol as they interacted with the MTV 101 program. The EUFS structure, questionnaire, and responses are included in Appendix D.

“Only a few studies are clearly and explicitly consistent with procedural criteria for eliciting think-aloud and retrospective verbalizations” (Ericsson & Simon, 1993, p. xx). In the strictest sense, the EUFS differed from protocol analysis which includes the following criteria:

1. Concurrent verbal reports should be collected so that processing and verbal reports coincide in time.
2. Subjects should verbalize thoughts while performing a task but should not describe, explain, justify, or rationalize what they are doing.
3. Social interaction between the subject and experimenter is minimized.
4. The presented task should have a clear focus and think-aloud protocol concerns completing the presented task; the instruction to think aloud should be secondary (Ericsson & Simon, 1993).

The EUFS were similar to protocol analysis in its use of concurrent verbal reporting, generally recognized as a major source of data on subjects' cognitive processes. Protocol analysis takes many forms and many research studies are conducted on how subtle changes in administering protocol analysis affects results (Ericsson & Simon, 1993). The presented task had a somewhat dual focus. Students were asked to think-

aloud about the program--its design and usability, but also about the content. Participants were occasionally prompted for their opinion on certain aspects of the program. The EUFS were more open-ended, allowing and even encouraging participants to describe, explain, justify, or rationalize what they were doing or their perceptions about the content and their academic lives. Social interaction between the subject and experimenter was not minimized.

The subjects who were asked to participate in EUFS were from the LSP subsample group of less self-determined students. They were not, however, randomly-matched pairs. Students from the original pool of potential subjects were contacted and informed about the changed research plan. The study was revised to pay participants \$20 for a 2 to 3 hour video-taped End-User Feedback Session (EUFS). This was considered a compromise to the spirit of conducting the research since the effect of external rewards on intrinsic motivation is an area of controversy in this field. Although it seems very subtle, the participants were told they were being paid for their time to avoid the appearance of the payment being an extrinsic reward. To be fair, the two students who had continued the program without intervention, were also paid. They were asked to participate in the EUFS and were also told that they would be paid for their time.

Appointments were again scheduled. Some of these students had completed the first session and agreed to return for a one-time 2-3 hour videotaped interview with the understanding that they would be paid \$20 for their time and effort. The unique identification system was helpful in identifying a few LS classes where several of the subjects from the subsample groups had taken the AMS preassessment. It was noted that several students were enrolled in one of three sections of a remedial math class. The LS instructor was contacted and agreed to hand out written requests. This instructor

supported the research effort even further by allowing students time from class to participate. Four of the nine EUFS participants were from these classes.

The time for each EUFS ranged from 30 minutes to more than 3 hours. If one participant pointed out a usability problem or undesirable design feature, participants in subsequent sessions who didn't think-aloud about it might be asked for their opinion. The shortest sessions were with the two students who had voluntarily completed the program as designed, as a 7-week, 7-session program, including self-report worksheets. Both preferred to complete the program as designed and be interviewed after they were finished. Their EUFS consisted of an overview about the program but they were also asked to log on and go through one session to comment concurrently as they interacted with the program. Since these EUFS sessions were among the last few, specific questions about the program were asked based on EUFS of previous participants.

At the end of the EUFS session, each participant completed a questionnaire about the program and took the AMS postassessment. The AMS postassessment was completed by individuals from the subsample group who had participated and by individuals who had not. Results from the pre- and postassessment would not be expected to provide meaningful data about change in motivation. It was completed to align the modified research as much as possible with the original research plan.

Reporting of Results

Data analyses for the research have been reported as follows: Question 1 on construct validity of the MTV 101 program was conducted prior to the study and is covered in this chapter and Appendix A. Quantitative analyses of the LSP sample population and subgroups have been reported in chapter 5. The EUFS and questionnaires completed by end users were analyzed to address the research question regarding the

appeal, learnability, and usability of the MTV 101 program (Question 3). Results have been described in chapter 6. The potential for and process of change have been addressed in chapter 7. The dissertation concludes in chapter 8 with discussion and reflection on implications of the study.

CHAPTER 4

MTV 101: MOTIVATIONAL STRATEGIES TRAINING THE INSTRUCTIONAL TECHNOLOGY PROCESS

This research included product development following Instructional Systems Design (ISD) models from the field of instructional technology (IT). This chapter is designed to share the experiences in planning, designing, developing, implementing, and evaluating the motivational strategies training program (MTV 101) that was designed for use as an intervention in this research. The first section will briefly explain the field of instructional technology (IT) and the development of ISD models.

The Field of Instructional Technology

The Association for Educational Communications and Technology (AECT) endorsed a revised definition of the field of instructional technology to better reflect its current conceptual framework. "Instructional Technology is the theory and practice of the design, development, utilization, management, and evaluation of processes and resources for learning" (Seels & Richey, 1994, p. 36).

Instructional design (ID) refers to the preparation of instructional materials used in a variety of settings. Instructional Systems Design (ISD) evolved, based on the need to follow a rational approach for managing the instructional process. Gagne', Briggs, and Wager (1992) extended general systems theory to instructional design by prescribing 12 basic steps to be used in ISD. More than 300 ISD models have been developed to meet the needs for different users, applications, and settings. Models have been designed

intended for varying levels of expertise, for use at a macro- or microlevel, and for use in different environments, such as schools, businesses, or governments (Edmonds, Branch, & Mukherjee, 1994; Gustafson, 1991). These models, however, do not explain how decisions are made within that framework (Rowland, 1993). All models include a similar sequence of activities:

1. Planning. This phase would include aspects of planning an instructional technology project which might include arranging for resources, and what is referred to as front-end analysis or needs assessment. Note that this activity is not included in the instructional technology definition but is an activity normally carried out prior to instructional design.

2. Design. The design phase is also referred to as pre-production and includes setting goals, objectives, and strategies.

3. Development. During the development phase, materials are produced.

4. Implementation. The instructional technology product or system is put into place. During this phase, utilization and management issues are also addressed.

5. Evaluation. Formative evaluation occurs during all phases of the instructional technology process. Feedback helps to improve the product or system. Summative evaluation is a more conclusive assessment of the product or system's effectiveness in meeting its intended purpose.

The systems approach should be viewed as a process, not a rigid structure. One of the most prevalent models, "The Dick and Carey Model" (1990) provides step-by-step guidelines. It has been sometimes misconceived as a linear approach to ISD but the model provides for continuous feedback and revision throughout the process. The Layers of Necessity Model (Tessmer & Wedman, 1995) advocates an adaptive approach that

realistically considers limitations in time, personnel, resources, and the training environment.

Despite the proliferation of ISD models and the support of improved technologies, Dipboye (1997) observed:

When training is provided, it often varies from the ISD model, as evidenced by the lack of thorough needs assessments, the neglect of psychological research on learning in the design of the program, the rarity of rigorous program evaluation, decision making that ignores utility considerations, and the prevalence of fads and the widespread use of unplanned and unsystematic on-the-job training. (p. 35)

Technology has also had an impact on the ISD process. The use of computers, in particular, allows "rapid prototyping," with design, development, and formative evaluation activities taking place concurrently. Improvements, revisions, and different versions can be created without the substantial investment of resources (i.e. time, personnel, funds) required previously.

Learning from Experience

The phrase, "Even the best laid plans can go awry" is based on a Robert Burns poem, but is a good cliché for the regularity of irregularities that can arise in any instructional technology process. Therefore, it is important for instructional technologists to share experiences in educational or instructional multimedia development (Phillips, 1997). This chapter describes the processes that were involved in planning, designing, developing, implementing, and evaluating the need for and creation of a motivational strategies training program for undergraduate college students. At each phase of development formative evaluation took place and modifications were made to the product. The program was named MTV 101 and will be referred to as MTV 101 for the remainder of this chapter. A printed version is included in Appendix B.

Stage 1: Planning and Needs Assessment

This stage began with the problem of academic motivation and considered the tasks performed by undergraduate college students and the knowledge, skills, abilities, and attitudes about academic motivation that might be required to successfully perform such tasks. For some students, there is a discrepancy in desired performance. The targeted groups of students were those enrolled in Learning Support Program classes. The level of academic motivation for students taking LSP courses was unknown. Therefore, a reliable and valid preassessment (the Academic Motivation Scale-AMS) was used to establish a motivational profile for why students go to college. Research, reviewed in chapter 2 of this dissertation, indicated that explicit motivational training would be an appropriate solution for students with less self-determined academic motivation.

One of the most difficult areas to assess in the preproduction phase was an organizational analysis to determine what factors in the situation might help or prevent transfer of what is learned. The director of LSP supported conducting the research with LSP students. Several LSP instructors agreed to provide 30 minutes during class to administer the AMS preassessment. The possibility of working with a specific instructor and specific classes was discussed, but there were several challenges associated with this that were not resolved. For instance, one LSP instructor felt the college orientation and study skills course already covered a great deal of material. This instructor was reluctant to add any other requirements. In addition, the targeted group would more than likely be located in several classes--not all in this particular class--and working with an intact class would add a confounding variable in the research design. With rose-colored glasses, it was decided that the course would be offered as a voluntary, supplemental, individualized program of study. Computer labs were readily available for student use at several

locations on campus. In fact, students with internet access and a web browser could access and work on the program at home. The rosy scenario envisioned participants applying motivational strategies during regular academic situations and self-reporting on strategy use. It was planned that effectiveness of the program would be evaluated using quasi-experimental research methods using a preassessment/postassessment, treatment/control group design. Within the limited time frame of the study (one quarter), it was unknown if the training period would be sufficient time for affective change for some or all of the participants. Therefore, interviews were also planned to provide additional qualitative data.

The outcome of the first phase was the prospectus proposal and defense. The research project was approved. The program was shared with others throughout the design, development, implementation, and evaluation process to obtain feedback and conduct formative evaluation. MTV 101 was designed using the ISD process; the product was developed in a rapid prototype, nonlinear fashion.

Why Build?

Many study skills textbooks, videos, and other educational programs are available and can be very helpful and even motivational to students. Other than occasional traditional classroom instruction, however, there was no known program that focused on strategies designed for college level students to improve academic motivation. The MTV 101 program was an integral part of conducting this research. The product was designed for undergraduate college students enrolled in LSP courses at a large urban university. Most of the students were enrolled in remedial, regents testing preparation, or college preparation courses that were taught in traditional classroom environments. The MTV 101 program was designed as a voluntary, supplemental program. Students would spend

about 30 minutes per week with the online portion of the MTV 101 program. They were also asked to apply these strategies during their regular academic activities and complete self-report forms on these experiences. Prior to this program, students received study skills training, but little or no content was specific to the area of academic motivation.

The purpose or intent of MTV 101 was to provide motivational strategies to students who were identified as more extrinsically motivated than intrinsically motivated. The theoretical model used to guide the research was the Hierarchical Model of Extrinsic and Intrinsic Motivation (Vallerand, 1997). Assumptions of the model are that repeated positive situational motivation would impact the contextual level of academic motivation. If the MTV 101 program were effective, students would perceive academic situations as more positive (because they would understand and control thinking when a situation was less motivating). It was hypothesized that academic motivation, as measured by the AMS, would improve after the 7-week program.

Why the Internet?

The choice of delivery vehicles is a well-known analogy in the field of instructional technology (Clark, 1983; Kozma, 1991). The analogy is used by many individuals in IT to compare the different features of instructional delivery vehicles and to establish whether the choice of a particular delivery vehicle makes a difference. There could be many methods for transporting instructional information. In some cases, it might not matter what kind of vehicle is used; in other cases, there might be distinct advantages or disadvantages among the choices. If it were ice cream being delivered in Georgia during summer, for instance, a refrigerated truck would be necessary.

Discussions with the programmer about what was desired and how it could be delivered resulted in the decision to use the web as a delivery vehicle because of some

very definite benefits in terms of (a) cross-platform compatibility, (b) worldwide accessibility, (c) capability of co-developing and evaluating the program from a distance, and (d) communications with students who may or may not have internet e-mail access.

The choice of the internet was not its cutting-edge appeal. It is still very difficult to program and ensure multimedia capabilities at remote workstations. The instructional aspects may seem very rudimentary. This may seem at odds with trying to enhance learner motivation; however, Lepper and Malone (1988) cautioned that motivational enhancements may prove highly motivational, but instructionally useless. In fact, such embellishments may compete with, rather than reinforce, the instructional goals of the activity. The instructional goal of MTV 101 was the development of self-regulated motivation. It was considered most desirable that students learn to self-regulate, to learn about, and promote their own motivational strategies. Learners would choose when they would apply strategies. The program was designed with a certain sequence, but students were free to enter the program at any point, go back to review, bypass, or print out pages, and spend as much time on a section as desired. Links to other sites provided enrichment if students were interested in learning more about a particular motivational strategy.

Why Open-Learning?

A second desire for this instruction was that it be open learning, not managed by anyone other than the learner. All sorts of things can be called open learning packages. Some are entirely print materials; others include audiotapes, videotapes, computer software, multimedia-based, CD-ROM, or CD-I format. The common factor is that the learners work through the package on their own. Open learning, however, may be

inappropriate for students who are not intrinsically motivated and have no external reason for participating.

The opportunity for enhanced communications between the learner and mentors, instructors, and other learners through computer-mediated communications was another reason for this choice. Real time discussion and interaction does not allow for adequate reflection. Continuous improvement of the product as internet capabilities expand was another reason for this choice of delivery. While open learning appeals to some learners, others prefer interaction with others. The modified study was enhanced by having a facilitator available to clarify, discuss, counsel, assist in selecting modules, assess work, encourage and motivate learners. In addition, a facilitator was able to explain or deal with problems on an individual basis. Initially, this may be an important component for students who are less self-determined.

Stage 2: Design and Development

The design phase began with the online assessment and data-collection instrument which would collect demographic data and administer the preassessment/postassessment instrument, the Academic Motivation Scale (AMS), developed to measure academic motivation of college students. With permission from Dr. Robert Vallerand from the University of Montreal, an online, self-scoring version of the AMS was designed using web-based forms and PERL programming. An online form that collected demographic information was also designed. Since the program also involved assessment, communications, and other interactive features, design was very dependent on programming. The online data collection instrument was completed first and seemed like an excellent “work smarter, not harder,” tool for collecting data.

Team. Few disagreements ensued, probably because there were fewer people involved than a normal ID process. The programmer was very cooperative and willing to work on the program for the experience of developing a web-based program, applying programming skills, and exploring interactive capabilities of the web.

Formative Evaluation. Feedback from faculty with multicultural research interests was obtained on the demographic information. The demographic information form was revised to include the capability for students to "self identify as" and provided an open response blank. It was discovered later that allowing open-ended answers will cause additional work and potential problems when analyzing data statistically.

Best Laid Plans. Although an online version had been designed to efficiently collect data from hundreds of students, logistically it became more expedient to administer the AMS in a paper-based format than to identify and reschedule each traditional classroom into a lab for a part of a class. A scannable version could have been prepared at the last minute, but the scoring aspects of the online version and conversion to ASCII text still offered advantages of entering the data online. Each form took about 15 minutes to enter. Fortunately, three courses were scheduled in a computer lab. The remaining 200 paper-based forms resulted in about 50 hours of data entry. Other alternatives were explored but to gain access to sufficient numbers, it was more expedient to go to the class than locate sufficient individuals to complete the online preassessment.

Why MTV 101?

Instructional technology, as with many design fields, includes a nebulous creative process for determining how a program should look and feel. Of course, a program about motivation should be motivationally appealing. The course title of MTV 101 seemed to come quickly and naturally because of the way college courses are labeled. It also

happened to be the same acronym as a music television channel which appeals to many college students.

Scenario programs are appealing to learners (Keegan, 1995), and thoughts about delivering the program as a film-making metaphor began to evolve. Web pages that looked like something--villages with separate areas, buildings with different floors and rooms--were personally most appealing. Graduating during this millennium was a primary goal and was considered during all phases of the instructional technology process. A studio set, virtual reality, movie-making scenarios--these were the ideas that were discussed at first. A reality check quickly occurred, knowing such features would be virtually impossible, given the personnel, time, resources, and financial constraints. Therefore, it was decided that this would be considered a prototype, a somewhat rudimentary approach, that could be further developed.

The program was designed more like traditional computer-based training (CBT) with navigational buttons and menus. The content and process used a film-making metaphor that seemed to be an appropriate and appealing method of presenting the material. If this prototype were further developed as a scenario-based program, the program would need additional student interaction. The product has some valuable features, but the overall result is somewhat superficial. In particular, MTV 101 needs more depth in explaining and providing scenarios that allow for applied use of motivational strategies. On the positive side, end users related to the content and enjoyed the program. The first scene was viewed as the least favorite and most confusing. It has since been lightened up a little. Some users enjoyed putting information into the program and receiving what seemed like "personalized" communications. To do so required students to log-in twice during each session to kick off an event to activate mail at the

next log-in. As design flaws surfaced, they were changed. The program continued to improve. The problems with user id and the log-in/password scenario were most frustrating. It required much effort to improve the situation. Merely pressing the right mouse button instead of the left can confuse users unacquainted with computers or internet web when unexpected screens or menus appear.

What's the Point?

The instructional goal of MTV 101 was the development of self-regulated academic motivation. Various researchers (McCall et al., 1992; McClelland, 1995; Pintrich et al, 1994) recommended that educational programs should provide a concrete situation, simulating as nearly as possible the life situation, expecting the individual to behave like a person with positive motivation. Goals for improving academic motivation would include:

1. Expanding the person's self-awareness.
2. Engaging achievement thinking and fantasizing about achievement.
3. Using activities that are intrinsically interesting to the trainees.
4. Involving opportunities for moderate and extreme risk without negative stigmata.
5. Establishing a climate of expectancy for learning and performance and high standards of excellence within capacity to accomplish.
6. Providing feedback on effectiveness of performance.
7. Expecting responsibility for what is to be done.
8. Allowing learning from experience.
9. Allowing learners to choose among alternative courses of action.
10. Presenting a role model they can relate to, someone with a similar background who has made it.

11. Organizing groups to discuss, suggest, and support on another.

12. Requiring all individuals meet a minimum level of competence.

An approach used by Manning (1991) called Cognitive Self-Instruction included teachers explicitly modeling strategies for students that included problem defining, attention focusing, self-guiding, self-coping, and self-reinforcing. Teachers and students reviewed what, why, how, and when such strategies should be employed.

MTV 101 was designed to build awareness about academic motivation in what might be classified as a minimalist approach (Carroll, 1997).

People want to make sense of their learning activities. But this active orientation to learning is not served well by the step-by-step sequence of preview, practice, test, and review, typical of systematic instruction. (p. 308)

Information about academic motivation was shared very quickly using a director reading and thinking about a script involving an unmotivated student grappling with the need to pass a class. Then participants were asked to apply these strategies in their regular academic situations to allow them to "make sense of their own skill development activity and thereby to refine what they already know and discover new things as well" (p. 309). MTV 101 allowed learners to get started fast and included strategies for thinking and improvising. The information was embedded in the script which was related to students' academic situations. The program did not support error recognition and recovery, however.

Who Objected?

A comprehensive review of literature dealing with academic motivation was conducted. The reference list does not include many of the valuable resources that were used in compiling a list of possible concerns relating to student motivation. The list might

be considered a task analysis of knowledge, skills, and abilities that could help students with academic motivation. These concerns were classified and developed into a mnemonic framework used to attach related strategies (M-I-N-D-S-E-T). The 7-week program would include the following areas: Metacognition, Interest/Relevance, Networking/Social, Demands/ Determination, Self, Environment/ Expectations, and Time/Attention. It was planned that each category would be covered during one scene. Goals and objectives that related to that strategy were incorporated into an outline of course content.

Goals/Objectives. Initially, it was planned that the goals/objectives would not be overtly stated to users of the program as it would distract from the film-making metaphor. Goals were included in the weekly letters from the Producer to the Director. Logging on and submitting data in the production scene kicked off the letter as an event the next time the person logged on. However, if a user did not log-on, or if no data were submitted in the production scene, no letter would be received. Since a few of the evaluators for formative evaluation--construct validity pointed out the lack of stated goals or objectives for the program, the learning goals for the program were added in the overview as a one-page weekly overview and are stated at the beginning of each scene.

Metacognition. Learners will learn about metacognition and how it can be used to help individuals self-regulate academic motivation. Metacognitive skills are usually taught in a more covert manner. Bruer (1993) advocated that metacognition should be taught overtly and explicitly, including instruction about when strategies are useful and explanations of why they are useful. The strategy of metacognition was viewed as very important. Metacognitive strategies would be used throughout the program, as participants applied other motivational strategies. Therefore, it made sense to introduce metacognition first.

Interest/Relevance. Learners will learn about interest and how it impacts motivation.

Networking/Social. Learners will learn about their network of support and non-support.

Demands/Determination. Learners will learn about external demands that affect motivation and strategies for controlling demands.

Self. Learners will learn about self-related factors (attribution, self-defeating behaviors, self-determination, self-esteem) that impact motivation and strategies for improving and controlling self.

Environment/Expectations. Learners will learn about environmental factors that impact motivation and strategies for controlling environmental impact.

Time/Attention. Learners will learn about factors of time and attention and how it affects motivation and performance.

It would be easy to list a few of the references that were particularly valuable for some of these categories. However, in other areas, it would be impossible to list all of the resources. In addition, some references were applicable to a number of strategy areas. The literature review in chapter 2 will give an indication of references that were useful in developing strategies for each category.

How Does the Program Measure Up?

ISD considers what will be assessed and how it will be assessed during the design phase. This ensures that assessment is aligned with the program. It was considered important to find out if MTV 101 was effective in helping students learn motivational strategies. However, the program was designed with the intent of providing a risk-free environment.

Testing. The program did not include assessment to measure students' knowledge about academic motivation. Rather, the program was designed to encourage thinking about and applying strategies. Offline self-assessment and self-reports of strategy use were designed. The postassessment AMS would be used to provide an objective overarching measure of affective change in the contextual level of academic motivation.

How Strategic are the Strategies?

The program began with the online strategy of students being hired by the producer of MTV 101 to direct of a film called "Possible Selves." The hiring letter for a fictitious director who logged on using an alias "Mickey Mouse" is shown in Appendix B. Each session included the following phases and strategies:

1. Log-on. Each session began with the Director logging on and checking for new messages. The new message was a letter from the Producer that summarized what had already been accomplished and what would be covered during this scene.
2. Preproduction. After reading the letter, the director could press a button to go directly to the next scene. In preproduction, the director would read about the cast, the set, and read the dialog between characters in the script.
3. Production. After reading the script about a college student named Chris, the director was asked for text input on what Chris was thinking about, or what actions Chris might take. The participants were required to re-enter identification and password prior to submitting the information entered (to identify each respondent and to kick off the next letter).
4. Postproduction. Research about academic motivation and strategies were explicitly stated. Participants were encouraged to complete offline materials and self-report on strategy use.

The rationale behind MTV 101 was to involve learners in a motivation-related situation to learn about strategies that could be applied in similar academic situations. Offline assignments were designed to help participants think about and encourage transfer to real academic situations.

When Do Changes Ever End?

Each week, the MTV 101 team of two devoted 10 hours or more to work on “tasks.” It was a very compatible arrangement. The instructional technologist was responsible for content, design strategy and graphics; the programmer was responsible for graphics, programming, and organization of the web materials. This project team needed a graphic artist. Clipart only goes so far. Without graphics talent, a movie studio look was difficult to achieve. When the programmer came up with a background and buttons for the main page--it certainly wasn’t what had been envisioned, but it provided a consistent look throughout. Each Saturday the team met, reviewed what had been accomplished, and made plans for the next phase. The team worked for about 5 hours each week on the next phase, creating “to do lists” for the coming week. During the week, the duo communicated ideas, problems, or questions using e-mail. Even with only two people, “previously agreed to conventions” changed or didn’t work out, causing extra work. The program was continually revised, improving the design and functionality, based on feedback.

Stage 3: Implementation

It is important to consider how a program will be implemented prior to beginning the project. Organizational structures may be inflexible about changing traditional procedures and processes. Instructional technologists must consider the contextual limitations and realistically identify what resources are available to accomplish training effectively (Carr, 1993; Gillespie, Dobrovolny, Spannaus & Wilson, 1997; Richey, 1995).

Implementing programs is often the most overlooked, difficult phase of ID. Most ID models don't address implementation, social, or environmental considerations (Burkman, 1987; Gillespie et al., 1997; Surry & Farquhar, 1996). Although this program was designed and developed following instructional development models, implementation was the most difficult stage. Prior to the study, one instructor had expressed her concern, "How are you going to get these students to participate? I had to fail more than 30% of a class because they just stopped coming."

After It Is Built, Will They Come?

Implementation was problematic, mainly in terms of structure. It was rather naïve to assume that students would want to participate if it were not required, and there were no other incentives. It should not be overlooked that a few students did voluntarily participate--even among those who were less self-determined. The vast majority of students, however, are unlikely to voluntarily participate in a supplemental academic program. If such a program were considered important, the organization, environment, and structure would need to support participation. In addition, programs designed to change affective domains require time. In an academic environment, students are often given assignments that may not appear congruent with the course they are taking. Occasionally, students may be informed about a voluntary extracurricular learning or training opportunity, usually of short duration.

Where's a Captive Audience?

In retrospect, it would not seem likely that individuals identified as being less academically motivated would voluntarily participate in a 7-week program with absolutely no extrinsic reason for participating. The planned research methodology was stringent, particularly in its reliance on a "non-captive audience." Modification of the

research was required and has been described in chapter 3. Problems with implementation provided insight into how difficult it may be for educators to promote individual change in academic motivation and why educators often rely on extrinsic motivators (Reeve, 1996). It also reinforces the need for finding effective methods for building intrinsic motivation of learners.

Stage 4: Evaluation

MTV 101 was evaluated by individuals in the field of instructional technology and by end-users. Prototype testing during a pilot test and by end-users was completed and are described in chapters 3, 6, and 7 respectively.

What Did Experts Think?

As the program was being designed and developed, the idea occurred to create an online formative evaluation form to allow remote evaluation of the program. Time was a limiting factor. An online web-based form for formative evaluation--construct validity would enable individuals to evaluate the program remotely. Instructional technology faculty at this university provided formative feedback on the formative evaluation form. Open-ended response areas were added to the more efficient but less informative, Likert-type choices.

When the online formative evaluation form was ready, instructions for accessing the program and formative evaluation form were provided to instructional technology faculty and students at this university and at remote locations. Since there were no clients, feedback from professionals in the fields of instructional technology and educational psychology (motivational researchers) was solicited via e-mail. Individuals were asked, as experts in the field, to consider evaluating the program. The Uniform Resource Locator (URL), the world wide web address for the program and the online

evaluation form were provided. Although most experts could not commit the time to formally evaluate the product, several conveyed words of encouragement. Some viewed the program and commented on the overall impression. Only four “eligible” content or instructional technology experts were able to devote time to formally complete the evaluation form. This process has been described in chapter 3 and all materials and feedback are included in Appendix B.

What Did End-Users Think?

Comments on appeal, learnability, and usability were made by students involved in the pilot study and by an education student who assisted by proofreading the online and offline materials. Feedback from these individuals were also used as formative evaluation for improving the program. All comments about the program were considered, but not all were incorporated. For instance, a few individuals commented that the design was a bit psychedelic. Others commented that they liked the look. Changing the design would require major reworking. In this case, it was left “as is” since it would be preferred that end users experience the same look for the program as evaluators for formative evaluation--construct validity.

End users were videotaped as they participated in End-User Feedback Sessions (EUFS) to collect data about their reactions to a new interactive MTV 101. After the session, end users filled out a questionnaire that went beyond a “smiley sheet” that asked whether they liked the program. Feedback from individuals within the target population were informative for modifying the program and exploring the problems encountered in implementing the program as a voluntary supplemental program. Surry and Farquhar (1996) advised that this information should be used to modify design and implementation, improving the likelihood of utilization and adoption.

What's the Verdict?

Formative evaluation determines whether the program is working as planned.

Summative evaluation examines the effectiveness of the final product. Summative evaluation indicates a decision about the effectiveness of the program can be made. In an applied computer-assisted learning program, Draper (1997) described the difficulty of reaching summative evaluation:

We can do evaluation that is summative in some senses but not in others. We can do evaluation at the end of the design cycle on completed software that will not be further modified. We can do evaluation that provides evidence relevant both to deciding whether to use that piece of courseware for teaching, and also on how best to use it. This latter evidence might be from careful comparative experiments or more formative style work that detects unforeseen problems that turn out to be important in successful use of the software. But there is no prospect of doing evaluation that sums up a product once and for all, measuring its essential properties in a way that will represent and predict its performance in all other contexts (p. 38).

The planned research, using quasi-experimental treatment/control groups, would have provided more conclusive results that the program was effective in effecting change in academic motivation. But, it would not have indicated why it was effective and for whom. It would not establish whether any improvement would last or whether some learners might benefit but that it would take longer to quantitatively "show." This study indicates that the program has face validity and construct validity in terms of appeal, learnability, and usability. Evaluation feedback was used to improve the program and although it has improved substantially; further revisions and development are needed.

Stage 5: Try, Try Again

Tessmer and Wedman (1995) pointed out that the success of any instructional design effort will be dependent on the instructional context and the design context. The instructional context includes the learner, instructor, and instructional materials--the

environmental variables. The design context influences the design team and the project--the resources and constraints. Together, these contexts influence the extent to which the ID effort will succeed in bring about desired change in performance.

The design context was questioned for flexibility and efficiency. Factors that were considered involved time, money, continued design and development, client desire for the product, available technologies, and organizational culture. These contextual factors shape and influence design tasks within and across projects. Traditional design models have not considered these contextual variables.

Richey (1995) recommended that needs assessment should move beyond determining prerequisite skills to consider the experiential background, attitudes, and interests of the learner. In addition, the nature of the environment and the learner's perception of the environment will result in a contextual analysis to determine essential physical and psycho-social factors at the pre-instructional, instructional, and post-instructional stages.

Will It Work This Time?

The opportunity to implement the program again (outside of this research study and in a different environment) became available shortly after the study had been concluded. In this case, the students were enrolled in remediation courses at a state-funded technical institute. They worked on self-paced computer-based training modules (in math, reading, or English) in a facilitated lab environment where attendance was required twice a week. The environment and support seemed more conducive to successful implementation. The program was revised slightly--customized for students and courses offered at a technical institute.

The reason this second attempt at implementation is being reported is to communicate the difficulties of implementation. Implementation problems were entirely different. The literacy level of several students was very low. In fact, it was very likely that some did not have the reading skills necessary to benefit from the program. Several students had never used a computer. This problem was accentuated by the fact that the other computer-based program they were using was DOS-based. Although a facilitator was available, the labs were physically separated. The facilitator moved between three small lab classrooms. Changing from the DOS-based program to the Internet-based MTV 101 program (or vice versa) required rebooting the computers. Finally, the director, who was very supportive of the research, resigned her position shortly before the beginning of summer quarter. Very quickly, it became obvious that this situation was perhaps even less conducive for conducting a formal study. The process of attempting implementation a second time heightened awareness as to why so many educational products fail to be implemented or are not implemented as designed.

Who Would Do It Again?

In retrospect, building a program in addition to conducting a rigorous research study was somewhat like the cliché, “What comes first the chicken or the egg?” The attempt to create a product, obtain approval to conduct the study, and logistically pull it all together as a Lone Ranger graduate student was very ambitious. Realistically, the program was being tested as a prototype, not a “ready for market” program. An outsider--a student--was attempting to introduce a one-time intervention. Students were not required to participate as part of any classes, nor were they offered any incentive to participate. Yet, the attempt was to implement the program on a voluntary, supplemental, individualized basis using only students who “needed” motivational

strategies training. It became an implementation problem in that these students were not in a particular time or place. If they wanted to participate, they had to come on their own time. For students who are experiencing difficulty with academic work and may also work full-time, time is a critical factor. In particular, students mentioned that time was the major barrier, particularly for participating in a program that was not required.

Stage 6: Reflection

The research allowed dual immersion in the fields of instructional technology and academic motivation. MTV 101 was based on academic motivation research. Evaluations indicated that the product has educational value. The research study confirmed that many undergraduate students would benefit from learning more about academic motivation. The involvement in a learning-by-doing process was an eye-opening experience. The eyesight of a novice researcher wearing rosy-scenario glasses changed as a result of the study. Now bifocals are needed. A different prescription helped to put things into perspective. Up close, it became obvious that participants needed social-cognitive scaffolding that wasn't built into the program. From a distance, it becomes clearer that societal changes will require learners be more self-regulated motivationally than ever before.

What's Left to Learn?

Surry and Farquhar (1996) stated that potential adoption and implementation of products must be considered as carefully as instructional outcomes to fully realize the impact the product has on society and on real people in real places. The implementation issues involved in this research experience occurred with real students in a real university. The motivational profile, as measured by the AMS, indicated that the majority of students enrolled in LSP courses were extrinsically motivated. While some were also intrinsically motivated, others were not. These are real people who will be found by

educators and trainers in classes and in the workplace. The need for programs that will improve intrinsic motivation for learning has been assessed. Such programs may be particularly challenging to implement. If society desires self-regulated learners, the vital learner motivation issue must be addressed.

CHAPTER 5
PRESENTATION OF QUANTITATIVE RESEARCH DATA
MOTIVATIONAL PROFILE OF LEARNING SUPPORT PROGRAMS
SAMPLE POPULATION AND SUBSAMPLE GROUPS

This chapter presents quantitative data from the sample population and subsample groups of Learning Support Program (LSP) students who completed the Academic Motivation Scale (AMS). The AMS was administered to 250 students in 12 LSP courses during the first few weeks of the quarter. The AMS was being administered (a) as a statistical snapshot of academic motivation for the sample population of LSP students, (b) as a needs assessment tool, to identify the subsample groups for subject selection, (c) to compare motivational profiles of more and less self-determined students, (d) to ensure representative sampling of participants with the LSP subsample, and (e) as a preassessment measure that could be compared with postassessment measures to determine the potential for change in academic motivation.

This chapter addresses Question 2 of the research:

Question 2. What is the motivational profile of students enrolled in LSP courses who completed the Academic Motivation Scale (AMS) and how did selected demographic variables (age, gender, or ethnicity) affect academic motivational profile?

The LSP Sample Population

Descriptive statistics were used to answer questions relating to students enrolled in LSP courses, the sample population for this study. A total of 250 students completed

the AMS and information sheet. There is no easy way to handle missing data, a fairly common occurrence in certain areas of research (Stevens, 1992). When missing data are random and not substantial, one method is to drop cases where data are missing. In this case, 14 cases were dropped, leaving data for 236 students.

