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The development of a computer literacy curriculum for California charter schools

Barbara Ann Mobarak

THE DEVELOPMENT OF A COMPUTER LITERACY CURRICULUM FOR CALIFORNIA CHARTER SCHOOLS

A Project

Presented to the

Faculty of

California State University,

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In Partial Fulfillment

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in

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ABSTRACT

To develop leaders for the 21st century, schools must be able to prepare students to meet the high academic, technical and workforce challenges. Charter schools are increasingly attempting to meet these challenges by educating students through innovative means and by creating effectual educational programs that are more conducive to the needs of the student. However, charter schools are failing to provide students with the necessary computer literacy skills they will need in order to compete in the workforce and to become success in college. Students must have current computer literacy skills. This paper describes the necessary skills a student needs to become proficient in the use of computer software and hardware user. This document provides a computer literacy curriculum, which will facilitate students in gaining competent computer literacy skills and instruction.

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DEDICATION

I dedicate this thesis to my husband, Azhari M. Mobarak for his encouragement, understanding and support and to our children for their patience, and most of all for their love and hugs. I also dedicate this thesis to my role models, Aunt Sue, Shahidah S., Lynn H., Atiyah M., Madgda I., my parents and to everyone who have supported me throughout this endeavor.

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CHAPTER ONE

BACKGROUND

Introduction

The contents of Chapter One presents an overview of the project. The purpose of the problem was discussed followed by the context of the problem, significance of the project, and assumptions. Next, the limitations and delimitations that apply to the project are reviewed. Finally, definitions of terms are presented.

Purpose of the Project

The purpose of the project was to develop a computer literacy curriculum that include six computer literacy modules; Word Processing (WP), Internet (IN), Data Bases (DB), Spreadsheets (SS), Computer Basics (CB), And Presentations (PR).

This course was designed to be an introductory course. The course teaches students to use computers for problem solving and to use applications, which are currently used in places of work, colleges and homes. The CB module will teach students how the computers work, troubleshoot and solve basic repair and upgrade the computer. Although the Computer Basic module will not be taught at an advance level, due to time and budget

constraints, students who complete the course will have skills that will help them to become employed in the field of entry-level computer technicians.

This course is intended for the beginning PC user as such, no previous experience was necessary to enroll in this course. It is intended to provide the best possible skills for the high school students to transfer to more advance courses of computer literacy and to complete the course possessing skills the student will be able to use to obtain employment after graduating from high school. This curriculum will also be used as a means to standardize the computer literacy curriculum throughout the California charter schools system.

Context of the Problem

The context of the problem in the California charter schools was that teachers were not using standardized computer literacy curriculum in their classrooms. Teachers were basically designing their own lesson plans to teach students Computers Literacy skills as a result a large number of students do not possess the ability to complete basic homework assignments using a computer. Because teachers are developing makeshift computer literacy curriculums there was no assurance that students were learning the necessary skills needed to function in this

age of technology and digital information. Many students in California charter schools are not familiar with computers so they often do poorly on homework assignments, which must require the use of a computer.

Another problem with the California charter school computer literacy curriculum was that they are outdated. Some schools are teaching applications, which are no longer wildly used in the workforce, schools and colleges. Teachers do not feel that they can teach computer literacy because they have not had the necessary computer training to teach computer literacy skills.

California charter schools offer students the options to complete their studies on an independent basis, therefore most of the student's assignments are completed at home. This program requires the parent to play an active role in their child's education, which causes problems for the parent because the parent may not be familiar with computers nor have the capability to use computer applications. This causes more inconsistencies in the computer literacy skills the student learns. Therefore, a standardized and up-to-date curriculum was needed for the teacher, student and parent.

Significance of the Project

The significance of the project was that current computer literacy curriculums in California charter schools were outdated and do not teach students the skills to use the applications currently being used in workplaces, schools, and homes. This curriculum was designed to teach students, teachers and parent's computer skills and to provide a standardized curriculum that will give them the necessary skills needed to compete in the workforce, feel comfortable using computers, and empower them to use applications and computers to improve their lives at work, school and home. This curriculum was designed to teach basic skills in the use of computers and software applications.

Assumptions

The following assumptions were made regarding the project:

1. The students need computer literacy because they will be using computers and software at work and school.
2. Businesses require their employees to have advanced knowledge of computers and hardware equipment.

Limitations and Delimitations

During the development of the project, a number of limitations and delimitations were noted. Presented in the next section are the limitations and delimitations.

Limitations

The following limitations apply to the project:

1. The computer literacy curriculum is for California charter schools.
2. The computer literacy curriculum was designed for the personal computer and not the Macintosh.

Delimitations

The following delimitations apply to the project:

1. This computer literacy curriculum could be used in high schools with some modifications.
2. The Macintosh computer could be used but some modification to the applications and software segments must be changed.

Definition of Terms

The following terms are defined as they apply to the project.

Bookmarks - Placeholders for saving web addresses, or URLs. The designers of Netscape Navigator coined the phrase. Microsoft Internet Explorer uses the somewhat

more quaint term "favorites" (Computing Dictionary, 1998).

Browser - Software used to search the WWW (Microsoft Internet Explorer, Netscape Navigator) (Computing Dictionary, 1998).

Download - The process of transferring a copy of a file from a server to a client computer over the Internet (How Computers Work, 1998).

Electronic mail (E-mail) - Yet another protocol that facilitates the exchange of electronic notes and letters (Computing Dictionary, 1998).

Hardware - The components of a computer (such as the monitor, keyboard, printer, mouse, modem) that are tangible and can be touched (Computing Dictionary, 1998).

