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PERCEPTIONS OF EFFECTIVE INSTRUCTION IN COMMUNITY COLLEGES: A STUDENT VIEW

BY

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DISSERTATION

Submitted in partial fulfillment of the requirements
for the Degree of Doctor of Philosophy in Education
in the Graduate School of the
University of Missouri – St. Louis, 2010

St. Louis, Missouri

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UNIVERSITY OF MISSOURI – ST. LOUIS

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We hereby recommend that the dissertation by:

Stephen K. Biermann

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PERCEPTIONS OF EFFECTIVE INSTRUCTION IN COMMUNITY COLLEGES: A STUDENT VIEW

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Doctor of Philosophy in Education

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_____	_____
Committee Member	Committee Member

ABSTRACT

Stephen K. Biermann

PERCEPTIONS OF EFFECTIVE INSTRUCTION IN COMMUNITY COLLEGES: A STUDENT VIEW

This qualitative study was designed to identify key elements of effective instruction as perceived by community college students. Since the majority of research pertaining to effective instruction has been primarily conducted using a quantitative format, it is important to consider other methodologies for future research. The use of qualitative research helped capture student dialogue in its fullest, unhindered by the constraints of a survey tool or scale.

The students involved in the study voluntarily participated in either individual interviews or focus groups and commented upon various aspects of collegiate instruction, including direct instruction methodologies, instructional enthusiasm, and the use of instructional technology. A moderator conducted each of the nine individual interviews and three focus groups required to research the topic. Forty-four students from three community colleges participated in the study, with three individual interviews and a focus group conducted at each community college campus. Participants in the study were required to have a limited amount of community college experience.

The individual interviews and focus groups were recorded and later transcribed. Together with notes taken by the moderator, the transcriptions were analyzed and themes were identified through the use of a qualitative data software package. The emerging

themes allowed the researcher to draw significant conclusions or theories concerning the community college student perspective of effective instruction.

The research indicated that students overwhelmingly found instructional enthusiasm to be the most effective instructional method. While the direct instruction model was also reported as significant, other factors such as the use of instructional technology were viewed as insignificant.

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CHAPTER 1

INTRODUCTION

During the 1960s, the number of Americans between the ages of 14 and 24 increased by 52% (Witt, Wattenbarger, Gollattscheck, & Suppiger, 1994). This overwhelming growth in the birthrate (dubbed "baby boomers") represented more than five times the rate of the preceding three decades. Young adults, driven by social norms and personal goals, accounted for the greatest decade of expansion in the history of post-secondary education. To meet the tremendous need of the new influx of college- going students, colleges and universities across the U.S. redefined their roles by dramatically expanding program and degree offerings. Community colleges also experienced exponential growth during this era and averaged one new institution per week (Witt et al., 1994).

The influx of post-secondary students fostered a focus on instructional practices. Initiatives requiring higher standards, instructional reform, and curriculum reorganization became commonplace in post-secondary institutions across the country. Students insisted they have a role in the transformation and, for the first time, requested courses to meet their specific needs. The process of initiating change in education was accompanied by substantial literature on the subject of instructional transformation (e.g., Bash, 2005; Brint, Proctor, Murphy, Turk-Bicakci, & Hanneman, 2009; Campbell, Schwier & Kenny, 2009; Horowitz, 1988).

Since that time, educational researchers have observed the classroom setting and focused upon the relationship between the student and the instructor. Many studies have focused on areas such as classroom management, effective instruction, and learning

environments. While much research has focused on the opinions of administrators and faculty, research on instruction from the student perspective has been relatively limited. This is especially true for community college students (Cohen & Brawer, 1982).

With the rapid growth in community colleges, instructors in this sector of higher education face special challenges, especially concerning student diversity (Brint & Karabel, 1989). A first-year English class might consist of new high school graduates from varying academic backgrounds, returning students who have decided to complete their formal education they may have put on hold, and older students slowly working their way toward a degree. An assorted mix such as this certainly requires instruction that can be relevant to a wide range of age groups and learning styles.

Past studies have identified strategies and techniques that address the needs of a diverse learning environment. Whether designed for recent high school graduates or older adults, certain methodologies have proven to be more effective than others in the classroom. But the culture of schools is in a continual state of flux and some traditional instructional strategies require re-examination and perhaps, reinvention. New studies that emphasize instructional techniques and motivation must be considered in future research (Good & Brophy, 1990).

The digital revolution has also influenced instructional approaches, through both the incorporation of technology into the teaching process and the widely varying levels of technological skills of students. In general, younger students are technologically literate and have a much larger skill set when it comes to implementing the use of computers in their work, even though the “digital divide” separates all students along socio-economic lines. Older students continually struggle with basic computer skills, so the instructor

must carefully offer approaches to reach all skill levels. As a result, differing modes of education will have to be addressed in order to provide the best learning environment for all students (Gagne, Wager, Golas, & Keller, 2005).

To accommodate this wide variety of learners, today's post-secondary instructors must be aware of differing learning styles. Gardner (2004) suggests they teach students in a way that addresses individual student intelligences. Instruction must be structured in such a way that a variety of needs are met. Even instructors who are well grounded in theory and methodology remain less effective unless they possess the capabilities of meeting students on their own level. According to Galbraith (1998):

> Becoming an effective teacher of adults depends upon acquiring a balance between an appropriate philosophical vision of teaching and the understanding and implementation of that vision into a practical instructional process and its related elements. Good teaching should be a balance of understanding one's self as a teacher and knowing how to develop learning encounters that are meaningful and useful in the promotion of personal and professional growth. (pp. 3-4)

An accomplished educator should possess a suitable knowledge base for the discipline and also master the art of delivering the message to students in a seemingly effortless manner.

Background of the Study

Although the first American community college was not founded until the start of the twentieth century, the attitudes of some of the founding fathers concerning education shaped the way to the institution's creation. Thomas Jefferson, the nation's third president and author of the Declaration of Independence, was a firm believer in the

concept of practical education. Andrew Jackson believed the public sector should be responsible for providing the funding needed to establish and maintain a public education system (Boone, 1997). The philosophies of individuals such as these helped to spur the educational transition in the early years of the United States that eventually led to the establishment of the public school system. Years later, an extension of this commitment to public, practical education would lead to the beginning of the American community college system.

The early community college movement grew out of the Midwest, with the first institutions connected directly to the University of Chicago. William Rainey Harper, president of the University of Chicago, began to separate the lower divisions from the university as early as 1896. By 1901, several junior colleges had been established, including Joliet Junior College, Bradley Polytechnic Institute, Lewis Institute, and Hardin College (Witt et al., 1994). These early institutions were a mix of public and private schools attempting to serve different constituencies.

In 1911, the state of California passed legislation that enabled high schools to offer the first two years of a college program. Shortly thereafter, other states adopted the California model. The two-year program attracted many students who were interested in an accelerated college degree in either business or teaching. Other schools attracted students who were interested in vocational education, such as engineering. However, the initial interest in the new community colleges would soon be interrupted by the threat of war. Many of those typically interested in a college education soon found themselves involved in World War I (Witt et al., 1994).

In the early 1920s, most of the existing community colleges were private institutions. According to Frye (1992), only about 26% were public at the time, but a shift was underway. The 1920s saw the first meeting of the American Association of Junior Colleges and the beginning of significant growth in two-year college enrollments. By the end of the decade, more than 70,000 students were enrolled in 450 public and private community colleges nation-wide.

The stock market crash of 1929 was followed by the Great Depression which made it difficult for many students to attend pricey universities. As a result, community colleges experienced rapid growth during this era. More and more students were finding the community college to be the best value in a tough economic environment.(Brint & Karabel, 1989).

Under the direction of Franklin Delano Roosevelt, many communities in the 1930s were provided with funding to establish an "emergency" junior college. The Federal Emergency Relief Foundation provided educational opportunities to those who were unemployed and needed additional training. The junior college sought to provide job training which would help reduce the massive unemployment problem the country was facing (Kasper, 2002/2003). Students responded by flocking to the fledgling institutions in great numbers. By the late 1930s, junior college enrollments had more than doubled to include over 140,000 students. Nearly 1 in every 10 college students was now part of a junior college system (Brint & Karabel, 1989).

As the Great Depression came to an end, the United States faced yet another crisis, World War II (WWII). The national mobilization of troops created a heavy demand for skilled workers in the defense industries. Many junior colleges quickly

responded by adding wartime curricula to their course offerings. Some junior colleges accelerated their degree programs to accommodate the draft, while others offered summer school programs for the first time (Witt et al., 1994).

The mid-1940s saw an end to WWII and patriotism reached an all-time high. To show support for returning troops, Congress enacted the Serviceman's Readjustment Act, more commonly known as the GI Bill. Among other things, this piece of legislation allowed discharged veterans a free college education. The GI Bill opened the doors to the masses and rapidly increased the number of students attending college. Veterans took advantage of the new GI Bill and many sought educational opportunities close to home. By 1946, about 43% of all junior college students were WWII veterans. Junior colleges expanded rapidly during this time and saw their enrollments soar in 1947 to include over a half million students (Cohen & Brawer, 2003).

The President's Commission on Higher Education, or Truman Commission, released a report in 1947 that highlighted the role of the junior college. The 28-member commission recommended a sizeable increase in the number of two-year institutions on a state-by-state basis, setting the stage for massive growth of junior colleges over the next two decades (Witt et al., 1994). The President's Commission also recommended the term *community college* be applied to these schools that primarily served local educational needs.

The end of the Korean War in 1953 marked the beginning of yet another boom in community college enrollments. By 1955, the number of students attending two-year institutions had reached 750,000. The enrollment explosion was created by affording additional benefits to Korean War Veterans. The Veterans' Readjustment Act extended

educational opportunities created under the GI Bill to those who served in the Korea. The tremendous growth experienced during this period exceeded the boom that followed the end of WWII.

The 1960s was the most dramatic period of growth for community colleges. A new community college was opened on an average of one-per-week throughout the decade. Large gains in enrollment were caused by "baby boomers' coming of age, a piqued interest in higher education, and the passage of community college legislation in many states. Several institutions had opening day enrollments in excess of 3,000 students. Additionally, the population of young adults, aged 14 to 24, increased significantly. Less than a million students attended two-year colleges at the beginning of the decade and by 1970, 2.2 million students attended community colleges (Weiger, 1999). Lower tuition rates and lenient admission policies also helped the institutions to prosper.

As the funding support from Korean War veterans began to decline in 1965, the first Vietnam veterans began to arrive on community college campuses. The latter part of the 1960s was characterized by an all-out effort by many community colleges to meet the needs of burgeoning enrollments. Building projects and curricular offerings were radically expanded to accommodate those seeking general education and technical education degrees. The community college had etched its place in the American culture (Kasper, 2002).

Growth in the following decade was also significant. Kasper (2002) reported enrollments almost doubled from 2.2 million in 1970 to 4.3 million by 1980. The interest in the community college was fueled by: (a) continued growth of the Baby Boomer

population; (b) parents seeking more education for their children; and (c) students seeking to avoid the military draft. But the boom in the community college sector slowed as students opted to take more of their classes on a part-time basis. An economic downturn in the 1970s forced many students to make tough decisions regarding their education. The practice of holding a full-time job and attending college on a part-time basis became much more prevalent during this timeframe.

Between 1980 and 1999, the expansive growth of the previous two decades finally slowed. Total enrollments grew only 23% during this time and in 1999, 5.3 million students attended community colleges (Kasper, 2002). Slightly more than 1,100 community colleges were in operation at the beginning of the 21st century, quite an accomplishment over a single century.

By the latter part of the 20th century, community colleges became an integral part of the U.S. higher education system. These colleges specialized in meeting the needs of a diverse group of students from equally diverse backgrounds. Two-year institutions were responsible for academic preparation that could lead to transfer to an upper-division college or university and gradually shifted towards meeting community needs that included vocational and job training opportunities (Kasper, 2002). In most cases, state systems were developed so that a quality, low-cost general or technical education could be found within a reasonable driving distance of most of the population. The evolution of the two-year, comprehensive community college closely paralleled the development of the United States throughout the 1900s.

Missouri community colleges, utilized in this study, have a significant history of their own. The first Missouri junior college was established in 1915 in Kansas City,

Missouri. During the 1920s, three additional junior colleges were formed throughout the state in Flat River, Trenton, and Moberly. In 1961, legislators created the Missouri Junior College Act which defined distinct junior college districts throughout the state (Farnsworth, 1997). Missouri currently has twelve community college systems throughout the state, composed of nineteen individual campuses and several off-site locations.

At the beginning of the third Millennium, 64% of all undergraduate college students attended a two-year institution at some point during their college careers (Kasper, 2002). The expansive growth and the resulting mix of student types and instructional programs indicated the need for a body a literature that explored pedagogical approaches and instructional techniques used in these uniquely American institutions.

It is important to note that most of the research conducted at educational institutions across the U.S. and in Missouri has utilized quantitative methodologies. Many studies dealing with instruction have utilized surveys to elicit responses from a large number of students. These surveys typically contain a limited set of questions that provide a broad and comprehensive data set that is statistically analyzed (Patton, 2002). Whether quantitative or qualitative, these studies have primarily focused on the four-year sector, and the numbers of studies available on community college students' views regarding instruction are extremely limited, and have provided similarly generalized data (Sheehan & DuPrey, 1999).

Problem Statement

Much of the research on instructional effectiveness focuses on alternatives to the traditional lecture approach to teaching, but the lecture still remains a dominant form of instruction in higher education. Teachers at the K-12 level have adapted their instructional methodologies to meet the needs of the millennial generation but collegiate instructors have been much more reluctant to do so (Dembicki, 2007). Despite encouragement by students to use other methods and to learn additional techniques a number of faculty, particularly older and part-time instructors, continue to use this traditional approach. Many, however, do not utilize the tools that can improve teaching using the lecture method, particularly those that are incorporated into methodologies referred to as "direct instruction." The effectiveness of the faculty might easily be improved if they became aware of and used techniques that still fall within the general framework of "lecturing," but that students find to be particularly effective and engaging.

As noted above, prior research on effective instruction has focused primarily on the four-year sector and it has largely been quantitative. As a result, the voice of the typical community college student has not been heard. This is particularly true as it relates to how direct instruction can be made more interesting, engaging, and effective.

Without literature based on the community college student perception of effective instruction, it is difficult to prepare full-time and adjunct instructors to more effectively teach their students. Community college administrators, deans, division chairs, and others must have access to meaningful, accurate data if they are to provide significant staff development programs.

Significance of the Study

This study was designed to identify key elements of effective teaching within the general parameters of "direct instruction," as perceived by community college students. Since usable qualitative research in this area can be very limited, it is important to research the topic of effective instruction using qualitative methodologies. The use of student focus groups and interviews can provide access to data that cannot be obtained using quantitative methods (Morgan, 1998). The "student voice" is a powerful instrument and must be incorporated into the research regarding effective instruction, providing thick and rich description of the student learning experience.

An interpretation of the community college student perspective of effective instruction will provide higher education professionals, such as faculty members, administrators, and researchers, with information regarding effective instructional methodologies. The findings of this study will supply supplemental information to those interested in staff development and will be extremely useful to those who are developing in-service programs for new and existing faculty who wish to use this instructional approach or who have found it their most comfortable teaching style. By exploring the student perspective, a new awareness of students' perception of effective instructional methodologies can be identified and used to improve teaching.

It should be noted that the researcher is a community college administrator and has a professional interest in this study. His curiosity in this study was piqued through interaction with faculty members during the evaluation process. A lack of literature reviewing effective instruction at community colleges inspired the researcher to study the

topic in detail and develop useful information that could ultimately be utilized to improve instruction in the community college classroom.

Research Questions

The following research questions guided this study:

1. According to community college students, which of these three elements is the most important element of effective instruction?
   a) Instructional enthusiasm
   b) Direct instruction
   c) Instructional technology
2. Which of these instructional techniques is viewed as least effective by community college students?
   a) Instructional enthusiasm
   b) Direct instruction
   c) Instructional technology
3. What process of the direct instruction model is viewed by students as most important and why?
4. How important is instructor enthusiasm in the delivery of the instructional process?
5. What role do students see technology playing in the instructional process and how important is it?

Overview of Methodology

Research Perspective

This study focused on the student perspective of effective instruction utilizing the direct instructional model. In order to examine the student perspective, the researcher had to choose either a quantitative, qualitative, or mixed method approach to gathering data.

Quantitative studies typically attempt to measure something in numerical terms. The use of a standardized measure allows the researcher to fit people's experiences into a limited number of predetermined categories (Patton, 2002). A particular strength of this method is that it can be relatively easy to measure the reactions of a large group of individuals. A review of quantitative studies relating to effective instruction indicates the use of a survey of some sort that is statistically analyzed and referenced for validity. Although this particular method has been reported as very effective over the years, research is limited by the questions asked by the research tool itself.

Qualitative research, on the other hand, allows the researcher to explore an issue in greater depth and detail, providing what is often referred to as "thick" description. There is a certain sense of intensity and openness associated with this research approach that one does not find when conducting a quantitative study (Patton, 2002). Interviews, observations, and documentation associated with this process allow the researcher to gain a rich, humanistic perspective that typically cannot be found when using quantitative methods (Lee, 1999).

Research Method

The research process most applicable to this study was a qualitative method employing the use of focus groups and individual interviews. Qualitative methods allow the researcher to carefully listen and document the specific thoughts students have about effective instruction. The participants entered into a discussion of various elements of instruction and had the opportunity to share their beliefs and perceptions about the topic (Krueger & Casey, 2000).

The focus groups and interviews gave students the opportunity to state what they thought and felt without the restraints of a restrictive survey. Although their discussion was guided by a moderator, they were able to shape the discussion in ways not limited by the use of a survey tool (Greenbaum, 2000). Natural, comfortable environments were provided so that the participants could feel at ease and able to express their opinions in an uninhibited manner. There was no attempt to reach consensus; the researcher sought to gain the candid opinion of each individual. A more detailed description of the method is discussed in Chapter 3.

Delimitations of the Study

The study was conducted in its entirety on community college campuses. The viewpoints and opinions of the subjects were indicative of instruction at the two-year institution and may not be generalized to the four-year college or university setting.

The research reflects the community college student perspective or opinion. The findings are the viewpoint of a certain group of students, as reported by the researcher. Since no attempt was being made to evaluate the effectiveness of instruction being

delivered, the results of the study consisted only of information regarding student perceptions of what they viewed as effective.

The study involved students enrolled in three community colleges in the state of Missouri. Although there was no reason to assume that students in other states or institutions might feel differently, the study does not claim to represent attitudes beyond the institutions where these students were enrolled.

Since the focus group and interview samples were drawn from daytime general education courses, virtually all of the volunteer participants were traditional age students (18-25). The study may therefore not adequately represent the views of non-traditional students and further research is warranted in this area.

Definition of Key Terms

For the purposes of this study, the following definitions are applied to key terms:

Anticipatory set: a technique used by teachers at the beginning of a lesson to prepare students to learn and to establish a link between their prior knowledge and the new information to be presented (Hunter, 1982).