The sample population of LSP students were grouped as more self-determined and less self-determined. Students were identified as being more or less self-determined based on a combined scores from four subscales of the AMS, as indicated in Table 2. Students were considered more self-determined if AMS subscale scores for intrinsic motivation--to know and intrinsic motivation--to accomplish were greater than combined scores for the AMS subscales extrinsic motivation--external regulation and amotivation.

Table 2

Combined Scores of AMS Subscales Used to Establish Subsample Groups

Intrinsic Motivation—To Know		
+	=	More Self-Determined
		Subsample Group
Intrinsic Motivation—To Accomplish		
Extrinsic Motivation—External Regulation		
+	=	Less Self-Determined
		Subsample Group
Amotivation		

Table 3 provides a demographic profile for each group and for the total population. Less self-determined students ($n=39$) were 16.5 percent of the total sample population ($N=236$). The second aspect of this research question, "How did selected demographic variables (age, gender, or ethnicity) affect academic motivational profile?" was analyzed using Chi-squares to determine if the two groups were significantly different based on expected percentages of the population for the factors of age, gender, and ethnicity. Due to cell size, ethnicity was limited to three categories: African American, Caucasian, and Other (consisting of three ethnic groups, including Asian/Pacific Islander, Hispanic, and Native American with smaller percentages represented). The two groups were similar in gender and ethnicity, but traditional students were more likely than non-traditional students to be less self-determined ($\chi^2 = 8.52, p < .01$).

Subsample Group--Less Self -Determined

The subsample groups of students enrolled in Learning Support Program (LSP) courses consisted of more and less self-determined students based on AMS combined scores indicating whether students were more intrinsically or more extrinsically motivated, respectively. This section focuses on the subpopulation of students ($n=39$) who were less self-determined as compared with the remaining sample population ($n=197$). Participants for the MTV 101 program were selected from this subsample group.

Table 3

Demographic Characteristics and AMS Profile of LSP Sample Population

Characteristic	Less Self-		More Self-		Total	
	Determined		Determined		Sample	
	<u>n</u>	%*	<u>n</u>	%*	<u>N</u>	%*
Age						
Traditional (25 or less)	33	21.7	119	78.3	152	64.4
Non-Traditional (Over 25)	6	7.1	78	92.9	84	35.6
Gender						
Female	23	16.3	118	83.7	141	59.7
Male	16	16.8	79	83.2	95	40.3
Ethnicity						
African-American	23	19.3	96	80.7	119	50.4
Caucasian	11	12.2	79	87.8	90	38.1
Other (Asian/Pacific Islander, Hispanic, Native American	5	18.5	22	81.5	27	11.4
Total Sample Population	39	16.5	197	83.5	236	100.0

Note. *Percentage in column is the proportion of the row total sample size.

MANOVA Results

Using the seven subscales of the Academic Motivation Scale as dependent variables, a multivariate analysis of variance (MANOVA) allowed comparisons of the motivational profile of subsample groups. The MANOVA mean and standard deviation for the sample population and subsample groups are shown in Table 4.

It would be expected that the subpopulation would differ since they were selected based on differences in extrinsic and intrinsic motivation. However, only four subscales had been used to assign students to the more or less self-determined groups. MANOVA was conducted to consider all seven subscales of the AMS. Results of the MANOVA, shown in Table 5, indicated that the two subsample groups were significantly different on every subscale except extrinsic motivation--external regulation. This finding was of interest since Extrinsic motivation--external regulation was one of the four subscales used in group determination. In addition, amotivation subscale scores were lower than all other subscale scores (See Table 4) but were still significantly different for the subsample groups.

Table 4

MANOVA Mean and Standard Deviation for 7 Subscales
of the Academic Motivation Scale (AMS)

AMS Subscale	Less Self-		More Self-		Total	
	Determined		Determined		Sample	
	(n 39)		(n 197)		(N 236)	
	M	SD	M	SD	M	SD
Intrinsic Motivation						
—To Know	10.08	2.38	15.85	2.78	14.90	3.46
Intrinsic Motivation						
—To Accomplish	8.56	2.85	14.56	3.37	13.58	3.97
Intrinsic Motivation						
—To Experience	6.97	2.73	11.75	3.85	10.96	4.09
Stimulation						
Extrinsic Motivation	14.07	3.43	15.86	3.21	15.57	3.30
—Identification						
Extrinsic Motivation	11.23	4.30	14.49	4.05	13.95	4.26
--Introjected						
Extrinsic Motivation	15.39	3.65	14.99	3.98	15.05	3.92
--External Regulation	7.49	3.60	4.73	1.53	5.18	2.26
Amotivation						

Table 5

Results of MANOVA on Seven Subscales by Group

Multivariate Statistic	<u>F</u>	<u>p</u>
Wilks'	38.14	< .01
<u>Univariate F-Tests with (1,234) df</u>		
Variable		
Intrinsic Motivation—To Know	147.11	< .01
Intrinsic Motivation—To Accomplish	108.47	< .01
Intrinsic Motivation—To Experience Stimulation	54.43	< .01
Extrinsic Motivation—Identification	9.88	< .01
Extrinsic Motivation—Introjected	20.61	< .01
Extrinsic Motivation—External Regulation	.38	.56
Amotivation	61.08	< .01

CHAPTER 6

PRESENTATION OF QUALITATIVE & QUANTITATIVE RESEARCH DATA FROM END-USER FEEDBACK SESSIONS ON APPEAL, LEARNABILITY, AND USABILITY

The previous chapter presented quantitative data about the Learning Support Program (LSP) sample population and subgroups. This chapter presents results from the End-User Feedback Sessions (EUFS) regarding the appeal, learnability, and usability of the motivational strategies training program (MTV 101). The research proposal had planned for interviews to take place after participation in the MTV 101 program and after the postassessment had been completed. The Academic Motivation Scale (AMS), administered as a pre and postassessment with matched pairs assigned to treatment and control groups, was planned for use as an overarching quantitative measure of change in academic motivation at the contextual level. Representativeness of the participants with the subsample population was planned. The quantitative measure was designed to reduce internal and external threats in objectively evaluating whether change in the contextual level of academic motivation took place. The research design also included qualitative aspects to provide greater understanding about the potential for and process of change through the views of individuals who had participated in the program.

As explained in chapter 3, the research design was modified. Relying strictly on voluntary participation resulted in an insufficient number of subjects participating in a

7-week motivational strategies training program. Since research shows affective change requires time (and ongoing active participation), it was decided that the research needed to be modified. The quantitative measure of change was still considered a valuable, objective source of data; however, it was no longer considered viable since the program was not implemented as a 7-week program. Individuals from the less self-determined subsample group were asked to participate in End-User Feedback Sessions (EUFS) as they interacted with the motivational strategies training program. End-User Feedback Sessions provided formative evaluation of MTV 101 with intended end users about the program's appeal, learnability, and usability.

In the MTV 101 program, when participants logged on for the first time, they received a letter from the producer of the film, Possible Selves, hiring them to be director of the film. In this chapter, the participants who were involved in the study are identified as a Director. Students' interactions with the program were analyzed as formative evaluation from intended end users regarding the appeal, learnability, and usability of the MTV 101 program. More than one measure is recommended (Flagg, 1990; Miles & Huberman, 1994; Patton, 1980); therefore, in addition to videotaped EUFS, participants also completed a questionnaire about the program.

Qualitative measurement has to do with the kinds of data or information that are collected. Qualitative data consist of detailed descriptions of situations, events, people, interactions, and observed behaviors, direct quotations from people about their experiences, attitudes, beliefs, and thoughts; and excerpts or entire passages from documents, correspondence, records, and case histories (Patton, 1980, p. 22).

Nine students participated in the EUFS. Two of the participants (Director A and Director B) had begun the program in its original form, as a 7-week intervention program.

When the study was modified, students from the subsample group of less self-determined students were asked to participate in the EUFS and be compensated \$20 for 2 to 3 hours of time. Eight of the nine participants were selected from the subsample group of students whose combined scores indicated they were more extrinsically than intrinsically motivated to go to college. The profile of combined intrinsic scores vs. extrinsic scores for each participant (Director) is shown in Figure 5.

One student (Director H) was from the LSP sample population, but not from the subsample group of less self-determined students. She was referred by an instructor who assisted in the research. When Director H arrived, the documentation (consent form, etc.) could not be located (so new ones were filled out). Later, it was discovered that she was not from the subsample group. The instructor who sent this student subsequently commented on and inquired about this individual specifically. He mentioned how bright this student was and lamented her lack of motivation for doing homework or attending class. The instructor may not have realized that the participants were selected from a quantitatively ascertained motivation profile. The instructor was aware that the study involved a motivational strategies training program and may have felt this program would be beneficial for any student who seemed unmotivated. This departure from the methodology, including someone who did not meet the intended intrinsic/extrinsic profile, was an asset to this research. The decision to identify and select more extrinsically motivated individuals was based on research and an assumption that indicated less self-determined students were more at risk. Director H and the change to EUFS provided insight into a student who was not less self-determined, as calculated by certain AMS subscale scores, but whose behavior indicated a less academically motivated student.

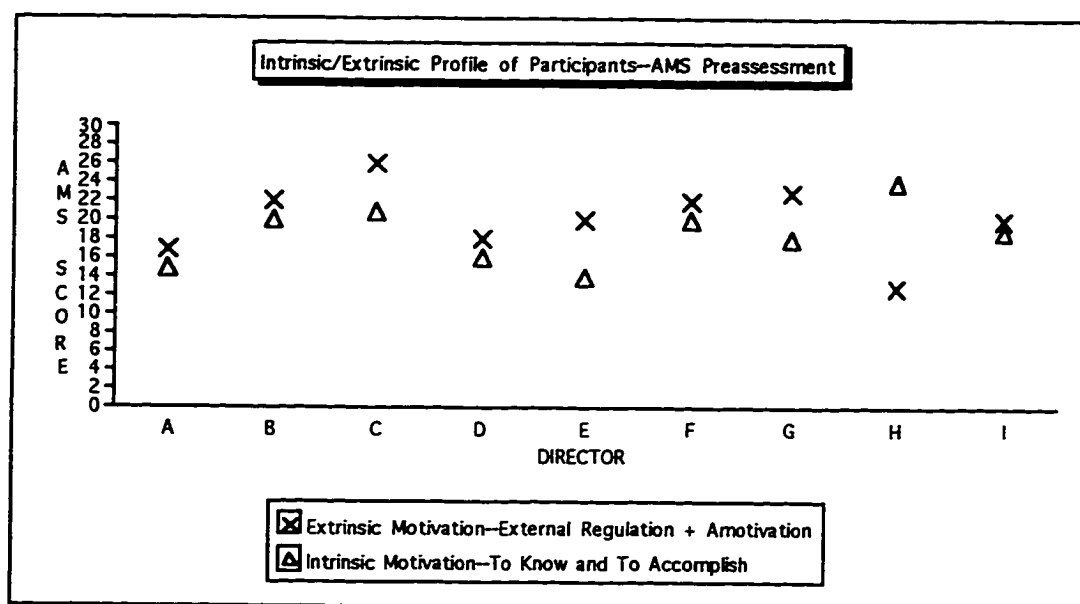


Figure 5. EUFS Participants' Preassessment Scores on the Academic Motivation Scale Indicating Intrinsic/Extrinsic Profile

Another participant who met the criteria of being less self-identified immediately informed the researcher that he had suffered a head injury a few years previously and wondered if that should prevent participation. This finding would not have been brought to light with quantitative measures, and it enhanced formative evaluation to include students with individual differences.

Structure of the End-User Feedback Sessions

The EUFS were structured in two ways. First of all, participants were told they were evaluating the MTV 101 program and were given directions on how to think aloud while they were interacting with the program. They were given a few examples about think aloud. "If you don't like a certain screen, you might say, 'I don't care for this page. It is hard to read.'" or "I don't understand what I'm supposed to do next. Should I press this button?" The End-User Feedback Session Plan that guided each EUFS is included in

Appendix D, along with questionnaire responses from each director involved in the EUFS. The second structure came from the sequence of the MTV 101 program. As participants went through the program, they would think aloud about the content of the program, including metacognition, interest/ relevance, networking/social, demands/ determination, self, environment/ expectations, and time/attention. Every participant consented to a videotaped session. It was considered important to videotape the EUFS to allow for extended opportunities to analyze the data.

Patton (1980) said, "The challenge is to combine participation and observation so as to become capable of understanding the program while describing the program for outsiders" (p. 128). Participants may have viewed the researcher as a facilitator, evaluator, 'Observer as Participant.' Participants were told that the research was being conducted by a doctoral student in instructional technology who had designed and developed a motivational strategies training program and was conducting research on the potential for change in academic motivation. The role was made public from the onset and students realized the research was supported by instructors affiliated with LSP. It may have biased the social interaction. Interactions tended to be very open; participants seemed free in sharing and discussing academic situations as they would with another student.

One of the first and most important steps in evaluating any program or technology is to assess the expectations and assumptions that participants bring to the context. It was difficult to analyze the qualitative data in this research because the participant reactions included two different types. Two students had completed the program as designed, working individually for seven weeks. Directors A and B

participated in the EUFS after they had finished MTV 101. Therefore, they were expressing views after receiving explicit motivational strategies; whereas, the others were reacting to the information as it was introduced. When this difference affected the analysis, it will be reported separately.

How people interact with a program is influenced by their views about it, by what they expect it to be like, and by what they hope to get out of it. Items on the AMS quantitatively address the question "Why Do I Go To College? After the EUFS Plan was described and before they began the MTV 101 program, participants were asked to talk about why they were going to college and their motivation.

Motivation for Going to College

The two students who participated in MTV 101 as designed continued with the program voluntarily. Both found the strategies useful in promoting their motivation for college. Director A said, "I didn't realize it, but my motivational level was very low. It was hard for me to concentrate on one thing. I was very distracted." Director B's answer was less direct, "I started interpreting on my own how to do certain scenes on the computer, and adapt that going to class and using those to help study for test. Helped me study better. My grades have been a whole lot better since I started."

Director I said his motivation for attending college was primarily social, "The only reason I'm in school is because I got bored at home. I'm just here to hang out with friends." Other participants from the EUFS expressed social pressures (from family) and extrinsic reasons (better paying jobs after graduation, to socialize) for attending college. All but one participant worked one or more jobs and several mentioned a desire for more time to sleep.

I know I have to stay in school even though I work full time. Then, I can get a better job and make more money to support myself. If you finish, you can make more money, If you finish, you can make your parents proud...positive things. (Director C)

Why I am here? Last time I was here (a previous quarter) I goofed up real bad and I ended up taking a lot of things over. I just felt like it was time for me to come back. I had so many things going on in my life. I had to ask myself why. Aren't you here in Atlanta to go to college? You're supposed to be here to learn and to better yourself so you won't be like your parents. I had to put into perspective why I was here. I had to put myself first for the first time in my life. (Director E)

You really require such responsibility for what you do. My mom graduated from college; she wants me to have the same thing. Some people think that college can wait. I need to finish at least before I am 30 years old. (Director F)

I'm just here for the duration of it. Just to get it over and done with. I think my motivation for school comes from my mother, saying You need to do this. I am the eldest and am expected to set the example. I just see the need to get it out of the way. Not really. I know I need to do it. The most I do is to try to make sure I don't fail the class. Motivated not to go to school, not to go to work. (Director G)

The individual who didn't fit the profile of the less self-determined subgroup was the only participant who, when asked about her motivation for college, expressed dissatisfaction with her current level of motivation.

I have to admit it's pretty low. That's a personal problem of mine. I really like to learn, I read all the time.. I read anything I get my hands on. Schools--I've never had any of the good classes. A few advanced courses in high school, a couple of them were really good. Most of it's so boring and so blase'. I skip class all the time. I work full-time too. If I've got something else to do, I'm tired, I'll just skip class--and just go home and go to sleep. I finally decided what I want to do--I want to be a veterinarian; I just try to stay focused on that. I volunteer at a vet's office 3 times a week--that helps me get involved. I'm really not taking the classes I want to take yet. I'm still taking basic stuff. While this class isn't directly related, it helps me lead the way to get into Georgia Vet School. I need to keep my grades up. I guess that's it. (Director H)

Director D fit the profile of the less self-determined subgroup and agreed that he was extrinsically motivated to go to college, but that did not impact his academic work. He mentioned a friend who procrastinates, who "waits until the last minute, the last hour." He said he used to do this, but no longer does. "I'm the type of person when I start something, I finish it and I don't do it halfway, I do it the best of my ability. It isn't that I need a whole lot of money, just enough to be comfortable, not to struggle."

Formative Evaluation--End Users

This research and this chapter addressed the quality and effectiveness of the MTV 101 program. Each screen of the program has been printed out and is available in Appendix C. Formative evaluation--Construct Validity, reported in chapter 3, provided feedback about the program from individuals with expertise in the field of instructional technology or research interest in the area of learner motivation. It is equally important to observe and hear feedback from intended end users, individuals for whom the program had been designed. If the training was effective in improving perceptions of academic situations, subjects in the treatment group should indicate increased positive perceptions of academic situations. However, affective change would take time--and it was even uncertain that one quarter would be sufficient. Since there was insufficient time for conducting the study as designed, the research was modified. Analysis was based on reactions to the program during an End-User Feedback Session of 1 to 3 hours in duration. This modification, observing end users interacting with the program, enhanced this research. Participant reactions indicated whether the program was appealing, whether they learned something from the program, and whether they could understand how to use the program.

Appeal

Overall, the participants found the program appealing. Prior to modifying the research, students who attended one session and did not return did not attribute the program as the reason. Time was the reason mentioned most often for not continuing. One of the students who did not return had dropped out of all of her college courses. Director A voluntarily began and completed MTV 101 as a 7-week program; yet she dropped a traditional for-credit course that offered college orientation and study skills. Two of the students who attended a first session returned to participate in the EUFS after it was restructured as a one-time session.

Screen Design. No student expressed like or dislike for the colors or overall design of the program. The original screen layout for the PreProduction pages was a three-column nightmare. This layout received the greatest negative attention. Students liked the film-making metaphor, but several mentioned the screens contained too much text and not enough graphics.

Content. The 7-scene film script captured their interest. Students related to or identified with the characters and were intrigued by the storyline (although a few were not aware it was a continuation until they were into the third or fourth scene). The first scene was mentioned by a few students as being somewhat confusing, frustrating, and the least appealing.

Characterization. Participants related very much to the characters. End-users were not aware that the two main characters, Chris and Torrey, were never assigned a gender. In the script and descriptions of the characters, neither was referred to as he or she. All participants referred to Chris as a "he," but Torrey was referred to as male and female by different participants. The neutrality of the characters' gender was pointed out to a few

of the participants when they referred to one of the characters as a certain gender. The script had been written this way to allow students to identify with the characters without gender bias. In addition, one of the formative evaluators--construct validity read the script for gender-related aspects.

Scriptwriting. During formative evaluation--construct validity and pilot testing, the script was critiqued as being somewhat stilted. The proofreader and one of the pilot test participants also offered a few suggestions for changes in the script which had been incorporated prior to EUFS. However, feedback from participants in the EUFS indicated that the script for Scene 1, in particular, needed further improvement.

Strategies. The basic strategy for each session consisted of (a) logging on to the system in the Message Center and receiving a letter that reviewed what had taken place and what would be taking place, (b) Reading about the set, characters, and script in PreProduction, (c) Thinking about and typing in a motivational strategy as Production in a text input box, (d) Reading about motivational strategies in PostProduction that pertained to that scene and as it applied in academic situations, and (e) Applying the strategies during regular academic situations (in class, while studying, and any other times that seemed appropriate) during the week.

Message Center. Students enjoyed being welcomed when they returned and receiving a letter that was personalized with their name. Web-based log-in and event-driven messaging were not reliable, however. It was great when it worked and frustrating when it didn't.

PreProduction. The layout of the screen was originally set in three columns. The first two columns were about the set and the characters, respectively, and were short (a paragraph or two). The final column was the script. This layout was based on studies

that indicate less than 10 words per line (like newspaper columns) would be more readable and to avoid having two or three separate web pages for PreProduction. Some students preferred to read each column separately which required scrolling down and then scrolling all the way back to the top. Other students read across columns and did not seem bothered by the layout. The layout was changed in a subsequent revision to a more linear-designed page approach.

Production. All but one student enjoyed the active nature of thinking about and keying in a response. The textbox looked contained, but did not word wrap. This was not user-friendly.

PostProduction. Most of the participants seemed to appreciate the value and relevance of the strategies. Several printed the page to keep and use later. A few participants indicated little interest in the strategies.

Learnability

The learnability of the MTV 101 program was analyzed based on the goals and objectives for the program. The data were categorized for each of the seven sessions: (a) metacognition, (b) interest/relevance, (c) networking/ social, (d) demands/ determination, (e) self, (f) environment/expectations, and (g) time/attention. The question driving the analysis for this section was “Would students from this group be able to learn these strategies and apply them in academic situations?”

Metacognition. Because it was considered a metastrategy that would be used with all of the other strategies, metacognition was introduced in the first scene. The strategy would also help participants as they completed self-reports when strategies were used during regular academic situations (as the original research design proposed).

Metacognition was a new term for all but two of the participants (and for all three pilot

study participants as well). Some participants were confused by the concept after reading about it and wanted further clarification. Additional examples in the program or offline interaction (discussion, interaction, scaffolding) would help students understand the concept of metacognition and how it can be used as a motivational strategy. Those who did grasp the concept found metacognition a very effective strategy. Director A said that sometimes when she was studying she felt like she was "just going through the motions" and that metacognition had helped her.

The one that really stood out to me the most had to be metacognition—thinking about what you are thinking about—I think that was very interesting. I would think of it when I was in class drifting off. That was the one that really stuck in my head the most and the one that I have used a lot. I do that often, sometimes even when I'm talking, how did I get here? (Director A)

Interest/Relevance. The participants were genuinely interested in the program and found it highly relevant to their lives as students. They talked about the characters and strategies in a positive way. Even students who began the program and were not very enthusiastic became more so as they "got into the story."

Students were able to relate with the characters about experiencing courses that were interesting and relevant and the difficulty of doing well in courses that were not. Several conveyed the difficulty of finding relevance for courses that did not relate to future goals.

Director C didn't like the part where the program suggested students shouldn't count on the instructor, that they should take responsibility for finding interest or relevance. She related stories of teachers who seem to be in a hurry and zip into class, who stick straight to a syllabus, or who just go over the problems. Director C was adamant that it should be the teacher's responsibility.

Networking/Social. In this scene, the character “Chris” was tempted by a friend to skip class and go boating (on a beautiful day). Most students in this group understood the social cost of being a college student and the need to avoid friends like ‘Lou’ and ‘partying,’ while attending college. Still, three Directors (G, H, and I) would definitely choose to go boating. Only Director I indicated that his primary motivation for attending college was the social aspect. Most said they did not find study groups very productive. A few students, however, liked study groups. One student said he hates to read and liked study groups because he could learn enough from others to pass the test without reading the material.

Another aspect of networking and social aspects was the perception of others. Director G, in particular, viewed college and studying as “nerdy” and studying as something losers do. He mentioned his sisters thought so too. Several participants mentioned someone influential like a mother or grandmother who communicated the expectation for attending college and graduating.

Demands/Determination. All but one participant juggled working and school. A few had more than one job. Most mentioned falling asleep in class or not being able to study because of the need to sleep. They related to the character “Chris” when the telephone kept ringing and it seemed there were constant demands for time. They made recommendations about how Chris should deal with the demands. For instance, several recommended that the telephone should be put on call waiting.

Self. The data were analyzed for attributions about perceived autonomy, competence, and relatedness. Consistently, in looking at all of the students’ feedback, students understood the importance of effort. There were no statements that referred to a lack of ability or that indicated a lack of confidence. For instance, in talking about courses,

they referred to the instructor or the subject as hard, boring, or interesting. Director F related that "Before I took the class I was thinking it should be easy, but it's hard. I fall asleep. That never happened to me before. I drink coffee, don't eat lunch, drink Coke." Director F said, "I can study hard and get a decent grade. I only became good at math when I went to summer school. Too much ego, maybe, overconfidence in certain subjects not studying." Director G said, "See there it goes again. I have a problem with this. Not that it is wrong. I just don't see that as a problem. I just never think that I cannot do; I just don't do!"

Environment/Expectations. In the script, the character Chris sets up a conducive environment to study for an important test the next day. Students were able to relate to the strategy of setting up a study environment. They recognized what did or did not work for them. Some said it was better for them to get out of the house and work with a study group or go to the library. For others, a study group would be very unproductive as they are extroverted and sessions tended to get 'chatty.' "When you are home there are a lot of distractions-TV, food. If you are eating, you aren't studying," Director F said.

While participants recognized the importance of setting expectations, some were willing to settle for less.

There's a difference. You settle for a 'C' because you don't want to work for an A. It is so easy, you should try it. How does one raise expectations if all one wants to do is get by? It comes back to motivation. Recognize that if you want more, you have to do more. Or, become satisfied with less....What you put in is what you get out. (Director G)

I don't make bad grades. Mostly B's. Usually it comes to that effort--well it's going to take just a little more effort I'm usually not willing. My GPA's not like where I want it to be. Working with the veterinarian, she's been encouraging. (Director H)

Time/Attention. Participants were able to distinguish quality study time from superficial studying. However, several students recognized they had a tendency to procrastinate.

See I have a problem here. Procrastinating. It is extremely easy. I procrastinate because I'm not motivated. I'm so simple I'm complex! It comes back to one thing, determination and persistence. (Director G)

To analyze the qualitative data regarding learnability, the question was raised "Would students from this group be able to learn these strategies and apply them in academic situations?" This would involve a process of change. They must first recognize the need to change (awareness) and be willing to work on it. Some of the strategies in MTV 101 were new to students; in particular, the strategy of metacognition. From a learnability perspective, the EUFS indicated that this strategy needs further development in the program. Participants expressed that they learned strategies and found the program of educational value. The two students who completed the program as planned were very complimentary about the program and its effectiveness in helping them become more motivated students.

But once I started the program, even though I didn't think of it as a way to help me. But just some of the things--if I just glanced at it, or doing at the notebook. It made me think of strategies I was using myself and pick up easier--it made me notice it more. Before I started the program I thought it was just fine how I was going, but I realized I needed to do some things different--straighten up a little bit. (Director A)

I enjoyed doing this. I guess I was lucky I got picked. At first I was kind of frustrated. I wasn't sure what I was supposed to do. I looked in the folder. I got better and better at it. It helped me study more better. My grades have been a whole lot better since I started. (Director B)

Usability

The usability of the MTV 101 program was analyzed based on end users understanding of how the program worked. Usability also uncovered glitches or methods that might frustrate users. The question driving the analysis for this section was “Would students from this group be able to use this program without a facilitator?” Concurrent observation was a far more effective methodology for evaluating MTV 101 than the original research plan. Seeing end users interact with the program was more informative than a postassessment measure and interviews conducted after participants completed the program. Participants were potential end-users who were not familiar with the program. As they interacted with the program, usability issues were observed and documented. Students tended to think aloud about the content and appeal of the program more so than how the program worked. If difficulties were observed, perhaps in logging on or in navigation, the participant might be asked questions to establish what had happened.

Logging On. As mentioned in Chapter 4, some aspects of the program, particularly logging on and sending input over the Internet did not always work reliably. In addition, students forgot their password or logged on incorrectly. The user identification (ID) was case sensitive (i.e., LSP, Lsp, lsp would all be treated differently, uniquely). It would only accept the ID exactly as it had been entered initially. As they were logging in, it became apparent that the “submit” button did not show on smaller computer screens unless the user scrolled down beyond the login and password input boxes. They would fill in the information and sit there waiting. This was an example of something that could easily be revised to improve program usability.

Personalization. When it worked properly, the personalization and letters were very effective features. The program included the ability of students to use their own

name or an alias, a feature that was originally designed to provide confidentiality of the participants. Some students wanted to use their own name; others thought it would be fun to use another name. The welcome screen and letters from the producer used the personalization feature. Appendix C shows a fictitious user who used the alias, "Mickey Mouse."

Navigation. The program was user-friendly on most screens. The few screens that were not user-friendly were improved based on formative evaluation. For example, it was not apparent where to go from the "personalized letter from the producer" screen. A button was added at the end of the letter to take users directly to the next scene. Several of the participants used the site map as a primary method of navigation. It was a very user-friendly method for jumping into the program from almost any screen. The PostProduction screen was the last screen for each session (at the end of each scene). Users unfamiliar with Internet web browsers found the idea of just stopping somewhat discomfoting. Navigational icons were added to the bottom of this screen that replicated other screens so they could go to the site map or back to the main page. To avoid getting lost in webspace, links to other sites that would provide enrichment on strategies covered in that sessions were available from the PostProduction screen only. A few students expressed interest in going to those links.

Internet Web Browser. Students who were not familiar with Internet browsers or Windows-based programs didn't know how to use the scroll bars to move down the screen. These end-users were able to learn these skills very quickly and seemed comfortable with the use of the mouse and clicking on buttons. Web browsers have other incidental methods for navigation that students can use but are outside the bounds of the program. Students can use the "back" button, for example. Depending on the screen, this

might or might not cause a problem. For this reason, MTV 101 used a navigational bar at the bottom of each screen. Other unexpected things occurred when participants were in the program due to the Internet browser's capabilities. A few users clicked on the right mouse button and a menu popped up. A few users accidentally clicked on Netscape Mail and a mail form popped up.

Textbox Input. Some end-users were not familiar with having to click inside a textbox area to begin typing. Once they were shown they needed to click inside the box, they continued to do this on other screens. The larger textbox on the Production screen where students wrote in a response or strategy for Chris did not have word-wrap capability. This made the text go beyond the box and students could not see what they had typed nor could they relocate cursor to begin typing again after pausing. Students could put in a hard return and the text would stay within the textbox, but users expected the capability of word-wrap.

"It depends," would be the answer to the question regarding usability of the MTV program and whether students from this group would be able to use this program without a facilitator. All students needed a short overview and a facilitator available when they first logged on to the system. Many students were very comfortable using the system after just one or two scenes. A facilitator would be needed with end-users who are uncomfortable with computers in general or who have not used Windows-based programs. In this section, the use of a facilitator has been addressed from the usability perspective only. Directors A and B were provided with an overview and completed Scene 1. Director A never requested assistance with the program, "No, it was very easy, once I knew my password and login, it was simple, very easy to learn." Director B needed assistance only once when he logged on for the second time.

I understand log-in. I logged in the first time when I watched you. After that 2nd time you showed me how to login, I've been able to do it every time by myself. I learned myself. (Director B)

All end users were observed as finding the program easy to use after the first few scenes. Director D said "The program seems straightforward, easy to follow." and Director F said, "It's pretty easy to learn how to use."

Summary on Appeal, Learnability, and Usability of MTV 101

This chapter concerned the appeal, learnability, and usability of the program, whereas the next chapter explores participant reactions to the content of the program from the perspective of the Hierarchical Model of Intrinsic and Extrinsic Motivation. A demographic description of each the nine individuals who participated in an End-User Feedback Session and comments from the MTV 101 Questionnaire about the overall quality of the program are included in Appendix D. All participants rated the program as more than just "OK," choosing that they "enjoyed the program," "learned strategies," or that it was a "useful program."

CHAPTER 7
PRESENTATION OF QUANTITATIVE AND QUALITATIVE RESEARCH DATA
ON INDIVIDUAL AND SITUATIONAL ASPECTS
OF ACADEMIC MOTIVATION BY THE DIRECTORS OF MTV 101

This research began with a primary purpose of determining the potential and process of change in academic motivation. This chapter addresses the primary research question:

Question 4. What is the potential and process of change in academic motivation as a result of learning about and applying motivational strategies in a number of situated learning environments?

As described in the previous chapter, nine participants were videotaped as they interacted with the MTV 101 program in End-User Feedback Sessions (EUFS). Evidence from studies using protocol analysis indicates that verbal reports provide relevant information about the cognitive processes and memory structures of participants (Ericsson & Simon, 1993). Furthermore:

Protocol data have been used to support and refute proposed mechanisms underlying various processes. Verbal reports, even from a small number of subjects, can serve as evidence that at least some subjects' cognitive processes conform to a hypothesized model of the sequence and type of information that is heeded. In such situations, the verbal reports serve as evidence for the existence of certain cognitive structures and processes, an important first step towards gaining evidence for generality and generalizability. Similarly, evidence of the existence of some cognitive

structures in the memories of some subjects can refute the universality of theory that makes strong predictions about the nature and range of internal cognitive states. (Ericsson & Simon, 1993, p. 216)

Analysis of Situational Motivation

Students' interactions with the program and the situation were analyzed from the perspective of the Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997) which is described in chapter 2. The analysis is on the individual-situational aspects of academic motivation; therefore, the analysis reflected an individual-situational perspective rather than a synthesis across participants. However, the motivational strategies and students' reactions to each has been reviewed.

At the beginning of the EUFS sessions, participants were informed that they were helping to evaluate the motivational strategies training program to determine the effectiveness of the MTV 101 program for appeal, usability, and learnability. In the MTV 101 program, when participants logged on for the first time, they received a letter from the producer of the film, Possible Selves, hiring them to be director of the film. In this chapter, the participants who were involved in the study are identified as a Director.

Unlike a strict protocol analysis, students were encouraged to discuss anything that related to the program which included perspectives about each of the subject areas and strategies covered in the MTV 101 program. Students naturally related strategies and content to aspects of their academic lives and their motivation. Sessions were analyzed for factors that are included in the model and any factors that might not be included in the model. Students were aware the researcher was a doctoral student who had designed and developed the program and that this was part of the dissertation research. If students were curious about their being selected, they were told that the preassessment they had

taken earlier in the quarter had indicated that they were more extrinsically motivated than intrinsically motivated. This may have biased their behavior toward the program.

In essence, each EUFS was analyzed for verbal data regarding the academic situation, including any social factors, the participant's perceived autonomy, competence, and relatedness. Finally, verbal data was analyzed regarding the consequences of participation in terms of the participant's affect, cognition, and behavior. Data were interpreted beyond the situational level if possible. Several strategies were considered for coding data (Ericsson & Simon, 1993; Miles & Huberman, 1994; Patton, 1980; Strauss & Corbin, 1990). Each phase of analyses began with the research questions and how the data might be coded to provide insight. The first phase consisted of coding on think aloud about the MTV 101 program's appeal, learnability, and usability (which was shared in the previous chapter). In the second phase, when attempting to code the data further, it eventually became obvious that the structure had been designed in the MTV 101 program. Seven categories had been established in the MTV 101 program; namely, (a) metacognition, (b) interest/relevance, (c) networking/ social, (d) demands/ determination, (e) self, (f) environment/expectations, and (g) time/attention. Because these were the topics introduced in the program, participants' think aloud also addressed these topics. This analysis provided additional information about the program's learnability.

The missing piece was that which would address the primary research question: How could the data be coded to investigate the potential for change? Since the Hierarchical Model of Intrinsic and Extrinsic Motivation was the theoretical model upon which the research was based, it became clear that participant data should be coded on the components from the model. The fourth postulate of the Hierarchical Model of Intrinsic and Extrinsic Motivation concerned recursiveness between levels. This research was

interested in the effect of repeated motivation at the situational level and its impact on an individual's contextual level of academic motivation. According to the model, each positive situation would result in positive outcomes in terms of affect, cognition, and behavior. Repeated positive academic motivation experiences would gradually (more than likely subject to individual differences) impact the contextual level of academic motivation. Since the EUFS was a one-session experience for all but two of the participants, this postulate could not be tested quantitatively. However, each EUFS was analyzed as a situated motivational experience as indicated in Figure 7. A visualization technique was used while coding the data. Each Director entered the model at the situational level. Data were coded for each Director and the academic situation of participating in the MTV 101 program--the social mediators, any indicators of personal competence, autonomy, and relatedness, and information about the contextual nature of the Director's life was coded. Extraneous information (related to academic motivation) were also coded to indicate areas the model did not overtly address. Potential consequences (behavior, affect, and cognition) for each Director were based on the questionnaire and on comments about the experience made during the EUFS. Data were treated as case studies and were not decontextualized; the focus remained on the individual, the situation, and insight into the contextual aspects of that person's lifestyle. Each EUFS was analyzed as a situated motivational experience from the perspective of the Hierarchical Model of Intrinsic and Extrinsic Motivation (as shown and described in chapter 2).

Analysis of Individual Change

The research, before modifications, included a quantitative measure of change in academic motivation. AMS pre and postassessment scores from the treatment and control

groups (matched for similar preassessment profiles and factors of age, gender, and ethnicity) would be compared to indicate the potential for change in academic motivation as a result of becoming aware of and applying motivational strategies.

As stated previously, except for Directors A and B, the program was not implemented as planned; therefore, pre and postassessments were not expected to change significantly. The data in this chapter (Figures 6 through 14) are being presented for two reasons: (a) preassessment scores indicate the individual's academic motivation profile before participation, and (b) graphs show how individual change would have been indicated had the research been implemented as planned. A similar graph of pre and postassessment scores for each matched pair from the control group would also be shown. Postassessment scores for two of the subjects, Director E and Director F, are missing. It had been planned that participants would take the postassessment at the end of the quarter. The first few EUFS participants did not take the AMS postassessment at the end of their session. In subsequent sessions, it was decided that since it was so near the end of the quarter the participants would complete the AMS postassessment at the end of the EUFS. Earlier participants were asked to complete the AMS postassessment (by mail with an addressed, stamped envelope included), but these two did not respond to that request.

Director A

This 17-year-old female who self-identified as a Human was one of two students who began and continued with the MTV 101 program as a 7-week motivational strategies training program. When the research was modified, she was offered the opportunity to finish the program as an EUFS. However, she preferred to complete the program as a 7-week program. She agreed to participate in a shortened EUFS when she

completed the program. The profile for Director A's AMS pre and postassessment as shown in Figure 6.

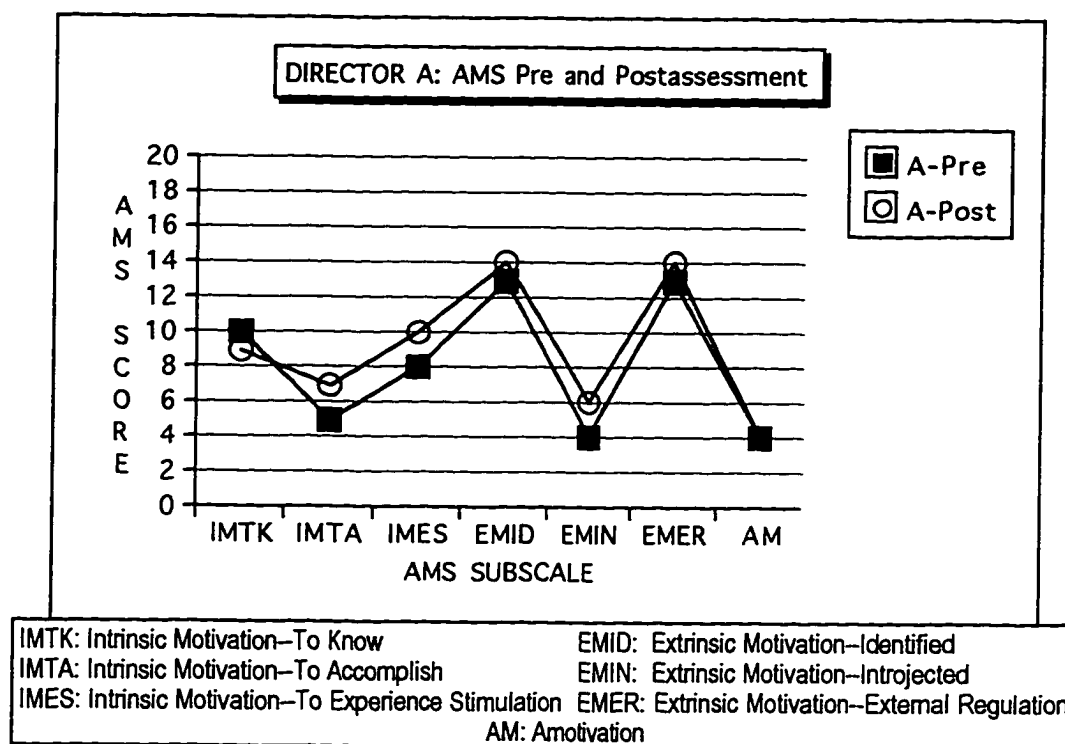


Figure 6. AMS pre and postassessment scores for Director A.

Individual-Situational Analysis

Director A said that she had not realized she needed improvement in academic motivation prior to participating in the MTV 101 program, but once she started the program it made her more conscious that she needed to “do some things different,” that she needed to “straighten up a bit.” No comments were made that indicated perceptions of autonomy, competence, or relatedness.

The social factor that was intriguing about Director A was that she dropped a traditional for-credit college orientation/study skills course while continuing with this voluntary, supplemental experience. She did not seek out interactions while she was

involved in the program. She came to the lab every week and efficiently logged on, read the materials, and printed a copy of the motivational strategies provided in PostProduction. She stated that she enjoyed receiving a new letter from the producer each time she logged on. Director A said she felt like she was taking the time to do this and someone else was taking the time to check on it--someone was right there with her. She also liked the personal touch of the program using her name.

When I approached Director A about the EUFS, she was reluctant but agreed to participate and an appointment was set. She said she would bring all of the progress reports with her. She was the last individual to participate in the EUFS and had postponed the session twice because of a family situation. When she rescheduled, she did not bring the progress reports; she had forgotten them at home (miles away). Comments indicated she had worked on offline materials. She mentioned "doing the journal too. Just like thinking about different situations during the day helped me think about how I could have better handled situations. It was an interesting learning experience."

Concerning situations related to MTV 101, Director A indicated that sometimes when she was studying she was "just going through the motions." She used the strategy of metacognition "a lot." It had helped her in academic situations such as studying and in class. "I would think of it when I was in class drifting off." She found it difficult to think of how to answer some of the questions in the Production textbox, but admitted, "It was something to make me think. Like when I'm giving Chris advice, I was thinking about myself, my study habits, and changing my study habits."

From the individual-situational perspective, Director A found the MTV 101 program enhanced her motivation. Since she did participate in a 7-week program, it was interesting to note that Director A's AMS pre and postassessment scores indicate change.

Director B

Director B, a 19-year-old African American male, was one of two students who began the MTV 101 program as a 7-week motivational strategies training program. When approached about participating in the EUFS, he preferred to complete MTV 101 as a 7-week program, but agreed to be videotaped when he completed the program. The profile for the AMS preassessment is shown in Figure 7.

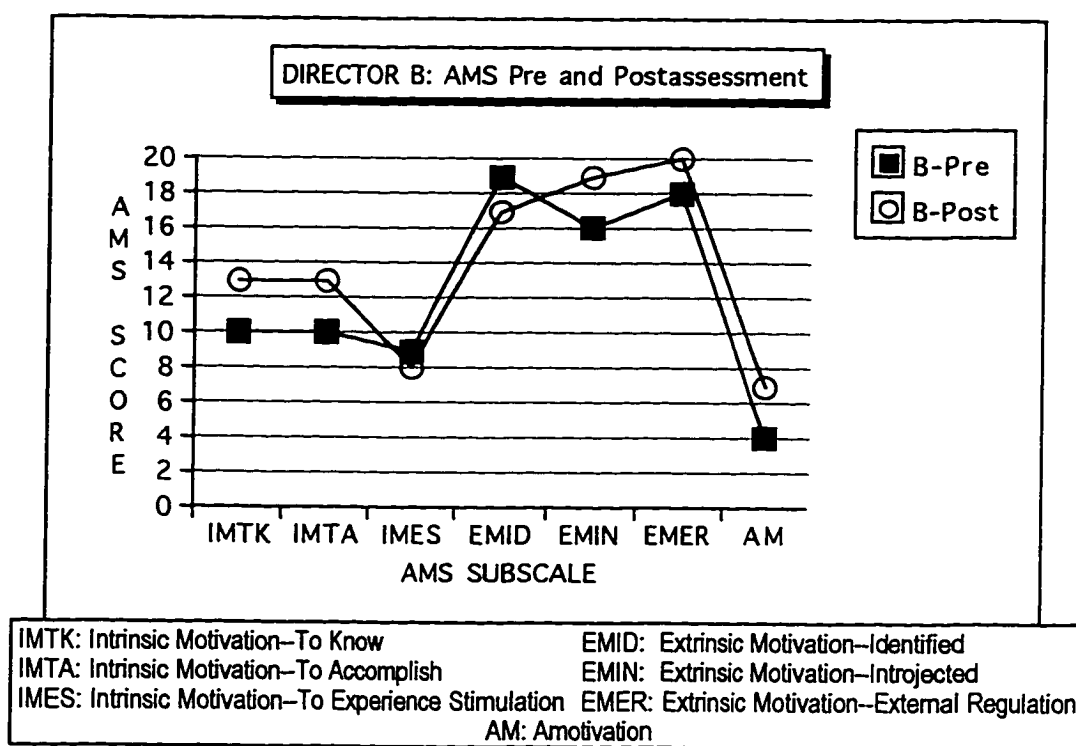


Figure 7. AMS pre and postassessment scores for Director B.

Individual-Situational Analysis

Director B said that when he first began participating in MTV 101 it made him somewhat nervous. He wasn't sure what he was supposed to do. However, he returned the following week and asked for some assistance logging on. During the 7-week program, he turned in progress reports each week, usually stopping by with a pleasant greeting.

Director B made comments that indicated perceptions of autonomy, competence, or relatedness. He said more than once that he enjoyed the program and felt lucky to have been picked. He related that he'd been frustrated at first, but he made statements about how he "figured it out for himself." He stated proudly that "I've been able to do it every time by myself. I learned myself."

The EUFS with Director B was shorter since he had already finished the program. There was no talk about social factors that might relate to academic motivation. Concerning situations related to MTV 101, Director B said "When I put words in, I try to relate myself to it."

When asked what he liked most about the program, he said "Everything, just about everything." From the individual-situational perspective, Director B took initiative in applying strategies in other academic situations. "I started interpreting on my own of how to do certain scenes on the computer, and adapt that going to class and using those to help study for test. Helped me study more better. My grades have been a whole lot better since I started."

The consequence of getting better grades are positive. His affect and behavior were also very positive. Director B's AMS pre and postassessment scores may also be viewed as one of the participants who completed MTV 101 as a 7-week program.

Director C

Director C, a 20-year-old African American female, completed the overview and the first scene and returned 2 weeks later to complete the EUFS. The profile for the AMS preassessment is shown in Figure 8.

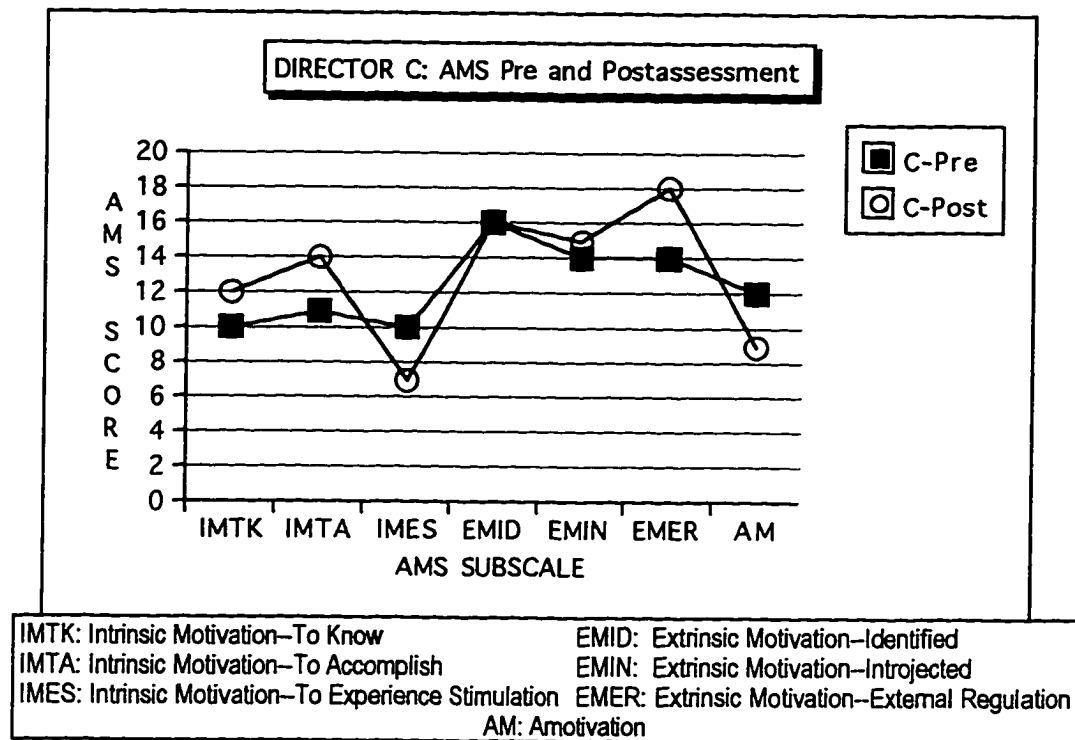


Figure 8. AMS pre and postassessment scores for Director C.

Individual-Situational Analysis

Director C was asked to participate in the EUFS through a letter sent to her class via the instructor. The first day she could only stay an hour or so. She completed the overview and the first scene. She was quiet and it was difficult to get her to think aloud. When asked if she liked something, she replied, "Yes, I guess. It's ok" or "It's all right, I guess." When she was typing in a response for Chris, she said aloud, "That's all. I don't have that much to say."

Her motivations for going to college were very extrinsic "I know I have to stay in school even though I work full time. Then, I can get a better job and make more money to support myself. If you finish, you can make more money, If you finish, you can make your parents proud."

Director C's goal was to be nurse practitioner. "That's what I see in the future. I'm engaged or whatever. I'm not ready to have kids. We are planning to move out and get a house or whatever."

Attributions tended to be external such as "The courses I tend to do better in are English, not math. Even when I have word problems though, anything to do with algebra, I have trouble." When the program mentioned interest and relevance as something the student can establish if the course or instructor does not, Director C reacted strongly that the instructors are responsible for making a class interesting and relevant.

Director C read motivational strategies and said she could see where they made sense, but pointed out how difficult it is to apply them. In response to finding interest and relevance in courses, she said, "That kind of makes sense, but algebra and stuff, trinomials--that's hard. When asked about the strategies she would use in those cases, she said, "Career-wise, money-wise, just keep thinking about that."

When she was on the PostProduction page--the list of motivational strategies and applications--it was pointed out that these pages are helpful and she could print it out. She showed no interest in doing so. Later, she was asked if she found any of them helpful. "Yes, I know I have to focus on the studying."

Toward the end of the EUFS, Director C mentioned that sometimes when she was reading, her mind would wander off because she didn't really want to read it. She also started to respond more to the program content, "What can he do? I don't know--stop leaving his work until the last minute. Become more motivated with his study."

From the individual-situational perspective, Director C was somewhat disinterested as reflected in many of her comments. She said MTV 101 "was kind of fun, once I saw it was a story, that it continued."

Director D

Director D, a 19-year-old African American male, received a letter in one of his classes, asking him to participate in the EUFS. He consented to participation in the EUFS. The AMS pre and postassessment scores for Director D are shown in Figure 9.

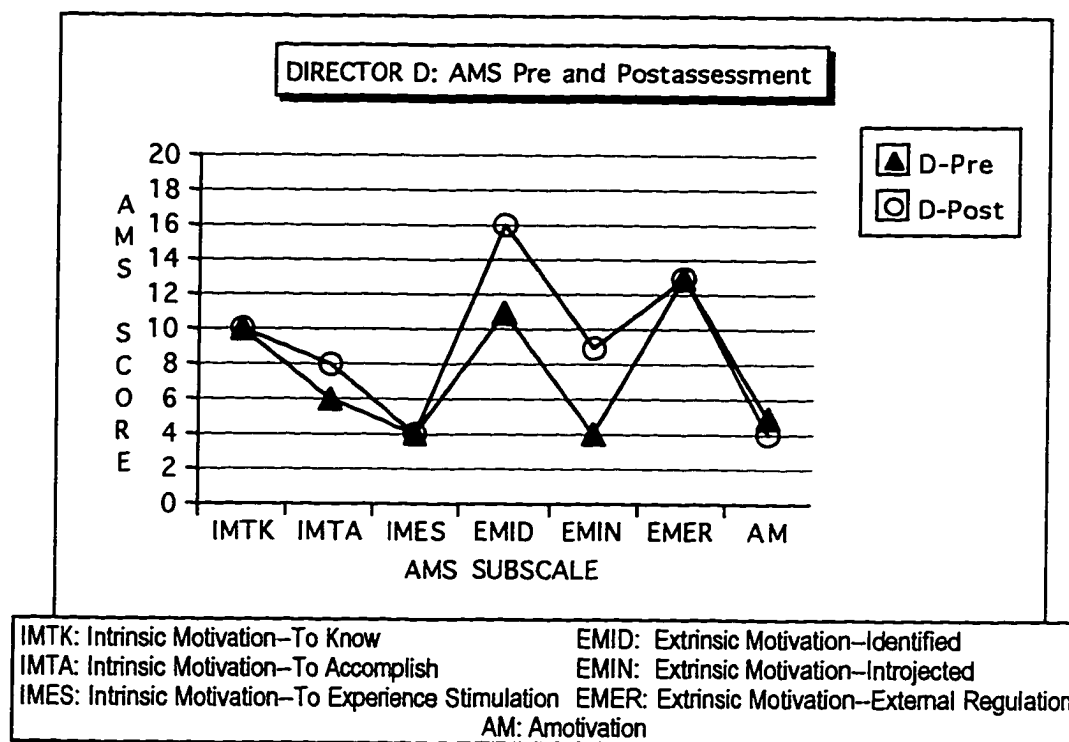


Figure 9. AMS pre and postassessment scores for Director D.

Individual-Situational Analysis

It was very difficult to get Director D to think aloud. He also didn't like filling in the textbox on the Production page, "I hate this. I don't like making up things. It's hard. Well, it's not hard once I start." His typing skills were very good, and when this was mentioned, he said it was because he "got dragged to Georgia" a few years ago from New York and likes to write letters to friends there. "I just sat writing letters all the time. I didn't want to leave NY."

Director D came across as a soft-spoken pragmatic student. He understood that doing well in school was "Mostly on you. Pay attention in class, take notes, read at home yourself, you'll be all right. They don't tell you. Syllabus, just follow that. If you choose not to, that's your problem. If you choose to, you'll be all right."

Director D mentioned friends who were having trouble in school. He doesn't. He said, "I work, I go to school." He perceives himself as a very organized person. "I will sit and think how I can get things done." He stays on task. "I don't like to rush to get things done." He described a friend, however, who "waits until the last minute, the last hour."

He was informed that he was selected as a participant because he was more extrinsically motivated for going to college. The term extrinsic and intrinsic were defined. He readily admitted this was true. "I'm the type of person when I start something, I finish it and I don't do it halfway, I do it the best of my ability. It isn't that I need a whole lot of money, just enough to be comfortable, not to struggle."

From the individual-situational perspective, Director D did not seem to need this type of training, although it sounded like he had a best friend who might. When asked what he liked or didn't like, he replied, "The program seems straightforward, easy to follow."

Director E

Director E, a 20-year-old African American female, was selected and attended the overview and first session of the program, but had not returned due to time constraints. She agreed to return to and finish the program as an EUFS. Her AMS preassessment is shown in Figure 10. She was one of the first students to complete the EUFS and the AMS postassessment was not given at that time. A subsequent attempt to administer the postassessment was not successful.

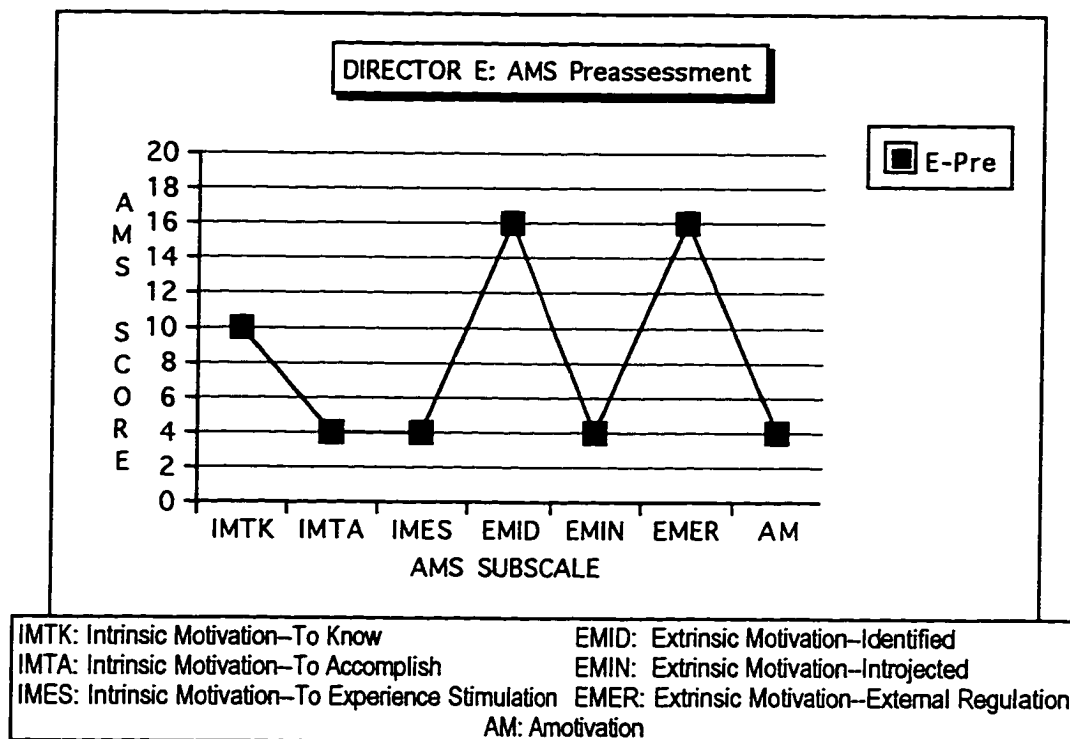


Figure 10. AMS preassessment scores for Director E.

Individual-Situational Analysis

Director E works two part-time jobs and goes to school full-time. She returned to college after having left for a few quarters because she “goofed up real bad and ended up taking a lot of things over.” Director E mentioned several activities that indicated she actively helps others. She related to the MTV 101 character Chris because her childhood was full of strife; her parents had drug and alcohol-related problems and “things at home haven’t improved.” Her grandmother, who she considers her best friend, tries to make excuses for her and her siblings, making such comments as “It’s because of your parents.”

Attributions for success were external. “I think an enthusiastic teacher makes the difference. A math teacher I had. Nobody failed her class. I think the lowest grade was a B.” She recently made a ‘D’ on an essay and she said, “My essay wasn’t developed

enough. I thought it was enough. Had I known it could have been 5 pages, I would have put in more stuff. She says I didn't have enough. That hurt! I wrote a three-page paper.”

She sees herself as more responsible than others and she says she's going to have her little brother (9 years old) stay with her this summer. She also plans to take classes and work. When asked how she would handle it all, she said she would put him in day care when needed. At the time of the EUFS, a friend with a little boy was staying with her and Director E would find him walking on her trying to wake her up. She recognized that having a roommate makes it difficult to concentrate. It is no wonder Director E said “It is hard to juggle.” and “I have so much on my mind.”

Director E said what works for her is remembering why she's here. “Counting my blessings. Only looking back on the past to see what you've been through, not dwelling on it.” Although Director E was able to relate to the MTV 101 program, she spent very little time on the PostProduction motivational strategies pages and indicated no interest in printing the pages. Director E's commitment to helping others indicates a motivational investment at the contextual level for interpersonal relations. She also works at two part-time jobs. This limits motivational investment for academic activities.

Director F

Director F, a 20-year-old Asian/Pacific Islander male, had completed Scene 1 previously as one of the participants who began but did not continue the 7-week program. He said this was due to time constraints. He was contacted and asked to participate in the modified EUFS. An instructor also provided time from class. The AMS preassessment for Director F is shown in Figure 11. He was one of the first students to complete the EUFS and the AMS postassessment was not given at that time. A subsequent attempt to administer the postassessment was not successful.

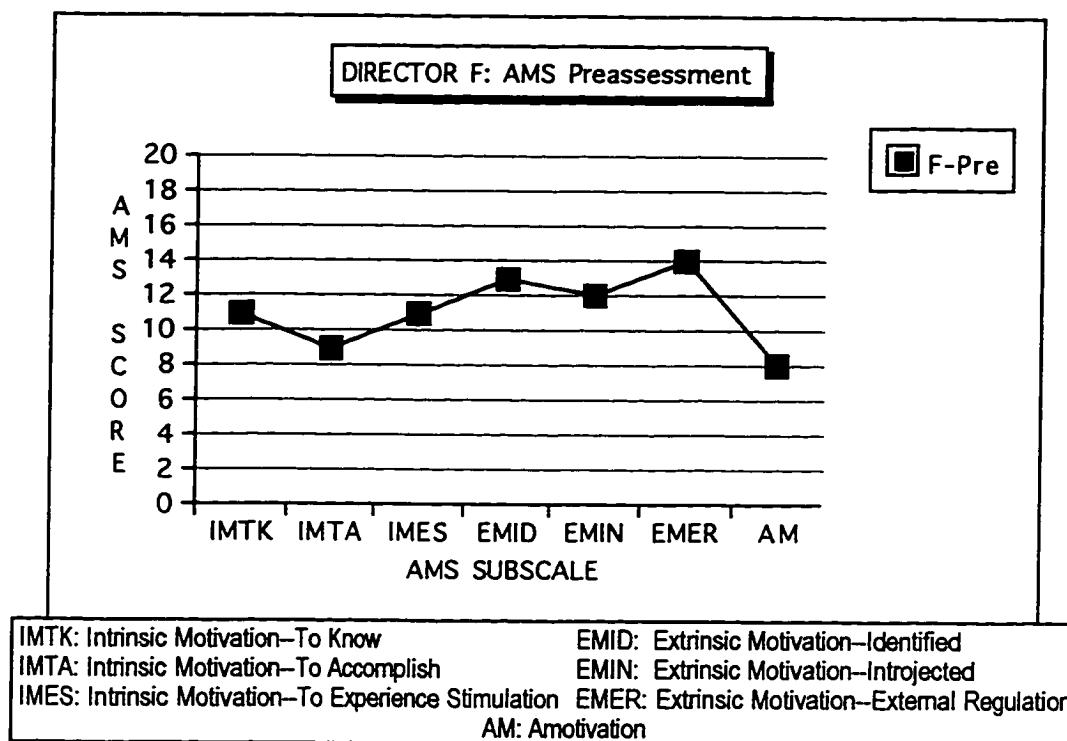


Figure 11. AMS preassessment score for Director F.

Individual-Situational Analysis

Director F was able to relate to the MTV 101 script. One scene, for example, reminded him of sociology class in which he has trouble staying awake. His mother has influenced his need to graduate. “My mom graduated from college; she wants me to have the same thing. Some people think that college can wait. I need to finish at least before I am 30 years old.”

Director F claimed that his sister is smarter and has the discipline to study. “Since I am the oldest, I hate the younger sister telling me what to do!” He likes to study with others because he really doesn’t like to be alone at home where there are a lot of distractions like television and food. Instead, he will go to the library. He moved here from the Philippines when he was in high school and mentioned that he likes to study

with others, but that it is hard to make friends. "Sometimes I feel like my friends think like hey I'm lucky I'm going to college." He finds college much harder than high school and more limiting on doing things. He works also and talks about having to call in sick so that he can work on a paper. He is unable to work on school work at his job.

Director F related to the peer pressure to socialize when you have school the next day or to skip a lecture because "you are hanging somewhere." Director F said it was fortunate that he does not like to go "clubbing." He does, however, enjoy singing, playing basketball, and watching television. Unfortunately, he doesn't like reading.

A positive academic experience for Director F was when he turned around his math skills by attending summer school. "After I took the basics. And, I got it. It motivated me to study more." Now, when he doesn't do well in a class, he doesn't drop the class, he tries to study more. "If I fail at something and I know I am good at this, then I will study more."

Director F found MTV 101 to be "really a good program" that talks about how people really learn. "It really makes you think. That's why I failed at that subject."

Director G

Director G, a 27-year-old African American male, began the program as a 7-week motivational strategies training program. He was unable to commit the time to a 7-week program, but agreed to return to complete the program as an EUFS. The AMS pre and postassessment scores for Director G are shown in Figure 12.

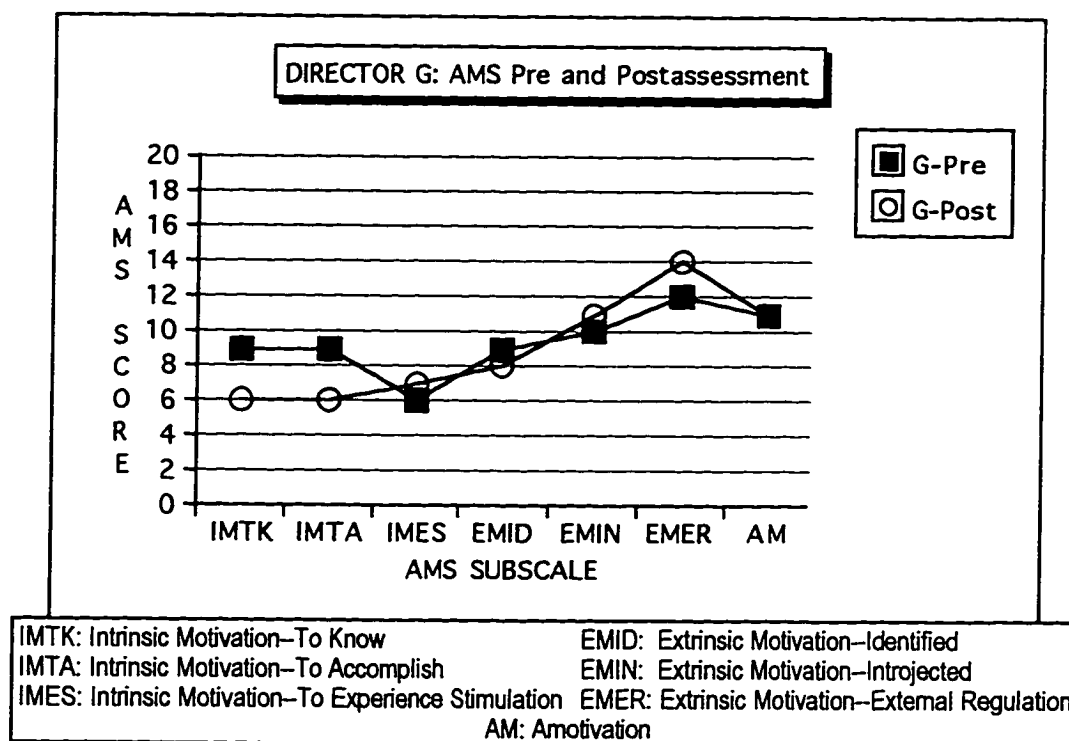


Figure 12. AMS pre and postassessment scores for Director G

Individual-Situational Analysis

Director G interacted with the program during EUFS admitting, somewhat proudly, to being an unmotivated student. He readily admitted he was not motivated to go to college or go to work. His motivation to graduate from college was primarily to satisfy his mother's expectations, but he also expressed the feeling that she devalued his accomplishments. Once when he got 2 A's and a B, she asked why he didn't get an A. He said, "Duh, I'm working." He feels that since he is the eldest, he is expected to set an example. "I just see the need to get it out of the way." He had an associate's degree when he began working towards an undergraduate in accounting six years ago. He is majoring in accounting and hates accounting courses. He has not been spending time reading his

accounting course materials. "I'm trying not to see myself as an accountant," he said. When asked what he did currently, he replied, "I work for a bank as an accountant."

This attitude was prevalent throughout his thinking. He wants to "get rich quick," and bought materials after hearing a televised advertisement about real estate investments. Very motivated to learn about this, Director G listened to audiotapes for hours on end, scanned newspapers, rode around looking at properties, and made telephone inquiries. He pointed out that he knew he had homework and had been unable to get to the homework. "Life has changed so much, or I have been exposed so much to stories of success without a degree. In the back of your mind, you are always wondering, 'Can I do it?'"

He said he might be motivated to learn, just not in a constricted environment like school. His sisters also seem glad he is in school, but says they all think he is a nerd. "It's always about school. Well, hurry up and finish school. It is hard not to blame school." He wants the reward without the investment. "I do want more, don't I? I just don't know how to achieve more unconventionally."

He talked about his own abilities, "I have a wonderful mind if only I would use it." "My mind is so good; I love it." "That's the kind of person I am. I like to help you if I can. I think I am very sweet."