Assessment: the process of collecting a full range of information about students and classrooms for the purpose of making instructional decisions (Banner & Cannon, 1997).

Behavior modeling theory: describes how people learn as a result of observing and recording the behavior of others (Bandura, 1977).

Community college: a two-year, post-secondary school whose main purpose is to provide academic, vocational and professional education. For the purposes of this study, this term may be used interchangeably with junior college.

Curriculum: the subject content and skills that make up an educational program (Galbraith, 1998).

Curriculum design: a process of formulating a specific educational platform that defines the beliefs of what should be in the curriculum (Galbraith, 1998).

Direct instruction: an approach to teaching basic skills and straightforward declarative knowledge in which lessons are highly teacher directed and learning environments are tightly structured (Hunter, 1982).

Effective instruction: instruction that enables students to acquire specified skills, knowledge, and attitudes as specified in the curriculum guide or syllabus (Gagne, 1985).

Guided practice: practice assigned to students to be completed under the guidance or watchful eye of the instructor (Hunter, 1982).

Junior college: a two-year, post-secondary school whose main purpose is to provide academic, vocational and professional education. For the purposes of this study, this term may be used interchangeably with community college.

Independent practice: an assignment given to students to accomplish on their own without the guidance of an instructor to practice newly presented material (Rosenshine, 1983).

Instructional design: the process of planning, developing, evaluating, and managing the instructional process effectively so it will ensure competent performance by students (Levin, 1981).

Instructional objective: a statement provided by the instructor which describes the instructional expectations of a particular lesson (Hunter, 1982).

Millennial students: students who have graduated from high school since the year 2000 (Gagne, Wager, Golas & Keller, 2005).

Social learning theory: the perspective advanced by Bandura that states learning occurs observationally from modeling done by others (Bandura, 1977).

Syntax: the overall flow, sequence, or major steps of a particular lesson.

Teaching: the process of making and implementing decisions before, during, and after instruction that increases the probability of learning.

Summary

There are two critical reasons why this study is necessary. First, the research fills a major void in the information available about instruction at two-year colleges. Community colleges have a long history of being characterized as "teaching institutions" only (Grubb, 1999). Their counterparts, the four-year colleges and universities, have a much richer research base than the two-year schools. As a result, it is essential that more research concerning teaching effectiveness be conducted at community colleges. This study is a step in that direction.

Second, only a small portion of the studies regarding effective instruction have been conducted from the student perspective and used a qualitative approach. Allowing community college students to express their views in an open forum provided base line information that ultimately could yield improved instructional practices. The student view was extremely important when it came to describing effective instruction and the qualitative approach lent itself well to gaining insight into this area of importance.

The following chapter reviews the literature relevant to this study, focusing on the characteristics of community college students, effective instruction as it related to "direct

instruction," and discusses both theoretical and empirical perspectives. The application of instructional enthusiasm and instructional technology are also discussed.

Chapter 3 outlines the methodology employed in the study in greater detail and Chapter 4 presents an analysis of the data. The final chapter provides a summary and discussion of these findings, makes recommendations based upon this analysis, and suggests additional areas of research that could be relevant in the future.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

Much has been written about the topics of effective instruction, instructional enthusiasm and the use of instructional technology. In this chapter, the literature is reviewed and a detailed summary is provided as it relates to the research questions being evaluated.

The Community College Student

Beginning in the 1960's, community colleges had phenomenal growth. The baby boom of World War II dramatically increased attendance at two-year colleges, as a diverse group of eighteen to twenty-four year old students converged upon post-secondary schools across the United States. In the past fifty years, student enrollment in two-year colleges has grown from 500,000 to more than 6,000,000. Today, more than 67% of high school seniors now attend a community college within one year of graduation (Cohen & Brawer, 2008).

There are many reasons why students choose community colleges; the most popular include affordability, accessibility, and an open door policy. Two-year institutions have catered to the needs of students who are academically challenged, have less expendable income, and seek a balance of education themselves while working. The result of the influx of working students has changed the environment on two-year campuses. Forty years ago, about half of the student body at community colleges consisted of full-time students. Today, more than 60% of students are enrolled on at least a part-time basis and that number grows annually.

Students attend community colleges for many different reasons. Two-year colleges are a melting pot of students who seek different levels and forms of education. Some attend and take a particular course, perhaps to "try their hand" for the first time at college or brush up on a particular skill. Others seek new job skills, not necessarily a degree, just what's required to help them become more employable. Degree seekers also fluctuate. Some students seek a one-year certificate or two-year technical degree. Others concentrate their efforts on an Associate of Arts or transfer degree. Whatever their motivation, community college students are definitively the most diverse group of learners in higher education.

As expected, community college students generally have lower academic skills than those enrolled in four-year colleges and universities. Many students who attend community colleges fall into the lower half of their high school classes, both academically and socially. A brief glimpse at standardized test scores reveals the concern. The Scholastic Aptitude Test (SAT) score averages in 2004 – 2005 were 841 for students who indicated they were most interested in attending a two-year college. Student SAT scores for those who targeted four-year colleges and universities as their destination during the same time frame scored higher at 968 (Cohen & Brawer, 2008). In an attempt to bring higher level learners to their institutions, many community colleges have developed scholarship programs to attract high-attaining students to their schools. The state of Missouri's A+ Schools program is a good example of an initiative that attracts typical four-year college students to community college campuses.

Community colleges also attract a high percentage of ethnic minority students. Whether Latino, African American, Asian American or Native American, the different

ethnic groups represent more than 35% of community college populations across the United States. Once again, this group of students tends to come from lower socioeconomic backgrounds and is academically deficient as compared to their high school counterparts who are headed to a four-year college or university. Community colleges serve the ethnic minority students well. If it were not for factors such as low priced tuition and accessibility, many of these students might not be able attend college at all.

The students who attend today's community colleges come from a wide range of backgrounds and seek education in many different forms. Whether it is general education, technical education, continuing education, or workforce development, the needs of communities are being met on a daily basis by local, two-year colleges. Community colleges are the key to the educational process of a significant portion of adult learners across the nation.

Effective Instruction

A variety of instructional methods can be used to deliver relevant information to students in the collegiate environment. One of the most frequently used methods of instruction among college teachers is a carefully prepared oral presentation, commonly referred to as the lecture (Galbraith, 1998). A lecture enables an instructor to transmit knowledge directly to students by using oral exposition and is often supplemented by visual aids. This type of instructional delivery can be shared with large groups and provides humanistic, face-to-face encounters. Hyman (1974) states that although most of the students' time is spent listening, they can be engaged if the lecturer asks questions and calls for responses.

Even though the use of the lecture is quite prevalent on most college campuses today, there are certain limitations to the methodology. Galbraith (1998) cites several drawbacks that commonly appear in the research, including: (a) exposure to one point of view, (b) the possibility of passing along inaccurate information, (c) not enough interaction between the lecturer and students, (d) discouraging student involvement in the learning process, (e) difficulty in determining comprehension, (f) the speaker failing to consider the knowledge base of his or her audience, (g) "stage time" being valued more by lecturers than actual learning, and (h) speakers often being judged on their entertainment value rather than the content of their message. The inference, therefore, is that lecturing could be improved if these concerns are addressed.

Learning theorists, such as Gagne (1985), classified the classroom lecture as an effectual means of presenting declarative knowledge. Although Gagne felt the lecture was an effective means of presentation, he also suggested that this type of delivery was not without limitations:

> Since the lecture is not an interactive mode, instructional events cannot be adapted to the moment-to-moment needs of every individual student. Their expected effects in supporting learning processes are not certain, only probable, in terms of the total membership of the lecture audience. From the students' point of view, it is they on whom greatest responsibility rests in learning from a lecture. (p. 324)

Gagne (1985) defined declarative knowledge as the act of simply "knowing" about a topic, not necessarily understanding fully how it works or functions. He defined procedural knowledge as possessing the knowledge of "how" something is actually done.

Although Gagne linked the presentation of declarative knowledge expressly to the lecture method of instruction, he also implied that the direct instruction model, teaching basic skills in a tightly structured learning environment, was specifically designed to promote both declarative and procedural knowledge-based learning among students. In his opinion, the direct instruction model provides more opportunities for student learning than the classical lecture-type approach.

Beginning in the latter part of the twentieth century, a significant body of literature was developed on the topic of direct instruction. Educational practitioners and theorists such as Madeline Hunter (1982, 1994), Barak Rosenshine (1976, 1983, 1986, 1995), and Robert Gagne (1979, 1988, 2005) all presented models of direct instruction that could be implemented by educators to improve the learning process through enhancing the effectiveness of lectures. Although these models all contained divergent characteristics which made them specifically unique, certain commonalities existed (Reyes, 1990).

Theoretical Perspectives

The model of effective or direct instruction was born in the minds of training and behavioral psychologists (Joyce, Weil, & Showers, 1992). Educational psychologists focused their work on teaching people to perform tasks, often with a high degree of precision. The implementation of these tasks required extensive task definition and task analysis. Systems analysis, which studies how to break down the whole so that it can be taught in individual units, was first applied to education by Gagne and Briggs (1987). They suggested that instruction would improve if learner performance were broken down into goals and tasks. Once the tasks could be divided into smaller subcomponents,

training activities would produce mastery of each area. They concluded that arranging the learning environment into individual, succinct parts would provide an enhanced learning environment.

The Behavioral Modeling Theory

Behavioral psychologists, on the other hand, study people and how they learn from observing others. Behavioral Modeling Theory (BMT), which originated in the 1930s and 1940s, used observation to explain the acquisition of social conduct. John Dollard and Neal Miller used observation as a means of explaining various social behaviors, such as aggression and cooperation (Joyce et al., 1992). Bandura (1977) broadened social learning theory to encompass the interactions between teachers and students. He perceived human learning to be a process of observation of other's behaviors. Bandura noted:

> Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling; from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. Because people can learn from example what to do, at least in the appropriate form, before performing any behavior, they are spared needless errors. (p. 22)

Bandura's developments included a three-step process that called for attention, retention, and production (Arends, 1997; Joyce et al., 1992).

At the onset of a lesson, Bandura suggested gaining students' attention through the use of some type of gesture or object. Once the instructor had the attention of the

class, a verbal remark served to pull the class in even further. Complex learning skills were then subdivided or broken down into various segments (Arends, 1997). Bandura (1977) contended that too much time spent on one topic might overwhelm students and the learning process might be less effective.

The second phase of Bandura's behavior modeling theory involved retention. This step relied upon the instructor's ability to tie new concepts to a student's previous experience (Bandura, 1977). To enhance long-term retention, the instructor might have students run through a specific practice process, both mentally and physically. The long-term effect of this behavior would ensure that the concept was comprehended in a meaningful way (Arends, 1997).

Bandura's third phase called for the use of feedback and correction. He suggested that if a student began practicing a new skill, the instructor should provide immediate, positive feedback. If the newly acquired skill was practiced incorrectly, the instructor should provide corrective measures until the skill could be mastered. Whether the student mastered the skill immediately or required some time for adjustment, Bandura (1977) recommended accompanying both with sufficient praise.

Shortly after Bandura introduced his concepts, other educational practitioners began expanding upon his model. Perhaps the most prominent educational psychologist was Madeline Hunter. Best known for drawing intense attention to direct instruction and its processes, Hunter had a profound impact on the design of instructional methodologies (Lasley & Matczynski, 1997). Her innate ability to convey her thoughts to fellow educators and her extensive publications dramatically helped to popularize her model. Hunter's method of direct instruction eventually led to the creation of the seven-step

lesson plan, a framework used extensively in many instructional programs today (Wolfe, 1998).

The Direct Instructional Model

Russell and Hunter (1977) introduced the Hunter method. Over the years, these seven steps have been utilized extensively by elementary and secondary and college instructors alike in the process of lesson planning (Reyes, 1990).

Hunter (1982) recommends that lesson design should consist of seven elements related to the teaching process (see Table 1). The elements of Hunter's direct instruction model include:

TABLE 1

Hunter's Direct Instruction Model

Instructional Step	Characteristics
Anticipatory Set	Focuses students' train of thought on topic
	Ties in previous learning
	Sets the "hook"
Objective Statement	Defines what learning will transpire
	Explains why the topic is important
Teaching	Shows how acceptable finished product looks and/or sounds
	Demonstrated by instructor
Check for Understanding	Provides for active participation of all learners
	Performed after each key point, usually through questioning

	Teacher monitors and adjusts lesson as needed
Guided Practice	New learning practiced under direct supervision
	Provides knowledge of results
Closure	Organizes student learning
	Helps form a coherent picture
	Reinforces major points of the lesson
Independent Practice	Students perform unassisted
	Develops opportunity to practice and retain new skills

Source: "Mastery Teaching," by M. Hunter, 1982.

Although Hunter's work on lesson design has been widely used over the years, its' true meaning and application have been somewhat misconstrued. Hunter viewed teaching as an evolving decision-making process and one that should not be limited to the constraints of a certain model (Wolfe, 1998).

Hunter (1982) did not attempt to design or invent a specific instructional practice, but merely observed teachers and identified certain successful elements of instruction. She then proposed a general model from which others could base their teachings. Hunter (1994) expressed her displeasure with the notion that instructional leaders viewed her work as a specific set of steps to be firmly followed:

> Unfortunately, some people, in their zeal to reduce the complexity of the teaching process, have misinterpreted our model for designing lessons by viewing it as a

> rigid system of "steps" that must be included in every learning situation. This was never the intent of our model. (p. 3)

Her methodology was never meant to be a strict set of guidelines which an instructor must follow. Instead, Hunter attempted to devise common elements which pertained to effective instruction and could be used as the basis to improve current strategies or approaches (Barlow, 2003).

Instructional Cues

Levin (1981) introduced additional concepts related to effective instruction. She found students were stimulated to learn in a variety of ways, and each instructional session presented different opportunities. According to Levin, instructional cues stimulate students and increase the learning process. However, the cues must be clear to the students and must elicit responses to be effective. Levin offered four ways to improve instruction through the use of these instructional cues: (a) educational objectives, (b) questions, (c) visual aids, and (d) practice.

According to Levin (1981), educational objectives are most effective when they are clearly stated and offered to students prior to instruction. By focusing on the objective, the student psychologically organizes the information and has a better chance of concentrating on significant points. Instructional goals emphasize important points and allow students a sense of accomplishing the task at hand. This designation of instructional goals facilitates student learning.

Levin observed that the use of questioning in the classroom is also a very important aspect of learning and instruction. Allowing students the opportunity to recall certain information through the use of questioning on the part of the instructor is

imperative. When an instructor initiates the questioning process, students typically retain more information than if the questions are raised by peers. Lower-order questioning or the use of a simplistic manner of inquiry seems to be more effective than the use of higher-order questions (Rosenshine, 1976).

The use of instructional media has also greatly enhanced opportunities for learning, especially in the past decade. While curriculum packages now incorporate many types of visual aids, Levin insisted that such visual aids that pertain directly to the instructional goal are most effective. Research has shown the recall of information to be greater when the use of visual aids has been incorporated. However, the resource itself must be clear, simple, and elicit proper responses from students.

Finally, Levin stressed the importance of praxis as it relates to instructional cues. An opportunity for students to carry out what has recently been learned strengthens the process of comprehension. A variety of practice exercises were recommended to effectively stimulate students. Levin also warned that practice should be attempted in moderation, in order to avoid frustration on the part of the student.

Levin (1981) observed that a number of studies have shown that instructional cues should be considered in terms of behaviors they attain in the student learning process. Dr. Levin wrote:

> Instructional cues are effective in improving learning, if they satisfy two related sets of conditions. They must be clear to students and they must elicit intended reactions or responses. If a teacher speaks too rapidly or uses strange words, the students will have difficulty responding to the cues. Under these conditions, we would not expect the desired learning to occur. If a teacher uses familiar words at

> an appropriate pace, students will be able to respond. If directions or explanations are relevant and help students learn, students' responses to such cues should result in improved learning. (pp. 26-27)

According to Levin, if instructional cues are used properly, students have a tendency to focus on the critical issues, which in turn, improves the learning environment.

Functions for Teaching Well-Structured Tasks

Another model related to direct instruction that evolved in the late 1970s and early 1980s was the Teaching Functions of Barak Rosenshine (1983). Rosenshine, like Madeline Hunter, grouped certain instructional procedures into categories. Although his model was similar, there were variations. Rosenshine's model (see Table 2) had fewer instructional steps and focused more upon the review process.

TABLE 2

Rosenshine's Functions for Teaching Well-Structured Tasks

Instructional Step	Characteristics
Review	Reviewing subject matter from prior lessons
	Reviewing previously assigned homework
	Reviewing prerequisite skills and knowledge for the lesson
Presentation	Stating goals
	Presenting new information in small, concise steps
	Modeling various methods to students
	Providing concrete examples

	Using clear language
	Checking for student comprehension
	Avoiding digressions
Corrections and Feedback	Review process when feedback seems hesitant
	Giving sustaining feedback, clues, or re-teaching when answers are incorrect
	Provide additional instruction when responses are incorrect
Independent Practice	Reviewing the various processes
	Practicing continues until students have mastered materials
	Providing active supervision
	Providing instructional supervision to those who struggle
Weekly and Monthly Reviews	Reviews supplied to retain learning
	Varied timeframes help to compliment retention

Source: "Teaching Functions in Instructional Programs," by B. Rosenshine, 1983, *Elementary School Journal*, (83)4, 335-351.

Rosenshine's model is best applied to structured disciplines such as reading, mathematics, and science. A regimented approach to these subject areas produces the best results. Considerable forethought on the part of the instructor is required for this model to be most effective, as reported by Rosenshine:

> Before and during teaching, a teacher has to make decisions on the amount of material that will be presented at one time, the way in which it will be presented,

> how guided practice will be conducted, how specific errors made by specific students will be corrected, the pace and length of the lesson, and how he or she will work with different students. Thus a great deal of thought, creativity, and flexibility is needed to apply these results to specific instances of teaching lessons on long division, on the Constitution, on grammar, and on reading comprehension. (p. 78)

More unstructured subjects, such as the social sciences or humanities, were less amenable to Rosenshine's model because the skills and concepts related to disciplines are more holistic (Reyes, 1990).

The Events of Instruction

Gagne and Driscoll (1988) also developed a popular model of direct instruction in the latter part of the 1980s. Gagne and Driscoll (1988) reported:

> Planning a lesson is mainly a matter of taking care to assure that each of the internal learning processes has been supported in an optimal fashion by external events. One must keep in mind the expected type of learning outcome and the special conditions each requires. In a more particular sense, attention must be paid to the series of events that can influence learning processes. (p. 118)

Gagne's expertise in the broad field of learning allowed for the use of his theories (see Table 3) in different arenas.