He also recognized weaknesses. "Discipline. Oh I have poor discipline. I've got none. I've got no commitment to nothing." One scene takes place in the student center which he recalled was a "Great Time Waster." He used to play games until he was too late for class. He thought he did pretty well but admitted he could have done better maybe. He remembered days when he went to college and never went to class. His entire life, everybody said the same thing, "Could have done better." He also said "I beat myself up. I don't need other people to beat me up." One of the motivational strategies hit home,

"See I have a problem with that, he said as he pointed to the screen. If I don't study, I can blame that. If I do study and fail, that says something about me."

Director G realized the value of reading, but said he hated to read and that was his real downfall in school. After one discussion, it seemed difficult for him to refocus back to a reading mode, as if he resisted quiet reflective activity. At other points, he acknowledged, "I try to avoid thinking by talking" and "I talk because I don't want to read." He preferred listening to tapes of a lecture or watching a show, but he encourages his younger sister to "read, read, read. I think to be successful in college you need to be able to read." He does well in courses where he doesn't have to read. He will check with instructors to find out if he needs to read a chapter or if the professor covers all the material in class. He also studies with groups so he could learn from others rather than read the materials himself.

Director G identified with the MTV 101 character Chris so much he almost thought someone had written about him. "Ooooh. I'm like Chris. Perfect. I'm Chris. Ha. Ah. I think someone was reading my mind when they wrote this program." Later, "OK Chris is back home. Go Chris!"

As Director G read and related aspects of the program to his situation throughout the EUFS, he also talked about numerous activities that take precedence over college-related responsibilities. He loves sports and knew the schedule of games for the weekend. Even though Director G understood the strategies and even provided examples of how they would be applied in courses he was taking at the time of the EUFS, he could not convert this knowing into consideration for changing behavior. Instead, he preferred to "Work my way around things and never get stuck."

Director G enjoyed the social aspects of participating in the EUFS. He would not want to do the program on his own. "You're here. It is because there's someone to bounce ideas around with. I am so glad you are not a serious person. I'd be so out of here." He was curious about the research and how people were selected. He was informed about the intrinsic/extrinsic scores. He wanted to know how he "stacked up" compared to the other subjects. His inquiries indicated he was curious about his performance and whether other participants were as loose as he, as fascinating. He wanted to know where the research would go, who would see it. When questioned about how he could tap into being more internally motivated, he replied, "Less work, not more work." He started to look at all of the work involved in the Motivational Strategies Training Program. He counted up all the strategies and self-reporting. He summed up, "I procrastinate because I'm not motivated. I'm so simple, I'm complex! It comes back to one thing, determination and persistence."

He said that MTV 101 "points out things you recognize but can't solve. There's no quick fix." He questioned, "How does one raise expectations if all one wants to do is get by?" It comes back to motivation. He recognized "If you want more, you have to do more. Or, become satisfied with less. Do I mind? Sometimes. I think if I would have applied a little bit more there I would have finished."

Director G said if he had not started the process over, he would never have met his wife. "I do have a good attitude. I knock myself over the head because I didn't. But, I'm more mature now." A few moments later when he is reading about studying, he said, "Am I reading this right? If there isn't a pressing reason a friend and I can just get together and 'say we are studying.' You never know. What does that mean? Studying might just pay off, so don't stop. And, on that note, I will stop."

Director G acknowledged that “The entire package itself lends itself to credibility—if you apply them.” Although he recognized his behavior was less likely to result in success, he was rather proud of his unconventional student ways. “Thinking about thinking takes away from thinking. I spent most of time thinking about what I should be thinking than about what I should write.” He was provided with another example about using metacognition to control procrastination by first recognizing thoughts that are rationalizing why it doesn’t have to be done. As he seemed to comprehend this, he pressed the button, “Ok, we are through.”

Director H

Director H, a 23-year-old Caucasian female was sent by the instructor to participate in the motivational strategies training and completed the program as an EUFS. She was the only participant who was not from the less self-determined subsample group. She liked critiquing the script. She thought it was fun. Her AMS profile is shown in Figure 13. Director H did not fit the less self-determined profile, as measured by four combined subscale scores. What is interesting about her profile is a very low subscale score for extrinsic motivation--external regulation (this was the subscale where the subsample groups did not differ and she obviously does). Intrinsic motivation--to accomplish is also very low when compared with intrinsic motivation--to know.

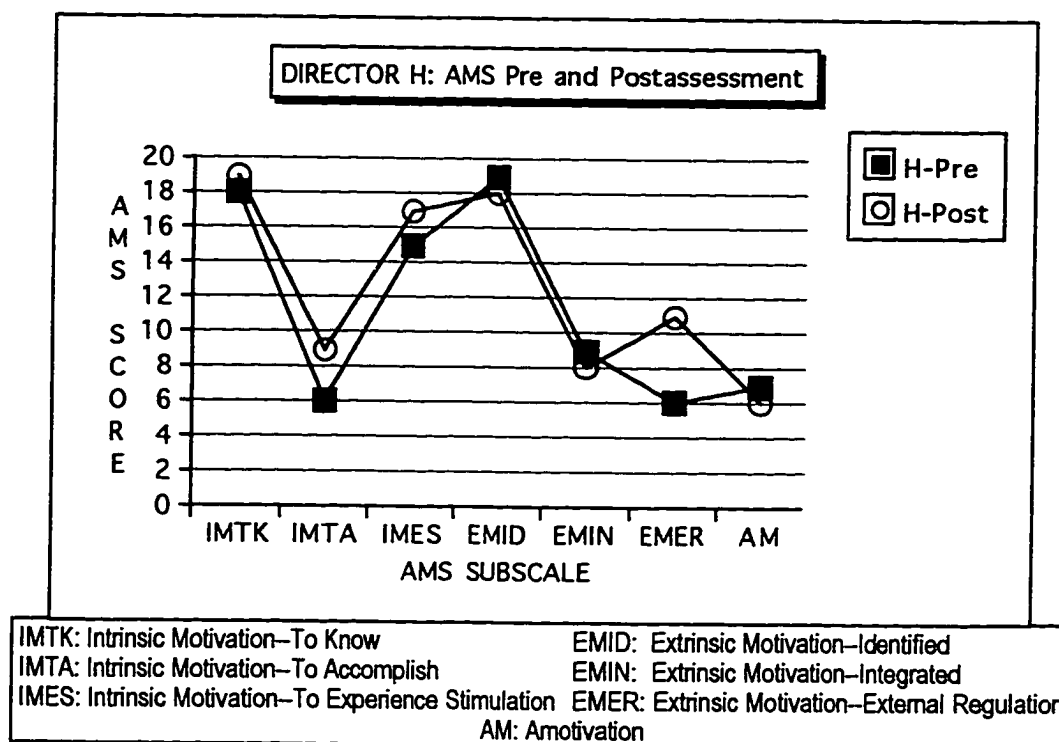


Figure 13. AMS pre and postassessment scores for Director H.

Individual-Situational Analysis

Director H admitted her motivation for college is pretty low and that it is a personal problem. She made disparaging remarks about school and courses--that very few courses were any good; most of them were boring. She is classified as a traditional student, but like many others her age, Director H works full-time. She also works as a volunteer at a veterinarian's clinic. She mentioned that she was often tired and would just skip classes and go home and go to sleep. "I think it is hard for college kids who are working. Unfortunately, paying bills is your priority."

Director H's apprehension for school seems to be based on a history of education-related affronts. Her scores on subscales of the AMS preassessment indicated far greater intrinsic motivation than extrinsic motivation-external regulation, indicating desire to learn

had not waned. "I read a lot; I've read thousands and thousands of books. In elementary school, they blocked out grades for reading so you could read anything--I read everything. She tried to think about when she started "not to do as well" because she was once a straight-A student. "The first time was in 5th grade. My teacher had one person who could go ahead in the math book. When I asked, I wasn't allowed to. I was bored. I was also in an advanced program, a gifted program. They told me I didn't do well, and I got taken out. I was mad. They told me I wasn't GIFTED anymore. I wouldn't do the vocabulary anymore. I got separated from the smart kids in high school."

Director H said she had always wanted the college experience. "I never got that; I feel cheated. I think that is important. You are more prone to do well--everyone is there to do the same thing. "My parents expected me to go to college, but never made any mention of helping me with money. I couldn't go to Ohio--out of state tuition--even though I'd lived there for ages and my grandparents live there." She comes from a lower socioeconomic background and graduated one year before the HOPE scholarship became available. By the time HOPE qualifications had changed a year later, her GPA was just a bit too low and by the time she raised it she had too many credit hours to qualify.

She recalled feelings of competition with another student in high school and expressed being somewhat smug when she heard this person was dropping out of college and having a baby. Director H also reveals a sense of pride in doing well with less effort.

They are screwing things up now and they are only in their 20s. We always had AP classes together. We had to take the test. She was always asking me what I made on a test. She knew I went out a lot; she knew I skipped school. She was always asking what I made on everything. What did you make on your SAT? What did you make on your English exemption test? It was making her angry that we were doing about the same.

The MTV 101 program discussed research that indicated students use self-defeating strategies (like not putting forth less effort) to protect their self-esteem (therefore, it isn't lack of ability). Director H thought that was true. "If you don't study, and don't do well, that's like a trap."

It was pointed out that the characters were "degenderized," and she expressed resentment about gender inequality. She noticed an advertisement at the veterinarian clinic about scrubs. In the advertisement all the nurses were female; all the doctors were male. Where she works, the male makes a dollar more per hour than she does for exactly the same position. It makes her very angry.

This seemed to be a period of transition for Director H. She has recently matured to a different lifestyle. "My social life is not a problem anymore. I used to drink a lot. My party days are over. I never thought they would be, but at 23, they are." She recently decided that she wants to be a veterinarian and (in addition to a full-time job) began volunteering part-time in a veterinarian's office. The veterinarian seemed to be acting as a mentor, encouraging her and helping her stay focused. Director H is "still taking basic stuff," but she recognized that "While this class isn't directly related, it helps me lead the way to get into Georgia Vet School. I need to keep my grades up." This connection has been somewhat successful. She made the first 'A' she's made in a long time.

She attributed the difference in grades to effort.

I don't make bad grades. Mostly B's. Usually it comes to that effort. Well it's going to take just a little more effort. I'm usually not willing. My GPA's not like where I want it to be. Working with the veterinarian, she's been encouraging.

The goal of being a veterinarian and working with a veterinarian has helped make classes more relevant for Director H.

Yes, it helps with classes. Microbiology--now that's relevant. But Italian, is not--it just helps that I like foreign languages. If you have a bad English teacher (like I do) that expects you to memorize a bunch of poems, it's hard to find the relevance of Emily Dickinson if you want to be an electrical engineer.

Still, as the instructor who sent her would attest, Director H misses class. "I try not to miss too many. It depends on the teacher. I'll miss three, go two. I'll take the B. I don't have time. Two jobs, a dog. It makes me tired, grumpy."

Director H recognized that it is hard for her to cut out distractions like the telephone and television. "I can make anything a distraction. Oh, I gotta call my friend in Ohio. I don't know how to make yourself focus when you don't feel like it. If I have a headache and I want to quit, I'll take my dog for a walk. Or, I'll say I'll go to bed now and wake up early. That never works!" When Chris is tempted by a friend to skip school and go boating, Director H read the script and said, "Now, see, I would have gone. I would have gone on the boat--for sure--it would have happened. It wouldn't even have to be a boat. It could be let's go to the mall. OK let's go."

Yet, Director H had very little empathy for the MTV 101 character, Chris.

Obviously he's got a personal problem here. Doing everything half-assed. I definitely think what I said before was true. If they don't have a learning disability, it's a mental thing. It's a psychological problem. Anyone that's in college is capable of doing well, but anyone who's not is setting themselves up not to. This program might help them, but they would need to find someone to help them get to the root of the problem.

Director I

Director I, a 21-year-old Caucasian male, was sent by an instructor who delivered letters to specific individuals from the subsample group asking them to participate in the EUFS for the MTV 101 program. Director I introduced himself and immediately stated that he had suffered a head injury a few years ago and asked if that would matter. Had the study used only quantitative measures, this individual difference would not have been known. The AMS pre and postassessment scores are shown in Figure 14.

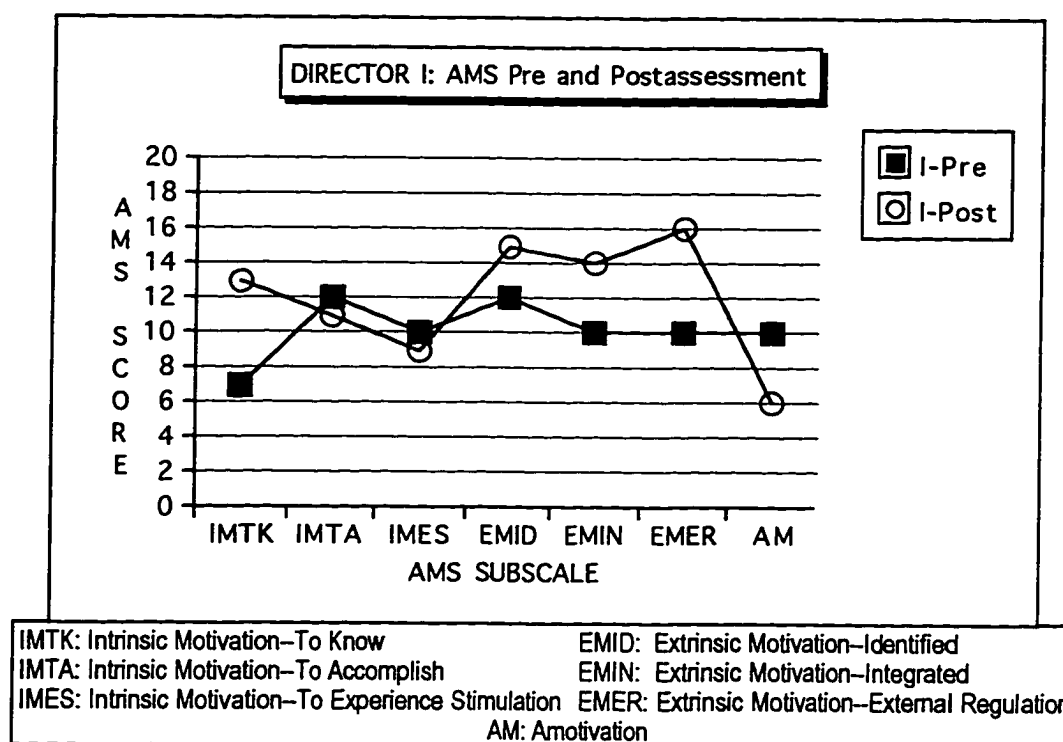


Figure 14. AMS pre and postassessment scores for Director I.

Individual-Situational Analysis

Director I explained that because of his head injury if he and another student were listening to a lecture the other person would get about twice as much out of it. He conveyed interest for a career in the music industry but his declared major is veterinarian.

He voiced concern about the requirement for six years of school. But, he also said that he is "retired" from work (parents) until he finishes college as long as he stays eligible for HOPE. He also mentioned that his primary motivation for college was the social interactions because staying at home was boring. "The only reason I'm in school is because I got bored at home. I'm just here to hang out with friends."

He enjoyed critiquing and poking fun at the MTV 101 program, "Why don't you just shut this program down," he joked. "Like the Barney Show; Let's just cancel it. What if I don't think it's ready for Production? It is too simple, boring. It's basically saying 'Think about it before you do it.' In an action film, if a guy has a hostage, if he shoots him, then he'll probably shoot her. You could show it in a more dramatic way." He wanted to know if it was going to be made into a movie. When he is told that the purpose of these sessions is to listen to ideas to make improvements, he said, "I'm taking this too literally, huh?"

He relates this to classes--a teacher who talks monotone compared to a teacher who continues to crack him up. When asked if he is learning from the class he is enjoying, Director I replied, "I already know it. It's just review." He said he keeps his grades up by "Just doing my work...Not in these basic classes. Maybe when I get to stuff I like--cutting up fetal pigs." He likes hands-on classes best, like science. "When asked if the goal of veterinarian helps to motivate him, he said, "Yes, I guess it does. It's better than being a bum on a corner shaking a cup."

Director I wants to see everything in life there is to see. He said that the MTV 101 character Chris made the wrong decision in deciding to go to class instead of on a boat with a friend on a gorgeous day. When asked about college and socializing, Director I said his biggest problem was finding enough time to sleep. When asked about homework or

studying, he said, "It's something I just don't do. It's just not feasible. Between school and sleep, there's no time--if I do, it would be after a nap. But, if I take a nap, I don't wake up." Procrastination is not a problem. "If I put something off, I'll get to it later." Director I said that he was hardly ever at home and "I don't really study, so it's not a problem." He later revealed that he studied in the evening or early in the a.m. and that his friends have been told not to call him after 9 p.m. He'll tell them "What are you calling me for? I have class in the morning." They all think he is sleeping, but sometimes he is studying. He doesn't really like to study with other people, but he does seem motivated by grades. He related a story about a test he took today and how he did on it. He tried to figure out how he did on it, but he couldn't remember how many points each item was worth.

At the end of the EUFS, Director I said that the best part of the program was the interaction with the instructor. He seemed unaffected by the content of the program.

Review of End User Feedback About Motivational Strategies

Qualitative analysis was used to examine the EUFS regarding MTV 101's content and the motivational strategies. The reactions of the participants were considered individually first, then holistically.

Metacognition. Because it was considered a metastrategy that would be used with all of the other strategies, metacognition was covered in the first scene. The strategy was also placed at the beginning of the program as a mechanism to be used by participants as they completed self-reports when motivational strategies were used during regular academic situations (as the original research design proposed). For all but two of the participants (and for all three pilot study participants as well), prior to this program, metacognition was an unknown term. More importantly, when the term was explained, it was also found to be an unknown strategy. Some participants were confused by the

concept after learning about it. Additional examples in the program, or group discussion and activities, would help students understand the concept of metacognition and how it can be used as a motivational strategy. Those who did grasp the concept found metacognition a very effective strategy. Director A mentioned feeling that sometimes when she was studying she was "just going through the motions" and that metacognition had helped her.

The one that really stood out to me the most had to be metacognition--thinking about what you are thinking about--I think that was very interesting. I would think of it when I was in class drifting off. That was the one that really stuck in my head the most and the one that I have used a lot. I do that often, sometimes even when I'm talking, how did I get here? (Director A)

Interest/Relevance. The participants were genuinely interested in the program and found it highly relevant to their lives as students. They talked about the characters and strategies in a positive way. Even students who began the program and were not very enthusiastic became more so as they "got into the story." Director C didn't like a comment made in PostProduct that suggested the student should take responsibility for finding interest or relevance. She related stories of teachers who seem to be in a hurry and zip into class, that stick straight to a syllabus, that just go over problems. Director C was adamant that it should be the teacher's responsibility.

Networking/Social. Most students in this group understood the social cost of being a college student and the need to avoid friends like "Lou" and 'partying,' while attending college. Only Director I indicated that his primary motivation for attending college was the social aspect. Overall, participants did not find study groups very productive. One student, however, liked study groups because he could learn enough from others to pass the test without reading the material.

What was revealed by the participants, however, were numerous and equally time-consuming distractors, some more controllable than others. Participants mentioned these activities--watching television, being a 'shop-a-holic,' offering to take care of a roommate's child and a little brother, investing time and money in a 'get rich quick' real estate investment strategy, accessing web sites with loads of graphics and music, volunteering at a clinic or the Special Olympics, sleeping, and most of all--working. All of these activities are routine and students should certainly have a "life" outside of academic work. For some participants, however, these activities might be avoidance techniques that prevent the commitment, the investment, the effort, and the focus necessary for student success. Several participants recognized the "saving self-esteem" strategy of not studying as an excuse for not doing well on a test or in a course.

Another aspect of networking and social aspects was the influence of others. Director G, in particular, viewed college and studying as "nerdy" behavior and mentioned his sisters thought so too. Several participants mentioned someone influential like a mother or grandmother who communicated the expectation for attending college and graduating. Two participants communicated resentment about the lack of support or recognition for academic success.

Demands/Determination. All but one participant juggled working and school. A few had more than one job. Most mentioned falling asleep in class or not being able to study because of the need to sleep. All related to the script about the numerous demands and distractions that can occur.

Self. The data were analyzed for attributions about perceived autonomy, competence, and relatedness. What was surprising in looking at all of the students feedback was that they said far less about themselves and their abilities than they did

about the effect of external factors. For instance, in talking about courses, they referred to the instructor or the subject as hard, boring, or interesting. They attributed success or lack of success primarily to effort. Two participants talked about their sisters' superior academic habits and recognized situations when effort resulted in success. Overall, they did not make disparaging attributions about self. Director F said, "I can study hard and get a decent grade. I only became good at math when I went to summer school. Too much ego, maybe, overconfidence in certain subjects not studying." Confidence in his abilities was not perceived as a problem for Director G, "See there it goes again. I have a problem with this. Not that it is wrong. I just don't see that as a problem. I just never think that I cannot do; I just don't do!"

Environment/Expectations. Students recognized the importance of setting up a conducive environment for studying and mentioned strategies like going to the library rather than staying home. Most found study groups more social than productive. Expectations became more important for students who had established a goal, usually related to a desired future career. However, expectations were seen as a trade off and most of these students were willing to settle for less so they would be able to enjoy other aspects of their lives--like a little more sleep. Director H said, "I try not to miss too many (classes)--it depends on the teacher--I'll miss three go two. I'll take the B. I don't have time. Two jobs, a dog. It makes me tired, grumpy." Director G was also willing to settle for less:

There's a difference. You settle for a C because you don't want to work for an A. It is so easy, you should try it. How does one raise expectations if all one wants to do is get by? It comes back to motivation. Recognize that if you want more, you have to do more. Or, become satisfied with less. What you put in is what you get out. (Director G)

Time/Attention. Students are leading very busy lives. For some of the participants, the investment of time (controllable or uncontrollable) and perhaps the ability to focus have diminished. One student felt that the program had helped him learn to focus better.

Preparing for test, note taking. I look at my Pro's and Con's and adapt that to get ready for test. I just focus on that one thing. Now I do! I just set back and just let things out. It has helped me focus. (Director B)

The Holistic View

What is the potential and process of change in academic motivation as a result of learning about and applying motivational strategies in a number of situated learning environments? Change begins with awareness. Students may be unaware of how motivation affects their ability to succeed in college. The MTV 101 program was designed to build awareness by explicitly sharing motivational strategies. Based on the interactions of these nine students with the program, it appears students may not contemplate the motivational commitment necessary to do well in college (precontemplation). Most of the individuals were more extrinsically motivated, indicating decreased value for the learning aspects of college. However, that is also why they were identified and asked to participate. Individual differences, readiness to change, and commitment to change will affect whether MTV 101 would be effective in improving academic motivation.

In retrospect, the combined Intrinsic/Extrinsic scores of the AMS that were used to identify less self-determined students might not be the best approach for identifying students who might benefit from participation in a motivational strategies training program. The AMS was designed for conducting research about academic motivation; its intended purpose was not as a diagnostic tool. One student who was identified as less self

determined, and viewed himself as extrinsically motivated, demonstrated effective academic motivation. Another student who participated in the program and demonstrated ineffective academic motivation was aware of the problem, recognized the need for change, but was unwilling to consider taking action. While two students did not seem to be aware of having an academic motivation problem even after participation in the program, two others recognized the need for improvement and began corrective action. The fact that these two individuals also voluntarily participated in the 7-week program indicated a readiness for change.

Further qualitative analysis about the potential for and process of change in academic motivation was limited by the fact that most users completed the program as a one-time EUFS and that the purpose of the EUFS was primarily feedback about the program itself. The program definitely needs to take place over time. The unsuccessful implementation of a voluntary, supplemental program and the close, personal nature of the EUFS revealed that MTV 101 or other motivational programs should include social-cognitive opportunities. Less motivated individuals, in particular, will benefit from working with others as they learn about and apply motivational strategies. All of the participants recognized the program had relevance for themselves or for other students they knew. The insights experienced as a result of this research were valuable and will be shared in Chapter 8.

CHAPTER 8
THE POTENTIAL FOR AND PROCESS OF CHANGE
IN ACADEMIC MOTIVATION OF UNDERGRADUATE STUDENTS
DISCUSSION, REFLECTION, AND RECOMMENDATIONS

This chapter discusses and reflects on the instructional technology process and research on the potential for and process of change in academic motivation of undergraduate college students enrolled in LSP courses. The research included evaluation of the effectiveness of MTV 101, a motivational strategies training program. The Hierarchical Model of Intrinsic and Extrinsic Motivation (Vallerand, 1997) provided the conceptual framework for the quantitative and qualitative aspects of this theory-based research. The focus of the research was on individuals whose motivational profile indicated they were less intrinsically than extrinsically motivated. The decision to select students of this motivational profile was based on the purpose of the research: to investigate the potential for and process of change in academic motivation of undergraduate students.

The decision to use quantitative and qualitative methods was based on the merits each method could contribute in acquiring and analyzing data. Miles & Huberman (1994) advocated that "Both types of data can be productive for descriptive, reconnoitering, exploratory, inductive, opening-up purposes. Both methodologies can be productive for explanatory, confirmatory, hypothesis-testing purposes" (p. 42).

The structure of this chapter will follow the instructional technology process which was used to guide each phase of this study.

Needs Assessment

The preference for intrinsic motivation in academic environments was established through a review of related literature. Undergraduate students enrolled in LSP courses completed the Academic Motivation Scale (AMS) as a preassessment to measure 7 subscales of academic motivation. The AMS, a valid and reliable instrument (Vallerand et al., 1992, 1993), was designed as a quantitative measure of academic motivation at the contextual level. It was not meant to be used as a diagnostic tool. In this research it was being used to preassess participants, but also to identify the participants. Alternative methods are recommended for identification of participants. In this research, an instructor sent someone the needs assessment did not identify. Another student met the AMS subscale criteria, but was not experiencing problems with academic motivation. There would be advantages to having instructors recommend students. First of all, instructors are apt to recognize students who do not seem academically motivated based on observable affect, cognition, or behavior. The AMS would provide a consistent measure for analyzing the motivational profiles for students who are identified by instructors as less motivated. The AMS could still be used as a pre and postassessment, measuring subscales of students who instructors perceived as less positively motivated.

Research Design

The design of the research combined quantitative and qualitative measures. Although the research was modified, quantitative measures were still used to provide descriptive data and analysis of the sample population's profile. This data provided a snapshot of students enrolled in LSP courses, the sample population. An assumption was

made that an at-risk population would have a greater number of students who might need and benefit from motivational strategies training. Further research is needed to determine if this is true.

When the number of participants reduced the viability of using quantitative pre- and postassessment measures, the research was modified to assess effectiveness of the motivational strategies training program (MTV 101) using qualitative methods. This change was highly beneficial to this line of research. End-User Feedback Sessions (EUFS) provided formative evaluation of the program by the intended audience and greater insight into the similarities and differences of individuals who comprised the intended audience. The program could be improved based on EUFS observations and think-aloud process. Furthermore, from a research perspective, this approach was somewhat unique. A program had been designed that related to the intent of the research. Then, participants were observed and videotaped as they interacted with the program using a think-aloud procedure. Using a designed program was somewhat like a structured interview. However, the participants were involved in a task that made it far different than a structured interview. It was an accidental, but very effective method for conducting protocol analysis that deserves further investigation.

Design and Development

The design and development of web-based data collection instruments, evaluation forms, and the motivational strategies training program provided a comprehensive systems approach to conducting research from beginning to end. The framework that is now in place could be used to further explore academic motivation. The program could be customized for different end users, similar research could be conducted with other sample populations, and further revisions and improvements could be made to the program.

Implementation, Management, and Utilization

Instructional technology includes the implementation, management, and utilization of processes and resources for learning. Had this research been conducted with an intact group (as many research studies are), the implementation issues would not have become so apparent. The MTV 101 program was not implemented as planned, but the end result was a far more informative study that could be used as a building block for further research. Failure to find and retain participants indicated that individuals who need to learn something may not take the initiative to do so. There are numerous possibilities for this line of research. The role of incentives or rewards has been researched a great deal. Other areas for further exploration about implementation might include: (a) being required vs. being selected vs. being a volunteer, (b) what it takes to implement voluntary programs, and (c) the potential for and process of change as individuals become more self-regulated about learning.

The purpose of this research was to explore the potential and process of change with less motivated students. Further studies with undergraduate college students and even graduate college students would be of interest. Longitudinal studies would be particularly important. Individuals who pursue graduate level coursework are probably more intrinsically motivated, but were they always more intrinsically motivated or have they become more so over time? Research at the middle school and high school level indicates that the structure of classrooms and schools contributes to decreased intrinsic motivation. Further research is needed to pinpoint who is most vulnerable and why. Researchers should continue to study individual differences and academic settings to establish individual and situational factors that affect (promote or diminish) intrinsic motivation. Further research is needed regarding implementation and motivational issues

in instructional technology, particularly as distance learning, performance support systems, and open or individualized learning approaches become more prevalent in education and training. Systems and methods are being put into place that will require more autonomous self-regulated learners. What action is taking place to assure users of such systems and methods are self-motivated? How will learning be managed without decreasing intrinsic motivation of learners?

Evaluation

The evaluation of the program was enhanced by the methods used in the EUFS. Miles & Huberman (1994) defined qualitative analysis as consisting of “three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification” (p. 10). Qualitative data were embedded within the End-User Feedback Sessions. The primary purpose for the EUFS was to obtain end-user feedback as part of the formative evaluation of the MTV 101 program. Data consisted of transcribed videotapes from each EUFS session and questionnaires from each participant. Data from each EUFS were sorted into categories for each user. One category concerned individual perception of academic motivation prior to beginning the program. Three categories concerned the appeal, learnability, and usability of the MTV 101 program. Data were partitioned and clustered and the results are reported in Chapter 6. Further research is recommended to evaluate the program’s effectiveness in promoting self-regulation of academic motivation and the potential for change at the contextual level of academic motivation. Affective change takes time. It is uncertain how much time is needed to impact academic motivation and would be expected to vary among individuals. Longitudinal studies using a variety of research methods are needed to examine the potential for and process of change in academic motivation. Furthermore, although pre and postassessment indicate change

occurred, would change have a lasting effect? The Hawthorne Effect would be expected to impact learners involved in such a program and any improvement in academic motivation could be short-term.

Academic Motivation

The desire to effect change in academic motivation for individuals who might be chronically unmotivated or amotivated has a somewhat cyclical effect, a vicious circle of motivational resistance. Researchers have found that underachievement tends to be a lifelong problem (McCall et. al, 1992). Individuals need to be motivated to change prior to being able to change their motivation. The transtheoretical change model (Prochaska et al., 1994) offers insight into the change process for individuals who have successfully and unsuccessfully quit smoking or drinking. Change begins with awareness. Students must become aware that their academic motivation may be a problem. Prior to awareness, the individual remains in the precontemplation stage. Director A in this study indicated she was in the precontemplation stage when she began to realize she needed to “straighten up a bit.” The program allowed her to enter the contemplation stage when she began a self-reevaluation. Subsequent stages would involve preparation (to change), action, and maintenance (and possibly set-backs). Director A was taking some action to change.

A final category examined think-aloud from each case from the standpoint of the Hierarchical Model of Intrinsic and Extrinsic Motivation at the situational and contextual levels. In this case, a summary table of the conceptual model was developed for each individual.

Although individuals may be intrinsically motivated, it is unknown how the motivational profile pertains to academic situations. Perhaps because of the nature of academic environments, even students who are intrinsically motivated to learn may not

find themselves motivated to learn certain subjects in certain environments. The question remains as to the balance of intrinsic and extrinsic forms of academic motivation that contribute optimally to success in traditional academic environments. Individuals who enjoy learning may not find academic environments motivational and may need a healthy dose of extrinsic motivation to succeed.

Theoretical Implications

The theoretical construct used throughout this study was the recursive nature of the Hierarchical Model of Intrinsic and Extrinsic Motivation. Repeated positive situational motivation should impact academic motivation at the contextual level. Examining the potential and process of change in academic motivation required action research methodologies that would allow repeated positive situations and evaluation of change. The opportunity for repeated positive situations was included as part of the 7-week MTV 101 program. Only two students completed the program as designed. Interactions with participants were analyzed with the model as its conceptual framework. The contextual level of motivation includes Education, Interpersonal Relations, Leisure, Work, and Religion. As students get older, social factors increase. As students get older, most have far more freedom in choosing what they will do with their time. At the contextual level of motivation, high school and college students choose and allocate time for activities involving Work, Education, Interpersonal Relations, Leisure, and Religion. These decisions will be based on personal intrinsic, extrinsic, or amotivational goals.

Empirical Implications

It has been stated throughout that the research was modified, thus preventing a quantitative measure of change at the contextual level of academic motivation or a summative evaluation on the effectiveness of the program. Implementation issues with

volunteers indicate that the use of more “captive” sample groups would be needed to obtain empirical evidence regarding the potential for change in academic motivation. The AMS and MTV 101 provide instruments for consistency across studies.

Miles & Huberman (1994) advocated using the same instruments as in prior studies as a way of conversing across studies. "Otherwise the work will be noncomparable, except in a very global way. We need common instruments to build theory, to improve explanations or predictions, and to make recommendations about practice" (p. 35).

This research study was modified and the EUFS methodology that was used is most intriguing. Computer-delivered content, along with the protocol analysis method, offer consistency that may be very useful in conducting studies with different individuals or different environments.

Practical Implications

Inert knowledge about quantum physics, relativity, gravity, genetics, and disease does little or nothing. It is only when such knowledge is applied in meaningful ways that improvements to human existence become possible. Increased understanding comes about when individuals are curious and willing to tackle difficult, complex matters of the universe. Knowledge about human motivation has increased. At the global level, individuals may have little choice about their level of motivation. Like many personality attributes, such as happiness, a proportion of how motivated an individual feels and acts may be genetic. Stress and other external factors can also affect motivation at the global level by affecting the chemistry of an individual. At the contextual level, individuals make choices about the importance of motivation in different areas of their lives that affect not only themselves but also their children, family, friends, and coworkers. At the situational

level, there are internal and external factors that affect an individual's perspectives on whether a situation is positive or negative, resulting in behaviors and consequences that have a cyclical affect on subsequent situations.

There are also two approaches for affecting situational motivation in academic environments--from the instruction/teaching standpoint and from the learner/learning standpoint. Both approaches should be used. This study focused on the learner/learning approach. Learners cannot always control what takes place on the outside; therefore, it makes sense to equip them with self-regulatory skills that will help their inner perspective. This research was designed to study the practical implications of exposing learners to explicit motivational strategies training program to help undergraduate students recognize what was inside and what was outside their control. The practical implications of this study can be applied by educators and trainers. Individuals who work with students--in middle, junior, high school, or college, or with workers in training environments--need to understand what impacts motivation from the learners' perspective. This research found that many students are not aware of or exposed to training in self-regulation of the learning process. Only two students were aware of the metaskill of metacognition. Without self-regulation of motivation, students are more likely to respond to non-motivating environments with less motivated behaviors and consequences. Repeated negative situations impact the contextual level of academic motivation, resulting in students who are less self-determined. Students need to learn how to invoke motivation from within to respond to academic situations. Educators and trainers must continue to be explore how humans lose, regain, or sustain motivation for learning. It is unknown how explicit motivational strategies training affects learners. In the short term, students could actually become more extrinsically motivated. The change

process might be gradual, as students move from being extrinsically motivated because of external regulation, to becoming more identified and integrated before they become more intrinsically motivated. It is a dual problem for students and teachers. It is difficult to work with extrinsically or amotivated students without using extrinsic measures. These same measures tend to cause extrinsic expectations from students who were more intrinsically motivated. Gaining voluntary participation from students who are not intrinsically motivated and have no external reason for participating will pose a dilemma for those who work with students (or those trying to find participants for a study...). A final area of research pertains to the similarities and differences of achievement motivation and academic motivation.

Implications for Instructional Technology

The field of instructional technology is concerned with the design, development, implementation, management, and utilization of processes and resources for learning. As new technologies allow more autonomous approaches through distance learning, open learning, and access to a world full of resources at the fingertips, learners will need to be more self-regulated. Individuals will need to be self-motivated to learn. How is this currently assessed in needs analysis? The ARCS Model helps ensure that instructional situations are designed to be motivating to learners and should be considered an integral aspect of instructional design and development (Keller, 1983, 1987).

This research also indicated concerns for instructional technology in the effectiveness of screen design for web pages based on reading patterns. Some students read two columns others must read all of one and then all of another. Students enjoyed viewing a program from the perspective of being a critic. This strategy might be incorporated into other programs.

Results of the Study

This study was informative about a sample population of undergraduate students enrolled in Learning Support Program (LSP) courses at an urban university in the southeastern U.S. This research contributed to the area of academic motivation through the following results:

1. This study found that students taking LSP courses, the sample population for this study, were high in extrinsic motivation--external motivation, indicating less self-determined motivation for going to college. Areas of research interest would be to find out if this sample population differs from other college students. Longitudinal studies would establish whether students become more intrinsically motivated as they continue to attend college, and to examine differences between students who persist and those who drop out.
2. The study found that students who may need training in motivation, self-regulation, or even study skills may not attend such training unless it is mandated or there is some external incentive for doing so. Change begins with awareness, and many of these students were not aware of a metaskill called metacognition, essential for self-regulation. The fact remains that students, instructors, trainers, and society will benefit if learners are self-regulated and intrinsically motivated. Organizational support is needed to incorporate the learning and application of self-regulatory skills into learning environments.
3. Participants enjoyed the MTV 101 program, learned strategies, or felt it was a useful program. Individual differences and readiness to change were factors that might affect whether participation in a motivation strategies training program would promote improved academic motivation.

Recommendations

This research project in academic motivation was very ambitious but also extremely rewarding. Passion and curiosity are the nourishment that provide the intrinsic motivation and energy to continue to research in any area of interest. Reeves (1995) stated that instructional technology research should focus on some aspect of how people learn and perform. He also pointed out that developmental research studies are scarce in instructional technology publications; whereas there is a preponderance of published 'pseudoscience' research that use scientific methods to prove something that has little or no relevance or value. This dissertation began with a socially relevant issue, one that impacts the quality of life for individual and groups in society, and pertains to learning and human development.

The quest to understand academic motivation caused great soul searching about personal academic motivation and what will "keep the fires burning," so to speak. As this particular study reaches its conclusion, it leaves more questions than answers about academic motivation, leaving curiosity and passion to renew this drained researcher.

As a final recommendation, researchers should seek a topic that intrinsically motivates them, something that they want to know as much as possible about, to continue to feel a sense of accomplishment, and to experience stimulation throughout their careers. If it is socially relevant and has practical significance to others--so much the better, for then it will also nourish the soul.

References

- Ainley, M. D. (1993). Styles of engagement with learning: Multidimensional assessment of their relationship with strategy use and school achievement. Educational Psychology, 85(3), 395-405.
- Ames, C. & Ames, R. (1992). Classrooms: Goals, structure, and student motivation. Journal of Educational Psychology, 84(3), 261-271.
- Anderman, E. M. Maehr, M. L. (1994). Motivation and schooling in the middle grades. Review of Educational Research, 64(2), 287-309.
- Bandura. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Barkowski, J. G., Carr, M., Rellinger, E., & Pressley, M. (1990). Self-regulated cognition: Interdependence of metacognition, attributions, and self-esteem. In B. Jones & L. Idol (Ed.), Dimensions of thinking (pp. 53-92). Hillsdale NJ: Erlbaum.
- Bong, M. (1996). Problems in academic motivation research and advantages and disadvantages of their solutions, Contemporary Educational Psychology, 21(2), 149-165.
- Boshier, R. (1985). The Houle typology after twenty-two years: A large-scale empirical test. Adult Education Quarterly, 35(3), 113-130.
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1994). Losing control: How and why some people fail at self-regulation. San Diego, CA: Academic Press.

Brawer, F. B. (1996). Retention-attrition in the Nineties. ERIC Digest. ERIC Clearinghouse for Community Colleges [Online]. Available HTTP: <http://www.gseis.ucla.edu/ERIC/digests/dig9606> [1997, July 31].

Brown, J. V. E. & Robinson, R. D. (1988). The adult male undergraduate: Who stays and who leaves? College Student Journal (22), 95-100.

Brown, R. (1991). Helping students confront and deal with stress and procrastination. Journal of College Student Psychotherapy (6), 87-102.

Bruer, J. T. (1993). Schools for thought: A science of learning in the classroom. Cambridge, MA: The MIT Press.

Burkman, E. (1987). Factors affecting utilization. In R. M. Gagne' (Ed.), Instructional Technology: Foundations. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Cameron, J. & Pierce, W. D. (1994). Reinforcement, reward, and intrinsic motivation: A meta-analysis. Review of Educational Research, 64(3), 363-423.

Cameron, J. & Pierce, W. D. (1996). The debate about rewards and intrinsic motivation: Protests and accusations do not alter the results. Review of Educational Research, 66 (1), 39-51.

Capelli, P., Bassi, L., Katz, H., Knoke, D., Osterman, P., & Useem, M. (1997). Change at Work. New York: Oxford University Press.

Carr, C. (1993). The ingredients of good performance. Training, 30(9), 51-55.

Carroll, J. M. (1997). Toward minimalist training: Supporting the sense-making activities of computer users. In M. A. Quinones & A. Ehrenstein (Ed.), Training for a rapidly changing workplace (pp. 345). Washington, D. C.: American Psychological Association.

Catterall, J. S. (1985, September 3). On the social costs of dropping out of schools. Stanford, CA: Stanford University, Center for Educational Research.

CDP Newsletter (1990). The demographics of school reform: A look at the children. CDP Newsletter, 1(3), 1-3.

Clark, R. E. (1983). Reconsidering research on learning from media. Review of Educational Research, 53(4), 445-459.

Cranton, P. (1994). Understanding and promoting transformative learning: A guide for educators of adults. San Francisco, CA: Jossey-Bass Publishers.

Csikszentmihalyi, M. (1990a). Literacy and Intrinsic motivation. Daedalus, 119, 115-140.

Csikszentmihalyi, M. (1990b). Flow: The psychology of optimal experience. New York: Harper Collins.

Csikszentmihalyi, M. (1991). Thoughts about education. In D. Dickenson (Ed.), Creating the future: Perspectives on educational change (pp. 82-87). Aston Clinton Bucks, UK: Accelerated Learning Systems Ltd.

Csikszentmihalyi, M. & Nakamura, J. (1989). The dynamics of intrinsic motivation: A study of adolescents. In C. Ames & R. Ames (Eds.), Research on Motivation in Education: Vol. III. Goals and Cognitions (pp. 45-71). New York: Academic Press, Inc.

Csikszentmihalyi, M., Ryunde, K. & Whalen, S. (1992). Talented teenagers: The roots of success and failure. Cambridge, UK: Cambridge University Press.

deCharms, R. (1968). Personal Causation. New York: Academic Press.

Deci, E. L. (1975). Intrinsic motivation. New York: Plenum.

Deci, E. L. & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum.

Deci, E. L. & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), Nebraska symposium on motivation: Vol. 38, Perspectives on motivation. Nebraska symposium on motivation (pp. 237-288). Lincoln, NB: University of Nebraska Press.

Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. Educational Psychologist (26)3-4, 325-346.

Dewey, J. (1938). Experience and education. New York: Collier.

Dick, W. & Carey, L. (1990). The systematic design of instruction. (3rd ed.). New York: Harper-Collins.

Dienstbier, R. & Spaulding, W.D. (1994). Integrative views of motivation, cognition, and emotion, Volume 41, Nebraska Symposium on Motivation.

Dipboye, R. L. (1997). Organizational barriers to implementing a rational model of training. In M. A. Quinones & A. Ehrenstein (Ed.), Training for a rapidly changing workplace (pp. 31-60). Washington, D.C.: American Psychological Association.

Draper, S. W. (1997). Prospects for summative evaluation of CAL in higher education. Association for Learning Technology Journal ALT-J (5)1, 33-39.

Driscoll, M. (1994). Psychology of learning for instruction. Boston: Allyn and Bacon.

Duchastel, P. (1994). Learning Environment Design. Journal of Educational Technology Systems (22)3, 225-233.

Edmonds, G. S., Branch, R.C., & Mukherjee, P. (1994). A conceptual framework for comparing instructional design models. Educational Technology Research and Development, 42(4), 1042-1629.

Entwistle, N. (1991). Learning and studying: Contrasts and influences. In D. Dickenson (Ed.), Creating the future: Perspectives on educational change (pp. 88-95). Aston Clinton Bucks, UK: Accelerated Learning Systems Ltd.

Ericsson, K. A. & Simon, H. A. (1993). Protocol analysis: Verbal reports as data. (Rev. ed.). Cambridge, MA: The MIT Press, A Bradford Book.

Flagg, B. N. (1990). Formative evaluation for educational technologies. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc., Publishers.

Gagne', R. M. (Ed.). (1967). Learning and individual differences. Columbus, OH: Merrill.

Gagne', R. (1985). The conditions of learning. (4th ed.). New York: Holt, Rinhart and Winston.

Gagne', R. M., Briggs, L.J.; & Wager, W.W. (1992). Principles of instructional design. (4th ed.). Chicago: Holt, Rinehart, and Winston, Inc.

Gagne', R. M. & Glaser, R. (1987). Foundations in learning research. In R. M. Gagne (Ed.), Instructional technology: Foundations, (pp. 49-83). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Gillespie, L., Dobrovoly, J., Spannaus, T., & Wilson, B. (1997). (February 13, 1997). If you build it, will they come? Paper presented at the Association of Educational Communications and Technology/Division of Learning and Performance Environments, Albuquerque. [Online] Available HTTP: <http://www.hbg.psu.edu/~jxf18/dlpe/abq97/p506.html>desc [October 16, 1997].

Garcia, T. P. & Pintrich R. (1994). Regulating motivation and cognition in the classroom: The role of self-schemas and self-regulatory strategies. In D. H. Schunk & B. J. Zimmerman (Ed.), Self-regulation of learning and performance (pp. 127-153). Hillsdale, N.J.: Lawrence Erlbaum Associates, Inc., Publishers.

Ghodsian, D., Bjork, R. A., & Benjamin, A. S. (1997). Evaluating training during training: Obstacles and opportunities. In M. A. Ehrenstein & A. Quinnones (Ed.), Training for a rapidly changing workplace (pp. 63-88). Washington, D.C.: American Psychological Association.

Guba, E. (1971). Frontispiece. In D. L. Stufflebeam (Ed.), Educational evaluation and decision making. Itasca, IL: E.E. Peacock.

Gustafson, K. L. (1991). Survey of instructional development models (2nd ed.). Syracuse, NY: ERIC Clearinghouse on Information Resources (ERIC Document IR-91).

Hancock, D. R. (1994). Motivating adults to learn academic course content. Journal of Educational Research, 88(2), 102-108.

Harackiewicz, J. M. & Elliot., A. J. (1993). Achievement goals and intrinsic motivation. Journal of Personality and Social Psychology, 65(6), 904-914.

Hattie, J., Biggs, J., & Purdie, N. (1996). Effects on learning skills interventions on student learning: A meta-analysis. Review of Educational Research, 66(2), 99-136.

Heckhausen, H. (1991). Motivation and action. Berlin, Germany: Springer-Verlag.

Houle, C. O. (1961). The inquiring mind. Madison, WI: University of Wisconsin Press.

Information Digest 1994-95. Learning Support Programs [Online]. Available HTTP: <http://www.peachnet.edu/admin/pubs/infodig/infodig95/academic/page51.html> [11/09/97].

Jonassen, D. H. & Grabowski, B. L. (1993). Handbook of individual differences, learning, & instruction. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Keegan, M. (1995). Scenario educational software: Design and development of discovery learning. Englewood Cliffs, NJ: Educational Technology Publications.

Keller, J. (1983). Motivational designs of instruction. In C. Reigeluth (Ed.), Instructional design theories and models: An overview of their current status. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Keller, J. (1987). Development and use of the ARCS model in instructional design. Journal of Instructional Development, 10(3), 2-10.

Kerka, S. (1988). Strategies for retaining adult students: The educationally disadvantaged. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education (Digest 76).

Klein, J. D. & Freitag, E. T. (1992). Training students to utilize self-motivational strategies. Educational Technology, 39(3), 44-48.

Koestner, R. & Zuckerman, M. (1994). Causality orientations, failure and achievement. Journal of Personality, 62(3), 321-346.

Kohn, A. (1996). By all available means: Cameron and Pierce's defense of extrinsic motivators. Review of Educational Research, 66(1), 1-4.

Kozma, R. B. (1991). Learning with media. Review of Educational Research, 61(2), 179-211.

Lemann, N. (1994). Is there a science of success? Atlantic Monthly, February 1994, 83-98.

Lepper, M. R. & Hodell, M. (1989). Intrinsic motivation in the classroom. In C. Ames & R. Ames (Ed.), Research on motivation in education: Vol. 3 - Goals and cognitions (pp. 73-105). New York: Academic Press, Inc.

Lepper, M. R., Keavney, M., & Drake, M. (1996). Intrinsic motivation and extrinsic rewards: A commentary on Cameron and Pierce's meta-analysis. Review of Educational Research, 66(1), 5-32.

Lepper, M. R. & Malone, T. W. (1988) Intrinsic motivation and instructional effectiveness in computer-based education. In R. E. Snow & M. J. Farr (Ed.), Aptitude, learning, and instruction: Vol. III. Conative and affective process analyses. Hillsdale, NJ: Erlbaum.

Manning, B. H. (1991). Cognitive self-instruction for classroom processes. Albany: NY: State University of New York Press.

Marton, F. & Booth, S. (1997). Learning and awareness. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

McCall, R. B., Evahn, C., Kratzer, L. (1992). High school underachievers: What do they achieve as adults? (Vol. 1). Newbury Park, CA: Sage Publications.

McClelland, D. C. (1995). Human Motivation. New York: Cambridge University Press.

McCombs, B. L. & Pope, J.E. (1994). Motivating hard to reach students. Washington, D.C.: American Psychological Association.

McLellan, H. (1996). Situated Learning Perspectives. Englewood Cliffs, NJ:: Educational Technology Publications.

Messick, S. (1976). Personal styles and educational options. In S. M. Associates (Ed.), Individuality in learning (pp. 327-368). San Francisco: Jossey Bass.

Mezirow, J. (1991). Transformative Dimensions of Adult Learning. San Francisco: Jossey-Bass.

Miles, M. B. & Huberman, A. M. (1994). Qualitative Data Analysis: An expanded sourcebook. (2nd ed.). Thousand Oaks, CA: Sage Publications.

Miller, R. B., Green, B. A., Montalvo, G. P., Ravindran, B. & Nichols, J. D. (1996). Engagement in Academic Work: The Role of Learning Goals, Future Consequences, Pleasing Others, and Perceived Ability. Contemporary Educational Psychology, 21(4), 388-422.

Mulry, G., Flemin, R., & Gottschalk, A. (1994). Psychological Reactance and brief treatment of academic procrastination. Journal of College Student Psychotherapy, 9(1), 41-56.

National Center for Educational Statistics (1993). Dropout rates in the United States. Washington, D.C.: National Center for Educational Statistics, U. S. Department of Education.

Pajeres, F. (1996). Self-efficacy beliefs in academic settings. Review of Education Research, 66(4), 543-578.

Paris, S. G. & Turner, J. C. (1994). Situated motivation. In P. Pintrich, D. Brown, & C. E. Weinstein (Eds.), Perspectives on student motivation, cognition, and learning. Essays in honor of Wilbert J. McKeachie (pp. 213-237. Hillsdale, NJ: Lawrence-Erlbaum. Patton, M. Q. (1980). Qualitative evaluation methods. Beverly Hills, CA: Sage Publications.

Phillips, R. (1997). Problems and Pitfalls of Educational IMM Development. In IT-FORUM (Ed.), IT-FORUM (pp. 4). Available: <http://www.hbg.psu.edu/~jxf18/dlpe/itforum/pitfalls.Essay.html>: IT-FORUM.

Piaget, J. (1971). *Biology and knowledge. An essay on the relations between organic regulations and cognitive processes* (Fr. orig.: "Biologie et connaissance: Essai sur les relations entre les régulation organiques et les processus cognitifs." Paris: Editions Gallimard, 1967., Trans.). Chicago: The University of Chicago Press.

Pierce, C. (1994). Importance of Classroom Climate for At-Risk Learners. Journal of Educational Research, 88(1), 37-42.

Pintrich, P., Brown, D., & Weinstein, C. E. (1994). Perspectives on student motivation, cognition, and learning. Essays in honor of Wilbert J. McKeachie. Hillsdale, NJ: Lawrence-Erlbaum. Pressley, M. (1995). More about the development of self-regulation: Complex, long-term, and thoroughly social. Educational Psychology (30)4, 207-212.

Prochaska, J. O., Norcross, J. C., & DiClemente, C. C. (1994). Changing for good. New York: William Morrow and Company, Inc.

Quinones, M. A. (1997). Contextual influences on training effectiveness. In M. A. Quinones & A. Ehrenstein (Ed.), Training for a rapidly changing workplace (pp. 177-199). Washington, D.C.: American Psychological Association.

Reeve, J. (1996). Motivating others: Nurturing inner motivational resources. Boston: Allyn and Bacon.

Reeves, T. C. (1983). The role, methods, and worth of evaluation in instructional design. In C. Reigeluth (Ed.), Instructional design theories and models: An overview of their current status (pp. 157-181). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Reeves, T. C. (1992). Evaluating Interactive multimedia. Educational Technology (32)5, 47-53.

Reeves, T. C. (1995). Questioning the Questions of Instructional Technology Research. Invited Peter Dean Lecture presented for the Division of Learning and Performance Environments (DLPE) at the 1995 National Convention of the Association of Educational Communications and Technology (AECT).

Rezabek, R. H. (1994). Utilizing intrinsic motivation in the design of instruction. Paper presented at the 1994 Convention of the Association for Educational Communications and Technology, Nashville, TN.

Richey, R. C. (1995). Trends in instructional design: Emerging theory-based models. Performance Improvement Quarterly, 8(3), 111-117.

Riipinen, M. (1994). Extrinsic occupational needs and the relationship between need for achievement and locus of control. Journal of Psychology Interdisciplinary & Applied, 128(5), 577-588.

Rose, S. (1997). Dropping Out Is Hard to Do. [Online] Available HTTP: <http://pages.prodigy.com/MD/zoilus/dropout.html> [1997, October 16].

Rothman, R. (1990). Educators focus on ways to boost student motivation. Education Week, November 7, 11-13.

Rotto, L. (1994). Curiosity, Motivation, and Flow. Paper presented at the AECT, Nashville, Tennessee.

Rowland, G. (1993). Designing and instructional design. Educational Technology Research and Development, 41(1), 79-91.

Ryan, R. M. & Deci, E.L. (1996). When paradigms clash: Comments on Cameron and Pierce's claim that rewards do not undermine motivation. Review of Educational Research, 66(1), 33-38.

Schunk, D. H. & Zimmerman, B. J. (1994). Self-regulation of learning and performance: Issues and educational applications. Hillsdale, NJ:: Lawrence Erlbaum.

Schwartz, W. (1995). School dropouts: New information about an old problem. ERIC Digest 109. ERIC Clearinghouse on Urban Education, New York. Available HTTP: <http://eric-Web.tc.columbia.edu/digest/dig109.html> [1997, July 31].

Seels, B. & Richey, R. (1994). Redefining the field: A collaborative effort. Tech Trends, 39(2), 36-38.

Shapiro, E. S. (1996). Academic skills problems: Direct assessment and intervention (2nd ed.). New York: The Guilford Press.

Snow, R. E. & Jackson, D. N. (1992). Assessment of Conative Constructs for Educational Research and Evaluation: A Catalogue, Project 2.3: Enhancing the Utility of Performance Assessments: Domain Independent R & D (Contract No. R117G10027. Washington, D.C.: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED 351 388).

Stevens, J. (1992). Applied multivariate statistics for the social sciences. (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Surry, D. W. & Farquhar, J. D. (1996). Incorporating social factors into instructional design theory. In M. Bailey & M. Jones (Eds.) Work, Education, and Technology (pp. 61-68). DeKalb, IL: LEPS Press.

Sylwester, R. (1994). How emotions affect learning. Educational Leadership, 52(2), 60-65.

Teegardin, C. (1996, September 6). High school completion rate flat, but some groups showing gains. The Atlanta Journal/The Atlanta Constitution, pp. A12.

Tessmer, M. & Wedman, J. F. (1995). Context-sensitive instructional design models: A response to design research, studies, and criticism. Performance Improvement Quarterly, 8(3), 38-54.

Tobias, S. (1987). Learner Characteristics. In Robert M. Gagne' (Ed.), Instructional technology: Foundations (pp. 207-231). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Tobias, S. (1994). Interest, prior knowledge, and learning. Review of Educational Research, 64(1), 37-54.

Trochim, W. (1986). Editor's Notes. (Vol. 31). San Francisco, CA:: Jossey-Bass.

Urdan, T. C. (1997). Examining the Relations among Early Adolescent Students' Goals and Friends' Orientation toward Effort and Achievement in School. Contemporary Educational Psychology, 22(2), 165-191.

Urdan, T. C. & Maehr, M. L. (1995). Beyond a two-goal theory of motivation and achievement: A case for social goals. Review of Educational Research, 65(3), 213-243.

Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. In M. Zanna (Ed.), Advances in Experimental Social Psychology. New York: Academic Press.

Vallerand, R. J. & Bissonnette, R. (1992). Intrinsic, extrinsic and amotivational styles as predictors of behavior: A prospective study. Journal of Personality, 60(3), 599-620.

Vallerand, R. J., Fortier, M., & Guay, F. (1996). Self-determination and persistence in a real-life setting: Toward a motivational model of high school dropout. Paper submitted for publication.

Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. Educational and Psychological Measurement, 52, 1003-1017.

Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1993). On the assessment of intrinsic, extrinsic, and amotivation in education: Evidence on the concurrent and construct validity of the Academic Motivation Scale. Educational and Psychological Measurement, 53, 159-173.

Vanderstoep, S. W., Pintrich, P. R., Fagerlin, A. (1996). Disciplinary Differences in Self-Regulated Learning in College Students. Contemporary Educational Psychology, 21(4), 345-362.

Van Horn, C. E. (1996). No one left behind (Background Paper). New York: Twentieth Century Fund Task Force on Retraining America's Workforce.

Weiner, B. (1994). Integrating social and personal theories of achievement striving. Review of Educational Research, 64(4), 557-573.

Winert, F. & Kluwe, R. (1987). Metacognition , motivation and understanding. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Wlodkowski, R. J. (1989). Instructional design and learner motivation. In K. A. Johnson & L. J. Foa (Ed.), Instructional design: New alternatives for effective education and training. New York: McMillan.

Wong, M. & Csikszentmihalyi, M. (1991). Motivation and academic achievement: The effects of personality traits and the quality of experience. Journal of Personality, 59(3), 539-574.

Zimmerman, B.J. (1995). Self-Regulation involves more than metacognition: A social cognitive perspective. Educational Psychologist (30)4, 217-221.

APPENDIX A
Formative Evaluation--Construct Validity
for the MTV 101 Program
Request for Evaluators & Responses

Message Sent via E-Mail to Motivation Listserv and
Individuals from Who's Who in Instructional Technology

Hi. I am a Ph.D. student instructional technology at Georgia State University.
My dissertation is :

The Design, Development, and Evaluation of
Web-based Motivational Strategies Training:
Individual and Situational Aspects of Academic Motivation

I am looking for a few extremely good and kind-hearted individuals to evaluate the materials. I am particularly interested in individuals who would be considered experts in instructional technology and/or motivational research.

If you are willing and have the time, I consider you one of those experts.

Here is just a bit of information to see if you are interested:

MTV 101 Studios Overview: The Film Studio Metaphor

The metaphor of the program is a movie studio. The user will become the director of a film. The metaphor was chosen as a way to engage learners and deliver the

content of motivational strategies. The concept of directing a movie parallels the need for students to become directors of their own academic situations. While directing the film, "Possible Selves," the student will be reading about, thinking about, and applying motivational strategies.

The program was designed as an 7-week course. The week prior to the program the students will attend an overview session with a facilitator and receive offline course materials. During subsequent sessions, students should complete one scene per visit, for a total of seven scenes. The director (student) will be asked to apply strategies covered in each scene during regular academic experiences for the following week and to submit weekly progress reports to the film's producer (instructor) sharing those experiences. Supplemental materials and online communications capabilities are also available.

MTV 101 Studios is located on the Georgia State University web server at:

<http://www.gsu.edu/~mstbmtx/mtv>

An evaluation form for individuals interested in providing feedback about the program is available on the Georgia State University web server at:

<http://www.gsu.edu/~mstbmtx/mtv/eval>

Offline materials, designed to accompany the motivational strategies program, are available for downloading in Microsoft Word format (Macintosh and Windows) at:

<http://www.gsu.edu/~mstbmtx/mtv/info>

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

COURSEWARE EVALUATION #1

Evaluation of Program—Evaluator

Evaluated On: 12/3/97

Evaluation time spent: 2

Evaluated by: XXXXXXXXXXXX

Title: Dir of Development, Access Sr Lecturer, UNSW

Evaluation Perspective: Instructional Technology Faculty

For rating content: Average

For rating pedagogy: Above Average

For rating courseware usability: Novice

Limitations of Evaluation: Not quite sure whether there is any in class activity, or activity other than on WWW. I find the distinction between instruction design and course design to be a bit odd. This form is awkward to use.

Instruction 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

The difficulty level was appropriate for intended users: 2

The breath and depth of content was appropriate: 4

Target audience probably would have prerequisite knowledge and skills: 4

Programs objectives would be met immediately after course: 0

Appropriate knowledge, skills, or attitudes would be learned: 3

Instructional interactions are appropriate for the objectives: 4

Students will retain significant knowledge that will be helpful long term: 3

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

Comments for Instructional Design:

The overall idea is good. The stories feel simplistic. Objectives not explicitly stated. Not sure of transfer. Depends on interaction/facilitation of reflection.

Course Design 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

Course design is based on solid learning theory and principles: 4

Activities provided sufficient practice and feedback: 2

Navigation and functioning were user-friendly: 1

The program's delivery was superior to alternate methods of instruction: 2

Alternate instruction would not have been as effective: 3

Alternate instruction would not have been as economical: 4

Comments on Course Design:

What feedback? Is there specific feedback on student actions? Navigation was awkward: "Help.html not found" loads slow music gratuitous, inappropriate no navigation on meta-cog sites page bkgd is too much on home page buttons indistinguishable from non-buttons nowhere to go from end of scene dialogue text coloured like links animated character distracting overview not available from site don't say what version of MSWord for docs.

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

What improvements would you recommend for MTV 101 overall:

1. Less earnestness in the scenario/dialogue. It's cliched, of course, as it has to be. So use some humour and weirdness to let people know that you know it's a bit heavy-handed (e.g. Meta's first line is way, way too unlikely) 3. Get some help in clean web-page design 4. Give the evil professor some lines!

What did you particularly like about MTV 101:

The underlying idea of motivating attention to the activities by empathising with similar characters.

What needs to be change to improve MTV 101:

Just lightened up.

The above may seem harsh, but I intend it as constructive criticism to improve what's at heart a good idea. Hope this helps, — XXXXXX I would like a summary of the evaluation results: Please send them to: XXXXXX

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

COURSEWARE EVALUATION #2

Evaluation of Program—Evaluator

Evaluated On: 31 Mar 1997

Evaluation time spent: 2

Evaluated by: XXXXXXXXXXXX

Title: GSU GRA/GTA

Evaluation Perspective: Curious Student

For rating content: Very Experienced

For rating pedagogy: Very Experienced

For rating courseware usability: Average

Limitations of Evaluation:

Instruction 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

The difficulty level was appropriate for intended users: 5

The breath and depth of content was appropriate: 5

Target audience probably would have prerequisite knowledge and skills: 4

Programs objectives would be met immediately after course: 4

Appropriate knowledge, skills, or attitudes would be learned: 4

Instructional interactions are appropriate for the objectives: 5

Students will retain significant knowledge that will be helpful long term: 4

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

Comments for Instructional Design:

Meta is obviously female, all other characters are male. There is a cast graphic (cast button) showing all males (no skirts); therefore, I am assuming Chris and Torrey are males. Good idea to make the shero of academic success a female. But, it does follow lines of attribution theory: girls attribute their academic success to factors outside of themselves: for instance, good study habits, cheerfulness, good social skills. Boys attribute their academic success to their innate ability.

Course Design 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

Course design is based on solid learning theory and principles: 4

Activities provided sufficient practice and feedback: 5

Navigation and functioning were user-friendly: 5

The program's delivery was superior to alternate methods of instruction: 3

Alternate instruction would not have been as effective: 3

Alternate instruction would not have been as economical: 5

Comments on Course Design:

The course is designed to "grab" the student at the beginning and get them to the end. The course design does this well. Could it be possible to allow the participating student in this course to be MORE of an actress/actor by allowing the participant to select a role he/she could play for MTV 101? Possibly even select their own names for the cast. It would personalize the course more for each participant.

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

What improvements would you recommend for MTV 101 overall:

See Comments.

What did you particularly like about MTV 101:

I particularly liked the topic of motivational strategies. There is a need for young adults to have assistance in this area.

What needs to be change to improve MTV 101:

See Comments.

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

COURSEWARE EVALUATION #3

Evaluation of Program—Evaluator

Evaluated On: 3-5-97

Evaluation time spent: 2

Evaluated by: XXXXXXXXXXXX

Title: Grad student

Evaluation Perspective: Instructional Technology Major (PhD Student)

For rating content: Above Average

For rating pedagogy: Average

For rating courseware usability: Above Average

Limitations of Evaluation:

Instruction 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

The difficulty level was appropriate for intended users: 3

The breath and depth of content was appropriate: 4

Target audience probably would have prerequisite knowledge and skills: 2

Programs objectives would be met immediately after course: 0

Appropriate knowledge, skills, or attitudes would be learned: 4

Instructional interactions are appropriate for the objectives: 0

Students will retain significant knowledge that will be helpful long term: 0

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

Comments for Instructional Design:

Objectives weren't stated in course materials. - Not much arrangement for feedback to student (I didn't see the letters from the producer, though). - Not much personalization of the materials.

Course Design 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

Course design is based on solid learning theory and principles: 5

Activities provided sufficient practice and feedback: 4

Navigation and functioning were user-friendly: 3

The program's delivery was superior to alternate methods of instruction: 2

Alternate instruction would not have been as effective: 2

Alternate instruction would not have been as economical: 4

Comments on Course Design:

Music on home page may be a problem for students in a computer lab. - Main page: what do I do now? - "Welcome to the Messge Center" screen: (1) why not use my real name? (2) Is this the "alias section"? - FAQ's: wrong links for "academic motivation" and "metacognition" - Production, Sc. 1: what are "endtakes"? - Where do you go from the Post Production screen? Have either instructions or navigation bar.

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

What improvements would you recommend for MTV 101 overall:

I didn't see how the "sequels" are to be used. What improvements would you recommend for MTV 101 overall: - The dialog in the scripts is a little stilted. Try making it more conversational. (Read it aloud.) - I'd like to see more details about the strategies. - How about a glossary of explanations and definitions.

What did you particularly like about MTV 101:

I like the metaphor of making a film. The animated "spot" is cute. (Do you have copyright clearance?)

What needs to be change to improve MTV 101:

(see above) Good luck with your project!

I would like a summary of the evaluation results: Please send them to:

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

COURSEWARE EVALUATION #4

Evaluation of Program—Evaluator

Evaluated On: 03/04/97

Evaluation time spent:

Evaluated by: XXXXXXXX

Title: miss

Evaluation Perspective: Instructional Technology Major (PhD Student)

For rating content: Average

For rating pedagogy: Average

For rating courseware usability: Average

Limitations of Evaluation:

Instruction 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

The difficulty level was appropriate for intended users: 0

The breath and depth of content was appropriate: 2

Target audience probably would have prerequisite knowledge and skills: 5

Programs objectives would be met immediately after course: 3

Appropriate knowledge, skills, or attitudes would be learned: 2

Instructional interactions are appropriate for the objectives: 2

Students will retain significant knowledge that will be helpful long term: 3

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

Comments for Instructional Design:

I didn't quite get to the making of the movie, where did I miss it ??? Would like it more interactive, choosing scenes for conflict. Making of own dialog, would lead to better problem solving

---

Course Design 1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

Course design is based on solid learning theory and principles: 3

Activities provided sufficient practice and feedback: 1

Navigation and functioning were user-friendly: 2

The program's delivery was superior to alternate methods of instruction: 2

Alternate instruction would not have been as effective: 1

Alternate instruction would not have been as economical: 3

Comments on Course Design:

Role play would be just as good in setting the problem. It is important to keep in mind, that I didn't quite get the whole movie making aspect. If effectively run, this is a good method. I liked the idea, but there are loops and thought it is user friendly, I did miss a few spots, which will bring the effectiveness of the program down.