TABLE 3

Gagne and Driscoll's Events of Instruction

Instructional Step	Characteristics
Gain Attention	Drawing the attention of the group

Inform learner of the objective	Communicating the instructional focus
Stimulate recall	Calling for previous learning
Guide learning	Suggesting cues to trigger learning
Elicit performance	Testing to assess performance of class members
Provide feedback	Providing comment and response
Enhance retention	Conducting reviews at various intervals
Promote transfer	Varying tasks to encourage generalization of learning

Source: "Essentials of Learning for Instruction," by R.M. Gagne and M.P. Driscoll, 1988.

Gagne and Driscoll viewed their model as a broad-based application and suggested that it could be used for most disciplines. Their events of instruction have been utilized by business and industry, but are also useful in the field of education. The scope of the instruction could perhaps be limited by the learning situation at hand, but typically the capacity of the model was quite extensive (Reyes, 1990).

The Four Steps of Instruction

Meyer (1992) added to learning methodologies by emphasizing a four-step instructional model, but again suggested that the steps were merely guidelines noting that, "To be effective, you don't have to follow the steps by the numbers" (p. 23). Meyer's (1992) four steps of instruction created a basic environment for learning and included: (a) introduction, (b) presentation, (c) application, and (d) test. Meyer explained that these steps are essential because they create an opportunity to motivate students, present new materials, offer a chance for practice, and present the opportunity to check comprehension.

Meyer (1992) recommended that a good introduction would encourage a student to learn. He advocated the introduction of new material or lessons in order for the stage to be set. The opening statements show how the information is applicable and useful to the student. In addition, the introduction should be motivational and pique the interest. He compared the introduction to a television commercial. Meyer felt that what students first see should capture their attention and create a desire to learn.

Meyer (1992) advocated that the presentation of material should be an active process. It should involve the students in such a way as to enhance learning. Questioning, problem solving, and discussion were all methods suggested by Meyer to get students actively engaged in the learning process. He also discussed the importance of using visual aids but asserted student discussion of a film or video must be appropriate to the lesson plan. Meyer believed that without proper implementation, visual material could actually divert attention from the intended outcome.

Application or practice involved the process of applying relevance to what had been learned by simulating real-life situations. This method helps transfer information to knowledge. The application process also helps an instructor assess what has been comprehended. Certain parts of the lesson may need repetition if students did not understand what has been taught. A certain amount of application or practice should be allowed before students are actually tested, according to Meyer.

Testing relates to the application process in that it helps assess what students have learned and how well the information has been presented. Meyer (1992) pointed out that the evaluation process should not be considered as just a written test, but can be presented in many different formats. Performing tasks, classroom discussions, and visual

presentations can all be assessed for student mastery. Testing can also help an instructor assess how well information has been presented and what should be revisited the next time a particular unit is taught (Meyer, 1992).

The Guidelines of Lecture

Kemp, Morrison, and Ross (1998) researched different forms of instructional delivery methods but focused primarily on classroom lectures. They suggested that the instructor should consider the material and audience before choosing a method of instruction. The educational environment also must be considered due to limitations that could affect delivery.

Kemp and his associates (1998) concluded that the conventional lecture was the most prevalent form of instruction, particularly when dealing with groups. The presentation consisted of a one-way communication process and often had time constraints. They listed a standard model for the lecture format, which included the following six guidelines: (a) orient students to the topic through the use of a narrative or summary; (b) review objectives; (c) present subject matter in a clear, organized manner; (d) use questioning to enhance interaction; (e) provide opportunity for independent practice; and (f) review the lesson and look ahead.

The Eight Ways of Teaching

Gardner (1985), famous for his work with multiple intelligences, reasoned that the best way to begin the learning process was to incorporate a wide variety of teaching strategies in the classroom. Gardner's theory of multiple intelligences suggested that there is no common denominator when it comes to instruction and no one set of strategies works best for all students. Instead, he identified eight intelligences (see Table 4) that an

instructor should be familiar with and recommended that each be given some consideration during the instructional process.

TABLE 4

Gardner's Eight Ways of Teaching

Intelligence	Teaching Activities (examples)	Teaching Materials (examples)	Instructional Strategies
Linguistic	Lectures, discussions, journal writing	Books, books on tape, tape recorders	Read, listen, talk, and write about it
Logical-Mathematical	Critical thinking, mental calculations, science experiments	Calculators, science equipment, math games	Quantify, think, experiment, and categorize
Spatial	Visual presentations, mind mapping, metaphors	Graphs, videos, maps, cameras	See, draw, visualize, color, and mind map it
Bodily-Kinesthetic	Tactile activities	Manipulatives, building tools, sport equipment	Build, act, touch, and dance it
Musical	Rhythmic learning, rapping	Musical instruments, tape recorders	Listen, sing, and rap it
Interpersonal	Simulations, community involvement, cooperative learning	Props for role playing, board games	Teach it, collaborate on it, interact with it
Intrapersonal	Individualized instruction, independent study	Journals, self-checking materials	Connect to personal life, make choices, reflect on it
Naturalist	Ecological study, caring for animals	Plants, animals, gardening tools	Connect it to living things and natural phenomena

Source: From "Frames of Mind: The Theory of Multiple Intelligences," by H. Gardner, 1985.

Gardner's (1985) Multiple Intelligence Theory suggested eight areas in which humans are capable of learning. Some individuals may exhibit the potential to utilize a number of these strategies, depending upon their heredity, early training, or constant interaction between the factors. Considering every person is exposed to a variety of experiences, Gardner (1985) believes that each and every individual possesses the potential to develop within these eight intelligences. The process begins at birth and develops over the course of a lifetime. It is the responsibility of classroom instructors to recognize these principles and nurture students in the particular intelligence that best suits their learning styles (Armstrong, 2000; Gardner, 2004).

The common belief that instruction should match learning styles was recently challenged Pashler (Glenn, 2010). Pashler co-authored a paper that stated there is no strong scientific data that customizing instruction to meet the needs of specific visual, auditory, or kinesthetic learners has a profound effect on students. He and his colleagues claim there is no solid proof that teaching in a specialized manner helps one student and hurts another. They assert that although learning styles are a prevalent part of today's educational arena, the research required to prove the claims made by scholars and consultants is virtually non-existent.

If this is the case and teaching to specific learning styles does not make a significant difference, it is then even more important to review the elements of direct instruction. By pinpointing the steps that are most fundamental to the process, instructors will be capable of reaching students no matter what learning style they ascribe. The end result will create a classroom environment more conducive to the learning process and enhanced student comprehension of all.

The Four Stages of the Instructional Process

The Multiple Intelligence Theory has been used in different ways since its inception. Lazear (1999) used Gardner's theory to develop his own model of instruction. He noted four stages in his instructional process: (a) awaken; (b) amplify; (c) teach and (d) transfer. Lazear stated his four stages of teaching were necessary if an instructor were to address multiple intelligences.

Lazear's (1999) initial stage, awaken, is closely related to Hunter's introductory phase of anticipatory set. It is at this initial step that Lazear suggested the instructor activate various senses to set up the brain for learning. Once students are prepared to discover, the instructor uses a combination of practices designed to address multiple student needs. The amplification of the instructional process strengthens the awakened capacities. During the actual instructional process, Lazear suggested that lessons be reconfigured to emphasize all intelligences. The majorities of prepackaged learning materials typically address linguistic or logical/mathematical intelligence but do not attempt to reach other areas. Emphasizing all intelligences should be the goal of the instructor. Finally, Lazear suggested transfer as the final step of instruction. At this point, the instructor integrates practical application so that the materials taught become part of the student's cognitive life. Problem solving and practical application skills provide students the necessary skills they will need in the real world (Lazear, 1999).

This diverse body of literature outlining what theorists consider to be instructionally effective suggests that studies would be useful that ask learners what they consider effective. The literature also implies that research concerning student

perceptions of effective strategies within the general rubric of direct instruction would be of particular value.

Empirical Support

Although the research base for effective instruction has evolved from a variety of sources, the clearest empirical support for a model originated from the teacher effectiveness studies originally carried out in the 1970s and 1980s (Arends, 1997). Throughout this era, studies were conducted which eventually had a profound impact upon instructional procedures and the way teaching was to be delivered in the future.

Time on Task

In the early 1970s, Stallings and Kaskowitz (1974) began a study that contributed empirical support for the use of effective or direct instruction. One hundred and sixty-six classrooms were observed in an attempt to discover what types of teaching activities were most effective. The researchers studied a variety of instructors, including those who were very structured and those who were less formal in their academic approach. Instructional behaviors were observed and paired with student academic gains in two subject areas.

Stallings and Kaskowitz (1974) found that academic achievement was closely related to time-on-task and the use of direct instruction strategies. Students who were exposed to well-organized classrooms in which a significant amount of time was spent on learning a specific task, paired with direct instruction strategies and methods, produced the most effective means of providing high student achievement.

One of the most popular research methods of this era emerged in the early 1970s and was commonly referred to as process-product research (Arends, 1997). Process-product research was distinguished by the types of questions the researcher asked and the

methods of inquiry that were used during the process. The researcher sought to determine what individual instructors do to improve their students' academic performance. The research focused on what was actually done by the instructor (process) and examined the benefit to students (product). Process-product research was first applied to effective or direct instruction by Good and Grouws in the 1970s (Arends, 1997).

Berliner and Rosenshine (1987) described the four-stage procedure of process-product research:

> In the first stage of process-product research, researchers observe and record overt behaviors of students and teachers during the school year. Second, they measure the amount of learning that has taken place during the school year by computing gains in student achievement on standardized tests from the beginning to the end of the year. Third, they examine the relationship between these achievement gains and the number of times a specific teacher or student behavior occurred in the classroom. Finally, they identify those behaviors that are most highly related to the achievement-gain scores and thus appear to be most important for increasing student learning. (pp. 112-113)

Process-product research has helped researchers discover that students learn more when a direct instruction methodology is used (Brophy & Good, 1986).

The Characteristics of Effective Instruction

Good, Grouws, and Ebmeier (1983) performed a process-product study that focused on over 100 instructors in a large, urban school district. Through the use of the Iowa Test of Basic Skills, the researchers identified nine instructors who were very effective, as well as a number of instructors who were classified as ineffective. Once the

instructors had been classified, the researchers followed up with observation of the teachers. The observations allowed the researchers to identify nine basic characteristics of effective instruction (see Table 5).

TABLE 5

Good, Grouws, and Ebmeier's Characteristics of Effective Instruction

Instructional Behavior	Characteristics
Whole-class instruction	Lessons introduced with purpose and materials explained clearly
High performance expectations	Higher expectation for students, more work assigned, moved through instruction at a brisk pace
Task-focused but productive learning environment	Task-focused classrooms, paced instruction
	Classroom environment basically free of disruptions
Student-initiated behavior	Students initiate more interactions with instructors
	Instructor more approachable
Process feedback	Instructor regularly informs students of their progress
	Instructor provides developmental feedback to students, especially during seat
	Feedback is immediate and non-evaluative
Praise	Less praise provided on a consistent basis
	Praise provided only under certain conditions

Source: From "Active mathematics Teaching," by Good, Grouws, and Ebmeier, 1983.

The process-product research found that instructors who had well-managed classrooms that contained structured learning environments were more successful with student learning. Effective instruction, according to Good, Grouws, and Ebmeier (1983), was best characterized by the instructional behaviors listed in Table 5.

Considerable research has also been conducted relating to effective teacher studies. This research often involved one group of teachers trained to implement new teaching behaviors and another group which utilized typical patterns of instruction. Rosenshine and Stevens (1986) summarized the findings from many of these studies and reported that when effective teachers taught, specific behaviors could be identified as a part of their instruction.

The Criteria for Effective Instruction

Rosenshine and Steven's (1986) Criteria for Effective Instruction found that teachers were most effective when they: (a) began with a short review of the lesson; (b) stated objectives or goals for the lesson; (c) administered lessons in short sequences, provide for student practice; (d) issued instructions that were clear and concise; (e) provided guided practice; (f) checked comprehension through the use of questioning; (g) implemented active practice; and (h) provided feedback and correction.

Rosenshine (1995) also reported three findings significant to the subject of effective instruction: (a) presenting information to students in small increments, (b) guiding student practice, and (c) using extensive practice.

The Characteristics of Effective Higher Education Instructors

Another empirical study, conducted by Sheehan and Duprey (1999), attempted to identify the characteristics of effective higher education instructors. After conducting a

comprehensive literature review, they developed a questionnaire with a Likert scale that contained 27 items designed to identify the most significant elements of effective instruction. Over 3,500 students evaluated the effectiveness of the various elements and the top 5 items were: (a) lectures were informative; (b) tests/assignments were good measures of course material; (c) instructors were prepared; (d) lectures were interesting; and (e) classes were challenging.

With the exception of the second, each of these top five items stressed the importance of the performance of the instructor. Although Cruickshank (1986) found instructor characteristics such as personality, appearance, gender, and intelligence irrelevant to effective instruction, Sheehan and Duprey (1999) reported university teaching could be improved significantly in areas in which the instructor played a major role. The influence of their personal performance played a significant part in the success of their students.

The use of effective instructional techniques in the community college classroom can dramatically improve the instructional environment and strengthen the learning process. Effective instructional techniques, as formulated by Hunter, Rosenshine, Gagne, and others, provide a systematic framework by which an instructor can lead students through the process of knowledge. The regimented steps associated with effective instruction are designed to draw attention to the topic and methodically lead the student down the path of enhanced comprehension. Effective instructional methodologies can be greatly enhanced if the instructor presents the materials to students in ways that are stimulating, imaginative, and enthusiastic (Nwagwu, 1998). This body

of research suggests that student perceptions of how instructor behavior stimulates imagination can be extremely useful to both faculty and academic leaders.

In the next portion of this review, another important factor associated with the instructional process will be discussed. Research indicated that demonstrated enthusiasm while teaching can enhance the learning process and a detailed perspective of this element of instruction follows.

Instructional Enthusiasm

Students cannot be fooled. They know if an instructor likes what he or she is doing. Enthusiasm is a tell-tale characteristic (Mahoney, 2003). The responsibility to foster an educational environment conducive to a high degree of student success rests with the abilities of individual instructors. Those who have a passion for their subject, know the names of their students, and reinforce student participation are typically seen as being enthusiastic in their approach to instruction. A high level of enthusiasm is the mark of a confident, competent instructor. The zeal this individual possesses is contagious and leads students to success (Walls, 1999).

Weaver (1993) listed six characteristics of dynamic instructors in an address to the Australian Communication Association. He pointed out that over the course of his 25 years of teaching, he had known many vibrant teachers, had examined many student course evaluations, and had observed winners for outstanding instruction awards. One quality was inherent in all of his observations. Weaver (1993) reported:

> I claim enthusiasm is the most important characteristic of dynamic teachers. In student evaluations, an instructor with enthusiasm is likely to be ranked higher on

> all other factors. When you have it, you have most of what there is in dynamic teaching- at least to students. (p.32)

Weaver also indicated that all instructors who had received the Master Teacher Award at his university exhibited enthusiasm. He was convinced that an ordinary instructor, if enthusiastic, was more credible than the most articulate instructor without it.

Later that same year, Weaver and Wenzlaff (1993) conducted a qualitative study, seeking student perception of eight "Master Teacher" award winners. Focus groups were conducted in order to determine characteristics of these effective instructors. When asked to narrow effective instruction to just one element, the focus group participants named enthusiasm. The students reported instructors who possessed enthusiasm loved what they do and had a definitive passion for their subject matter.

A 1994 study analyzed nomination letters for undergraduate teaching awards at a major university in North Carolina. Over 500 letters written by university students were scrutinized for all adjectives, adverbs, and descriptive phrases. Lowman (1994) reported the single most common adjective, enthusiastic, topped the list of 39 words that appeared most frequently. The results of the study revealed that students definitely felt an instructor with enthusiasm was most effective.

Students are often drawn to learning as a result of enthusiasm expressed on the part of their instructor. As an example, the introduction to a topic can be greatly enhanced by an instructor who portrays the subject matter as meaningful and important. The tone of voice used and the enthusiasm portrayed indicate the value of the topic. If the instructor possesses a passionate attitude towards a particular topic, students are more likely to focus and adopt the same mind-set (Good & Brophy, 2000). But the processes

involved in gaining students' interest through instructor enthusiasm can be much more complex.

Research suggests that a systematic approach can be used to draw the interest of students to learning through techniques that gain and retain the attention of students. Keller (1983) outlined three categories of action that could be taken by the instructor to demonstrate enthusiasm and motivate a student to learn. Keller's ideas included: (a) varying presentations of materials, (b) using concrete examples, and (c) utilizing paradox and surprise.

The process of varying materials can be implemented through audio, video, and print materials. An instructor must be motivated to do so and enthusiastic about the procedure. Keller (1983) suggested integrating additional voices in an audio-based presentation and frequently changing visuals when using the video screen. Enthusiasm can be displayed visually by changing print formats, by better utilizing bold print, highlighting, and by emphasizing titles.

Enthusiasm can be enhanced during an introduction when the element of surprise is utilized. Hunter (1982), Rosenshine (1987), and Gagne (1988) all stressed the importance of the introductory set as the first part of effective instruction. Keller (1983) maintained that surprises such as flashing lights, unexpected sounds, or even humor can keep students' attention and initiate the learning process.

Another strategy which focuses student attention and requires enthusiasm on the part of the instructor calls for stimulating curiosity. Reeve (1996) proposed five strategies that help an instructor arouse and pique interest prior to the start of a lesson. His approach included: (a) suspense; (b) guessing and feedback; (c) playing to students'

sense of knowing; (d) controversy; and (e) contradiction. Without enthusiasm, these suggestions could be seen as phony and artificial and would be rendered useless.

The strategy of using suspense focuses the students' attention on a particular problem about which they are unsure of the ending. Reeve (1996) suggested that this approach leads to critical thinking and challenges students to ask intelligent questions. By creating mental struggles, students are enticed through the learning process. This method often systematically and naturally leads students through the various stages of investigative study.

Guessing and feedback can be used to pique curiosity about a particular issue or topic. By asking students to guess a particular answer, they are naturally inclined to want to know the correct answer if they are wrong. Reeve (1996) noted that the questions posed to students should be connected to the main ideas of the lesson, thus providing a natural transition. The interest of the class should remain high if students have guessed incorrectly; the instructor now has full attention as students prepare to learn the correct information.

When students already possess basic knowledge in a particular area, they may become bored or feel the information they are about to receive is redundant. Reeve (1996) suggested that one way to overcome this problem is to play to the students' sense of knowing. He recommends that if students possess a certain amount of knowledge, an instructor should pose larger-scale questions in order to stimulate their thinking. A regimented approach of intense questioning can pique curiosity and stimulate interest in subject previously perceived as routine or mundane.

Purposely creating a controversy can lead students on fact-finding missions to support their own beliefs. The students may need to consult various textbooks or resources along the way to prove their point. Once materials have been gathered and the class has sufficient evidence to support its views, Reeve (1996) recommended a sustained discussion. By this time, class members should be eager to discuss their findings and will have played into the controversy strategy.