What improvements would you recommend for MTV 101 overall:

Colour - Attractive Buttons - Not always clear, look at use of text and background colour. Buttons - Not always giving information requested, like mail or wrap-up sessions. Text - Clear Navigation - easy, but too free in movement. Evaluation form - this I like, IT is GOOD ! Maybe some will find it hard to type

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

all his info in in the evaluation, but I think at this level it effective. Less user control, let the user skip from one seen to the next, not to be able to move to the last scene directly. I'd like more interactivity, maybe set a problem scenario myself, learn a few motivational strategies, and now solve your problem that you have created. The one created by you, will be easier to solve, because you thought about it. Important to let learner use own experiences. Design, too much free movement. Graphics - Good Screen layout - Good

What did you particularly like about MTV 101:

Something different. I like the metaphor, of making a movie, but when does it happen ??? Liked the access (form all over) Evaluation - Good to have it attached.

What needs to be change to improve MTV 101:

More info for the novice user, with no subject knowledge. Clearer instructions on making the movie ..... where am I missing it, please let me know ! I Liked it !

I would like a summary of the evaluation results: Please send them to:

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

Other Responses from Instructional Technologists

Michael J. Hannafin Director, Learning and Performance Support Laboratory

Wheatley-GRA Eminent Scholar in Technology-Enhanced Learning

611 Aderhold Hall University of Georgia Athens, GA 30602

Web Site: <http://lpsl.coe.uga.edu/>

I will circulate your request among our program faculty and doctoral students, but I will not have the time to review the materials myself. The topic appears timely and interesting. I wish you success in your research.

Thomas M. Duffy, Professor

School of Education

Internet: duffy@indiana.edu

I am really sorry but I am swamped this semester. I passed your note on to several advanced grad students who have worked with me a lot and to Marty Seigel, a faculty colleague. If they are able to do they review, they will contact you.

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

Dr Annelise Kachelhoffer
Computer Assisted Education
Faculty of Education
University of Pretoria
South Africa
AKachel@econ.up.ac.za

Of course i will help you, I will be away for 2 weeks but in the meantime, I will put some of my students to work.

M. David Merrill Professor
Dept. Instructional Technology Director
ID2 Research Group
E-Mail: Merrill@cc.usu.edu

I'm not the best person to review these materials but I have some associates who are. I have forwarded your request to Linda Wolcott, a member of our faculty, who has particular interest in Distance Education and Web Based instruction. I have also forwarded your message to Andy Gibbons, who is also very interested in alternative educational formats. I have asked them to respond directly to you about your materials. Thanks for thinking of me. Hopefully my associates will respond.

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

Prof. Gabi Salomon Dean
Faculty of Education
University of Haifa, 31905,
E-Mail: gsalomon@research.haifa.ac.il

Hi Beverley; the stuff you have sent me sounds VERY interesting and I WISH I had the time to review it, as you requested. Unfortunately, still serving as the dean here, I am absolutely overworked these days and - being a somewhat responsible person - should not take upon myself something new, exciting as it may be. Sorry. I wish you the best in finding the suitable and available reviewer.

Chris Dede, Professor Education and Information Technology
Mail Stop 4B3 George Mason University Fairfax, VA 22030-4444
www.virtual.gmu.edu (currently on leave from GMU)
as Senior Program Director Research on Education, Policy and Practice
(REPP/EHR) Room 855 National Science Foundation 4201 Wilson Blvd.
Arlington, VA 22230 cjdede@nsf.gov EHR home page: red.www.nsf.gov

Thanks for thinking of me as a potential resource. As you can see from my "signature" below, I am on leave from GMU at the National Science Foundation for a year or two. This new set of duties is sufficiently overwhelming that I cannot take on any additional commitments. Sorry...

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

Brent Wilson

U of Colorado at Denver

<http://www.cudenver.edu/~bwilson>

Hi Beverley— I just spent a few minutes looking through your web resource. The project looks ambitious and well-grounded theoretically. I can imagine students benefiting from it. But I've decided I don't have the time to go through the materials as an evaluator. Good luck on the project; it looks substantial enough to be a worthy dissertation.

APPENDIX A: FORMATIVE EVALUATION--CONSTRUCT VALIDITY

APPENDIX B

MTV 101:

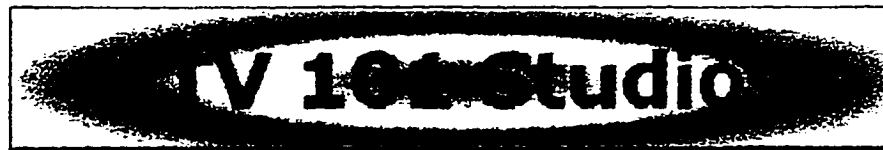
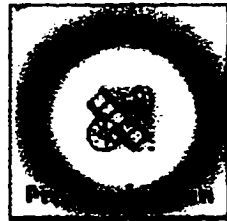
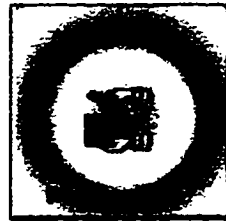
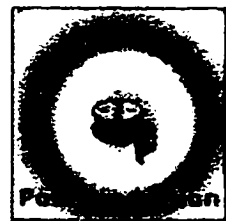
Motivational Strategies Training Program

Printed Version

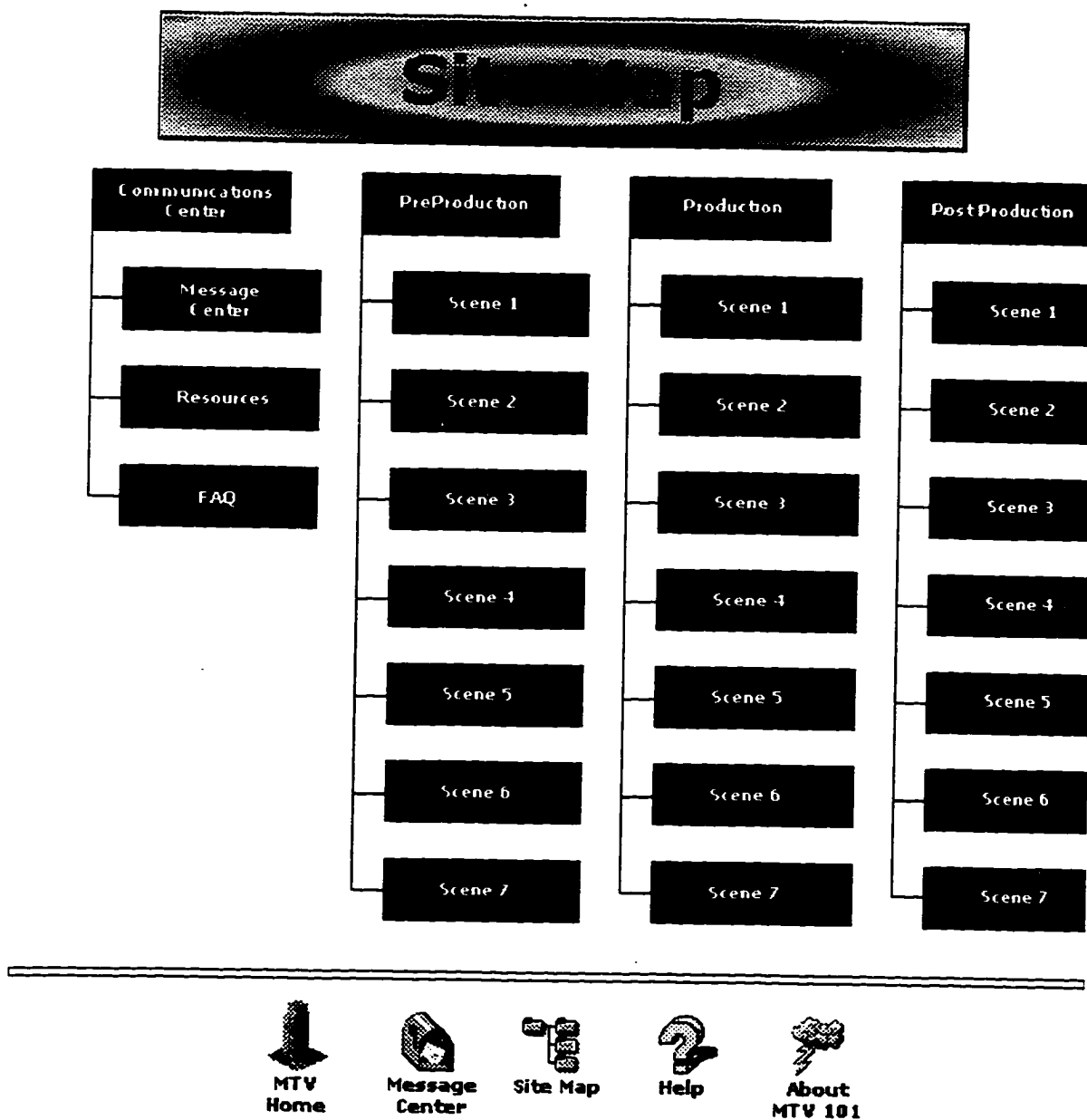
Online version available at <http://www.gsu.edu/~mstbmtx/mtv>

This printed version of the program shows each screen. It cannot show the interactivity of the program. The internet location may change as it was created using a student account.

MTV 101 Main Page

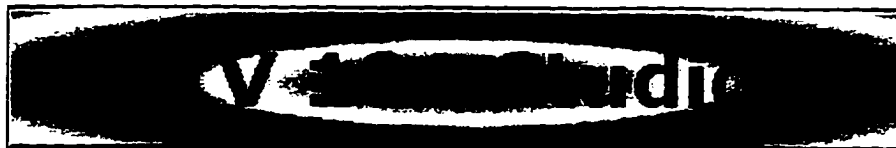


Site Map



APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

About the Film

**About the Film: *Possible Selves***

This film examines the life of a student learning about academic motivation.

It's the beginning of a new quarter. Two friends--Torrey and Chris--have signed up for a difficult course with an instructor everyone dreads--Arthur Itarian. Chris wants to drop the course, but Torrey realizes they have no alternatives. It is a course they really need to take this quarter. Because of grades, Chris is in jeopardy of losing the chance to continue attending school. Torrey convinces Chris to wait until after the first exam and make a decision then.

CHRIS: A nice, fun-loving person, who seems to lack self-control about school-related matters. Chris is concerned about GPA and graduating.

TORREY: A friend of Chris since elementary school. Torrey is an excellent student who studies and makes good grades. Torrey wants to help Chris succeed.

AUTHUR ITARIAN: The most intimidating instructor a student would ever experience. Dictator-like with no sign of compassion for people or passion for teaching, Author Itarian is unfortunately the only instructor assigned for this particular course.

META: Torrey met Meta last year in a class. Meta shared strategies that are very helpful for students.

LOU: A friend of Chris and Torrey. Loves to party and enjoy life. Doesn't go to school and feels no need to do so.

EVA: Younger sister of Chris. They have a special bond. Life wasn't easy growing up and they are still learning to overcome problems associated with their past.



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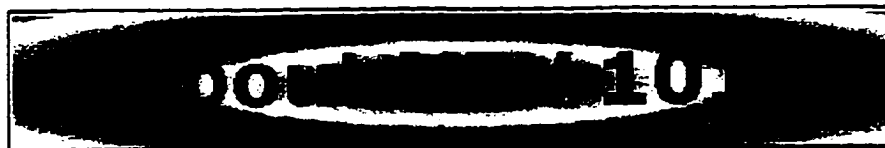
Help



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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Credits



MTV 101 is a motivational strategies training program designed, developed, implemented, and evaluated as part of a dissertation research project for Beverley Taylor, a Ph.D. student in Instructional Technology at Georgia State University.

Dissertation Committee: • Dr. Skip Atkinson, Chair • Dr. Natacha Akshoomoff • Dr. Beverly Armento • Dr. Sheryl Gowen • Dr. Steve Harmon	Design, Development, Implementation and Evaluation: Beverley Taylor and Charles Harmon worked together on the design, development, implementation, and evaluation of this web-based project.
Special thanks to: Dr. Robert Vallerand University of Montreal Motivational Research and Academic Motivation Scale	Students: Students from GSU's Learning Support Programs who evaluated the MTV 101 program. Students from North Metro Tech who participated in the MTV 101 program.



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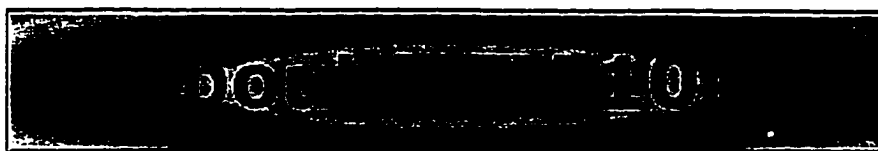
Help



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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Course Overview



COURSE OVERVIEW

INSTRUCTIONS FOR GETTING STARTED

Logging In

The first time you enter MTV101 Studios, you may wish to go through an overview of the program. Click on the About MTV button at the bottom of the screen. It will take you through an overview of the program and bring you to the Log-In screen. You may also get to the Login-In screen by clicking on the Communications Center and then the Message Center. After entering a Transaction ID (this has been assigned), click the box which says "New User." Each student enters his/her real name or an alias to add a personalized approach. Then, click on "Check Mail," for the next screen which will be a letter from the Producer of the film, Possible Selves.

Each week you will log-in and check your mail.

Directing Scenes

The program has been designed to complete Scene 1 within a week after logging on. It may be beneficial to complete Scene 1 immediately after the overview.

Checking Your Mail

During each visit, you (the director) should check for new mail in the Communications Center. Once you have read your mail, enter the PreProduction Stage and choose the next Scene. Log on each week, first checking in at the Communications Center for new letters. Students are encouraged to complete one scene each week for a total of seven weeks. Entering PreProduction In PreProduction, you will read about the set, cast, and rehearsal of the script. Imagine visually how this scene needs to be directed. Then, proceed to Production using navigational buttons at the bottom of the screen.

Production

During Production for each Scene, you will enter information about the main character, Chris. Once you have submitted this information, you will press next to go to PostProduction.

PostProduction

PostProduction provides strategies and encourages you to use these strategies during the week in academic situations and report on different academic situations you encounter. Fill out the offline materials each week. Please turn these materials into the Producer (instructor) before starting a new scene.

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Other Features of MTV 101

Other Features

Communications. The Director (student) may contact the Producer (instructor).

Resources. The Budget shows areas which may impact motivation. The Timeline for the program is also included.

FAQ. Frequently Asked Questions allow users to find out more about the program. Users may also submit new questions which may be added to the FAQ.

Map. A navigational map of the program, which is hyperlinked to that area, is included at the bottom of most screens.

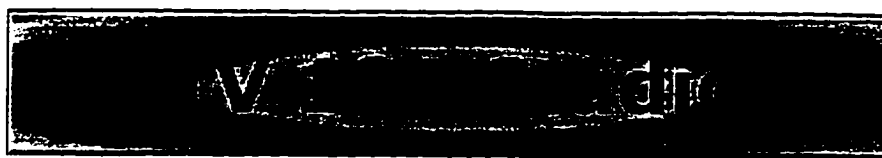
About MTV 101. Information about the program, About the Film, About the Cast, and Credits is included.

Help. Users may seek Help that tells what to do can be accessed from most screens.

Navigational Buttons. Navigational buttons allow users to return to the main MTV 101 Studios screen, the Message Center, the program map, Help, About MTV 101, and to next and back areas (in the PreProduction/Production/PostProduction sequence).



APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION



Welcome! 

Goal:

Learn more about academic motivation and strategies that may be used to become more motivated toward academic work.

Description:

Using a movie-making metaphor for the film *Possible Selves*, the director (you) will encounter 7 scenes of situations in the academic life of Chris. Students will share strategies that have helped them with motivation. During the week, you will apply these strategies in your academic pursuits.

Course Overview:

The course consists of seven scenes, each focusing on a different objective and strategies. Students should complete at least one scene per week (more if desired). Students are expected to turn in a Progress Report for each scene.

Week 1 ● Scene 1 ● Metacognition ● Thinking about Thinking

Objective: Learn about and apply strategies of metacognition

1. Pretest on Academic Motivation
2. Course Overview
3. Complete Scene 1: Thinking About Thinking

Week 2 ● Scene 2 ● Interest/Relevance ● Tuning In and Turning On

Objective: Learn about and apply strategies of interest and relevance

1. Complete Scene 2: Tuning In and Turning On
2. Turn in Progress Report #1

Week 3 ● Scene 3 ● Networking ● Network Connections

Objective: Learn about and apply social aspects of academic motivation

1. Complete Scene 3: Networking
2. Turn in Progress Report #2

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

MTV 101 Welcome (continued)

Week 4 ● Scene 4 ● Demands and Determination ● Rolling with the Punches**Objective: Learn about and apply strategies of determination**

1. Complete Scene 4: Rolling with the Punches
2. Turn in Progress Report #3

Week 5 ● Scene 5 ● Self ● Getting to Know You**Objective: Learn about and apply strategies of self-regulation**

1. Complete Scene 5: Getting to Know You
2. Turn in Progress Report #4

Week 6 ● Scene 6 ● Environment ● Environmental Issues**Objective: Learn about and apply strategies of environmental control**

1. Complete Scene 6: Environmental Issues
2. Turn in Progress Report #5

Week 7 ● Scene 7 ● Time and Attention ● Watching Out**Objective: Learn about and apply strategies of time and attention**

1. Complete Scene 7: Watching Out
2. Turn in Progress Report #6

Week 8 ● Summary**Objective: Reflect on the program and strategy use**

1. Turn in Progress Report #7
2. Complete Questionnaire
3. Posttest on Academic Motivation



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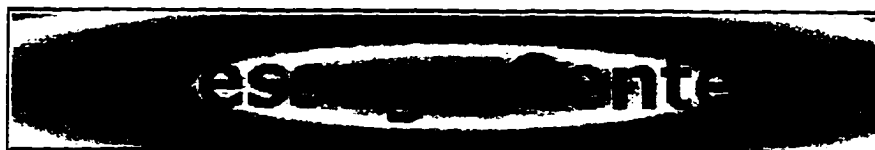
Help



Next

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Message Center Log-In



Please enter the transaction ID assigned to you.
The first time you sign in, enter a password of your choice.
Then check the "Sign on as new user" box.

ID:	____
Password:	

Sign on as a new user ☐



MTV
Home



Message
Center



Site Map



Help



About
MTV 101

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

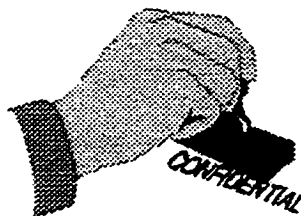
Welcome to the Message Center

First-Time User Log-In

Welcome to the Message Center

We are delighted to have you participating in this program.

In order to process your request to sign up as a new user we need you to fill out the following information. Under the alias section you may use your real name or make one up! This is so we will be able to refer to you as something more than a number. Once again thank you for your participation.



First Name:

Last Name:

Please choose your favorite subject:

▼

Please choose your least favorite subject:

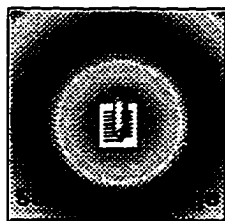
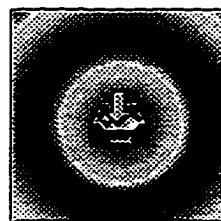
▼

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Message Center Response to Log-In

Welcome Mickey Mouse!

What would you like to do today?

MTV
HomeMessage
Center

Site Map



Help

About
MTV 101

Message Center

Communication Form

To: **Beverley M. Taylor, Executive Producer**

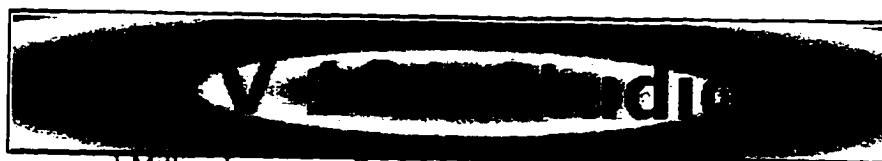
Send

Subject:

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

First Message from Producer

Received after First Log-In



1 Million Investment Boulevard, Hollywood Hills, CA 90210
Phone: 555.902.1010 * Fax: 555.902.1001 * www.mtv101.com

10/02/97

Dear Mickey Mouse:

Welcome to MTV101 Studios. We are pleased you have agreed to direct the film "Possible Selves."

My friend, musician Miles Davis said "The difference between a fair musician and a good musician is that a good musician can play anything he thinks. The difference between a good musician and a great musician is what he thinks."

I believe that what you think makes you one of the most important directors. We are certainly proud to have you direct this film. Please review the notebook I have enclosed. It contains all of the necessary paperwork for this project including the weekly progress reports. This week you received an overview of MTV101 Studios and logged on to our Message Center system. You may log on again whenever you want to; however, you should complete Scene 1 within the next week.

If you have any questions, you may reach me through MTV 101's Message Center, located in the Communications Center. You may also check under Frequently Asked Questions. I encourage you to submit questions and share information with other directors and producers.

If you need to get in touch quickly, feel free to call me at 651-0195. I look forward to working with you over the next several weeks.

Sincerely,

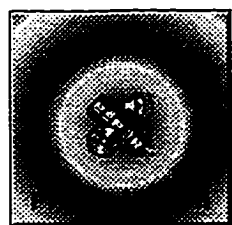
Beverley M. Taylor
MTV 101 Executive Producer
Possible Selves

P.S. If would like a copy of this letter, you should print it now.

[Start Scene 1](#)

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Alternative Preproduction Menu



Scene 7: Watching Out
 Scene 6: Environmental Issues
 Scene 5: Getting to know you
 Scene 4: Polling with the Punches
 Scene 3: Network Connections
 Scene 2: Tuned In and Tuned On
 Scene 1: Thinking about Thinking



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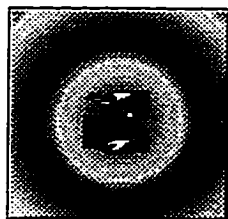


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Alternative Production Menu



Scene 7: Watching Out
 Scene 6: Environmental Issues
 Scene 5: Getting to know you
 Scene 4: Polling with the Punches
 Scene 3: Network Connections
 Scene 2: Tuned In and Tuned On
 Scene 1: Thinking about Thinking



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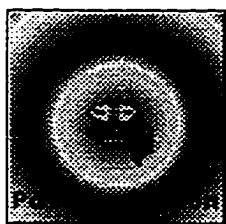
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Alternative PostProduction Menu



Scene 7: watching Out

Scene 6: Environmental Issues

Scene 5: Getting to know you

Scene 4: Polling with the Punches

Scene 3: Network Connections

Scene 2: Tuned In and Turned On

Scene 1: Thinking about Thinking

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Site Map

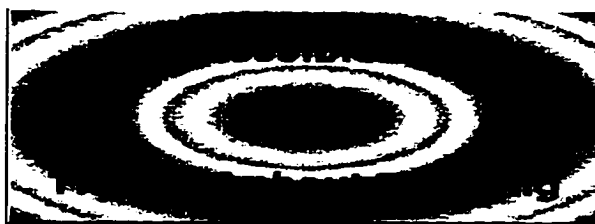


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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 1--PreProduction (Revised Version)



Week 1 ● Scene 1 ● Metacognition ● Thinking about Thinking

Objective: Learn about and apply strategies of metacognition



Director's Responsibilities	Visualize the environment where this scene occurs and the particular world where these events are taking place. The world includes physical setting, everything that has happened to the characters before the scene begins, and the attitudes shaped by those events. We see, hear, taste, smell, and feel through a set of filters that makeup the given circumstances of our lives. We will react differently in different situations.
The Set	This scene takes place in the hallway outside of class. The instructor walks out...grim and intimidating. Then two students--Torrey and Chris--exit the classroom and exchange petrified looks. They talk with another student named Meta. Later, this scene will include closeups of Chris thinking about class.
The Cast ● Chris ● Torrey ● Meta ● Instructor	Chris thinks about the factors that have led to resenting and resisting school-related things, recalling specific situations at home and at school that were particularly negative. Torrey cares about Chris. Torrey understands how education can help Chris. How might these decisions change their lives and friendship? Meta has learned strategies that help students academically. She shares these strategies with others, often surprised that students aren't aware of them already. Instructor Arthur Itarian shows no compassion for students or passion for teaching.
The Script	CHRIS: Can you believe it? Of all the instructors, we get this one! I'm going to have to drop this course. TORREY: Oh Chris, you can't. It's not offered again this year. CHRIS: Why does this always happen to me? TORREY: At least we're in it together. We'll be able to study and review. I'll help you through it. CHRIS: I have a lot going on in my life right now. I don't need this. This is my worst subject. I've always been lousy at this subject. I don't think I can handle it. I don't think it's a good idea. TORREY: Wait a minute. Meta! There's my friend Meta. <i>Meta joins them.</i>

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 1--PreProduction (Revised Version, continued)

TORREY: Meta, this is Chris. Chris--Meta. Remember the strategy you told us about in our class last year? What was that--it was like your name. Meta, would you explain it to Chris?

CHRIS: Hi Meta. *Looks at Torrey* What-- did you plan this?

They both laugh and shake their heads in denial.

META: Being motivated in school isn't always easy. It starts with a decision to be strategic and remain strategic in the face of problem-solving challenges. Will you try it?

CHRIS: I guess so...what have I got to lose?

META: OK. This first one sounds simple. And, it really is, once you get to it. It's called Metacognition and it means "thinking about what you are thinking about."

CHRIS: Weird!

META: Yeah, it sounds kind of weird. Most people do it without consciously thinking about it. At first, though, it helps to make a conscious effort to think about what you are thinking about until you make sure that what you are thinking about is what you should be thinking about. You are really monitoring your own thinking which is a higher order of thinking.

CHRIS: It sounds very strange. Give me an example.

META: O.K. Think about what you were thinking about when you were in that class today. What was running through your mind? Mostly negative thoughts about your skills, your ability to pass the course, your immediate impression of the instructor, your intention to drop out ASAP...right?

CHRIS: Well, yes.

META: If you had been thinking about what you were thinking, you would have caught yourself being negative and might have tried to counter those negative thoughts with more positive thoughts. You might have thought that at least you had a supportive friend taking the class with you. You might have thought about how necessary this course is in achieving your career goals. If you monitor your own thinking--you could control when to change direction. Have you ever had a bad dream and tried to turn it around on purpose?

CHRIS: I have. But, it doesn't always work.

META: True. It takes practice to get good at it. Practice doing metacognition for a week, just to get used to it. Write down what you are thinking about until you get a sense of thinking about what you are thinking about. It's as if you were listening to a conversation at the table next to you. You'll be more objective about what you are hearing.

On to Production!



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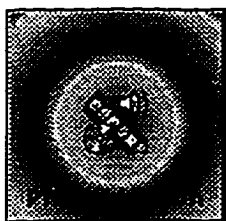
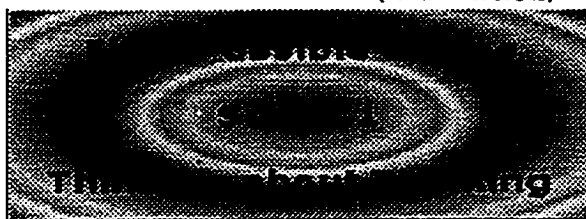
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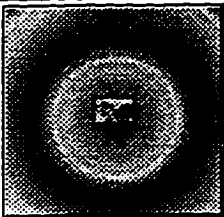
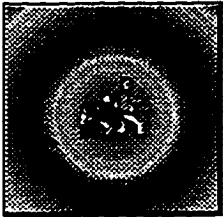
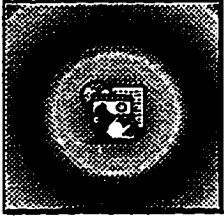
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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 1--PreProduction (Old Version)



Visualize the environment where this scene occurs and the particular world where these events are taking place. The world includes physical setting, everything that has happened to the characters before the scene begins, and the attitudes shaped by those events. We see, hear, taste, smell, and feel through a set of filters that makeup the given circumstances of our lives. We will react differently in different situations.

																		
This scene takes place in a traditional university classroom. As the professor enters the room. Chris and Torrey exchange looks. Closeups of Chris and what Chris thinks about during class. After class, the students will talk in the hallway. Torrey will introduce Chris to Meta.	Chris: Ask Chris to think about the factors that have led to resenting and resisting school-related things. Try to recall specific situations at home and at school that were particularly negative. Torrey: Encourage the actor to become Torrey. Torrey cares about Chris. Help Torrey understand what will become of Chris as a result of not graduating from college. How might their lives and friendships change? Meta: Encourage the actor to become Meta. What inner	The actors rehearse the following script: <table><tr><td>Chris:</td><td>I have a lot going on in my life right now. I don't need this. This is my worst subject. I've always been lousy at this subject. I don't think I can handle it. I don't think it's a good idea. I'll do it some other quarter.</td></tr><tr><td>Torrey:</td><td>When? Later won't be any easier.</td></tr><tr><td>Chris:</td><td>Just layoff. You live your life the way you want to; I'll live mine.</td></tr><tr><td>Torrey:</td><td>Hey, there's Meta. You've got to meet her. She is so cool!</td></tr><tr><td></td><td>Meta! It's been awhile. How's it going? This is my friend Chris.</td></tr><tr><td>Meta:</td><td>I'm pleased to meet you Chris.</td></tr><tr><td>Torrey:</td><td>Meta, do you think you could talk to Chris about some of the strategies you talked about in our class last quarter?</td></tr><tr><td>Chris:</td><td>Torrey...</td></tr></table>	Chris:	I have a lot going on in my life right now. I don't need this. This is my worst subject. I've always been lousy at this subject. I don't think I can handle it. I don't think it's a good idea. I'll do it some other quarter.	Torrey:	When? Later won't be any easier.	Chris:	Just layoff. You live your life the way you want to; I'll live mine.	Torrey:	Hey, there's Meta. You've got to meet her. She is so cool!		Meta! It's been awhile. How's it going? This is my friend Chris.	Meta:	I'm pleased to meet you Chris.	Torrey:	Meta, do you think you could talk to Chris about some of the strategies you talked about in our class last quarter?	Chris:	Torrey...
Chris:	I have a lot going on in my life right now. I don't need this. This is my worst subject. I've always been lousy at this subject. I don't think I can handle it. I don't think it's a good idea. I'll do it some other quarter.																	
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Chris:	Torrey...																	

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 1--PreProduction (Old Version, continued)

qualities does Meta have that make her so special?

Dr. Arthur Itarian:
Encourage the actor to become Professor Arthur Itarian. What experiences might have contributed to an instructor turning out this way?

Meta: It starts with a decision to be strategic and remain strategic in the face of problem-solving challenges. Will you try it?

Chris: Well it depends. How long is it going to take?

Meta: The rest of your life...but let's just start with a few hours each week. But, after a few weeks, you'll probably save all of that time and more because you'll be more effective.

Chris: Oh well then, I guess I'll give it a try. What have I got to lose?

Meta: OK. This first one sounds simple. And, it really is, once you get to it. It's called Metacognition and it means "thinking about what you are thinking about."

Chris: WEIRD!

Meta: Yeah, it sounds kind of weird. Most people do it without consciously thinking about it. At first, though, it helps to make a conscious effort to think about what you are thinking about until you make sure that what you are thinking about is what you should be thinking about.

Chris: It sounds strange. Give me an example.

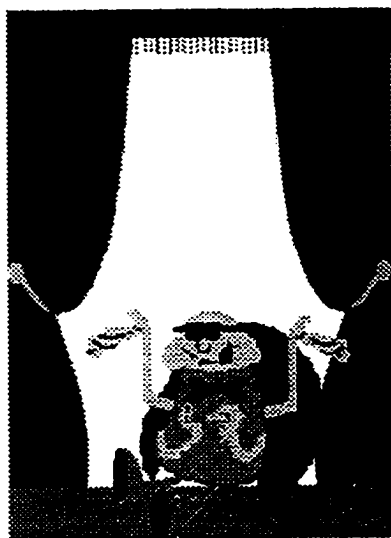
Meta: Think about what you were thinking about when you were in that class today. What was running through your mind? Mostly negative thoughts about your skills, your ability to pass the course, your immediate impression of the instructor, your intention to drop out ASAP...right?

Chris: Well, yeah...

Meta: If you had been thinking about what you were thinking, you would have caught yourself being negative and might have tried to counter those negative thoughts with more positive thoughts. You might have thought that at least you had a supportive friend taking the class with you. You might have thought about how necessary this course is in achieving your career goals. If you monitor your own thinking--you could control when to change direction.

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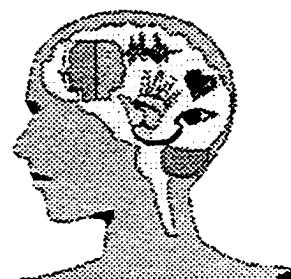
Scene 1--Production



Film: Possible Selves

Scene 1:

Thinking about Thinking



Chris is sitting in Dr. Arthur Itarian's class. Some endtakes will show some of the things that Chris thinks about during class.

What might some of those thoughts be?

Chris is thinking I better drop this class so I don't hurt my GPA. Why do I always get these kind of teachers? I'm hungry. I wish I could just go home.

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Password:	**

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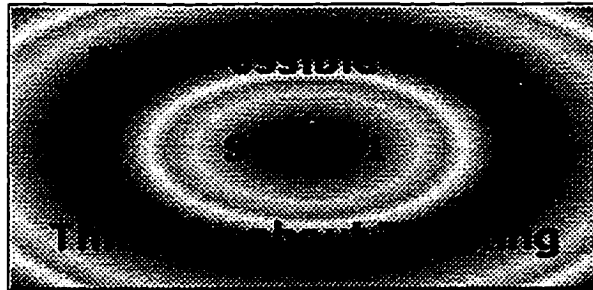
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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 1--PostProduction



About Metacognition	Strategies
Metacognition means "thoughts about thoughts, knowledge about knowledge, or reflection about actions." It provides a larger sense of control because the mind watches itself work and can direct itself to work. At first metacognition might be a very conscious, distracting effort. In time, it will become more natural.	• Use metacognition to listen to and control negative thinking and actions. • Redirect thoughts back to class or studying when they begin to stray. • Apply metacognitive strategies and reflect on how they worked out. • Think of new situations when metacognitive strategies might be used. • Practice thinking about a subject and think about you thinking about it. When studying, ask yourself "What do I know and how do I know I know it?"
This Week: • Track your thinking by using Metacognitive Strategies. • <u>Developing Metacognition</u>	Next Week: • Return to MTV 101 Studios • Check for new messages • Begin directing Scene 2



You are the Director of Possible Selves!