Lastly, Reeve (1996) discussed the contradiction strategy, which called for introducing new material after students have already confirmed their position on a particular issue. The new material, which is assumed to be inconsistent with what students believe, forces the group to reconsider the topic. Debating who is right and who is wrong may require substantial investigation. The process requires students to develop a more complete understanding of the issue at hand.

The proper use of instructional enthusiasm can cause a dramatic shift in the classroom environment. A piqued interest at the beginning of a lesson can often lead to higher levels of student participation. Berk (1996) indicated that humor used at the inception of a college class reduces actually can reduce anxiety and improve learning. Energized instruction is more readily accepted by students and creates a more positive learning environment.

Whether it is through a planned activity designed to draw student attention or just a good sense of humor, students undoubtedly give more attention when instruction is enhanced through enthusiasm. The research indicates that whether instructors possess a natural zeal to entertain, a natural passion for their subject matter or augment their points through personal experience, instructional enthusiasm excites students during the

presentation of material and can help to keep them on-task during the lesson. While conducting a qualitative study to determine what students consider effective in instruction, this study will attempt to validate the importance of faculty enthusiasm, as viewed by community college students.

Another method that has been shown to have a profound impact on the student learning process, especially those considered to be "Millennial" students, is the use of instructional technology. PowerPoint presentations, video clips, internet access, and podcasting are various tools an instructor can employ to bolster interest. The next section discusses the application of these sources and the impact it may have upon students.

Use of Instructional Technology

Many college and university professors, especially those who have been in the profession for more than 10 years, indicate that they prefer various forms of lecture or direct instruction as their primary means of instructional delivery. They want to enhance their teaching methodologies with a variety of technological techniques, but for various reasons, have had a hard time making the transition (Quick & Davies, 1999). Whether it is apprehension on the part of the instructor or a lack of proper staff development at the educational institution, there are still many who have chosen not to incorporate the use of technology into their classes (Armstrong, 1996; Keller, 2005).

According to Quick and Davies (1999), instructors intend to make the appropriate transitions and many are in the process of doing so. They have seen the benefits of using technology and are currently revising their presentations to accommodate the changes. Community college instructors view instructional enhancement through technology as a

necessary function of educating the new wave of technology-oriented students (Quick & Davies, 1999).

In order for instructors to update their skills and move ahead technologically, they should have help from their various institutions. Colleges must begin carefully to integrate technology into the curriculum and be aware of those who have a natural fear of the implementation process. Quick and Davies (1999) recommended that colleges provide staff development, faculty technical support, classroom computer systems, and access to an instructional podium (wired for computer, sound, and overhead projection) in order to show a vested interest in moving their instructors to a higher level.

According to Gagne, Wager, Golas, and Keller (2005), high schools, colleges, and universities are cultural institutions that are apt to change slowly. Classrooms are still being built to facilitate the instructor standing at the front of the room, delivering his or her message from the whiteboard. In essence, although technology is beginning to have a significant impact on instructional delivery, classrooms are still configured to fit the mold of instructional delivery from decades ago.

The advent of technology has created many new instructional strategies that have recently been made available to educators. These new advances will eventually allow instructors to address the needs of a wide range of students more effectively. Gage et al. (2005) reported:

> Effective instruction depends on appropriately designed learning experiences that are facilitated by knowledgeable teachers or instructors, or by some other means of delivery, such as a computer. Because people have different learning styles or a combination of learning styles, instructional designers and teachers often design

> activities that address these different modes of learning in order to provide the best learning environment for each student. (p. 226)

The first-year students who are now entering colleges and universities are typically computer-literate and expect various forms of technology to be integrated into the curriculum. In order to get in touch with these students, course design and delivery will have to reflect their needs for technology-based instruction.

If technology is to be properly integrated into the classroom curriculum, the instructor must assume varying new roles (Morrison, Lowther, & DeMuelle, 1999). Costa (2001) describes three of these roles, portraying the effective instructor as a designer, a facilitator, and a manager of the classroom.

As a designer, an instructor is responsible for either implementing new or modifying existing lesson plans to incorporate desired technologies. The result of including various media resources should be to provide a better education for students and help the instructor reach the stated objective in a more cohesive manner. However, the media used as a part of the lesson must be solely complimentary, a mere tool to reach the goal of the session (Costa, 2001).

The second role calls for the instructor to become more of a facilitator than an instructor, helping students find the information they desire instead of delivering it forthright. When questions are asked, the facilitator merely points students in the right direction and helps them with the technology they may need to find the answer to their questions. Costa (2001) noted that the instructor is to model the informational gathering process to ensure the specified learning transpires.

Finally, an instructor who uses technology effectively must be a good manager of the resources within that environment. Many of the tools available for instruction are accessible on a limited basis, and the situation can vary from building to building, from classroom to classroom, or in the case of on-line delivery, from student to student. Besides managing the actual technology, Costa (2001) suggested that the instructor be aware of managing these varying environments well, since the inappropriate use of technology can be significantly more distracting than with a typical lecture-type presentation.

The use of instructional technologies will become even more prevalent in the future. Some educators look upon this phenomenon with excitement and others look at it with a sense of doubt (Blankenship, 2010). In the past several years, textbook publishers increasingly have included computer-enhanced teaching aides with their curriculum packets and the advent of products such as Kindle may significantly transform how written material is delivered. Development of these materials is increasing and new technologies are on the horizon. It will be useful through this study to establish whether the participants typically enjoy technology-enhanced instruction and welcome it as a part of the instructional process.

Summary

The review of literature has shown that effective instruction model(s), instructional enthusiasm, and the use of various instructional technologies are all important practices associated with the classroom instructional process. A resourceful, well-organized instructor will use a combination of each of these practices to efficiently

reach all types of learners in the educational environment. This study served to establish how important these elements are in the experience of community college students.

The next chapter focuses upon the methodology used to conduct this study. The design, data collection strategies, participant criteria, and the analysis of interviews are all discussed in detail.

CHAPTER 3

METHODOLOGY

The intent of this qualitative study was to examine the perceptions of community college students concerning effective instruction, specifically as they relate to direct instruction, faculty enthusiasm, and use of technology. Based upon the research reviewed in Chapter 2, an assumption can be made that many faculty continue to rely heavily on some form of lecture-based presentation. This study was designed to identify elements of effective instruction that can enhance traditional instructional delivery and to determine the impact of instructor enthusiasm and instructional technology on student perceptions of teaching effectiveness.

This chapter presents the rationale for the selection of the qualitative method and discusses what processes were used to gather the data. Discussions of design and data collection follow. Brief descriptions of the participants and role of the researcher are included. The chapter closes with a succinct description of the procedures that were employed to analyze the data.

Rationale

Although research exists concerning effective instruction (Hunter, 1982; Griffiths, 2009; Levin, 1981; Rosenshine, 1983; Youssef, 2009), most of what has been written deals primarily with theoretical approaches to the topic. The student viewpoint has been historically overlooked, especially the perceptions of community college students. This study analyzes the opinions of the participants and their beliefs concerning what particular characteristics of instruction are most important.

After reviewing both quantitative and qualitative research methodologies, the design that best fit this study was a qualitative approach, utilizing focus groups and structured in-depth interview techniques. This approach allowed students to voice their opinion, as opposed to choosing one of several short responses that may or may not fully reflect their feelings about effective instruction. Due to the nature of the information desired, focus groups and structured interviews supplied the rich and full description needed to analyze the research questions (Firestone, 1987). The voice of the student was of profound interest and importance in this study. Sheehan and DuPrey (1999) emphasized the need for qualitative observations to build on the quantitative research that currently exists.

Individual Interviews

Individual interviews, also known as the in-depth interviews (IDI), were utilized in this study. This interviewing technique calls for direct dialogue between the moderator and a respondent. The process allows the researcher to collect personalized and detailed information, which is not possible with other forms of qualitative research (Lee, 1999). Individual interviews encourage participants to make comments that they might not make in a more public forum, including the focus groups. Oakley (1981) stated, "Interviewing is rather like a marriage; everybody knows what it is, an awful lot of people do it, and yet behind each closed door there is a world of secrets" (p. 41). The typical timeframe of an individual or an in-depth interview can be anywhere from 30 to 90 minutes, with an average of about 45 minutes (Greenbaum, 1998).

Three individual interviews were conducted at each of the three community colleges participating in this study. These interviews were conducted in context very

similar to the focus groups but differed in that only one student was involved during the course of questioning. Some students are apprehensive about stating their true opinions in the presence of their peers, so the individual interviews allowed for uninhibited comments from the subject. Individual interviews also tend to alleviate the peer pressure found in homogenous classroom groups (Fern, 2001). The format closely followed the procedures used during the focus groups but provided a more direct, personal perspective than a group setting might allow. The same design and inquiries (Appendix B) were utilized in both individual interviews and focus groups.

In order to establish a level of comfort, the individual interview began with some small talk to put the students at ease (Bogdan & Bilken, 2007). Building small talk helped to develop rapport with the interviewee and put the subject at ease. Once the subject was comfortable, he/she tended to talk freely and provided greater insight into the subject being discussed. If the subject were initially hesitant to give in-depth details concerning the topic, a series of probing questions were used to elicit stronger answers to the questions being asked. Subjects were informed, however, that they could discontinue the interview at any time although all chose to participate in the full interview.

Focus Groups

In addition to the individual interviews, "full-group" focus groups were used. Focus groups were used primarily by business and marketing institutions until the late 1970s. Beginning in the early 1980s, other disciplines began to utilize focus groups as a part of their research processes (Fern, 2001). One of the first known departures from the marketing field involved a 1981 study on the use of contraceptives in Mexico. This particular study used focus groups and surveys to determine attitudes concerning

contraception among various segments of the Mexican population. The study was replicated and fostered the use of this type of method in other science-related fields (Morgan, 1998).

Shortly thereafter, the academic world began to borrow and adjust focus group methodology to fit the needs of educational research. Morgan (1998) and Krueger (1994) both wrote books in the 1980s dealing expressly with the topic of focus groups and their application to academic research. According to Morgan (1998), over 100 articles are published per year in social science journals that emphasize various applications of focus groups to academic research.

As the concept of the focus group expanded, various approaches developed. The result has been identification of three forms of focus groups, which Greenbaum (1993) classified as: (a) full groups; (b) mini-groups; and (c) telephone groups. While all of these approaches have some similarities, they do differ in significant ways.

A full group consists of six or more persons who have been recruited based on certain common characteristics. The session is led by a trained moderator who spends approximately an hour-and-one-half to two hours guiding the group through the session. A mini focus group is almost identical to the full group, but the number of participants usually consists of four to six participants. Finally, the telephone group is essentially a conference call, in which the moderator leads the group through a series of questions. The call can last anywhere from 30 minutes to 2 hours. Telephone groups offer more anonymity but lack the face-to-face communication process that the other two groups enjoy (Greenbaum, 1993).

Regardless of the type of group chosen for a particular study, each focus group must be effectively administered by a skilled moderator. The moderator plays a significant role in the research process and influences the dynamic of the group (Fern, 2001). A good moderator exhibits qualities beneficial to the research and allows the group to operate functionally. Referring to these unique characteristics, Karger (1987), writing about consumer focus groups, stated:

> The best facilitator has unobtrusive chameleon-like qualities: gently draws consumers into the process; deftly encourages them to interact with one another for optimum synergy; lets the intercourse flow naturally with a minimum of intervention; listens openly and deeply; uses silence well; plays back consumer statements in a distilling way which brings out more refined thoughts or explanations; and remains completely non-authoritarian and nonjudgmental. Yet the facilitator will subtly guide the proceedings when necessary and intervene to cope with various kinds of troublesome participants who may impair the productive group process. (p. 54)

Greenbaum (1993) listed several key characteristics of an effective moderator, which included: (a) superior listening ability; (b) excellent short-term memory; (c) organized; (d) quick learner; (e) high energy level; (f) personable; and (g) above average intelligence. According to Greenbaum, there are three essential roles for the effective moderator: (a) preparation; (b) implementation; and (c) analysis.

The first thing the moderator should be concerned with when conducting focus group research is preparation. Greenbaum (1993) suggested the moderator should initially determine his/her responsibilities and begin to outline the research goals. Next,

screening criteria should be developed in order to determine which characteristics the participants should possess. The number of groups needed and the actual locations of the sessions also should be determined. A moderator's guide should be developed at this point, in an effort to outline information pertinent to the study. The discussion guide helps direct the focus group and keeps the conversation flowing in a positive manner (Greenbaum, 2000). Finally, the moderator must coordinate well in advance with the facility in order to alleviate any concerns that may become problematic.

Once the foundation for the process has been established, it is time to begin the actual implementation of the sessions. The moderator may want to prescreen participants as they arrive, to be sure that they qualify for the study. Once the group is seated and ready to begin, the moderator should open with a brief statement concerning the recording of the session and ask participants to introduce themselves (Stewart & Shamdasani, 1990). When the actual session has begun, the moderator is responsible for interview elements, such as assuring participation, time management, probing, and resolving problems. The session should end within at least 10 minutes of the agreed upon time (Greenbaum, 1993).

After the session has been completed, it is important to check the recordings to be sure they are satisfactory. Once adequate data have been collected, the next step is to transcribe the interviews. Several processes, such as cut-and-paste or coding are helpful to systematically categorize the findings. The final two processes, content analysis and data making, help lead the researcher to a thorough analysis and understanding of the data (Stewart & Shamdasani, 1990).

The focus group presents the opportunity for a stimulating discussion and according to Morgan (1998) can "generate a rich understanding of the participants' experiences and beliefs" (p. 11). Focus groups are often used because of the enthusiasm they evoke when the participants become fully engaged with each other and benefit from the comments made by others in the group, triggering other useful observations. Effective, meaningful information on a specific topic can be generated through the use of this method. The typical timeframe involved with this technique is usually about 100 minutes (Greenbaum, 1998).

However, focus groups can present some unforeseen difficulties of their own (Bogdan & Biklen, 2007). Many people feel either uncomfortable or inhibited in a group situation and may not discuss the topic to the degree they would if one-on-one with the moderator. Others in the group may dominate the conversation or even digress from the topic at hand. The moderator must skillfully attempt to obtain reactions from all individuals in the focus group, while balancing the discussion and keeping it on track.

The focus groups for this study employed the standard of six or more individuals; all participants had previous college experience beyond one semester with community college instructors. One focus group was conducted at each of the three community colleges associated with this study.

The actual process (see Appendix B) consisted of an initial discussion of three topics: the direct instruction model, instructional enthusiasm, and instructional technology. Once these topics had been presented in detail and the participants had an understanding of these three elements of instruction, each area was discussed independently, guided by the questions listed in Appendix B.

During the process of both the interviews and focus groups, in addition to audio recording, the researcher made mental and written notes to begin the process of data analysis. Later, the transcriptions of the recordings as well as the moderator's notes and observations helped to provide an overall view of the participants' various collegiate experiences.

Research Context

The research for this study was conducted at three Missouri community colleges, ranging in size from approximately 4,500 to 11,000 students. All are currently accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Each institution offers a two-year Associate's degree program, as well as technical programs that grant one-year certificates and two-year degrees.

For purposes of confidentiality, the community colleges will be referred to as College A, College B, and College C. Table 6 indicates the type of setting at each college location and the fall enrollment figures at the time the research was conducted.

TABLE 6

Student Enrollment at Participating Colleges

College	Setting	Enrollment
College A	Rural	4,574
College B	Suburban	5,165
College C	Urban	11,116

Each institution that participated in this study was contacted in advance and the research to be conducted was approved through each college's Institutional Review

Board (IRB). Once the researcher had letters of approval from each respective institution, approval was acquired from the IRB at the University of Missouri-St. Louis.

Participants

Participants in this study included community college students who had a number of commonalities. Although they varied in gender, age, work experience, or interests, they were bound together because they were community college students who had similar instructional experiences (Krueger & Casey, 2000). All students involved in the process were required to be enrolled at the time of the study and must have completed at least one semester or 12 hours at a community college. The Institutional Review Board-designated official at each respective community college was contacted and asked to provide class rosters of general education courses that would fulfill the requirements of the study. These rosters were used to identify and recruit participants for the individual interviews and the focus groups.

The participants for the individual interviews were selected from their second semester course rosters by contacting students at random until three from each institution agreed to participate in the study. The class roster was required to have at least 12 students in order to solicit a random group of students. Table 7 indicates gender and college of those interviewed:

TABLE 7

Participants of Individual Interviews by Gender

College	Male	Female	Total
College A	2	1	3
College B	1	2	3
College C	1	2	3
			9

Participants in the focus groups were also recruited from class rosters that had more than 10 students enrolled, so that the target audience of six or more students could be attained. Using a larger roster helped to accommodate for those students who did not wish to participate in the study. Ultimately, the commitment of six or more students was required to conduct each focus group. If six or more were not identified from a particular roster, the researcher used another roster to fulfill the requirements of the focus group criteria. Since these rosters consisted of daytime general education courses, the majority of student volunteers were of traditional age (18-25) and no effort was made to differentiate observations by age grouping.

Students who volunteered to take part in the research process were required to sign an Informed Consent form (see Appendix A) prior to the start of the session and were allowed to discontinue their participation in an individual interview or focus group at any time, although none chose to do so. The students involved in the study were not compensated in any way, shape, or form.

Ultimately, 44 students participated in the study. Table 8 provides an analysis of participants categorized by college and gender:

TABLE 8

Participants of Focus Groups by Gender

College	Male	Female	Total
College A	3	7	10
College B	5	10	15
College C	5	5	10
			35

Participants in the study were 61% female and 39% male, which closely approximates the distribution of students enrolled in community colleges nation-wide.

Role of the Researcher

The researcher served as the moderator of all interviews and focus group sessions. He was responsible for tape recording each session and implemented a secondary recording device to ensure quality audio copy. The researcher also took personal notes during the focus groups and interviews to assist with interpretation as the recordings were transcribed. Proper facility acquisition and set-up was also a part of the researcher's role in the data collection process.

Each student was provided with an Informed Letter of Consent (see Appendix A). The researcher reviewed the information contained in the document and collected forms once they had been signed. At this time, those who did not wish to contribute were given the opportunity to be excused. All students who chose to participate were asked if they

understood the rules governing the interviews and if they had further questions regarding the process.

It was the responsibility of the researcher to create an uninhibited environment in which students could freely express their opinions. Issues such as subject anonymity and the importance of the research were addressed at the start of each session. Sufficient explanation was also provided to the students so that they understood and felt comfortable with the topic. During the interviews and focus groups, the researcher continually monitored the students to ensure all were at ease with the qualitative process.

The researcher was also required to make contact with each of the three community college's Director of Institutional Research to schedule site visits. The researcher worked closely with this individual to coordinate both the individual and group interviews. Prior to the actual site visit, the Director of Institutional Research was sent a detailed explanation of the study along with the Informed Letter of Consent to the instructors whose class had been recommended for participation in the study. This documentation provided the instructor information about the study. The instructor was allowed to share the synopsis of the study with students so that they were introduced to the topic prior to the actual interviews or focus groups.