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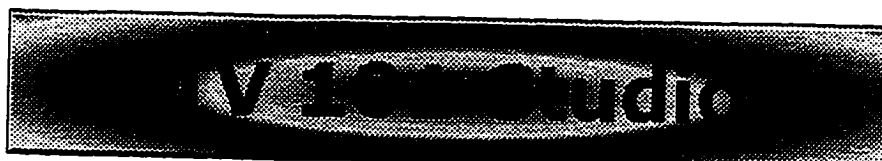


About
MTV 101

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Message 2 from Producer

Received after completing Scene 1 and logging in for Scene 2



1 Million Investment Boulevard, Hollywood Hills, CA 90210
Phone: 555.902.1010 * Fax: 555.902.1001 * www.mtv101.com

10/02/97

Dear Mickey Mouse:

In the *Mystery of Edwin Drood I*, Charles Dickens wrote, "Circumstances alter cases."

You have completed Scene 1 of the film *Possible Selves*. Chris has begun using a strategy called metacognition. Be sure to turn in the Progress Reports about this strategy and its use in personal academic situations. I do appreciate your timely input so that we can evaluate the direction at the end of each scene.

In Scene 2, Chris and Torrey discuss interests and relevance. I want you to feel you have total creative control over this film. Take it where you want it to go! The actors are really responding to your direction.

If you have any questions, you may reach me through MTV 101's Message Center, located in the Communications Center. You may also check under Frequently Asked Questions. I encourage you to submit questions and share information with other directors and producers.

If you need to get in touch quickly, feel free to call me at 651-0195. Keep up the great work.

Sincerely,

Beverley M. Taylor
MTV 101 Executive Producer
Possible Selves

Start Scene 2

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 2--PreProduction



Week 2 ● Scene 2 ● Interest/Relevance ● Tuned In and Turned On

Objective: Learn about and apply strategies of interest and relevance



Director's Responsibilities	As the director, you constantly gather information from all sources available to you. You strive to see how interesting or how relevant something might be to the film. You learn a great deal by reading and observing everything around you. You expand your knowledge by finding interest and relevance in everything you read, see, and do. Tune In and Turn On. Real listening is so simple. Reacting often means physically doing nothing--but mentally engaging in activity. Strive to observe and become a discriminating viewer.
The Set	This scene takes place in Torrey's apartment. Torrey serves Chris a beverage (think about budget and possible product endorsement). They sit in the living room and begin talking.
The Cast ● Chris ● Torrey	In this scene, Torrey and Chris are talking about the courses they are taking this quarter. They are recalling past experiences and what could have made them feel this way about this particular course. Torrey tries to boost the positives, to help Chris see how this course might be interesting and relevant to other aspects of life. Closeups of Chris and what Chris thinks about during class that relates to interest and relevance.
The Script	CHRIS: OK. OK. I agree. I won't drop this course. Now, how do I make sure I don't fail? TORREY: We've got to remain focused. Do you ever think about why you might have such negative feelings about this subject? I remember what happened to make me feel this way. I got my first C in this subject! CHRIS: A "C" sounds great to me. How can I get a C?

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 2--PreProduction (continued)

TORREY: Showing up for class and being on time probably wouldn't hurt...

Chris: Yeah, yeah....but sometimes that doesn't even help. Just a short time later, I can't even remember what the class was about.

Torrey: It also works out better if you stay awake--even show a little interest.

Chris: I guess I do have a reputation for nodding off a bit. I have trouble staying awake. It's SO boring!

Torrey: When I'm not interested in a subject, I make a conscious effort to see how this course is relevant to my goals. Passing the course is relevant to graduating--that's a start. But, as each class begins, I really listen. What are they talking about today? How can I use this information? When I graduate and start working, how will this information be applied?

Chris: Sometimes it's hard to figure that out. The teacher goes on and on.

Torrey: Some teachers are better than others, but ultimately it's up to you. The best teachers try to make sure they've captured the students' interest, but not every teacher's going to do it, so it's best to make sure you can do it for yourself. You know I don't care for all those algebraic formulas--so sometimes I pretend I'm going to be a famous mathematician so I can get into it.

Chris: Ok. Find the relevance and try to listen.

Torrey: Right! Use ALL your senses to listen. When we actively listen, we pick up all messages--facial expression, body language, tone of voice, inflection pattern from the sender. Active listening means weighing the meanings and implications behind the words. You can't really pretend to listen. If you have trouble listening, it's because you can't stop your mind from wandering off to deal with distracting thoughts. Concentration follows interest. You must use your imagination to create interest in the speaker and the message. It's amazing too. Sometimes a subject becomes more interesting as you learn more about it.

Chris: I doubt I'll ever be interested in this subject. But, I can sort of see the relevance.

Torrey: Try it all the time--when you are reading a book, magazine, watching a program. Figure out how it can be relevant to your goals. Make a conscious effort before each class or study time to think about how this course is relevant. It really helps. When you are using the metacognitive strategies and you find yourself thinking negatively about the subject, instead focus on the relevance.

On to Production!

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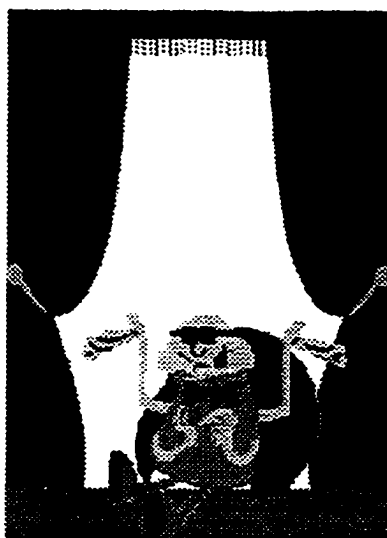
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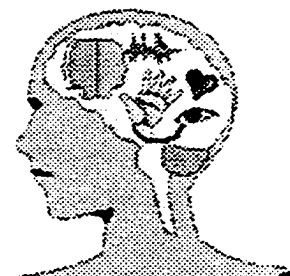
APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 2--Production

**Film: Possible Selves****Scene 2:****Tuned In and
Turned On**

Chris is sitting in Dr. Arthur Itarian's class thinking about why this course is relevant to career goals and other interests.

What are some of the possibilities Chris might be thinking about?



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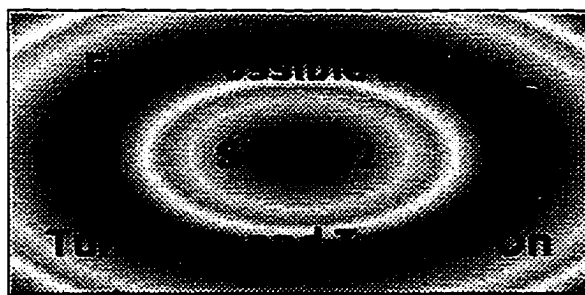
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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 2--PostProduction



About Interest & Relevance	Strategies
Interest and motivation are tied to one another. If you aren't interested, it is hard to be motivated about something. Curiosity leads to interest. The more you know about something, the more interested you tend to become. Relevance refers to finding a connection to something that you are interested in or related to--some reason why you need to know.	• Listen to your thinking to see whether you are curious or interested in a topic. • Try to find something about the topic that perks your interest or makes you more curious. • Attempt to find relevance for all classes and homework. • Think about your thinking to find out when and how your strategies for becoming interested or finding relevance are working.
This Week: • Track interest and relevance in education-related work. • <u>A System for Effective Listening and Notetaking</u>	Next Week: • Return to MTV 101 Studios • Check for new messages • Begin directing Scene 3



You are the Director of Possible Selves!



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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Message 3 from Producer

Received after completing Scene 2 and logging in for Scene 3



1 Million Investment Boulevard, Hollywood Hills, CA 90210
Phone: 555.902.1010 * Fax: 555.902.1001 * www.mtv101.com

10/02/97

Dear Mickey Mouse:

You have completed Scene 2 of the film *Possible Selves*. Chris has begun using a strategy called metacognition and has begun to consider the interest and relevance of learning different topics.

Be sure to turn in the Progress Reports about both of these strategies and their usefulness in personal academic situations. Thanks for your timely input. We will continue to evaluate the direction at the end of each scene.

In Scene 3, Chris bumps into a friend from high school. Peter Brook, in *The Book of US*, 1968, said "As we passed the sticks from hand to hand, to the rhythm of the drums... so we were to learn to handle words and speeches, sharing and experiencing them as a united group."

As you direct this scene watch the actors to make sure they avoid habitual performance. The impulse to speak naturally occurs while the other character is still talking. If actors are waiting, that is unnatural. Although you want the actors to pick up the tempo, caution them not to feel rushed.

If you have any questions, you may reach me through MTV 101's Message Center, located in the Communications Center. You may also check under Frequently Asked Questions. I encourage you to submit questions and share information with other directors and producers.

If you need to get in touch quickly, feel free to call me at 651-0195. Keep up the great work.

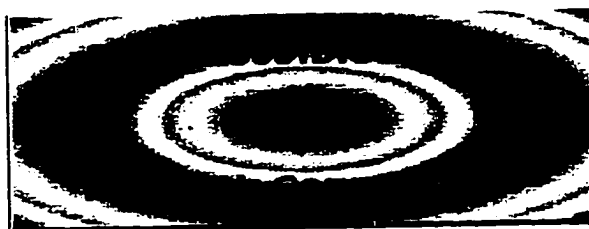
Sincerely,

Beverley M. Taylor
MTV 101 Executive Producer
Possible Selves

Start Scene 3

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 3--PreProduction



Week 3 ● Scene 3 ● Social Aspects ● Networking Connections

Objective: Learn about and apply strategies of social interactions



Director's Responsibilities	The interaction of characters interests the audience. They come to see what will happen, what people will do to one another. They want to see how the story turns out.
The Set	This scene takes place on a street near campus. It is an absolutely beautiful day! Imprint the street in your mind's eye; hear the sounds in your mind's ear; smell the variations of the city.
The Cast ● Chris ● Lou	In this scene, on the way to class, Chris bumps into Lou, a good friend from high school. Ask Chris and Lou to analyze the scene and make decisions about how to play the character. As they rehearse, ask them to awaken the unconscious to the possibilities of the character's experience. Actors should not make up their minds in advance; they should examine possibilities. Have the actors search for the intentions of their characters.
The Script	CHRIS: Lou! I can't believe it. It's been a while. What have you been up to lately? What are you doing down here? LOU: I'm working at my dad's place. The money's pretty good. In fact, I just bought a boat. What are you up to these days?

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 3--PreProduction (continued)

CHRIS: Trying to survive college.

LOU: Yeah, I'm glad I didn't make that mistake--not much fun I'm sure.

CHRIS: No. Especially this quarter. Total nightmare.

LOU: Poor Chris. Say--why don't you take a day off and we'll go for a cruise on my new boat. Turn that nightmare into a dream!

CHRIS: How can I resist an offer like that on a gorgeous day like this? Don't you have to work?

LOU: Working for your own dad has its advantages. Get your stuff and meet me at Cheers in an hour.

CHRIS: Oh Lou, don't tempt me like this. I think I have to pass so I can pass the class! Hey, remember Torrey? Torrey is also in this class.

LOU: Oh yes, Torrey. Well that's good. Torrey can take notes and fill you in on what you missed.

CHRIS: Yes, and what a price I shall have to pay. Guilt City for months. No thanks.

LOU: Well, sorry about that. Give me a call when you're ready to enjoy life again.

CHRIS: It's great to see you again

LOU: I'll call you soon.

On to Production!



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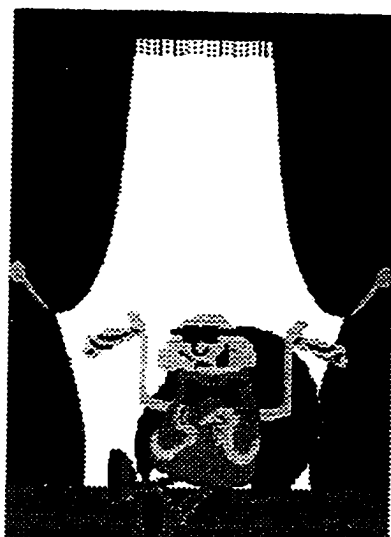
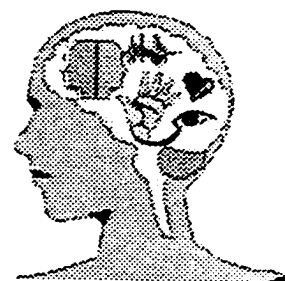
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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 3--Production

**Film: Possible Selves****Scene 3:****Network Connections**

Chris realizes that going to college requires changes in social activities. Share some of the specific changes Chris may consider.

A large, empty rectangular box with a thin border, intended for the user to enter their response. It has a small upward-pointing arrow in the top right corner and a small leftward-pointing arrow in the bottom left corner, indicating it is a scrollable area.

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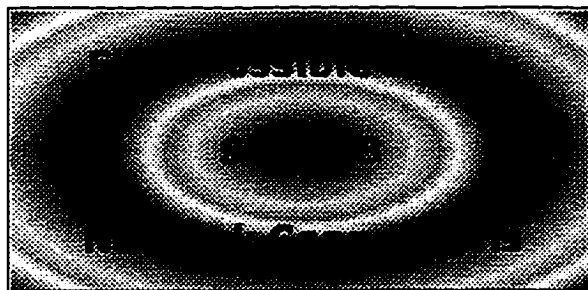
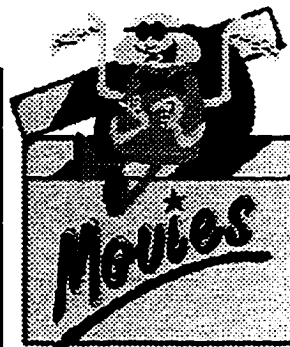
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Scene 3--PostProduction



About Networking & Social Aspects	Strategies
Influence of friends, family, and fellow students may be positive or negative. Social goals often conflict with motivation and achievement in school. Social interaction can help build curiosity and understanding about a subject. Persistence--sticking to it--is often enhanced when shared with someone else. In the short-term, social activities are more rewarding. But, in the long-term, you can have both! Rarely do individuals find homework a motivating experience. You are not alone.	• Watch and listen to friends, family, and fellow students. Does what they say and do indicate they want you to succeed? • Realize that it is natural to resent having to choose between school and social activities, but try not to blame school. • Find peers that will help you and that you can help. We all have strengths and weaknesses. We all have the potential to improve. • Study with others! It's more fun and you may learn more from one another. Just be sure to stay on task. • Think about your thinking to find out when and how your strategies for social interaction are helpful to your academic life.
This Week: Identify positive and negative social interactions.	Next Week: • Return to MTV 101 Studios • Check for new messages • Begin directing Scene 4



You are the Director of Possible Selves!



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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Message 3 from Producer

Received after completing Scene 3 and logging in for Scene 4



1 Million Investment Boulevard, Hollywood Hills, CA 90210
Phone: 555.902.1010 * Fax: 555.902.1001 * www.mtv101.com

10/02/97

Dear Mickey Mouse:

You have completed Scene 3 of the film *Possible Selves*. Chris has begun using a strategy called metacognition and has begun to consider the interest and relevance of learning different topics. Chris has also begun to realize friends can distract or support academic work.

It reminds me of what Grotowski said in *The Empty Space*, "The very purity of their resolve, the high and serious nature of their activity inevitably brings a colour to their choices and a limitation to their field. They are unable to be both esoteric and popular at one and the same time."

Be sure to turn in the Progress Reports. Thinking and writing about these strategies in personal academic situations will bring greater meaning to your directing this film. Your timely input is much appreciated. Each scene is evaluated and the direction reconsidered.

In Scene 4, Chris will be faced with demands that sometimes cause people to give up. Consider the given circumstances that make up the environment in which this scene occurs. The given circumstances compose the framework within which the action of the scene takes place. Feelings change constantly. Chris must think about the character and ask "What do I need to do?"

Feel free to contact me through MTV 101's Message Center, located in the Communications Center. I encourage you to submit questions and share information with other directors and producers in Frequently Asked Questions.

If you need to get in touch quickly, feel free to call me at 651-0195. I value your input.

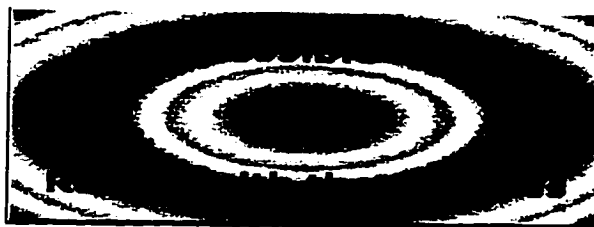
Sincerely,

Beverley M. Taylor
MTV 101 Executive Producer
Possible Selves

Start Scene 4

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 4--PreProduction


Week 4 ● Scene 4 ● Demands & Determination ● Rolling with the Punches
Objective: Learn about and apply strategies of demands and determination


Director's Responsibilities	What does a director do when actors get stuck...when they are mentally, emotionally, or physically paralyzed? Suggest that the actor empty the mind of actor-thoughts and fill it instead with character thoughts. This is a concentration challenge to make character concerns more important, compelling, than the actor-concerns.
The Set	This scene takes place in Chris' apartment. Chris unlocks the door, juggling key and a pile of college texts and notebooks. The telephone is ringing. There's a stack of mail (looks like mostly bills).
The Cast ● Chris	Chris is alone in the apartment but interacts with others on the phone. Creativity springs from tension between limitations and freedom. Work with Chris to realize the limitations set on the character by the circumstances, needs and revelations. These limitations are essential to the part; however, it is equally necessary that Chris liberate and improvise within those boundaries. Tell Chris to "Give yourself permission to think, feel, and behave with total spontaneity within your established limitations."
The Script	<i>Telephone is ringing...</i> CHRIS: Hello? LOU: Well, my friend, are you ready to party? CHRIS: I wish... Lou, I just got in. I'm going to have to call you back in a bit. LOU: OK. But hurry! I have some great plans for tonight. <i>Chris hangs up. Phone rings again.</i> CHRIS: Hello? MOM: Chris, I hate to bother you in the middle of the week, but your sister has strep throat. Could you pick up some stuff at the pharmacy for her and take it over to her apartment? It might be nice if you picked up some soup or something for her too. I was out yesterday and need to get to work tonight.

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 4--PreProduction (continued)

CHRIS: All right mom. I'll take care of it. Don't you worry.

MOM: Thanks hon. You are such a sweetie. Bye.

Phone rings again.

CHRIS: Hello.

VOICE: Is Chris Johnson there?

CHRIS: Yes.

VOICE: I'm with Corp America. We'll be in your area tomorrow and were wondering if you had anything we could pick up.

CHRIS: No, sorry.

Hangs up. Right away, the phone rings again.

TORREY: Chris, have you started studying for the exam tomorrow?

CHRIS: Torrey, I just got in. It seems there are million things to take care of and I just can't think about it right now.

TORREY: Chris, the exam is tomorrow!

CHRIS: I have to leave--my sister is sick. I have no control over this! I'll have to call you later.

TORREY: I understand. It sounds stressful. Please call me if there's anything I can do to help.

Chris hangs up the phone, looks through the pile of bills, looks at the textbooks, looks at the piles and messes all over the apartment. Chris grabs the car keys and leaves.

CHRIS: I am determined to work this out. Argh!

On to Production!



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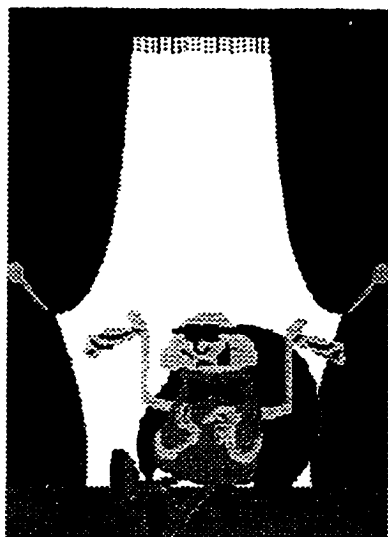
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Scene 4--Production

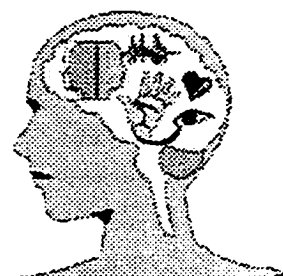


Chris feels overwhelmed by demands. Yet Chris is determined. What strategies might Chris use to resolve conflict?

Film: Possible Selves

Scene 4:

**Rolling with the
Punches**



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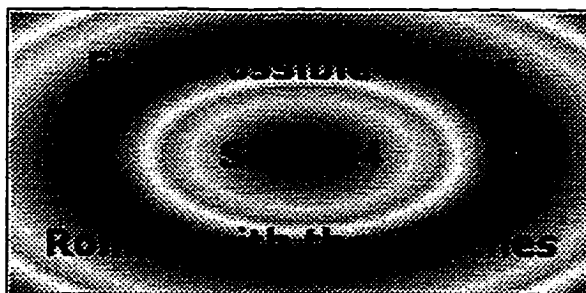
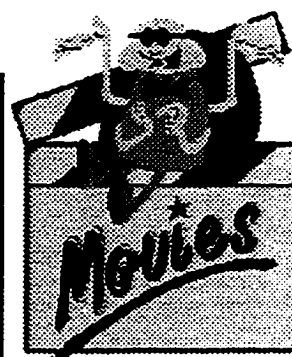
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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 4--PostProduction



About Demands & Determination	Strategies
Commitment, determination, and persistence are qualities found in successful people. Exercise and relaxation techniques help reduce feelings of stress. Individuals with supportive friends and family are more likely to realize and continue to use their talents. Conflicting demands cause stress. The choice to break free and move beyond a no-win situation is often painful. Even good students tend to procrastinate and find themselves in great distress during finals and large projects.	• Make a commitment each day to achieve your goals. Be determined to succeed. • Find time in your schedule to exercise and relax. • Surround yourself with supportive friends and family. Avoid non-supportive "taking" people. • Identify demands. Determine which demands can be eliminated, postponed, or redirected. • Communicate your feelings about demanding situations or people with someone who might help you be more objective about possible alternatives. • Monitor behavior to procrastinate. Make deals with yourself to get started. Once you get started, you'll usually continue to work.
This Week: • Identify demands in your life. • Be proactive about changing your lifestyle to reduce conflicting demands and stress. • <u>Controlling Procrastination</u>	Next Week: • Return to MTV 101 Studios • Check for new messages • Begin directing Scene 5

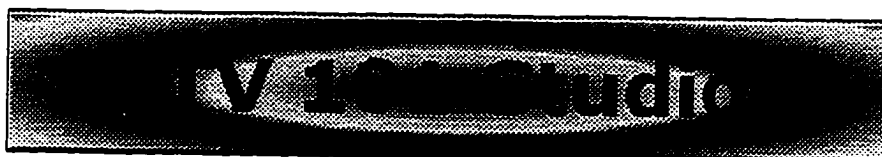


You are the Director of Possible Selves!

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Message 4 from Producer

Received after completing Scene 4 and logging in for Scene 5



1 Million Investment Boulevard, Hollywood Hills, CA 90210
 Phone: 555.902.1010 * Fax: 555.902.1001 * www.mtv101.com

10/02/97

Dear Mickey Mouse:

You have completed Scene 4 of the film *Possible Selves*. Chris has confronted demands and survived with greater determination. Let me share one of my favorites by Edwin L. Sabin in *Trouble's Strong Front*:

Trouble has a trick of coming butt end first;
 Viewed approaching, then you've seen it at its worst.
 Once surmounted, straight it waxes ever small,
 And it tapers till there's nothing left at all.
 So, whene'er a difficulty may impend,
 Just remember you are facing butt end;
 And that looking back upon it, like as not,
 You will marvel at beholding just a dot.

It's hard to believe, but you have completed more than half of the scenes in his film. Continue to turn in the Progress Reports that describe what occurs in personal academic situations. This input helps in the evaluation of each scene.

Speaking of scenes...as Chris and Eva talk in Scene 5, minor discoveries in this scene provide subtlety and texture. Revelations will alter a character's outlook. These altered perspectives may produce corrective actions. Do not let Chris disregard new information or nothing will happen during that moment. Action will continue to move forward in a straight, flat line. When confronted with new information, Chris may respond by changing tactics.

Contact me through MTV 101's Message Center if you have any questions.

If you need to get in touch quickly, feel free to call me at 651-0195. The daily briefs are looking wonderful.

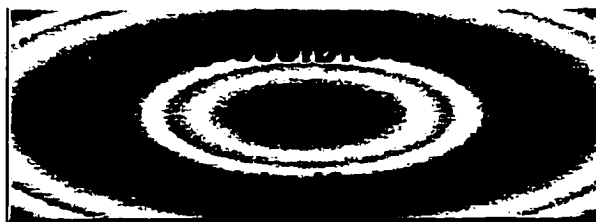
Sincerely,

Beverley M. Taylor
 MTV 101 Executive Producer
 Possible Selves

Start Scene 5

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 5--PreProduction



Week 5 ● Scene 5 ● Self ● Getting to Know You

Objective: Learn about and apply strategies of self understanding and regulation



Director's Responsibilities	To bring a character to life, the actor must imagine and be fascinated by the problems and obstacles of the character. Encourage the actors to use their creative imagination to combine images from previous experiences.
The Set	This scene takes place in Eva's apartment. Chris is delivering medicine and soup. Eva is lying on the couch under a pile of blankets looking quite pale.
The Cast ● Chris ● Eva ● Kids	Chris and Eva have always been close. They cared for one another during a pretty rough childhood. To bring a character to life, the actor must imagine and be fascinated by the problems and obstacles of the character. Encourage the actors to use their creative imagination to combine images from previous experiences.
The Script	EVA: Chris, you shouldn't have! I can take care of myself. Mom put you up to this, didn't she? CHRIS: You look pretty rough. I have the prescription. (Sets it down in front of her.) Here's some chicken noodle soup too. I'm staying away from you. I can't afford to get sick right now. EVA: I don't blame you. What's going on right now? I haven't seen you for a while. CHRIS: Just studying. Nothing fun. You wouldn't believe this one course I'm taking. It's a nightmare. EVA: Hang in there, Chris. Don't quit like I did. You'll end up in dead-end jobs like me.

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 5--PreProduction (continued)

CHRIS: It wasn't your fault. It's not easy juggling everything.

Two little kids are running around in the background.

EVA: Don't make excuses for me. And, don't make excuses for yourself either. Lots of people overcome the odds. They were told they were stupid, lazy, unmotivated. But despite the odds, they somehow found it within themselves the strength to make it. Chris, just be one of them!

CHRIS: I am trying, really. In fact, I need to study for an exam.

EVA: I know. I just care so much about you. I don't want you to let self-defeating thoughts and behaviors ruin your life. You can control them, not let them control you.

CHRIS: You sound like you've watched too much X-Files. There's no conspiracy here!

EVA: Ha. Ha. Ha. How do you know!

CHRIS: You must be feeling better. So, I'm going home now. You need to rest. Call me if you need anything ...anything at all.

EVA: OK, Chris. See you soon. Thanks for the soup!

On to Production!



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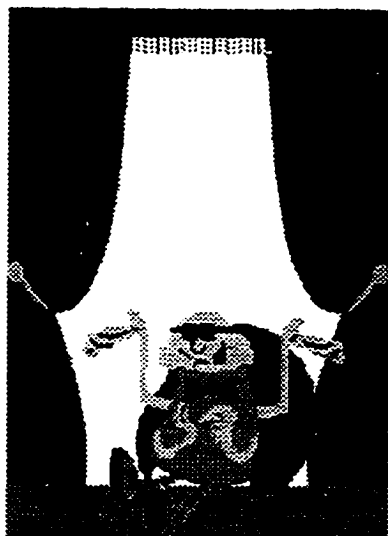
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Scene 5--Production

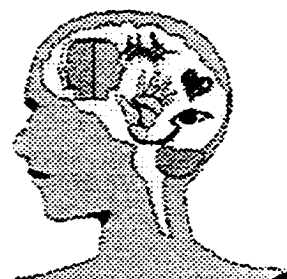


Film: Possible Selves

Scene 5:

Getting to Know You

Eva's comments about overcoming odds was true. Having a lousy childhood made it easier for Chris to rationalize--to make excuses based on limitations from the past. Give examples of strategies Chris can use to overcome self-defeating attitudes and behaviors and replace them with more positive attitudes and behaviors.



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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 5--PostProduction

About Self	Strategies
Some individuals downgrade their own abilities, effectiveness, and competence. Individuals may actually avoid effort towards academics to protect the ego. "I didn't study" is safer than "I'm not smart." Individuals have an optimum level of challenge for their skills and abilities. Too little challenge and an individual becomes bored. Too much challenge, and an individual becomes frustrated, worried or anxious. Individuals are different and will react differently to rewards. Rewards may actually reduce motivation because the task will be viewed as controlled by something outside of self. Grades can be considered a form of reward. As they grow older, some individuals tend to become less curious and motivated to learn, most likely because of social and cultural influences. Learner control affects motivation. Learners will feel less motivated when others specify what must be done or how something will be graded.	• Use metacognitive strategies to listen for and control self-defeating thoughts and actions. This is a <i>very</i> difficult habit to break. • Observe tendencies to procrastinate or avoid effort in course. Try to consider why you might be engaging in this no-win strategy. • Recognize that academic situations do not optimally challenge every individual. If you are bored, try to make the situation more challenging for yourself. If you are frustrated, worried, or anxious, use relaxation stress-reducing, and social-help strategies. • Use self-rewards for working on tasks you may not particularly enjoy. • Imagine yourself with the curiosity of a child as you encounter each learning experience. • Understand your reactions to external control by using metacognitive strategies. • Think about it...actually, the learner always has control over the situation. The learner decides whether to persist or give up. • Keep your mind on long-term goals when faced with negative short-term situations.
This Week: • Think about your life and learning. • Use metacognition to monitor thinking. • <u>ABC - The Anti-Blanking Course</u> • <u>Emotional Intelligence</u>	Next Week: • Return to MTV 101 Studios • Check for new messages • Begin directing Scene 6



You are the Director of Possible Selves!

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Message 5 from Producer

Received after completing Scene 5 and logging in for Scene 6



1 Million Investment Boulevard, Hollywood Hills, CA 90210
Phone: 555.902.1010 * Fax: 555.902.1001 * www.mtv101.com

10/02/97

Dear Mickey Mouse:

I just reviewed the daily briefs from Scene 5 of the film *Possible Selves*. Your sense of direction with the character of Chris has been most impressive. Chris has developed a sense of self. As John Locke wrote in *An Essay Concerning Human Understanding*, "I have always thought the actions of people the best interpreters of their thoughts."

As Chris enters Scene 6, the focus on action is key to expressing those thoughts. Afterall, as David K. Reynolds said, "There are no shortcuts when adopting a lifeway of consequence."

Be sure to turn in Progress Reports. As always, feel free to contact me through MTV 101's Message Center if you have any questions. For emergencies, call me at 651-0195. The progress on this film has been remarkably smooth.

Sincerely,

Beverley M. Taylor
MTV 101 Executive Producer
Possible Selves

Start Scene 6

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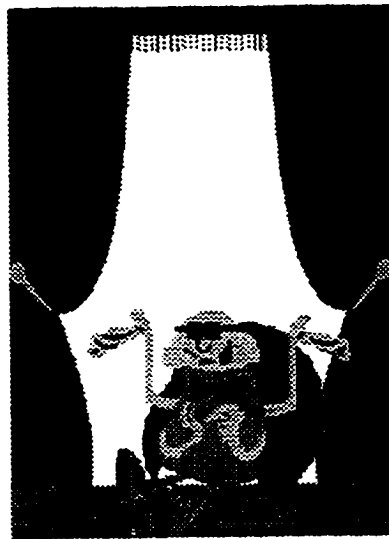
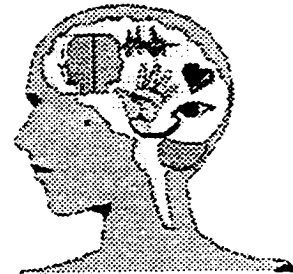
Scene 6--PreProduction

Week 6 ● Scene 6 ● Environment ● Environmental Issues Objective: Learn about and apply strategies of learning environment	
Director's Responsibilities	Only by an act of will can actors devote themselves to the character. Concentration and imagination will make the character's needs more urgent, more fascinating, and more demanding.
The Set	In this scene, Chris returns to the apartment. The place is as before—quite cluttered and somewhat dark. The lights are dimmed slightly from Scene 4, increasing the dismal effect of the apartment.
The Cast • Chris	Chris returns to the apartment and is the sole actor throughout this scene. Chris must show sincerity, truth, and directness. This can be most difficult when acting alone.
The Script	<i>Chris looks around the apartment.</i> CHRIS: <i>(mumbling/grumbling)</i> What a mess. I cannot study here. Maybe I should just call Lou and just forget about the exam. Oh no! I know what I'm doing. I'm doing exactly what Torrey talked about—if I don't study, that's my excuse for not doing well. If I do study and don't do well, then I have no excuse to fall back on—I'd feel like the problem was my ability. Then I set lower and lower expectations for myself. Self-defeating! <i>Chris looks determined. Chris picks up around the apartment, then quickly makes some coffee, turns on lights, lights a few candles, and puts on some soft music.</i> CHRIS: OK. Torrey's advice....create a study mood... What works for me? I need to feel relaxed, warm...but not too warm or I'll get sleepy. I prefer some soft music to stark silence. I've tried studying with the TV on and that's not a good idea. Feel like this is what I want to do right now and feel proud of myself for making the right choices. I will do my very best to stay focused on the material. I will keep checking on myself by using metacognition. <i>The scene fades as Chris appears absorbed in study.</i>
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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 6--Production

**Film: Possible Selves****Scene 6:****Environmental Issues**

Chris set up the environment to improve studying and become less distracted. What strategies might Chris use to raise expectations for doing well and create a positive environment for success?

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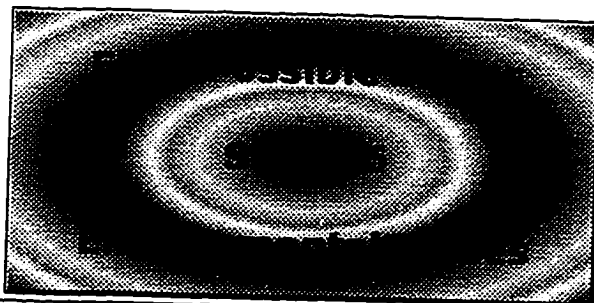
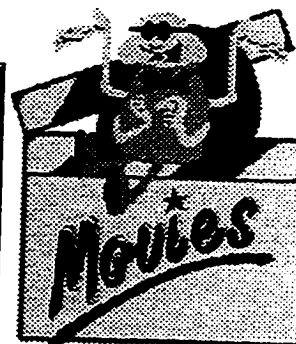
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Scene 6--PostProduction

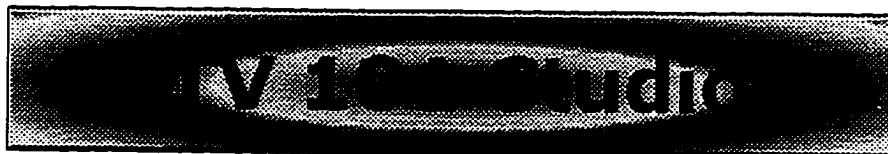


About Environment & Expectations	Strategies
Choice leads to commitment and increased involvement. Academic environments do not always allow students to make choices, making them feel like they are not in control. Individuals are different and will react differently to classroom environments and expectations. Supportive environments enhance a student's sense of control over a situation. Students vary in their need for structure in courses. Impersonal environments may cause students to feel unmotivated. Some instructors are open to student suggestions. Others are not. Some students prefer competitive environments; others prefer cooperative environments.	• Recognize that academic environments may promote negative reactions, but make it your choice to react positively. • Appreciate academic situations when you are given the opportunity to choose projects or topics. • Evaluate your reactions--thoughts and behaviors--to different courses. Look at the environment and expectations that promote positive reactions and those that promote negative reactions. • Choose supportive environments whenever possible. Avoid impersonal environments. • Determine your need for structure. If it is not provided within the classroom, impose structure upon yourself. • Think about the expectations you have set for yourself. Are they purposely set low so you will succeed or so that you don't have to put forth as much effort? Think about raising expectations and challenging yourself.
This Week: • Observe the environment, internal and external expectations, and your reactions to them. • <u>Things NOT to Learn in School</u>	Next Week: • Return to MTV 101 Studios • Check for new messages • Begin directing Scene 7

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Message 6 from Producer

Received after completing Scene 6 and logging in for Scene 7



1 Million Investment Boulevard, Hollywood Hills, CA 90210
Phone: 555.902.1010 * Fax: 555.902.1001 * www.mtv101.com

10/02/97

Dear Mickey Mouse:

Scene 6 of the film *Possible Selves*, captured the essence of how an individual can take charge of an environment. Chris has expressed the role well. Feel free to share this quote by William Redfield in *Letters from an Actor*, "Let's face it: acting is an art defiant of logic. It comes from the soul and it is a slippery business. There are rules and they should be observed, but the rules alone never make great acting."

As Chris begins Scene 7, here's another great one from our good friend Dr. Seuss:

When I leave home to walk to school Dad always says to me,
'Marco, keep your eyelids up And see what you can see.
--And to Think that I saw It on Mulberry Street

Be sure all Progress Reports are turned in next week. Please return to the Message Center to check your messages next week.

Sincerely,

Beverley M. Taylor
MTV 101 Executive Producer
Possible Selves

Start Scene 7

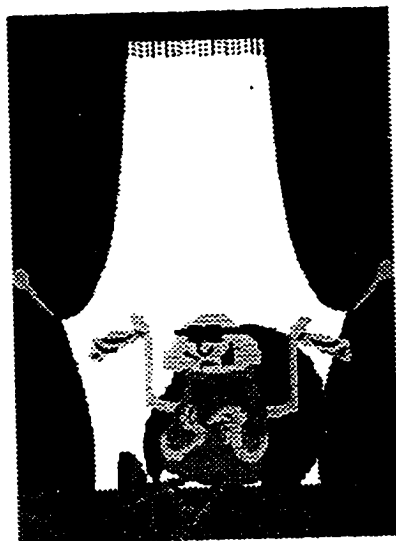
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Scene 7--PreProduction

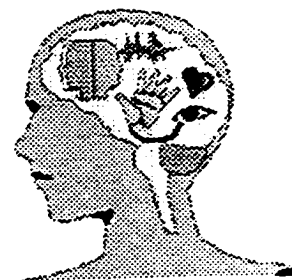
Week 7 ● Scene 7 ● Time and Attention ● Watching Out		
Objective: Learn about and apply strategies of time and attention		
Director's Responsibilities	If the actors are unable to find the required impulses within, the director can produce the required rhythms externally.	
The Set	A crowded, noisy, brightly lit Student Center. Think about several product endorsements--refreshments--fast food.	
The Cast ● Chris ● Torrey ● Meta ● Extras	Chris and Torrey join up with Meta at the Student Center following the first exam. The Student Center is very crowded and quite noisy.	
The Script	TORREY: At least the first exam is out of the way. CHRIS: I can't believe I did that well! I have to admit I studied more than usual. TORREY: Yes, and I bet you studied differently, deeper than usual. CHRIS: I guess I did. All these strategies have been great, but I feel guilty about how I spend my time now-- I feel like I can't even enjoy life anymore! TORREY: I know what you mean. How about you Meta? META: Yes, it's hard to juggle school and everything else. I deal with it by "making deals with myself." I promise to devote a certain number of hours -- full time and attention -- to a task and then I get a break to do something else I'd like to do. I evaluate whether I did my end of the deal and if so, then I earn a little rest and relaxation--time off for good behavior. I have found that once I get started doing what I should be doing, I get into it. TORREY: You are rewarding yourself for doing what you need to do. META: Yes. And, right now, I plan on rewarding myself with a nice lunch--an not here! I think you two deserve to join me. TORREY & CHRIS: Sounds good to me.	
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APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

Scene 7--Production

**Film: Possible Selves****Scene 7:****Watching Out**

Chris devoted time to studying and made a better grade. But time doesn't always = better grades. How might Chris make sure the time is well spent?



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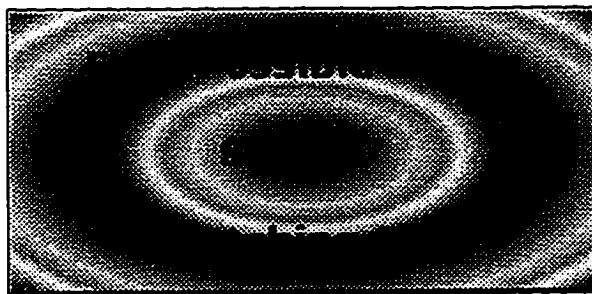
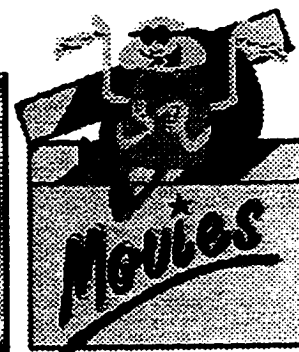
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Scene 7--PostProduction



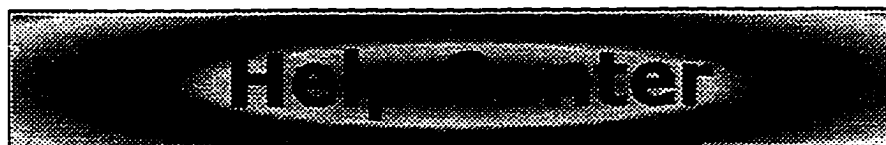
About Time & Attention	Strategies
Students who are committed to achievement and understanding will use deeper approaches to learning. Engagement in learning will be more important than the amount of time. Individuals with similar ability levels may achieve differently based on style of engagement. Students who use surface approaches focus on minimum task requirements. Desperation may bring inspiration, but doesn't usually result in the best work. For most students, procrastinating brings nothing but increased stress, anxiety, and despair. Student academic stress can be reduced and controlled through effective time and study techniques.	• Determine your beliefs about learning--usefulness, value of time, and goals for learning. • Observe yourself as you study. How deeply are you engaged? You will be less conscious of yourself, others, time, or your surroundings when you are deep engaged. • Compare how you become engaged in subjects of interest with subjects you find less interesting. In which courses do you tend to do better? • Find relevance for what you are studying with your goals. It will help you move beyond studying on the surface. • Become aware of your tendency to thrive on deadline pressure or to become very stressed. Do not allow yourself to procrastinate if you tend to become stressed. • Set mini-deadlines and reward yourself for meeting them, particularly for large projects or assignments.
This Week: • Identify long-term goals. • Prioritize time and attention. • <u>Success</u>	Next Week: • Return to MTV 101 Studios • Check for new messages



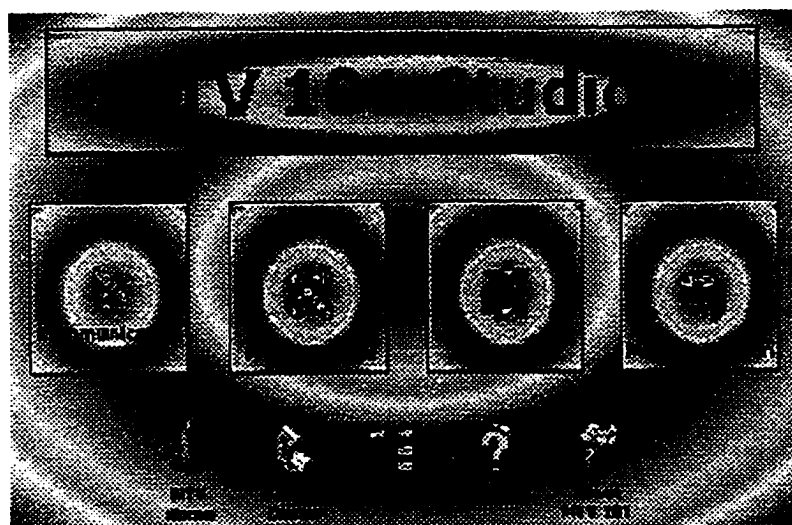
You are the Director of Possible Selves!

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

MTV 101 Help Center



To participate as a student:	To participate as an anybody:
Click on the Communications Center first where you'll be able to register and communicate interactively with the Producer. You will direct a film called "Possible Selves" scene by scene. There are a total of seven scenes that should be completed beginning with PreProduction, then Production, and finally PostProduction.	You will direct a film called "Possible Selves" scene by scene. There are a total of seven scenes that should be completed beginning with PreProduction, then Production, and finally PostProduction. If you don't register, you won't have interactive communications capabilities.



At the bottom of each screen you will find navigational buttons that will allow you to:

1. Enter the Communications Center
2. Send messages (and receive messages from the Producer (if you are a registered user)
3. View the course map
4. Access this help information
5. Find out about MTV 101--the film, cast, and credits



MTV
Home



Message
Center



Site Map



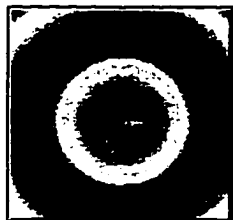
Help



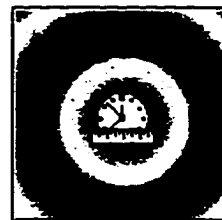
About
MTV 101

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

MTV 101 Resources



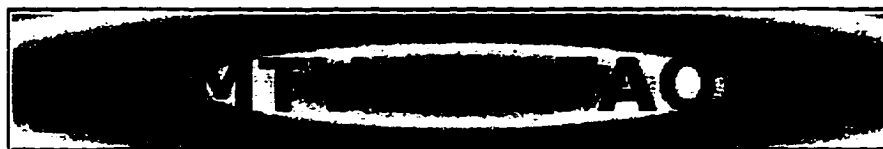
Above the Line	(in thousands)	
100	Goals	16.0
200	Attitude	17.0
300	Self Awareness	12.5
400	Determination	55.0
		\$100.5
Below the Line	(in thousands)	
Production		
500	Support System	20.7
600	Extras	6.0
700	Set Operations	34.8
800	Sets	17.0
900	Props	10.6
1000	Time	6.9
1100	Health	7.0
1200	Production Equipment	21.0
1300	Location/Studio	12.8
1400	Materials	38.0
1500	Tests	1.6
1600	Production Misc	16.5
		\$ 192.9
PostProduction		
1700	Editing	46.0
1800	Sound	14.5
1900	Music	26.0
2000	Titles/Opticals	5.0
2100	Laboratory	12.8
2200	Sound Mix	11.8
		\$116.1



Metacognition	● Thinking about Thinking	Week 1
Interests	● Tuned In & Turned On	Week 2
Networking	● Network Connections	Week 3
Demands	● Rolling with the Punches	Week 4
Self	● Getting to Know You	Week 5
Environment	● Environmental Issues	Week 6
Time	● Watching Out	Week 7

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

MTV 101 FAQ



 Who do I contact if I have questions?

Contact the Producer of the Film through the MTV 101 Communications Center.

 How do I add a FAQ?

Click on the question and you will be able to submit an FAQ

 What are the director's responsibilities?

The director is responsible to the producer for translating the screenplay into the images and sounds of a motion picture. The primary role of director is coordinating the activities of the cast and crew during preproduction, production, and postproduction. For more indepth information, click on the question above.

 What is meant by academic motivation? What does the word metacognition mean?

Academic motivation refers to an individual's motivation in academic settings. The word metacognition means "thinking about one's thinking." For more information about metacognition or other terms related to this program, click on the question above.

 Where are other sites related to these topics?

There are other topics related to student success. Click on the question for links to topics on study skills, time management, procrastination, testing tips, etc.



APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

MTV 101 Offline Materials

Pro's and Con's Worksheet

///SAMPLE\\ Pro's and Con's

List the Pro's of becoming more motivated toward academic work on the + side and the Con's of becoming more motivated toward academic work on the - side.

Decisional Balance Scale:
be as comprehensive as possible

PRO's	CON's
Better Grades	Less Fun with Friends
Learn More	More Stress
Feel Less Guilty About Not Trying	Takes Time to Try Harder
Pass My Classes	Feel like I'm Dorky
Please My Parents	Feel Overwhelmed

GOAL SETTING (focus on internal, not external rewards):

Long-term goals that help keep me motivated: I want to learn accounting and become a tax accountant. I want to graduate and feel good about my accomplishments. I visualize myself as an excellent accountant who is knowledgeable about all aspects of the field.

Short-term goals that help keep me motivated: I want to pass chemistry. I want to learn more about accounting, business law, and algebra. I want to respect the fact that I am striving to do my best each day, trying hard and learning in all of my courses.

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

MTV 101 Offline Materials

Situational Motivation Worksheet

Date/Time (When)	Situation (Who, What, Where, How)	Rating Positive (P) Negative (N) Unsure (U)
9 AM	Class-- You don't need to state which one. On campus.	U
Explanation: Why was it positive or negative? What aspects did you find that were positive or negative? Did you use any motivational strategies? Which ones? Were they helpful? I really enjoy this course and instructor. I am a night person and am crabby in the morning. I did try to connect the material to my goals. But, I still had a hard time staying focused. I thought about why and I think it is because I'm tired. I need to go to bed earlier when I have a morning class.		
Date/Time (When)	Situation (Who, What, Where, How)	Rating Positive (P) Negative (N) Unsure (U)
9 pm	Studying Alone	N
Explanation: Why was it positive or negative? What aspects did you find that were positive or negative? Did you use any motivational strategies? Which ones? Were they helpful? I studied, but I didn't enjoy it! Finding interest & relevance for this subject is hard! I was trying to study but I also didn't want to miss <i>Seinfeld</i>. By the time it was over I was very tired. I know I didn't concentrate very well and ended up falling asleep before I finished.		
Date/Time (When)	Situation (Who, What, Where, How)	Rating Positive (P) Negative (N) Unsure (U)
3/05 4 pm	Studying with friends in the computer lab.	P
Explanation: Why was it positive or negative? What aspects did you find that were positive or negative? Did you use any motivational strategies? Which ones? Were they helpful? One of my friends showed me how to do this graph with Excel. It will really help me with presenting work in my biology course. Studying with friends can really be beneficial IF we don't socialize instead of studying.		

APPENDIX B: MTV 101 PROGRAM--PRINTED VERSION

APPENDIX C

Participant Information:

Consent Form, Information Sheet, Selection Process, Calling Procedures
& Sample Questions from the Academic Motivation Scale

CONSENT FORM FOR GEORGIA STATE UNIVERSITY

Please sign both copies. Keep one and return the other to the investigator.

I, _____, have been asked to participate in a research project that will concern academic motivation. This project is under the direction of Beverley M. Taylor, a graduate student in Georgia State University's College of Education. There is no other sponsorship or funding for this project.

The following points have been explained to me:

The purpose of this research is to determine whether academic motivation can be improved through participation in a motivational strategies training program.

I have been told that there are no known risks or discomfort to me from participation in the project. No direct benefit can be promised from participating in this program; however, knowledge gained from this study may contribute to a better understanding of academic motivation. The participants may benefit from increased knowledge about personal academic motivation. GSU may benefit by continuing to understand its students and to improve the Learning Support Programs.

Procedures are as follows:

I volunteered to complete an informational questionnaire and the AMS. I may be asked to complete the AMS again, at the conclusion of this study.

I may be selected to participate in a computer-based Motivational Strategies Training program during spring quarter 1997. Individuals who are selected will choose whether or not they wish to participate. If I am not selected, I will be able to participate in the training program during summer quarter.

If I agree to participate in the Motivational Strategies Training, I will expect to devote no more than two hours of time per week to this program.

Interviews will be conducted with individuals who complete or participate but do not complete the Motivational Strategies Training. Group interviews will also be conducted at the conclusion of the program. I will choose whether or not I wish to participate at that time.

Information gathered from me will not be reported to anyone outside the research project in any manner which personally identifies me. Association of my name with the data will be known only to Learning Support Programs and the investigator. A report of general and combined results from several participants in this project will be prepared for the College of Education at Georgia State University, and may be submitted to a professional publication or conference at a later time.

The project investigator, Beverley M. Taylor, will respond to any questions that I might have about my involvement in this project. I understand that I may end my participation at any time. Beverley Taylor may be contacted at Georgia State University at 404-651-0195 or through e-mail at mstbmtx@panther.gsu.edu. Whether I choose to participate at all, or decide not to continue at a later time, will have no effect on the services available to me at Georgia State University.

I understand that a signed statement of informed consent is required of all participants in this project. My signature indicates that I understand and voluntarily agree to the conditions of participation described above, and have received a copy of this form.

TRANSACTION NUMBER ASSIGNED FOR THIS PROJECT: _____

APPENDIX C: PARTICIPANT INFORMATION

I, _____, volunteered to fill out an information
(Print)

questionnaire and the AMS.

_____
Date

_____
Signature of Subject

_____
I, _____, volunteered to participate in motivational
(Print)
strategies training.

_____
Date

_____
Signature of Subject

_____
I, _____, volunteered to participate in individual and/or
group interviews.
(Print)

_____
Date

_____
Signature of Subject

APPENDIX C: PARTICIPANT INFORMATION

M T V 1 0 1

Information About YOU!

This questionnaire and additional information are being gathered as part of a research project. Confidentiality of your answers is assured. Please sign the consent form before completing this questionnaire.

I am completing this questionnaire:

Location: _____

Course: _____

First Name: _____ Last Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____ Country: _____

Telephone (Home): _____ Telephone (Work): _____

Email: _____

Age: _____

Gender:

- ☐ Male
☐ Female

Ethnicity:

...I would consider myself in the following ethnic group:

- ☐ African-American
☐ Asian/Pacific Islander
☐ Caucasian (not Hispanic)
☐ Hispanic
☐ Native American

.....I self identify as _____

APPENDIX C: PARTICIPANT INFORMATION

Socio-Economic Level:

...growing up, I would consider myself in the following socio-economic group:

- ☐ Lower socio-economic
- ☐ Lower Middle socio-economic
- ☐ Middle socio-economic
- ☐ Upper Middle socio-economic
- ☐ Upper socio-economic

Father's Educational Level:

- ☐ Less than a H.S. diploma
- ☐ H.S. diploma
- ☐ A few years of college
- ☐ Completed college
- ☐ More than 4 years of college
- ☐ Not applicable

Mother's Educational Level:

- ☐ Less than a H.S. diploma
- ☐ H.S. diploma
- ☐ A few years of college
- ☐ Completed college
- ☐ More than 4 years of college
- ☐ Not applicable

I attended high school:

Less than 1 year ago

- ☐ 1-2 years ago
- ☐ 2-5 years ago
- ☐ 5-10 years ago
- ☐ More than 10 years ago

APPENDIX C: PARTICIPANT INFORMATION

Grades:

...in high school, I would say my grades were:

- ☐ Mostly A's and B's
- ☐ About B average
- ☐ About C average
- ☐ Mostly D's or less
- ☐ Varied greatly from class to class

Computer Comfort Level:

...I would describe my comfort level with computers as:

- ☐ Extremely Comfortable
- ☐ Comfortable
- ☐ Not sure one way or the other
- ☐ Don't Care for Computers
- ☐ Hate Computers and Everything Associated with Them

☐ Pre Test

☐ Post Test

Matched Pairs Selection Process

Start with the first pair.

Randomly assign matched pair by flipping a coin to choose Experimental and Control. The first person will be consider the Experimental individual if "heads" and the Control individual if "tails."

If home, and the individual says "Yes," go to the next pair.

If not home, leave a message to return the call as soon as possible; the pair remains intact for no more than three days. If the person has not been contacted by that time, the Experimental person will be dropped due to lack of contact.

If home, and the individual says "No," the Control person will become part of the next pair.

APPENDIX C: PARTICIPANT INFORMATION

In Case B: Call 3 times and a total of 3 days. If no response, drop the Experimental individual. Look for potential matched pairs from remaining Control individuals (never contacted) if they meet matching criteria (traditional/non-traditional student; gender; ethnicity).

Calling Procedures

Hi. My name is Beverley Taylor. I came to one of your classes in the past few weeks and you took the Academic Motivation Scale and filled out some information for me. I mentioned that some individuals would be selected to participate in a Motivational Strategies Training Program. That is why I am calling now. You have been selected!

If not home:

Please call me as soon as possible and I will be able to provide additional information for you. My number at work is 404-651-0195. My number at home is 770-427-4991.

If home:

The program is independent study—I will show you how to access and use the program and after that you will be able to work independently.

I need to set up an appointment for an overview of the program and begin the first week. This should take no more than one hour of your time. Each week, the program will take no more than one hour of your time on the computer and no more than one hour to complete offline materials.

APPENDIX C: PARTICIPANT INFORMATION

Sample AMS Questions
(Vallerand, 1997)

In general, why do you go to college?

<u>AMS Subscale</u>	<u>Sample Question</u>
Intrinsic Motivation --To Know	Because I experience pleasure and satisfaction while learning new things
Intrinsic Motivation --To Accomplish	For the pleasure I experience while surpassing myself in my studies
Intrinsic Motivation --To Experience Stimulation	For the high feeling that I experience while reading various interesting topics
Extrinsic Motivation --Identified	Because eventually it will allow me to enter the job market in a field that I like
Extrinsic Motivation --Introjected	To prove to myself that I can do better than just a high school degree
Extrinsic Motivation --External Regulation	In order to get a more prestigious job later on
Amotivation	Honestly, I don't know; I really feel that I'm wasting my time in college

APPENDIX C: PARTICIPANT INFORMATION

APPENDIX D

Formative Evaluation--End Users

End-User Feedback Sessions

Purpose:

- test the learnability of the interface to see if the user can get familiar with the interface easily
  - test the overall nature of the program to determine what the user likes the program dislikes about the program
  - test the effectiveness of the program in terms of the user obtaining new knowledge about motivational strategies and planning for strategy use in academic situations
-

The following are the suggested tasks to accomplish the purpose:

- Test the usability of the interface, how easily users get familiar with the interface

Tasks:

1. Each user will log-in as a first time user or log-in as a user (some have already done so—and this will be good to see if s/he can return after time and log-on without assistance).
2. The user will check for messages.
3. The user will enter the program at the correct scene.
4. The user will go through each scene. Data will be entered at the production stage.
5. The user will demonstrate understanding of the flexibility of the interface by returning to the production phase of a previous scene.
6. The user will send a message to the instructor.

- Test the effectiveness of the program in terms of the user obtaining new knowledge about motivational strategies and planning for strategy use in academic situations

Pre-interview students about:

1. What do you think about your current level of motivation for college?
2. What strategies do you use to stay more motivated?
3. How successful are you in using those strategies?
4. What are your immediate goals?
5. What are your long term goals?

During program, ask students after each scene:

1. Have you ever used this strategy?
2. Did this scene help think differently about motivation for college?

Post-interview students:

1. Do you think you will use any of the strategies from MTV 101?
2. Which ones and why?
3. Have you changed your immediate goals in any way?
4. Have you changed your long term goals in any way?

Test the overall nature of the program to determine what the user likes the program dislikes about the program.

Videotape the session and encourage the user to “talk aloud” about what s/he is doing, when s/he isn’t sure what to do, what s/he likes or doesn’t like and anything else.

Ask the user what s/he thought about each scene immediately after it is finished.

APPENDIX D: END-USER FEEDBACK

MTV 101 Questionnaire

1. Relate your recent MTV 101 experience. Would you characterize it as a complete motivational strategies training or a series of disjointed scenes? What was your favorite part, and why? What was your least favorite part, and why?

2. How would you describe MTV 101 to someone else?

3. Should students take MTV 101 as part of a class, as a homework assignment, as a voluntary program, or not at all? Why?

4. On a scale of 1 to 6, rate your overall impression of MTV 101.

1-Complete Waste of Time	2-Yuck!	3-OK	4-Enjoyed Program	5-Learned Strategies	6-Useful Program

APPENDIX D: END-USER FEEDBACK

Director A

Demographic & Motivational Profile

Gender: Female

Age: Traditional Student 17 years old

Ethnicity: Human--African-American

1. Relate your recent MTV 101 experience. Would you characterize it as a complete motivational strategies training or a series of disjointed scenes? What was your favorite part, and why? What was your least favorite part, and why?

I would say a complete motivational strategies training. My favorite part was post production. When I was able to print out an outline to help me with applying the strategy of that scene to my everyday life.

2. How would you describe MTV 101 to someone else?

A program that will help you with your study and motivational skills that is well worth the short amount of time it takes.

3. Should students take MTV 101 as part of a class, as a homework assignment, as a voluntary program, or not at all? Why?

MTV 101 should be taken as a voluntary program because people who don't want to learn new motivational strategies will not benefit from it, regardless.

4. On a scale of 1 to 6, rate your overall impression of MTV 101.

X					
1-Complete Waste of Time	2-Yuck!	3-OK	4-Enjoyed Program	5-Learned Strategies	6-Useful Program

APPENDIX D: END-USER FEEDBACK

Director B

Demographic & Motivational Profile

Gender: Male

Age: Traditional Student 19 years old

Ethnicity: African-American

1. Relate your recent MTV 101 experience. Would you characterize it as a complete motivational strategies training or a series of disjointed scenes? What was your favorite part, and why? What was your least favorite part, and why?

I would characterize it as motivational strategies training. I liked Scene 2, because that's when I started understanding the MTV 101 programs and how it worked. Scene 1, because I was confused, frustrated, and did not have a clue about what's going on.

2. How would you describe MTV 101 to someone else?

I would describe MTV 101 to someone else as a way to help you set all your classes at all times, stay focused and pay attention at all times.

3. Should students take MTV 101 as part of a class, as a homework assignment, as a voluntary program, or not at all? Why?

Yes, because it will help you self-motivate yourself, and also it helps you prepare yourself for your classes and later on down the road.

4. On a scale of 1 to 6, rate your overall impression of MTV 101.

(5 & 6) X					
1-Complete Waste of Time	2-Yuck!	3-OK	4-Enjoyed Program	5-Learned Strategies	6-Useful Program

APPENDIX D: END-USER FEEDBACK

Director C

Demographic & Motivational Profile

Gender: Female

Age: Traditional Student 18 years old

Ethnicity: African-American

1. Relate your recent MTV 101 experience. Would you characterize it as a complete motivational strategies training or a series of disjointed scenes? What was your favorite part, and why? What was your least favorite part, and why?

I would characterize it as a motivational strategy. My favorite part was with Chris having to deal with the bills, exams, party, and sister at the same time. My least favorite part was the intro and director scene.

2. How would you describe MTV 101 to someone else?

It was a script about kids who go through the same thing college kids go thru and how they deal with it.

3. Should students take MTV 101 as part of a class, as a homework assignment, as a voluntary program, or not at all? Why?

As a homework assignment. It helps you deal with stress and also motivates you.

4. On a scale of 1 to 6, rate your overall impression of MTV 101.

				X	
1-Complete Waste of Time	2-Yuck!	3-OK	4-Enjoyed Program	5-Learned Strategies	6-Useful Program

APPENDIX D: END-USER FEEDBACK

Director D

Demographic & Motivational Profile

Gender: Male

Age: Traditional Student 19 years old

Ethnicity: African-American

1. Relate your recent MTV 101 experience. Would you characterize it as a complete motivational strategies training or a series of disjointed scenes? What was your favorite part, and why? What was your least favorite part, and why?

I would say that it was training. It taught you as it went along in a sort of fun unobvious way. My favorite part would be the strategies page. My least favorite part would have to be the type in a response for Chris part.

2. How would you describe MTV 101 to someone else?

As a fun learning experience.

3. Should students take MTV 101 as part of a class, as a homework assignment, as a voluntary program, or not at all? Why?

They should take it as maybe an intro to college course because it can help out in a lot of ways as they go through school.

4. On a scale of 1 to 6, rate your overall impression of MTV 101.

X					
1-Complete Waste of Time	2-Yuck!	3-OK	4-Enjoyed Program	5-Learned Strategies	6-Useful Program

APPENDIX D: END-USER FEEDBACK

Director E

Demographic & Motivational Profile

Gender: Female

Age: Traditional Student 20 years old

Ethnicity: African-American

1. Relate your recent MTV 101 experience. Would you characterize it as a complete motivational strategies training or a series of disjointed scenes? What was your favorite part, and why? What was your least favorite part, and why?

I really enjoyed it overall. I can relate to Chris. Meta was an 'undercover teacher.' My favorite part was when Chris' mother called (Scene 5), and Scene 7 when Chris does well on his test. My least favorite was Scene 1.

2. How would you describe MTV 101 to someone else?

It is a motivational course. It is a film that is done on the computer. Each scene the individuals are able to see themselves in the individuals.

3. Should students take MTV 101 as part of a class, as a homework assignment, as a voluntary program, or not at all? Why?

As part of a class. It was motivating, it allows them to relate with Chris. At the same time they will see themselves in Chris, this will help the individual become more motivated.

4. On a scale of 1 to 6, rate your overall impression of MTV 101.

X					
1-Complete Waste of Time	2-Yuck!	3-OK	4-Enjoyed Program	5-Learned Strategies	6-Useful Program

APPENDIX D: END-USER FEEDBACK

Director F

Demographic & Motivational Profile

Gender: Male

Age: Traditional Student 20 years old

Ethnicity: Asian/Pacific Islander

1. Relate your recent MTV 101 experience. Would you characterize it as a complete motivational strategies training or a series of disjointed scenes? What was your favorite part, and why? What was your least favorite part, and why?

Well, the MTV 101 experience is a very helpful program. I would characterize it as a motivational strategy for training. I don't really have a favorite part because all of the examples and motivational scenes were great.

2. How would you describe MTV 101 to someone else?

I would describe MTV 101 as a good training program for people who are having trouble in learning diff. subjects. It is very helpful for everyone.

3. Should students take MTV 101 as part of a class, as a homework assignment, as a voluntary program, or not at all? Why?

Well, I would say that MTV 101 should be voluntary, because if a person is interested in improving his or her learning skill they would volunteer and take the chance.

4. On a scale of 1 to 6, rate your overall impression of MTV 101.

X					
1-Complete Waste of Time	2-Yuck!	3-OK	4-Enjoyed Program	5-Learned Strategies	6-Useful Program

APPENDIX D: END-USER FEEDBACK

Director G

Demographic & Motivational Profile

Gender: Male

Age: NonTraditional Student 27 years old

Ethnicity: African-American

1. Relate your recent MTV 101 experience. Would you characterize it as a complete motivational strategies training or a series of disjointed scenes? What was your favorite part, and why? What was your least favorite part, and why?

As a complete motivational strategies training tool. What I liked most are the strategies that are presented. Often time you know the problem and lack the solution. What I liked least was that there is 'no quick fix solutions.'

2. How would you describe MTV 101 to someone else?

A course that helps you to recognise some problems that you encounter and overcome without thinking about it. A tool that can be used to help you become successful in your college career.

3. Should students take MTV 101 as part of a class, as a homework assignment, as a voluntary program, or not at all? Why?

I think MTV 101 should be more part of a class. Often time freshmen or transferring students are unable to step up to the challenges of a university because they lack the tools needed to succeed. Arming them with the tool presented would help them a great deal.

4 On a scale of 1 to 6, rate your overall impression of MTV 101.

X					
1-Complete Waste of Time	2-Yuck!	3-OK	4-Enjoyed Program	5-Learned Strategies	6-Useful Program

APPENDIX D: END-USER FEEDBACK

Director H

Demographic & Motivational Profile

Gender: Female

Age: Traditional Student 23 years old

Ethnicity: Caucasian

1. Relate your recent MTV 101 experience. Would you characterize it as a complete motivational strategies training or a series of disjointed scenes? What was your favorite part, and why? What was your least favorite part, and why?

My favorite part was typing in Chris' response. It allowed me to use my imagination. It flowed well, but if at all possible I would implement more visuals of some sort. Text is always more interesting with something to break it up.

2. How would you describe MTV 101 to someone else?

I would tell them it was a program that gave tips on how to succeed in school.

3. Should students take MTV 101 as part of a class, as a homework assignment, as a voluntary program, or not at all? Why?

I think all extracurricular activities that aren't directly relevant to a certain class should be voluntary only.

4. On a scale of 1 to 6, rate your overall impression of MTV 101.

X					
1-Complete Waste of Time	2-Yuck!	3-OK	4-Enjoyed Program	5-Learned Strategies	6-Useful Program

APPENDIX D: END-USER FEEDBACK

Director I

Demographic & Motivational Profile

Gender: Male

Age: Traditional Student 21 years old

Ethnicity: Caucasian

1. Relate your recent MTV 101 experience. Would you characterize it as a complete motivational strategies training or a series of disjointed scenes? What was your favorite part, and why? What was your least favorite part, and why?

Yes, I would characterize it as motivational. The interaction with the instructor. The time that it took.

2. How would you describe MTV 101 to someone else?

A fun exciting easy class.

3. Should students take MTV 101 as part of a class, as a homework assignment, as a voluntary program, or not at all? Why?

As a class because it is fun and easy.

4 On a scale of 1 to 6, rate your overall impression of MTV 101.

X					
1-Complete Waste of Time	2-Yuck!	3-OK	4-Enjoyed Program	5-Learned Strategies	6-Useful Program

APPENDIX D: END-USER FEEDBACK