Data Collection

All interviews and focus groups were conducted in a classroom at the student's respective institution. During the focus groups, the moderator attempted to make the atmosphere as relaxed as possible and arranged the seating so that students were placed in a U-shaped formation. This arrangement allowed students to openly participate in

discussion and gave the moderator the capabilities of being able to move around the room uninhibited (Morgan, 1997).

One focus group and three individual interviews were conducted at each of the three colleges. The interviews were conducted first because they could be most easily replicated if changes needed to be made to the discussion guide or interview format. The focus groups allowed for in-depth group discussion, while the individual interviews provided a more intimate review of the topics. Through the use of the two types of interviews, the researcher sought to discover themes that were validated in both, providing triangulation. The first set of interviews and the first focus group were reviewed immediately by the researcher to allow refinements to subsequent interviews.

The actual group interview process involved a three-step progression (see Appendix C) designed to elicit accurate responses from the students. First, a preliminary round of introductions helped the moderator gain general background knowledge of the students and allowed them the opportunity to become comfortable with the interview. Next, the researcher asked a series of guided questions designed to obtain the data necessary to complete the study. Lastly, the researcher was careful to give the students time to give their opinions, free from guiding questions. Any and all comments regarding effective instruction were welcomed.

Before the actual interview process took place, students who participated in the study were informed that a tape recorder would be used during the session. Students were reassured that information shared during the process would remain anonymous and confidential. In addition to the tape recorder, the researcher took field notes to document any type of non-verbal communication that might be important to interpreting the

interview process and results (Bogdan & Biklen, 2007). The field notes were also reviewed immediately following each session to aid in refining subsequent interviews.

The introduction phase of the interviews and focus groups allowed time to initially complete the housekeeping chores associated with the study. It was at this time the researcher made introductions and shared the purpose of the research with students. The session rules were also discussed at this point and students were given time to ask specific questions regarding the guidelines. Students were also asked to give a brief introduction and provide a brief synopsis of their field of study and future plans. Finally, consent forms (Appendix A) were distributed and collected, once signed. The researcher assured the participants that they would only be identified as students at College, A, B, or C so that no specific comment could be traced to any individual respondent.

The second portion of the research sessions called for an in-depth discussion of effective instruction methodologies. The students were presented with several effective instruction techniques that are prevalent in many of today's college classrooms. These themes were chosen by the researcher based on the analysis of literature pertaining to effective instruction. The components chosen for research, direct instruction, instructor enthusiasm, and the use of technology, were found to be three of the most popular and widely discussed areas of effective instruction. Finally, students were asked to comment on which of elements of effective instruction was most important to them and why. It was at this point the students voiced their collective opinions. The focus groups in particular, took this opportunity to provide the thick, rich dialogue the researcher sought to capture. Opinions varied and healthy discussion resulted at this point of the sessions.

Lastly, students were given the opportunity to provide additional information whether it related to the study or not. They were asked if they could send a message to the academic dean regarding instruction, what it would be. This inquiry stimulated limited response and provided the researcher some additional information that was not always apparent in the interviews and focus groups.

Analysis of the Interviews

There is not a single, agreed upon technique for analyzing qualitative data. The researcher played a pivotal role in the classification and interpretation of the study. As a result, the quality of analysis and its trustworthiness became heavily dependent upon the care, accuracy, and intellectual capabilities of the researcher. It was his responsibility to carefully filter through narratives, develop themes, and classify information into general categories. Conclusions were made only after categorical data began to form general patterns, which were identified, synthesized, and used to accurately depict the findings of the research.

Once the individual interviews and focus groups were complete, the researcher used a transcript-based analysis of the data. The recorded information was supplemented with notes the researcher had taken during the sessions (Krueger & Casey, 2000). The actual transcripts were typed word for word and entered into files organized by college. Statements verbalized by the moderator were bolded. The transcripts were also created as electronic files and analyzed using a current software package designed to process qualitative research.

As the various interviews were transcribed, the researcher began the process of systematically familiarizing himself with the data by carefully reading and rereading the

pages of recorded information. As the field notes were read, the researcher made notes in the margins and spacing between the sentences. Reoccurring themes and/or common threads began to emerge as a part of this constructive review process. A manual overview, such as the one described above, helped develop an initial thematic sense for the research. The researcher utilized an analysis approach commonly associated with grounded theory, by initially conducting open coding, reviewing the data in detail for general themes, and developing initial categories through comparative analysis. Once these categories were established, selective axial coding was employed, systematically applying data units to the core categories recognized throughout the initial review. This process was followed until it was evident that a point of conceptual saturation had been reached.

This analysis was supplemented by a review of the notes describing the students involved in the study, the environment in which they were interviewed, and the general demeanor of the group as they were interviewed. Through review, the researcher determined what kind of cooperation he had during the actual interview process and considered these observations when writing the analysis portion of his work.

Once the aforementioned steps had been completed, the data were again broken down using one of the forms of organizing data for qualitative review and analysis, the software package NUD*IST (Gay, Mills & Airasian, 2006). Although many new types of software now exist to aid qualitative researchers in the analysis of the data, the actual software packages are merely a tool to assist and will not do the actual analysis. They do, however, serve to confirm the accuracy of manual coding and were used for that purpose in this study.

NUD*IST, a commercial software package, was used to manipulate the text and divide the information into themes and categories. NUD*IST provided the researcher with a system that stored, coded, and searched the electronically processed data to determine if similar categories emerged from electronic analysis. This software was chosen by the researcher because it is a powerful software package that can be used to decipher large amounts of information. As the data were delineated into subcategories, themes emerged which supported or supplemented the researcher's initial coding analysis and notes. Certain comments and observations began to repeat themselves. This review was checked against the researcher's own coding analysis to determine if any themes had been overlooked or if supportive data had escaped the evaluator's notice. The electronic review was utilized as a form of checking code reliability. It was the responsibility of the researcher to compile the results and render an effective analysis of this information that will later be used to help draw conclusions.

Finally, the researcher identified themes from the study that were common to most or all of the interviews. These themes, discussed at length in the next chapter, were the interconnecting ideas that led the researcher to the development of a common description of student perceptions, drawn as a result of many hours of interviewing, research, and analysis. The pieces of the puzzle finally began to come together and a logical judgment or conclusion was made relating to the topic of effective instruction (Bogdan & Bilkin, 2007).

It should be noted that not every student answered each question during the course of the focus groups. As a result, the researcher opted to report some of the outcomes using percentages. The use of percentages helped to provide clarity and avoid

confusion that might have been incurred by listing results using number of students that responded to various inquiries.

Triangulation

Cohen and Manion (2000) define triangulation as an attempt to map out or explain more fully, the richness and complexity of human behavior by studying it from more than one standpoint. The researcher in this study cross-checked the data by using different processes in an attempt to gain a more detailed and meaningful student perception.

First, the research was conducted at three different community colleges. These colleges differed in size and could be considered to have small, medium, and large student populations. They also differed in that they were located in diverse geographic locations. One set of data was collected at a rural community college, another at a suburban setting, and a third set of data was gathered at an urban community college campus.

A second triangulation technique involved the use of two different forms of data collection. Two different qualitative gathering systems were employed, including individual interviews and focus groups. Three individual interviews were conducted on each of the three community colleges campuses, as well as one focus group at each of the institutions. Each of these approaches provides somewhat different student insights, with the individual interview encouraging intimate observation and the focus group allowing students to prompt each other's memories and observations.

Finally, students from the each of the community college campuses were chosen from multiple course sections. The students were required to be in at least their second

semester of community college coursework so that they could ultimately provide an educated opinion of effective instruction at the two-year college.

The collection of data at three different community colleges and at different settings, the use of individual interviews and focus groups, and the careful selection of students all aided in the process of supplying data that was trustworthy. These measures helped to provide a balanced depiction of student perception and eliminated any institutional culture bias that may have existed.

Summary

This chapter outlined two qualitative methodologies used to determine the student perspective of effective instruction, the interview and focus group. It reviewed what was expected on the part of the moderator and the students who were involved in the interviews or focus groups concerning effective instruction. The chapter also described how data gathered through these interviews were analyzed to identify reoccurring themes.

A complete analysis of the data follows in the next chapter, regarding the most important and least important elements of effective instruction. The researcher will also discuss the significance of the three defined elements of effective instruction: the direct instruction model, instructional enthusiasm, and instructional technology.

CHAPTER 4

ANALYSIS OF DATA

As stated in Chapter 1, the majority of current literature pertaining to effective instruction at the collegiate level has been written about the lecture method and often does not account for other factors such as organized presentation framework, instructional enthusiasm, and enhanced use of technology. Most authors, who consider the student at all, address the view of the typical four-year college student. Very little information can be found regarding the community college student perspective of effective instruction. This chapter presents the findings of nine individual interviews and three focus groups conducted at three community colleges and address the five research questions presented in the earlier discussion.

The research, qualitative in nature, was conducted at three Missouri community colleges in urban, suburban, and rural settings. Forty-four students participated in the sessions; 35 actively contributed in focus groups and nine were interviewed individually. The distribution of students by gender was 61% female and 39% male, closely approximating the student population of the colleges involved in the study and of community college enrollment in general. All students who took part in the process volunteered to participate in either focus groups or individual interviews and were not compensated for their contribution in any way. Students who participated in the individual interviews did not take part in or contribute to the focus group process. Likewise, students who were a part of a focus group were not interviewed on an individual basis. The interviews and focus groups were conducted as planned and the data were collected as originally designed by the researcher.

The Most Important Element of Effective Instruction

Teacher Enthusiasm

When asked about the most important elements of effective instruction, the participants overwhelmingly chose instructional enthusiasm as the key to successful teaching. Although this is primarily a qualitative study in terms of evoking a rich and descriptive narrative of student observations, it is helpful to note the general frequency with which students supported an instructional element. Seventy percent of the participants indicated that there was nothing more effective than instructors who consistently taught their students in a motivated manner. Comments such as "enthusiasm is very important," "passion is huge," and "enthusiasm is definitely most important to me" were statements heard repeatedly throughout the various focus groups and individual interviews. A male student from College A summed up the importance of enthusiasm by stating:

> I think it's (enthusiasm) very important. I have a class this semester, it's an exposition class. The teacher is always enthusiastic, not overly enthusiastic but she wants you to understand what she knows, what she's trying to pass on, and she will do pretty much about anything to help you out with that. She is very passionate about what she does; she writes for literary magazines all the time, she wants you to be as passionate as she is. I really love this class now, it's my favorite class. Being a pre-Engineering major, you wouldn't think English would be my favorite class right now, but it is. It's just the way she comes across, very happy to be in class, very happy that you're in class, always willing and wanting for you to come up and ask questions. Everything is laid out for class, she is

> ready for class, and that fact that she is ready makes you want to come to class. Because everything is set up, it's organized, you know what's expected for the day, and it's perfect. I couldn't imagine a better class because she's very passionate about what she does and what she believes in. Everything we discuss in class will be a part of the class which makes it kind of interesting. I like when you take daily life situations and put them into a lesson. I think it's really great that she does that.

The general consensus among students interviewed revealed a perception that instructional enthusiasm dramatically helped students learn. A sense of enthusiasm on the part of the instructor invoked engagement on the part of the student, which led to increased participation. "Passion is contagious" remarked one student in a focus group from College C, "It engages students and helps you to see what is important." Once students were engaged, they found themselves motivated to learn. Several students stated that the enthusiasm demonstrated by the instructor was infectious; the passion exhibited spread throughout the class created a motivational learning environment. A female student from College A who participated in an individual interview reflected upon how enthusiasm affects the learning environment in the classroom:

> [Enthusiasm] is very important. Without enthusiasm, it makes you think that the teacher doesn't want to be there as much as you! I have a teacher who has humorous enthusiasm right now, it's a 5-hour class and I love the class just because he keeps you going throughout the whole class. There's never a boring part and I'm horrible at biology! He makes it fun and you learn a lot too. He starts the class out with a joke to get us all engaged and he just goes through class

> like that. He can make a joke about something we are experimenting and we learn while having fun at the same time.

Another female student from the focus group at College C commented on the importance of enthusiasm:

> My biggest thing is that I'm tired of teachers who are more interested in listening to themselves talk than are interested in conveying information that is understandable. I had a teacher who just liked to talk, he didn't want to hear your questions, he didn't want to make sure you understood it; he just wanted to sit up there and talk. I think its balance, passion, and humor, keeping the material exciting even though sometimes it's not. Sometimes, even in math, I had a funny teacher. I just couldn't believe it; I thought math was just a dull, dull, dull subject. He kept it fun and entertaining, he was excited about it, and he was passionate about it. Finding that balance of keeping things funny, keeping things light but making sure you're understanding, getting information and key points across at the same time are very important.

Organized Presentation

Second, a significant number of the participants found organized teaching methods, such as the steps involved in the direct instruction model, to be important when considering effective instruction. Nearly 30% of participants, the remainder of the sample, found systematic instructional strategies to be of greatest importance when determining effective instruction. The students who felt direct instruction was most important were motivated by organization and a distinct instructional outline. A female student from College C summed up her thoughts about direct instruction:

> Without direct instruction, the class would be very chaotic. If you have a group of students coming into a room and you're like OK, we're going to do this then just jump right into it, it's very hard on a psychological level. But if you make transitions and steps, do it in the right order, you are more effective. You need to start out with an introduction and transition students from what they've just done or what they'll be doing. Having an introduction, instruction, and closure is a good template for how a class should be run. It doesn't create a chaotic jumble in the classroom. You have to have steps; you have to have a process. It's just like doing math, you can't start with the answer and work your way back to the problem. You have to start with the problem and work your way to the answer.

Students who felt this strategy was most important personally identified with the elements associated with the direct instruction model, such as structure, order, organized sequence, and so forth. The standard format of concrete, sequential instruction techniques that Hunter (1982) proposed decades ago were still found to be appealing to many of those who participated in the study.

Students who felt direct instruction to be of greatest importance in the instructional process supported their assertion with comments such as "you cannot learn without it," "it is the most effective way to learn," and "if a student does not comprehend, enthusiasm won't help" to illustrate how they felt about the importance of using specific teaching methods. A female student from a focus group at College B commented on the importance of consistency concerning the direct instruction model:

> I think the instruction should be uniform in that teachers should use a lesson plan that everyone follows. I've been in a beginning math class that used a certain

> styles of teaching and it was totally different than the next math class I took. I understand teaching cannot always be the same but some sort of conformity is good for students, especially for those who are just out of high school. We're used to being taught a certain way and it's important for us to learn that way in college.

A student from College B who preferred structured teaching, remarked, "I don't think it is as much the teacher as it is us. We've been taught this way from kindergarten on and when someone comes in with something different, we're thrown off." For these students, information presented in a format to which they were accustomed, and organized in a sequence that could be easily followed, was particularly critical. A male student from College B explained:

> It's more difficult if you do not use an organized, structured set up. That's the way to do things, that's the way we function best. It is a lot more difficult if you don't have a structural set up when you teach.

Students who felt strongly about direct instruction consistently mentioned the need for organization during the teaching process and reiterated the fact that their primary experience as learners was based upon this type of methodology.

Instructional Technology

Only one student found the use of instructional technology to be the most important part of effective instruction. Most students reported that instructional technology was indeed an important part of the instructional process but viewed the use of technology as strictly an aid or a supplement to teaching. They also noted several

implications for both traditional and non-traditional students. A male student from College C shared this thought in a focus group:

> I think it (instructional technology) holds middle ground because technology can help advance things and with older generations it may hinder things. But it plays more as entertainment. It can draw a student in, it can help them, if it's a Powerpoint it can give them a visual. With technology comes a younger generation and the younger generation are more into entertainment. We have music, we have TV, we have tons of things going on, so it's always different things catching our eye to where older generations are used to getting it one-on-one, getting up to go to the board and do stuff by hand. So, technology to me is more entertainment. It is more of a luxury. It helps things run smoother and quicker. So, a long time ago a class might have run three or four hours, now we can do it in fifty minutes, sixty minutes, maybe an hour and a half. It helps things to move along smoother but to me it's more of an entertainment. It catches somebody's eye. It helps to draw the younger generation in and makes things smoother for them.

Several perspectives were also shared by non-traditional students who had not always had technology at their fingertips. A female student from College C discussed her thoughts from that particular perspective:

> I grew up in a time where we didn't have the computer or the web. The web hadn't even been developed yet and I learned a lot of things that I can still recall now. I don't think it's absolutely mandatory but it does make things easier to learn. I like teachers to use technology but it only goes so far. You still have to

> have the instructor in order for you to gain out of it. You can go and show me a bunch of art appreciation pictures and paintings, but someone is going to have to tell me what it means or what idea came out of it. It's nice to have and has some advantages.

Additional comments were made that implied instructors simply did not have the skills needed to properly operate software packages, multi-media tools, and technological equipment. A number of students contributed this to a generational gap, with students stating that time would eventually fill the void or lack of knowledge currently possessed by today's instructors. A good example of this type of thought came from a sympathetic male student who participated in the focus group at College C:

> I feel bad for instructors. They're being told you have to use technology like the Blackboard. They're being told you can't print the syllabus and it's a waste paper to do so. I think instructors are being forced into a faster paced world than they're used to and I feel bad for them. I feel its cool embracing my math teacher but he feels stupid sometimes and you can see it.

Again, the vast majority of students reported that instructional technology is best used as an aid or supplement. Both traditional and non-traditional students indicated that technology is best served as a supplement to teaching with several students expressing concerns with instructors and their abilities to properly operate the equipment provided by the colleges.

Figure 1 illustrates the participants' preference regarding the most important elements of effective instruction:

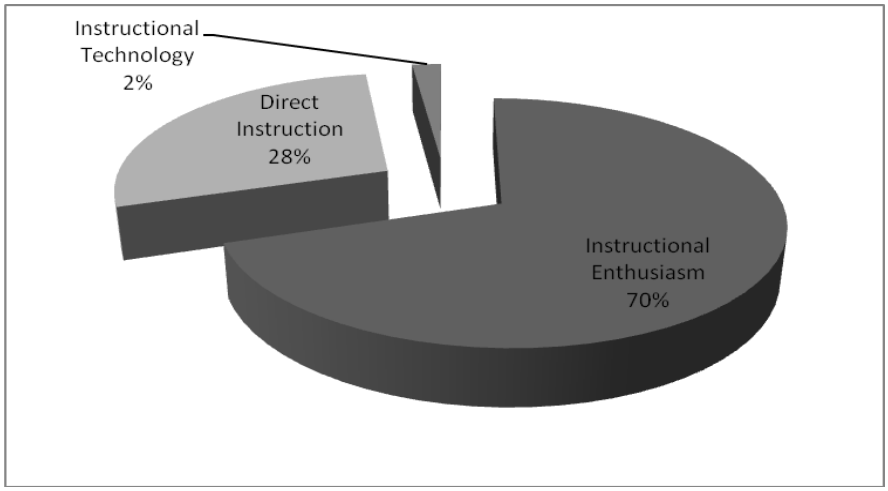

Figure 1: Community College Student Perception of Effective Instruction

The Least Important Element of Effective Instruction

The participants in this study clearly indicated that the use of instructional technology was the least important to them as an element of effective instruction. Of the 44 student participants, one from College B indicated that instructional technology was most important, stating "Instructional technology is number one for me, the other two (instructional enthusiasm, direct instruction) depend upon the course itself."

As noted above, most students supported the idea of instructional technology being best implemented as a supplement to teaching or as a resource. A female student from College B commented during an individual interview:

> Technology adds a lot to the classes. It allows them [faculty members] to show pictures of things that will maybe more than words, so it allows people to visually see it. If you have a question you can look it up on the Internet. And its right

there, it's not like I'll get back to you later. It's really nice to have as far as learning and the learning environment.

Since the sample population was largely traditional in age, most reported that they had high technological skill level but they reported the overall technical abilities of most of their teachers to be much lower than their own. As a result, students stated that their instructors needed more professional development to enhance their technological skill set. One student from College A commented, "It is the responsibility of the college to make sure staff knows how to use technological elements." Another stated, "Trainings should be given to teachers to show them techniques to use and proper ways to teach students with technology."

Students complained that the use of instructional technology is on the rise but often fell short of their expectations. While use of on-line platforms such as Blackboard are quickly gaining popularity, students complained that only a small percentage of their instructors have the ability to use it properly. A student from College C commented, "They're not always able to run the computer or DVD player efficiently." Other criticisms consisted of comments that instructors were not keeping their information up-to-date, some merely posting a syllabus on a website and never returning to it again for the rest of the semester. Some students felt only a portion of the faculty were trained to use technology. A disgruntled student at College A stated, "I have five classes and only two of my instructors use the Blackboard. The others don't know how to use it and that's a downfall."

Students did, however, express their belief that instructional technology had a place in instruction and would increase in importance. They reported that utilizing this

method of instruction, even in an on-line format, may be the wave of the future. "We're getting to a point where we're expecting the use of technology, it's becoming the standard," stated a student from College C. They observed the use of technology should first be developed as an enhancement to current teaching styles, refined through the years, and possibly one day could play a more prevalent role. Some concerns were expressed relating to the gap that has been identified in current instructional capabilities and the skill sets of students. Until a more level playing field is established bridging this technological gap, students declared the best use of technology is as an instructional supplement rather than an instructional methodology. Another student from College C who was very verbal concerning the use of technology said, ". . . it holds middle ground. The use of technology plays more as entertainment, conveys a part of but not the whole message."

The Most Important Process of Direct Instruction

When discussing the relative importance of aspects of the direct instruction model as they relate to effective instruction, students were asked to place a comparative value on the three main elements of the model, including the introduction, the instructional process, and closure. The importance of these three steps, as well as the significance of each individual step, was covered in detail.

Introduction

First, students discussed which of the three elements of the direct instruction model was most important to them. Those who responded indicated that either the introduction or the actual instructional process was most important. Fifty-six percent of the respondents believed that the introductory phase of the process was most important.

"The introduction helps develop your interest, captures your attention" stated a student from College B. Others shared their philosophy from a classroom management standpoint. A male student, who participated in a focus group from College C, commented:

> The anticipatory set is most important in my opinion. Because if a student walks in and the teacher cannot control the setting, can't get the students to pay attention, focus, understand what's going to be expected of them, can't bring attention in their classroom then it makes it really hard for a student to receive and learn information that they need. And it makes it really hard for the teacher in general. I mean if you can't get someone's attention then how do you expect them to listen?

Students consistently reported that the introduction to the lesson set the tone for the entire class. It was at this point that the instructor engaged students and systematically drew them in, eventually moving into the instructional process without losing the student focus on the material being presented. Gravitation towards learning best described how many students felt about this process.

Instruction

The remaining 44% reported the instructional process was most meaningful. Many students presented the instructional stage as key and as the part of the direct instructional model that was absolutely imperative. Others felt elements such as guided practice, independent practice and checking for comprehension were most important. A male student from College C summarized his opinions about lecture:

> I think lecture is one of the most important things; this is when you are able to sit and relax, listen to what is being said. I know for myself I can only do one thing at a time. I can't sit and listen and try to take notes, it doesn't work for me. If I spend time note taking, it takes away from my listening and I miss parts of the lecture. The lecture is better when that is all that is expected.

While the majority reported the lecture to be the most important part of the instructional experience, opinions varied on the importance of the various steps that can accompany the lecture itself. Individual learning styles dictated how students felt about other steps such as guided or independent practice. Some students preferred an interactive approach, using collaborative learning concepts to practice what had been taught. Others were most comfortable working independently and favored a self-study approach.

Closure

All participants indicated that closure was the least effective part of direct instruction. Student comments such as "Closure doesn't do much for me; I might be interested to know what is happening next time but probably not," were typical of the statements made concerning closure. Many students reported that this segment of the direct instruction model was totally unnecessary. A few commented that peer pressure on the collegiate level caused this step to be awkward and pointless. Reportedly, students often feel uncomfortable or embarrassed asking questions at the end of a lesson. It signals to fellow classmates that they did not fully comprehend what was covered and makes them look less intelligent in the minds of their contemporaries.

Figure 2 represents the importance of the various stages of the direct instructional model, as reported by the participants:

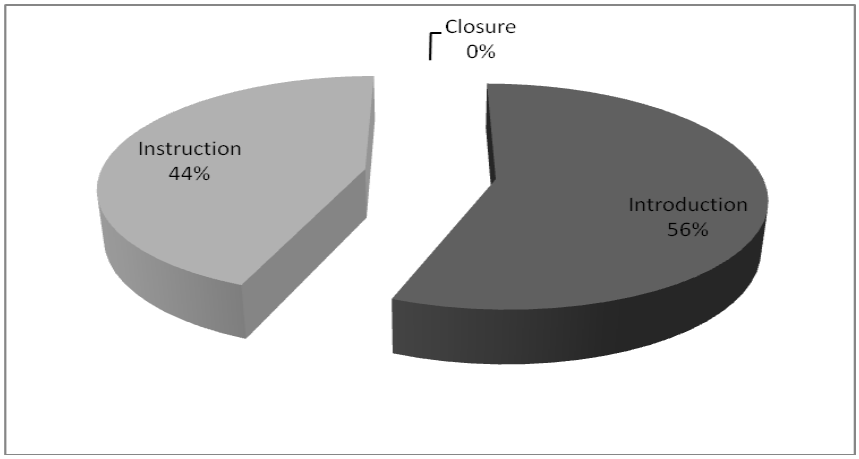

Figure 2: Community College Student Perception of Direct Instruction

The Importance of Sub-sets within the Three Elements

Students were asked to comment on the importance of the various subsets or components of each of the main elements of the direct instruction model. The introduction contained three areas of emphasis, including: the anticipatory set, review from the previous lesson, and stating the objectives, verbally or in writing. The instructional process consisted of the actual lecture, guided practice, checking for comprehension, independent practice, and feedback to students. Finally, the closure phase of the direct instructional model dealt with a review, asking for additional questions, and looking ahead to the next lesson.

Introduction

Anticipatory Set

Slightly more than half of the students who responded found the anticipatory set to be the most important factor of the introductory phase. Many comments were made by students that this first step of the lesson is most crucial. Statements such as “it gets us excited about what’s going on,” “it gets your attention,” and “it gets you in the mood for what you’re doing that day” were among those that supported the importance of this

phase. Students stated it was at this point that an instructor commanded the attention of the class and many expressed the belief that this step sets the tone for the entire class period. A female student from the College C focus group best summarized her thoughts this way:

> I think the most important part of the introductory phase is the anticipatory set because you have to develop interest before you can share about the subject. So if you can develop a big interest in what you are trying to teach, then you have captured the attention of the student. Then I'm interested, then I can learn, then I can repeat back to you whatever I've comprehended.

Other students felt that if they did not become engaged at the beginning of a lesson, the value of the actual instructional stage may be lost.

Review

About one-third of students thought that reviewing the previous lesson was most important, indicating that taking them back to the last class period helped revive their memories and prepared them to learn. "The review of the previous lesson refreshes your memory of what you've done before," and "It's nice when you walk into a class and pick up where you left off, to know what you did the previous day even if you were there" were both student statements made in support of reviewing the previous lesson. A male student from an individual interview at College A elaborated:

> To me, the review is the important part. It refreshes your memory of what you've done before. When you hear something over and over, when it comes time for the test you might be able to remember it more than if they just said it once and go on about their business. The points that they bring up in class are obviously going to

be the important stuff that you're going to need or need to know later because it's something important that they needed to bring up to you. That's what we learned last time or that's what we talked about last time.

Stating Objectives

A small percentage of students reported that stating the objectives, either verbally or in writing, was most crucial. A student from College B who felt stating objectives should be most important said "I feel the instructor has to know what he or she wants to do to even get the class going. They have to know what they're going to do throughout the lesson." Other students implied that stating the objectives was unimportant and did not need to be a part of the introductory phase. A student from College C even went so far as to say, "Most students probably really don't even care what they're going over." Another said, "Stating objectives is least valuable because it can be confusing."

Figure 3 represents the critical elements of the introductory phase of the direct instruction, as identified by the participants:

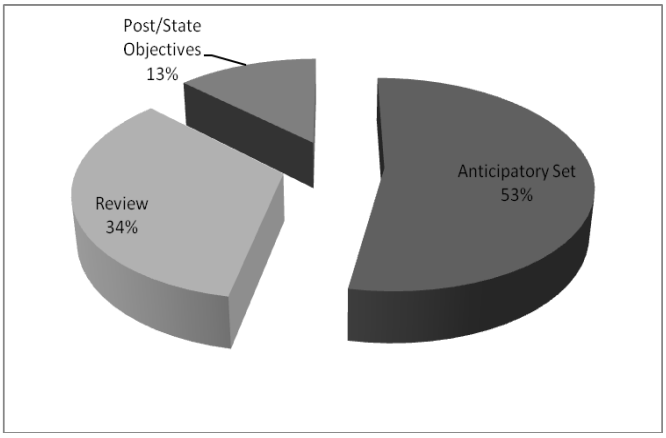

Figure 3: Community College Student Perception of the Introductory Phase of the Direct Instruction model

Instruction

The Lecture

When considering the importance of the various steps of the instructional process, the majority of students chose the actual lecture as being most important. Several students stated that learning would be impossible without the lecture. In a brief but strong statement one student said, "You can't go anywhere without a lecture." A male student from College C stated in an individual interview:

> I like the lecture; it's the meat of the discussion. I think some of the instruction does not necessarily tailor to the class itself. I would expect math to be taught differently than psychology. The lecture is where we're going to get the material. Everything is based off the lecture.

Guided Practice

A slightly smaller group of students felt guided practice was most important, second only to the lecture. Some of the students who found guided practice of utmost importance commented that lecture with strategic practice immediately following imbeds the concepts into their minds and helped them comprehend the information to a higher degree. It also provided a systematic means of instruction. A female student from College A advised:

> Guided practice is most important for me because I like to see how it's done and then they can explain it as they go. If you have any questions, you can just ask them. And like they're showing you, step-by-step.

Checking for Comprehension and Individual Practice

While a few students regarded checking for comprehension as most important, most felt this was a part of the entire process and therefore, ordered it lower on the scale of importance. One student even went so far as to say checking for comprehension "makes me anxious." For this student, the thought of an instructor calling on a student and the student perhaps giving a wrong answer takes away from the student's ability to relax and learn.

An even smaller number of students found independent practice as most significant. No student found providing feedback as the most important aspect of the instructional process. Some thought it was a necessary part of the progression, but the majority believed it to be of lesser significance.

In summary, the lecture and guided practice were rated as the two most important elements of the instructional phase of the direct instruction model. Checking for comprehension, independent practice, and providing feedback were all mentioned by students but proved to be an insignificant part of the process in the minds of the participants.

Figure 4 represents community college student perception of the importance of the instructional portion of the direct instruction model:

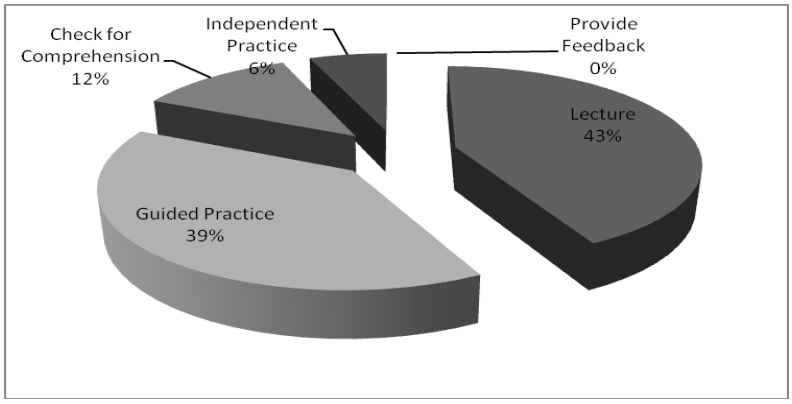

Figure 4: Community College Student Perception of the Instructional Phase of the Direct Instruction model

Closure

Review during Closure

When focusing on the three general categories of closure, slightly more than half of the students who responded to this question chose the review as most important. The review helped them synthesize the lesson and brought closure to what they had learned. Some students viewed the review as the key to comprehension. In an individual interview, a male student from College B, said:

> A lot of times you leave class and the only thing you remember or the only thing that is fresh in your mind is what you just covered, you just shut the book. If you do a quick review, that's what sticks in your mind. You have a clear memory of everything that was covered.

Looking Ahead and Addressing Questions

A quarter of respondents thought looking ahead to the next lesson was the most significant element of closure. These students believed it important to know what would transpire during the next class period and felt better prepared. Statements such as ". . . looking ahead to the next lesson is most important because nothing else is going to come close to touching what looking ahead would have" supported the strong sense of importance some felt for this portion of closure.

Finally, a small group of those surveyed believed asking for additional questions was paramount. Some students felt it gave a second chance to ask questions they might not have asked during the lesson. A student from Focus Group B explained, ". . . some

people need a little more time to get their courage up." Several students also commented that classmates are sometimes apprehensive to ask questions at the end of a class period. The questioning implies to other students that they were unable to understand the lesson and makes them look unintelligent.

In summary, a little more than half of students who commented on the closure phase of the direct instruction model indicated the review was the most important element. Looking ahead to the next lesson was essential to one-fourth of students who participated in this inquiry. Asking for additional questions fell slightly behind, with almost one in five students committing to this tenet of closure.

Figure 5 represents community college student perception of the importance of closure relating of the direct instruction model:

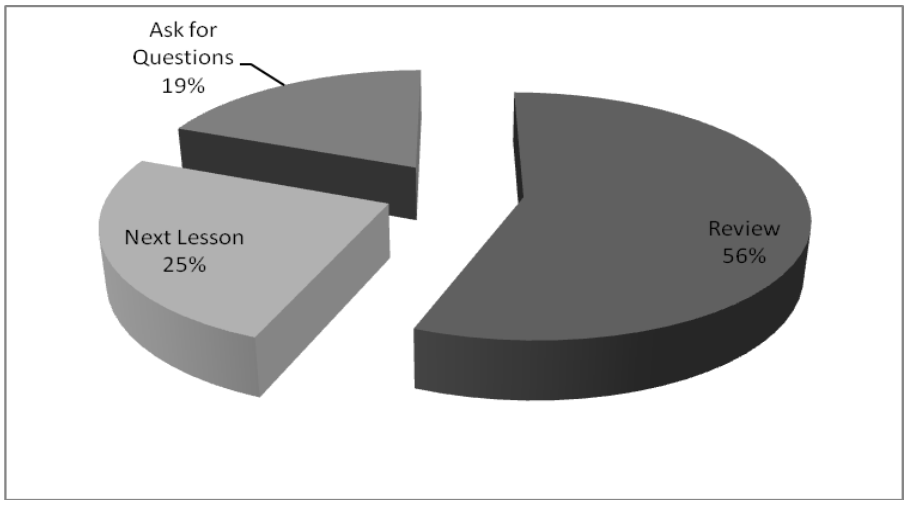

Figure 5: Community College Student Perception of Closure and the Direct Instruction model

Limitations to Student Ordering of Importance

Instructional Enthusiasm

As noted above, participants in this study overwhelmingly found instructor enthusiasm to be the most important element regarding effective instruction. Seventy percent indicated that this element of effective instruction was more important than the others. Comments such as "I think it's of utmost importance," "Passion is huge," and "It's definitely important, it's what brings you in" demonstrated how strongly students felt about this element of the instructional process. However, instructional enthusiasm that is common in community college classrooms was reported as both positive and negative. A female student from College C described how enthusiasm is not always appropriate:

> Sometimes I think teachers can throw out a little bit too much humor. Sometimes the humor they use isn't appropriate to begin with. Like if they tell a joke or refer to something that may not be related to the class at all, but it's just kind of to lighten the mood. Some of the choices of the jokes are inappropriate to share with a class. You need to be sure you don't offend anyone and sometimes instructors go a little overboard with that and refer to words that probably shouldn't be used.

Most students also agreed that in order for instructional enthusiasm to be most effective, the instructor must improve his or her zeal for teaching and provide instruction to students in a way that is both helpful and useful. Teachers who try to be "too cool" or overfriendly with students lose the respect of the class.

Three definitive themes emerged as the topic of enthusiasm was discussed. Some students stated that enthusiasm was absolutely essential to the instructional process.

Others found it a bonus, not necessarily needed but an added value to teaching. Some students specifically stated there needed to be balance between the instructor and student with enthusiasm and that the passion for teaching and learning was reciprocal.

One-third of students indicated enthusiasm was absolutely crucial to the learning environment. They felt enthusiasm was the tool an instructor must use to actively engage a college class and maintain their attention throughout the lesson. Many of these students noted that enthusiasm, when used properly, draws attention to the lecture from the beginning, helps them to connect to the material, and eventually enhances comprehension. A student from College B advised, "It engages you, makes you care about what they are talking about and you see that it is important." A student at College C stated "I think it's a connection between the teacher and the student. It helps them learn and helps ease the burden of trying to make them learn." Students also mentioned that an enthusiastic instructor encourages attendance, actually draws students to class as a result of the atmosphere they create.

An additional benefit discussed by students who found enthusiastic instruction of high importance included speculation that passion is contagious and has a profound influence on those in the class. These undergraduates, approximately a quarter of those participating, reported a passionate teacher creates a reciprocal environment and reported that enthusiastic instruction resulted in a higher participation among classmates. Statements like ". . . if that's what they enjoy, it makes it a lot easier for you to be alert and learn" and ". . . they're excited because not only is this something they love but they're passing it on to someone else who may feel the same way about it" supported this train of thought. Students also felt that increasing their excitement towards learning and

a higher degree of involvement resulted in higher levels of understanding of the materials being presented. Several students reported a direct relationship between an instructor's passion for the subject and the student's enthusiasm to gain knowledge of what is being taught and learned.

Not all students believed that an enthusiastic teacher could create an effective instructional environment unilaterally. Just less than one in five students stated there must be balance or middle ground when it comes to enthusiasm. A male student enrolled at College B offered this opinion of instructional enthusiasm in the classroom environment:

> I would say enthusiasm isn't really that important. I think it is at the discretion of the student and the class. Even if they want to make a good grade or it's something they really like, you can go home, look over and study it, you're going to retain what you want to retain. If he's [the instructor] just teaching the class, telling you everything you need to know, writing it all on the board, you're just copying it down, you want to make a good grade, you want to retain the information, you're going to go home and copy it down a few times. I know personally if I type up my notes, after I write them down, even if the teacher does just lecture the entire hour, I tend to retain the information after I type it up and look it over before the test. Enthusiasm does help out for me, especially if it's a really early class and you feel kind of tired, if that teacher is kind of excited then that's going to wake you up and get you interested. More or less, it is at the discretion of the student.

Other students reported some instructors attempt to be overly friendly with students, crossing the line when it comes to appropriate familiarity in the classroom setting. A student at College C commented, "They try to be too buddy-buddy with you and I'm like you're still the instructor, not our best friend." A common theme developed that indicated the participants felt most comfortable with an instructor who was able to maintain an enthusiastic equilibrium in the classroom, provide a light atmosphere for learning but maintain professional distance. A balance of an eagerness to teach, as well as a good grasp of the subject matter were most important to 19% of those who responded in this area.

Finally, about a quarter of students indicated that enthusiastic teaching was an additional benefit, but not totally necessary. This group noted that they had taken classes in the past in which the instructor was not particularly excited when presenting the material, yet learning occurred. A male student from College A commented about a math teacher and said:

> I had a really good math teacher my sophomore year and she wasn't too enthusiastic, but I got every single bit of it. I never had a problem with anything. Even though she wasn't enthusiastic but because math is my favorite subject, I was fine, she taught me well.

Several other students mentioned enthusiasm as being a positive, easing the burden of learning. But the general consensus among this relatively small group of students was that material itself was the most important part of the process, not necessarily how it was presented. They reported the presentation of the material, specifically enthusiastic instruction, as being a benefit not a necessity.

In summary, the majority of students were clear that instructional enthusiasm was an absolutely critical piece of effective instruction but some believed that while enthusiasm stimulated the learning environment, a balance of enthusiasm is best. Finally, a small portion of students reported instructional enthusiasm as a benefit, not a requirement for learning.

Observations on Instructional Technology

During the course of the various individual interviews and focus groups, 32 students responded directly to the research question regarding the use of instructional technology. The majority of respondents reported that instructional technology was best used as an aid or a supplement and a small percentage commented that instructors did not use technology correctly. An even smaller group suggested technology was problematic due to factors such as out-of-date materials and an over-reliance on technology on the part of the instructor.

The majority of students (59%) implied the best use of technology was as an instructional aid and not as a teaching method. They commented that the visuals help to enhance a lesson and create relevant illustrations that augment comprehension. A female student from College A who participated in a focus group summed it up simply and stated:

> It's a good supplement. You don't have to have it to learn but it helps along with your experience to help better understand what you're talking about. Some of us are visual learners and if it's projected onto a Powerpoint, if a teacher says what it is, you can hear it and see it, it helps you learn a little bit better.

Powerpoint presentations were frequently mentioned as the most common form of applied technology, accompanied by some negative comments about the improper use of videos. Students also felt that the use of technology is on the increase and expectations of quality of its use rise on a semester-by-semester basis.

Several participants reported supplemental use of instructional technology stimulating because they had not been exposed to a high degree of its use during their high school years. A few commented that the secondary schools they attended could not afford the equipment that is typical at community college campuses. They found the introduction of technology into the instructional process to be refreshing and invigorating, an added stimulus that helped to increase their interest in learning.

However, not all students were as impressed with the use of technology in community college classrooms. Some of the students reported that many of the instructors were unable to properly operate the technology that had been made available. Students were concerned that the level of proficiency with the available technologies was very low among many instructors and the results were often detrimental to the learning environment. They felt as if technology was being forced upon these instructors and their inability to use it became evident during their class time. A male student from College C made these comments during an individual interview:

> I actually have a few professors who have been around a few years, they're pushing 60. They're not able to run the computer or DVD efficiently. I have instructors who go to the wall and stare at the AV controller in amazement.

Other students thought instructors should be trained to be at least at the student's level of proficiency, which could be a challenge for many older instructors who are unfamiliar with today's technology.

Another issue reported was the use of instructional technology as a substitute for good teaching. Eighteen percent of students indicate that instructors have an unhealthy dependence on technology. They stated that some of their teachers use technology as an alternate or substitute for teaching. One male student who participated in a focus group at College C explained:

> I think the enhancements are just a simple crut0ch. A lot of things, like the DVD's and stuff, is just like getting the teacher out of doing the research and coming up with creative ways to present the material. Some teachers rely on things like DVD's to do the teaching. You put the DVD in, push PLAY, and the only thing they do is sit there and push PAUSE. And if the DVD doesn't work, the class is cancelled. Plain and simple.

There were also several comments made that insinuated instructors would be at a total loss if the computer or the online platform would crash. The excessive use of technology, especially videos, was also reported as a concern.

Finally, students were also concerned by the use of outdated materials. They pinpointed the practice of some instructors who repeatedly play older videos to be highly problematic. Comments such as ". . . it helps when they're not from the 80's," ". . . you're distracted by what they're wearing," and ". . . videos that use the word psychedelic should be banned" are a few examples of how many felt about outdated videos. Students said the utilization of obsolete or archaic materials, especially videos,

was a turn off and a waste of their instructional time. Some thought the college was responsible and needed to update materials available to their faculty.

In summary, the majority of students who responded to this question suggested instructional technology is best used as a supplement to teaching. Students also voiced concerns about instructors who cannot properly operate the equipment available or tend to rely too heavily on technology. They additionally mentioned various issues regarding outdated materials and equipment.

Summary

The results of the three focus groups and nine individual interviews present a clear view of student perceptions of effective instruction in the community college instructional environment. The 44 students who particpated in the study expressed their distinct impressions regarding the various methodologies involved in the teaching process. These students overwhelmingly chose instructional enthusiasm (70%) as the key element of effective instruction. A smaller percentage found the direct instruction model to be most beneficial and the percent favoring the use of instructional technology was found to be minimal—one student.

The participants who found instructional enthusiasm as the most important element of effective instruction varied in their opinions of exactly how significant enthusiasm is. Some stated it was an absolute, while others saw enthusiasm to be important but less momentous. Just less than half of those who responded reported instructional enthusiasm as a benefit to teaching, balanced with other strategies.

The direct instruction model was found to be the second most effective element of instruction. Students reported the introduction (56%) to be the most important part of

this strategy, followed relatively closely by the instructional phase (44%). Students agreed that the least import step of the direct instructional process was closure. Some students felt closure was not always necessarily needed.

Finally, the participants stated that the use of instructional technology was least important to them. They were more concerned with the direct instruction model or instructional enthusiasm. Many commented that used properly, instructional technology could greatly enhance a lesson. But several students were quick to respond that it is best used as a supplement and not a technique. The general consensus of the group reflected the notion that students are typically on a higher level of technological awareness than their instructors. The students also suggested more training for most of their instructors in order to bridge the technology gap between the two groups.

The next chapter focuses on various recommendations resulting from the findings of the individual interviews and focus groups. Components of effective instruction, including instructional enthusiasm, the direct instruction model, and the use of instructional technology, are addressed. The suggestions made in the following chapter may be used by Missouri community college educators to improve the instructional environment in community college classrooms.

CHAPTER 5

ANALYSIS AND DISCUSSION

This chapter includes a brief look at the problem statement, a review of the methodology used in the study, the significance of the study, summary of the results, and an analysis of the results and their implications for community college instruction. The final portion of the chapter discusses recommendations for further research.

Statement of the Problem

A considerable amount of research published on instructional effectiveness focuses on alternatives to the traditional lecture approach to teaching, but the lecture still remains a dominant form of instruction. Despite encouragement to use other methods and to learn other techniques a number of faculty, particularly older and part-time instructors, continue to teach as they were taught, using a traditional lecture approach. Recent studies have also suggested that past focus on matching instruction to various student learning styles may not have scientific support, and that the most critical element of instructional delivery is to match instructional style to the content being presented (Bash, 2005). Many, however, do not utilize the tools that can improve teaching using the lecture method, particularly those that are incorporated into methodologies referred to as "direct instruction." The effectiveness of the faculty might easily be improved if they became aware of and used the techniques that still fall within the general framework of "lecturing," but that students find particularly effective and engaging.

Prior research on effective instruction has focused primarily on the four-year collegiate sector, and has largely been quantitative. As a result, the voice of the typical

community college student simply has not been heard. This is particularly true as it relates to how direct instruction can be made more interesting, engaging, and effective. Without literature based on the community college student perception of effective instruction, it is difficult to prepare full-time and adjunct instructors to more effectively teach their students. Community college administrators, deans, division chairs, and others must have access to meaningful, accurate data if they are to provide significant staff development programs designed to improve instructional methodologies.

Significance of the Study

This study was designed to identify key elements of effective teaching within the general parameters of "direct instruction," as perceived by community college students. Since qualitative research in this area has been limited, denying us the rich description that can be derived from personal student accounts and experiences, there has been a need to research the topic of effective instruction using qualitative methodologies. The use of student focus groups and interviews can provide access to data that cannot be obtained using quantitative methods (Morgan, 1998). The "student voice" is a powerful instrument and must be incorporated into the research regarding effective instruction.

An interpretation of the community college student perspective of effective instruction will provide higher education professionals, such as faculty members, administrators, and researchers, with information regarding effective instructional methodologies. The findings of this study supply supplemental information to those interested in staff development, and will be extremely useful to those who are developing in-service programs for new and existing faculty who wish to use this instructional approach or who have found it to be their most comfortable style. By exploring the

student perspective, a new awareness of students' perception of effective instructional methodologies can be identified and used to improve the current educational environment.

Review of Methodology

This study focused on the student perspective of effective instruction utilizing the direct instructional model, specifically as presented by Hunter (1982) and Rosenshine (1983). In order to examine the student perspective, the researcher chose a qualitative method approach to gathering data. Qualitative research allows the researcher to explore an issue in greater depth and detail than is allowed by quantitative inquiry. There is a certain sense of intensity and openness associated with this type of research that one does not find when conducting a quantitative study (Patton, 2002). Interviews, observations, and documentation associated with this process allow the researcher to gain a rich, humanistic perspective that typically cannot be found when using quantitative methods (Lee, 1999).

Research Method

The research process most applicable to this study is a qualitative method employing the use of focus groups and individual interviews. These methods allowed the researcher to carefully listen and document the specific thoughts students have about effective instruction. The participants who were involved were able to enter into a discussion of various elements of instruction and had the opportunity to share their beliefs and perceptions about the topic (Krueger & Casey, 2000).

The focus groups and interviews gave students the opportunity to state what they thought and felt without the restraints of a pencil and pencil survey. Although their

discussion was guided by a moderator, they were able to shape the discussion in ways not limited by the use of a survey (Greenbaum, 2000). Natural, comfortable environments were provided so that the participants could feel at ease and able to express their opinions in an uninhibited manner. There was no attempt to reach consensus; the researcher simply sought to gain the candid opinion of each individual. The use of both focus groups and individual interviews at three different colleges allowed for triangulation of findings that enhanced the study's trustworthiness.

Research Questions

The following research questions guided this qualitative study:

1. According to community college students, which of these three elements is the most important element of effective instruction?
   a) Instructional enthusiasm
   b) Direct instruction
   c) Instructional technology
2. Which of these instructional techniques (instructional enthusiasm, direct instruction, instructional technology) is viewed as least effective by community college students?
   a) Instructional enthusiasm
   b) Direct instruction
   c) Instructional technology
3. What process of the direct instruction model is viewed by students as most important and why?

4. How important is instructor enthusiasm in the delivery of the instructional process?
5. What role do students see technology playing in the instructional process and how important is it?

Analysis of Results

Instructional Enthusiasm

As noted in the presentation of results in Chapter 4, students overwhelmingly chose instructional enthusiasm (70%) as the most important element of effective instruction. Students felt strongly about instructors possessing a strong desire or passion to teach. Comments such as ". . . it's (instructional enthusiasm) of utmost importance," ". . . passion is huge," and ". . . it's the *most* important" exemplified how strongly most students felt about instructional enthusiasm. Many students implied that their effort in the class was often directly related to the desire of the instructor to convey his or her material in a passionate or meaningful way.

Instructional enthusiasm was viewed differently by students and there were distinct differences noted in what enthusiasm entailed from student to student and group to group. Some equated enthusiasm directly to the instructor's passion or zeal for the subject matter. Others defined instructional enthusiasm as an ability to present materials in an enlightening manner, almost "entertain" the class through the use of humor or wit. In any event, students unquestionably found great value in an instructor's ability to present materials in an enthusiastic manner.

Students also reported that instructional enthusiasm was instrumental to learning. They stated that instructors who are enthusiastic create an educational environment that

stimulates them to engage and remain motivated throughout the class period or through an entire course. Many cited examples of how an enthusiastic instructor helped them to understand a particular concept or theory that they may have struggled with had the lesson not been delivered with passion or in a manner that closely held their attention.

These comments directly reflected the observations of Bandura (1977), who stated that the learning process would be extremely laborious if students had to rely upon themselves to gain the knowledge they require. Bandura's supposition, based on behavior modeling theory, stipulated that information is most easily accessed and comprehended as the result of observation and modeling. He observed students to be most receptive when their cognitive abilities are stimulated by a particular action on the part of an instructor that draws interest and keeps them engaged. Later, Bandura (1977) reasoned, students find it easier to recall what they have learned and grasp the details of the concepts that were presented. While it does not seem to be particularly profound to learn that students value instructor enthusiasm above any other single element of teaching, the implications of this finding are both sobering and encouraging. They are sobering in that they suggest that even the most knowledgeable faculty can be rendered ineffective by their own classroom behavior – by failing to show a spark that ignites the interest and imagination of those they teach. Faculty may easily say "my job is to impart the information; not generate a receptive spirit in students." But particularly in the community college setting, their job is to *teach*; to create a learning environment in which students thrive. The finding is encouraging in that it demonstrates that students will respond when that enthusiasm is modeled, as Bandura recommended.

Bandura's behavioral modeling theory laid the foundation for other educational practitioners, who took his simplistic three-step process and expended its functionality. Hunter, Levin, Rosenshine, and Gardner are among notables who borrowed thoughts and ideas from Bandura's behavioral framework. The end result was the birth of several direct instructional models that establish the basic framework for most teaching approaches today.

Direct Instruction

Almost a third of the participants in the study found the basic framework of "direct instruction" the most important element of effective instruction. The students who most valued these components reported they were drawn to succinct instruction, defined by order and systematic teaching methods. They appreciated certain organizational processes characterized by this technique such as the use of stated objectives and a sequential approach to the delivery of the lesson.

Slightly more than half of these students found the introductory phase of the direct instruction model the most essential piece of the framework. This is consistent with the finding that enthusiasm is the most valued instructional characteristic. It indicates that students place great importance on the need to become engaged with both the instructor and what is to be learned. Just as enthusiasm 'connects' the students with the instructor, the introduction connects the student with what is to be presented.

Forty-four percent alluded to the actual instruction process as being most meaningful. Closure was deemed unimportant by all students and most had little to no use for it as a part of their learning experience. There were strong indications in the data that students have established expectations, based on educational experience, for how

instruction should occur and each step in the instructional process is seen to have value. Their observations support Piaget's Constructivist approach to learning in that students expect what they will be taught to be tied to what they have learned in the past and related to what will come later. When expected steps in the learning sequence are missing, students either fail to engage or become confused. This may be particularly true of community college students who often are less mature as learners than some of their university peers. Here again, the implications are critical to strong faculty development. Although instructors need to be granted considerable latitude in how they conduct their classes, they need to be aware that structure has learning value, and that when major elements of the expected learning sequence are missing, students may get lost or may not feel that the instructional process is complete.

When various subsets of the direct instruction model were discussed, students reported the anticipatory set to be the most significant portion (53%) of the introductory phase. This again supports the findings concerning enthusiasm and Bandura's assertion that gaining student's attention is a key to further learning. Students liked the idea of instructors using "attention getting" tactics to get the class focused and on track. Review of the previous lesson was of secondary importance, helping students to refresh their memories of the last class period's activities. Finally, a small percentage (13%) reported that the stating and posting of objectives was the most critical part of the introductory phase.

The participants who indicated the instructional process to be the most important component of the direct instruction model identified the lecture (43%) as being the crucial phase of this step. Others reported guided practice as their first choice, a close

second to the lecture phase. Lastly, checking for comprehension and independent practice had much lower support than the other tenets of instruction.

Although most students felt that either the introduction or the instructional process was most important, many still had comments concerning the importance of closure. The majority of students thought that the review was the key part of closure, while fewer perceived looking ahead to the next lesson as the main factor of this phase. An even smaller portion of students identified asking for additional questions as essential to them.

Although students varied in terms of the weight they placed on various elements of the direct instruction approach, there was general agreement that each phase outlined by Hunter (1982), Levin (1981), Rosenshine (1983), and others, has value. It is perhaps surprising that students rated the anticipatory set above the actual teaching portion of the presentation but student comments suggested that unless the class initially becomes engaged with the instructor and sees a need for modeling the instructor's interest, using Bandura's words, the content of the lecture will lack a sense of importance. The clear message from students in the study was, "First, show me why it is important for me to learn, and then tell me what I should know about it." There is in this observation a powerful lesson for faculty about the difference between "presenting information," and "teaching for learning." Students understand the difference between being "lectured at," and becoming actively engaged with the material. Without demonstrated passion for the subject by the instructor and a conscious effort to draw students into that enthusiastic embrace of the information to be shared, learning may never occur.

Instructional Technology

Finally, the participants involved with this study were very open with their opinions concerning the use of technology in the classroom. While many commented on the relevance of instructional enthusiasm as a teaching methodology, only one student in 44 indicated that use of technology was the most important of the three elements.

The majority of students reported that the use of instructional technology in the community college is generally most effective when it is used as a supplement to teaching. Students reported that although the approach has importance, there are a number of issues that are restrictive and limit the proper use of instructional technology. First among these are the skill set of instructors, inefficiency of usage, dated materials, and the lack of commitment of educational institutions to support the techniques.

One of the most prevalent forms of instructional technology available to community college instructors is on-line platforms such as Blackboard. Many instructors are required by their institutions to use this tool on a limited basis, such as to report grades, post syllabi, etc. Students complained that many of their professors had very limited skills and could barely perform the minimal functions required to operate the system. They also stated that instructors were so unskilled that they could not properly operate classroom computers or DVD players capably. The lack of technological skills displayed by these faculty members ultimately detracted from the course and diminished respect among some class members.

Many students criticized their particular educational institution for not providing adequate faculty training and/or affording instructors the equipment needed to function in the classroom properly. Most of the complaints centered on improper training for

instructors, with an understanding that a generational gap plays a part in their dissatisfaction. Students recognize they have been raised using computers and many of their instructors have not had the same experience. Although they realize a generational gap exists, many students feel it is the responsibility of the college to bring those who are teaching up to modern standards of technology use.

The implication in this finding is that although students see effective use of technology to be helpful, its ineffective use is a distraction and may suggest, again relating this observation to modeling, that the instructor should not be viewed as credible in other areas of learning. The instructor is essentially saying I am largely incompetent in this area where most of you have considerable skill. These skills are now considered basic to functional literacy and I acknowledge that I lack them, but you should trust me to be competent to teach you in other areas.

Students stated that until a faculty member is competent, he or she is better off not trying to use technology until properly trained. Institutions should, however, see it as critical to train faculty in areas that students see as being part of today's fundamental knowledge. Colleges often emphasize with students that they are being prepared for the new 'Information Age' yet they demonstrate at the same time those who are supposedly models of instructional ability have only the most rudimentary grasp of the tools of this new age.

Many institutions recognize that a number of their senior faculty are not well versed in the use of technology, but colleges are often inclined to "wait these faculty out" until they retire, resigning themselves to either little use, or poor use of technology by this instructional group. In doing so, colleges should recognize that they potentially are

compromising learning and students' attitudes about the credibility of faculty expertise, and a more pro-active approach to faculty training in this area may be warranted.

In summary, community college students felt strongly that the effective use of enthusiasm is by far the most important element of effective instruction. Many found value in direct instruction and reported the introductory phase to be the most important element of the model. The use of instructional technology was found to be best utilized as a supplement to instruction and not as an actual methodology. Students were also adamant that instructors should only use technology if effectively employed.

The final section of this study considers the results reported above and provide recommendations regarding these findings.

Implications of Results

The participants in this study clearly indicated which tenets of effective instruction were most important for them and gave descriptive narratives in order to support their beliefs. However, simply identifying student perspectives does not enhance instruction in community college classrooms. The following portion of this study offers suggestions for implementing strategies that may help colleges improve instruction and learning.

Proactive Initiatives

If community colleges are going to satisfy the needs of their students, they must make concerted efforts to both initially hire instructors who teach with passion and enthusiasm and provide staff development opportunities that help instructors improve upon their current skill set. In other words, the key to improving instructional enthusiasm, instituting better direct instructional methodologies, and progressing with

instructional technologies in community college classrooms requires both a proactive and reactive approach.

As a starting point, community college educators must begin to assess the learning needs and interests of their students in greater detail, using more diverse means of data collection. Various methods should be used to effectively evaluate instruction (Gillespie, Hilsen, & Wadsworth, 2002). Many two-year and four-year schools evaluate instruction on a semester-by-semester basis by using survey devices that are limited in scope. Likert-scale and multiple choice questions that are easily recorded on Scantron forms are popular tools used to evaluate a course or instructor but can ultimately bias the true student point of view. Quantitative data collection methods are limited both by the questions selected and by the willingness of the students to answer them thoughtfully, and do not always allow students the opportunity to fully voice their opinions.

In order for two-year schools to properly evaluate student perspective, greater utilization of qualitative research methods needs to be employed. A mixed methodology approach, using both quantitative and qualitative techniques would be an improvement for schools that currently limit themselves to surveys only. The channel for student opinion must be expanded if faculty, staff, and administration are to better gather and understand the true perspectives of community college students. The creation of student focus groups specifically designed to comment on academic issues would certainly benefit colleges and their students. By soliciting the descriptive details this process provides, community colleges would be better informed as to their student sense of what is working well in instruction and what is not.

A second practical method of improving instruction in community college classrooms involves the strategic selection of faculty during the initial employment process. If the overwhelming majority of students indicate specific instructional traits are of utmost importance, it is the responsibility of the community college to seek instructors who possess these attributes. As new positions become available, whether full-time or adjunct, community college administrators should enhance the human resource process to include measures that help identify candidates who incorporate into their teaching the methodologies most important to students. The research indicates, in fact, that in selecting faculty we may place too much emphasis on credentialing and insufficient emphasis on enthusiasm, personality, and the ability to engage effectively with those being taught.

Because most teaching candidates would certainly report that they teach with enthusiasm, use systematic instructional measures, and integrate technology into the instructional process, it is important to do more than simply ask if they are enthusiastic, use direct teaching methods, or incorporate technology into their lessons. Requiring potential instructors to present a short lesson to the interview committee will aid in determining how well these strategies are implemented. Checking references vigilantly and perhaps interviewing former employers and students may also be advantageous when trying to determine an instructor's level of effectiveness.

Reactive Initiatives

Carefully screening prospective instructors can help to enhance effective instruction among a small percentage of faculty members but the vast majority is already gainfully employed and currently teaching in classrooms. Current faculty members are

the real key to enhancing instructional enthusiasm and their skills can be determined and augmented through a variety of methods. Assessment and faculty development are the two key components of this process (Lawler & King, 2000).

Before the instructional process can be enhanced, a determination of the existing levels of instructional enthusiasm must be completed. Evaluations can be administered in a variety of ways and by different groups of individuals who interact with instructors. Classroom observations, both by students and administrators, are key phases of the process (Simpson, 2005).

Most community colleges disseminate student course evaluations each semester and these surveys should incorporate opportunities for students to respond to the overall effectiveness of the instructor and his/her instructional enthusiasm. In order for the survey to be most useful, it should provide students the opportunity to comment on open-ended questions that allow for extended dialogue. Since students observe that there are both appropriate and inappropriate displays of enthusiasm, questions must be designed to differentiate between inappropriate or unrelated displays of humor, inappropriate attempts to become over friendly, and true professional demonstrations of passion for the subject and its importance. The purpose of the assessment instrument must be to determine how effectively the faculty member engages the student with the learning process and the information to be learned.

College academic administrators should also be observing in the classroom on a regular basis (Rosenshine, 1995). Their evaluation or critique should always encompass comments regarding instructional enthusiasm since this element of effective instruction is crucial to most students. The college faculty and staff should be aware of the faculty

members who most effectively display enthusiasm so that they can mentor incoming instructors and provide assistance to current instructors.

Finally, the key element to providing college students the effective instruction they desire is a successful staff development program (Lawler & King, 2000). The majority of community colleges typically offer current faculty and staff opportunities for staff development through events such as convocation, annual conferences, summer institutes, and in-service opportunities. In addition, other avenues such as intensive workshops, newsletters, and hand-outs can also help to bolster effective instruction.

Staff development programs are crucial when it comes to meeting the requirements of students. Once the needs have been identified, it is a successful staff development program that provides instructors the tools they need to meet and deliver the required product to students. It can be a long journey from assessment to appropriately addressing student desires but it is well worth the time and effort required to do so.

Training instructors to teach with enthusiasm can be a daunting task. While most faculty members have little trouble describing certain dynamics associated with enthusiastic teaching, there is not a set method or regimented strategy that clearly defines the tenets of enthusiasm in instruction. Professional development activities centered on acquiring or bolstering effective enthusiasm may be best accomplished by group analysis of videotapes of actual teaching. As instructors scrutinize the examples before them, they become keenly aware of various motivating techniques that they may lack or need to improve. Simple discussion of the examples can comfortably trigger instructional change in style and approach. Later, the same instructors involved in the discussions may pair with a trusted colleague and videotape one another during the instructional process.

Helping one another recognize areas of improvement and continued discussions regarding strengthening passionate teaching can help the learning environment come alive (Lowman, 1995).

Second, community colleges must continue to train and retrain instructors using the direct instruction model. Research has shown that the direct instruction model has learning advantages over other commonly used instructional programs (Watkins & Slocum, 2004). The task of teaching instructors to be more enthusiastic may be complex but preparing instructors to teach using the direct instruction model may be far less problematic.

Over the past few decades, direct instruction has been developed and refined. Many educational publishers now incorporate the tenets of the direct instruction model of teaching into their curriculum packages and the lesson plans are often fabricated based upon its concepts. In essence, instructors are now being provided systematic teaching strategies built right in to their curriculum by the textbook publisher.

The direct instruction model can also serve as an ideal topic for staff development sessions. There is an abundance of materials and information available on the topic and the concept is very straightforward. Most instructors who have an education degree are already well-versed on the topic and may just need slight remediation to help them remember what they have already learned.

Other instructors, such as adjuncts who do not have formal training with the technique, may require more in-depth training. Community colleges may want to prepare a handbook or manual for those who are totally unaware of the concept. By preparing

such a guide, those who typically do not attend college training sessions may familiarize themselves with the theory and apply it to their current teaching methods.

Finally, community colleges should address the growing technological needs of both full-time and part-time faculty members. Many current faculty members are not very well versed in the use of modern day technologies designed to help enhance teaching. Older instructors especially seem to struggle with instructional technology and are in dire need of skill enhancement.

Curriculum packages now come fully loaded with an array of Powerpoint presentations, links to enhanced websites, and a multitude of other teaching tools that require a higher level of competence to operate. Many of today's community college students, most of whom are already tech-savvy, welcome the use of technology incorporated into their courses. But these same students become very frustrated by instructors who are unable to efficiently operate the technology and see it as a distraction from the learning process.

Much like direct instructional theology, the use of instructional technology lends itself well to various learning opportunities provided by the college. Whether it be faculty in-service, staff development sessions, state conferences, etc., community colleges have a looming responsibility to provide training to enhance the technology skills of their current and future instructors.

While many educational institutions have spent years or even decades addressing a variety of educational trends and issues, it is time to refocus and return to the basics. Community colleges must carefully listen to the student voice and realign teaching methodologies to meet the needs of today's students. The new generations of students

demand instructors who lecture with enthusiasm, teach with some degree of organization, and incorporate technology into the process.

Recommendations for Future Research

This study has provided a brief glimpse of various elements of effective instruction and their importance to community college students. While several key components were identified and elaborated upon, there is still much more research that should be conducted regarding effective instruction and the community college student. The ongoing investigation of effective instruction will continue to provide the true student perspective and allow community college instructors to tailor their teaching methods to meet the needs of their students. The alignment of effective instruction with community college student learning styles should enhance the learning process and help to bridge the comprehension gap.

One variation on this study might include research that segments community college students into different categories. Traditional community college students, those who have recently graduated from high school, are attending college on a full-time basis, and are in the 18-24 year old age group, have grown in numbers in community colleges in recent years. However, non- traditional community college students, those who may have already entered the workplace, attend college on a part-time basis, and are above 24 years old, also constitute a large portion of community colleges. The study of both of these groups of students might help identify very different learning styles and needs and help instructors to better understand the needs of each.

Another related study would include more research on the topic of enthusiasm. Students overwhelming declared instructional enthusiasm as being most important to

them but their actual views of enthusiasm differed. Some students saw enthusiasm as an instructor's passion for the subject, while others appeared content with just being entertained. When coaching faculty to display greater enthusiasm, it is too easy for them to equate this with being an entertainer, while this may not be what students have in mind. A careful study focusing solely on enthusiasm might provide some interesting findings and help instructors better understand the exact needs of their students.

As new technologies are introduced, combined with the tremendous growth in the popularity of online courses, more research on the topic of instructional technology is certainly warranted. Every year students become more and more tech-savvy and the demand to integrate more technology into the classroom is certainly on the horizon. More research might be done to determine what technologies are most important to students, what instructors need to know specifically about technology, and if the use of technology has a discernable impact on the student learning process.

Finally, it would be interesting to see how students differ in their views of effective use of technology for instruction in diverse settings. Does the use of technology benefit two-year or four-year students the most? Is the use of technology most important to older or younger students? Do students who are exclusive to online courses and degrees perform as well or better than those who take the majority of their courses in a seated classroom? These are all good questions regarding technology and students who differ in their learning styles, backgrounds, etc.

The review of literature conducted for this study revealed a tremendous gap that exists in research directly related to community colleges. Although there is a significant amount of information available regarding four-year institutions, there is still ample

opportunity for more research to be conducted on the community college or two-year level.

Conclusion

The research findings have shown that the community college students in this study value enthusiastic teaching and systematic instruction most in the classroom. The use of technology was noted as important but best used as a supplement until instructors can effectively apply their expertise in a relevant manner.

As colleges and universities move into the new millennium, they must continue to assess the opinion of their students and what motivates them to learn. More importantly, educational institutions must act swiftly upon what they have learned. The focus on developing faculty members to meet student needs is crucial. Administrators should recognize the value of professional development and place a major emphasis on this crucial area of concern. There's an old adage that states "it takes an entire village to raise a child." In the case of educational reform, it takes the commitment of the entire organization to properly educate both faculty and their students!

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Appendix A

Informed Letter of Consent

Department of Educational Leadership

One University Boulevard
St. Louis, Missouri 63121
Telephone: 314-516-5000

Informed Consent for Participation in Research Activities
Perceptions of Effective Instruction: A Community College Student Perspective

Participant _____
HSC Approval Number _____ _____

Principal Investigator Stephen K. Biermann PI's Phone Number (417) 886-1970

Why am I being asked to participate?

You are invited to participate in a research study about a community college student view of effective instruction conducted by Stephen K. Biermann, Department of Educational Leadership, at the University of Missouri-St. Louis. You have been asked to participate in the research because you are a community college student and may be eligible to participate. We ask that you read this form and ask any questions you may have before agreeing to be in the research. Your participation in this research is voluntary. Your decision whether to participate will not affect your current or future relations with your community college or the University of Missouri. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

What is the purpose of this research?

The purpose of this study is to determine the community college student perspective of effective instruction. The data provided from the study should provide valuable information to community college faculty/staff/administration. The results of this study are intended to enhance the instructional process by informing instructors of the most important instructional elements or factors, according to community college students.

What procedures are involved?

If you agree to participate in this research, you can expect to:

- participate in an in-depth interview involving your perceptions of effective instruction, which will last approximately forty-five minutes.

-OR-

- participate in a focus group involving your perceptions of effective instruction, which will last approximately an hour and a half.

Both in-depth interviews and focus groups will be tape recorded so that the principal investigator may transcribe the data following the actual sessions.

What are the potential risks and discomforts?

There are no known risks associated with this research.

Are there benefits to taking part in the research?

There are no direct benefits to the student as a result of participating in the study. You will not be compensated in any manner for your participation.

Will I be told about new information that may affect my decision to participate?

During the course of the study, you will be informed of any significant new findings (either good or bad), such as changes in the risks or benefits resulting from participation in the research, or new alternatives to participation, that might cause you to change your mind about continuing in the study. If new information is provided to you, your consent to continue to participate in this study will be re-obtained.

What about privacy and confidentiality?

The only people who will know that you are a research subject are members of the research team. No information about you, or provided by you during the research, will be disclosed to others without your written permission, except:

- if necessary to protect your rights or welfare (for example, if you are injured and need emergency care or if the University of Missouri-St Louis Institutional Review Board monitors the research or consent process); or

- if required by law.

When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity. If photographs, videos or audiotape recordings of you will be used for educational purposes, your identity will be protected or disguised. Any information that is obtained in connection with this study, and that can be identified with you, will remain confidential and will be disclosed only with your permission or as required by law.

All recordings / transcriptions will be assigned a pseudonym to protect the privacy of the subject. Audio recordings will be destroyed upon the completion of the study.

Can I withdraw or be removed from the study?

You can choose whether to be in this study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You also may refuse to answer any questions you do not want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. If you decide to end your participation in the study, please complete the withdrawal letter found at http://www.umsl.edu/services/ora/IRB.html, or you may request that the Investigator send you a copy of the letter.

Who should I contact if I have questions?

The researcher conducting this study is Stephen K. Biermann. You may ask any questions you have now. If you have questions later, you may contact the researcher(s) at (417) 894-6155.

What are my rights as a research subject?

If you have any questions about your rights as a research subject, you may call the Chairperson of the Institutional Review Board at (314) 516-5897.

What if I am a UMSL student?

You may choose not to participate, or to stop your participation in this research, at any time. This decision will not affect your class standing or grades at UM-SL. The investigator also may end your participation in the research. If this happens, your class standing will not be affected. You will not be offered or receive any special consideration if you participate in this research.

What if I am a UMSL employee?

Your participation in this research is, in no way, part of your university duties, and your refusal to participate will not in any way affect your employment with the university or the benefits, privileges, or opportunities associated with your employment at UM-SL. You will not be offered or receive any special consideration if you participate in this research.

Remember: Your participation in this research is voluntary. Your decision whether to participate will not affect your current or future relations with the University of Missouri–St. Louis. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

I have read the above statement and have been able to express my concerns, to which the investigator has responded satisfactorily. I believe I understand the purpose of the study, as well as the potential benefits and risks that are involved. I agree to participate in the research described above.

All signatures and dates must match.

Participant's Signature	Date	Participant's Printed Name

Researcher's Signature	Date

Appendix B

Interview / Focus Group Questions

Direct Instruction

- Discussion of the Direct Instruction Model

-Introduction

1. Of the three processes related to the introductory phase of direct instruction model (anticipatory set, review, post/state objectives), which is the most important and why?

-Instruction

2. Which element of the instructional process (lecture, guided practice, checking for comprehension, independent practice, providing feedback) is crucial to the learning process?

-Closure

3. The main tenets of closure, according to the direct instruction model, consist of reviewing objectives, asking for any additional questions, and stating what will be covered during the next lesson. Which part of the closure process is most essential and why?

4. Do you feel an instructor can teach effectively if he does not use organized, direct instruction?

Instructional Enthusiasm

- Discussion of Instructional Enthusiasm

1. How important are enthusiasm, passion, and/or humor to the instructional process?

2. Do you feel an instructor can teach effectively if he/she does not demonstrate enthusiasm throughout the instructional process?

Instructional Technology

- Discussion of Instructional Technology

1. How crucial is the use of technology (Powerpoint presentations, internet resources, DVD/videos) in the instructional process?

2. Can instruction be effective without the use of technology?

Additional Questions

1. We have discussed direct instruction, instructional enthusiasm, and instructional technology. Which of the three is most important to you and why?

2. If you could provide any advice to the Academic Dean regarding instruction, what would it be?

Appendix C

Discussion Guide for Effective Instruction Research

- Introduction
  - Moderator
  - Purpose of the research
  - "Session Rules"
  - Self-Introduction of participants
    - Name
    - Field of study
    - Future plans

- Collection
  - Sign and collect consent forms

- Discussion of Effective Instruction
  - Direct Instruction
    - Introduction
    - Instruction
    - Closure
  - Instructor Enthusiasm
    - Passion for the subject matter
    - Humor
    - Engage students
  - Use of Technology
    - Powerpoint presentations
    - Internet resources
    - DVD/Videos
  - Most important Element of Effective Instruction

- Advice for the Academic Dean