Hypertext Markup Language (HTML) - The language used to write web pages (Computing Dictionary, 1998).

Hypertext Transfer Protocol (HTTP) - This is the protocol used by computers to transfer web pages to one another. This is why "http" is at the beginning of every URL (How Computers Work, 1998).

Hypertext - Non-linear text, containing plain text and links. You are currently reading a hypertext document (Computing Dictionary, 1998).

Internet - A network of interconnected computers regardless of operating system, program language or any other protocol (How Computers Work, 1998).

Modem - An electronic device that allows your computer to exchange information with other computers over phone lines (How Computers Work, 1998).

Online - Term for when a user is connected to the Internet (Computing Dictionary, 1998).

Search Engine - A keyword searching algorithm or a software package that includes a searching algorithm. It has now come to mean a program that allows you to do a keyword search on the Internet (Computing Dictionary, 1998).

Software - A set of instructions for a computer. There are two kinds of software: system software and application software (How Computers Work, 1998).

Upload - Sending a file from a client to a server. Usually, this refers to updating web pages (Computing Dictionary, 1998).

World Wide Web (WWW) - The fastest-growing part of the Internet, the web supports pictures and text in an easily navigated environment (Computing Dictionary, 1998).

Organization of the Thesis

The thesis portion of the project was divided into four chapters. Chapter One provides an introduction to the purpose of the project, context of the problem, and significance of the project, limitations and delimitations and definitions of terms. Chapter Two consists of a review of relevant literature. Chapter Three documents the steps used in developing the project. Chapter Four presents conclusions and recommendations drawn from the development of the project. The Appendices for the project consists of: Appendix A Computer literacy Curriculum and finally, the Project references.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

Chapter Two consists of a discussion of the relevant literature. Specifically, a history of charter schools will be discussed as well as a history of computers, computer literacy, teaching computer literacy and a lastly a summary of the literature review.

Charter Schools

The charter school movement has roots in a number of reforms. Charter schools stemmed from people's frustration with the traditional public school system. In 1983 the U.S. Department of Education distributed an article "*A Nation At Risk.*" The report criticized student achievement in the traditional public school system and focused on the dilemmas of low-income families. The article opened the eyes of many Americans, but a solution to the deficiencies in the educational system was not clearly defined. Before charter schools opened their doors, there were numerous attempts to remedy the faults in the public education system including: alternative schools, magnet schools, vouchers, privatization, and community parental empowerment (Weil, 2000).

Charter schools begin with A. Shanker, who was a past president of the American Federation for Teachers and R. Budde, a retired schoolteacher. *Charter Schools in Action* acknowledged Shanker as the "father" of charter schools, but many other reports acknowledged Budde as the visionary (Finn, 1996). In the 1970's Budde first suggested the term "charter" to a local New England school board as an education reform movement in which local school boards gave small groups of teachers contracts or "charters" to explore new educational approaches. In 1988 Budde put the concept in writing in a report titled *Education by Charter: Restructuring School Districts* (Budde, 1988). He proposed: a more rigorous course of study and more stringent graduation requirements; teachers accounting for their students' outcomes and the incorporation of applicable training to prepare young people for the realities of the work place (Budde, 1988). Budde's model allowed the local school board to grant a charter to a group of teachers who would manage the school in exchange for a heightened degree of accountability of their failures and successes.

Albert Shanker, then president of the American Federation of Teachers (AFT), was impressed by Budde's proposal and began to promote some of these ideas through

speeches and through his regular column in the New York Times. The Peabody Journal of Education published *Restructuring Our Schools*. Shanker stated in the speech, people live in a technologically sophisticated society, but the main technology of schooling is still 'talk and chalk' (Shanker, 1988). Through his efforts, the 1988 AFT annual convention endorsed the charter school concept. Some legislators also liked the ideas and concepts Shanker was proposing and as a result, Shanker and others were able to pass the first charter school legislation in 1991. This was the beginning of the charter school movement.

In 1992, California passed a charter school law. Barely ten years later California remains at the forefront of charter school innovation, with the largest charter-school population in the country, the second largest number of charter-schools and the fourth highest overall percentage of students enrolled in them. More than one-third of California's charter schools have opened within the past two years (CCSA, 2003).

The basic premise of the charter school movement was that deregulation and site-based management and governance would generate new programs and pedagogies that would subsequently improve student performance, graduations rates, and ultimately, produce more economically efficient

and independent citizens. Autonomous charter schools in theory are held accountable for increased student achievement as defined in a school's chartering contract.

Independent charter schools are public schools and require state legislation to authorize their existence.

Community leaders, business leaders, universities, parents, and teachers may initiate charter schools (CCSA, 2003).

A majority of states requires that charter schools seek sponsorship and approval from their local boards of education. The sponsor grants or denies a *charter* to operate. In California, for example, districts were least supportive of charter schools seeking the most autonomy.

Charter schools are public schools. However, charter schools are neither magnet schools nor alternative schools. They are mandated to teach all types of students, not just gifted or well-financed students. Admission cannot be limited by any intellectual or athletic characteristic. All civil rights provisions bind charter schools. In addition, when demand for admission exceeds the number of slots, students are chosen randomly by lottery. Furthermore, a charter school may not have a religious affiliation or charge tuition.

Students do not have to demonstrate extraordinary skills or pass tests for admission, as is the case in some magnets. However, charter schools may target certain enduring learning problems or developmental needs.

The charter negotiated and signed between a charter school and the sponsor sets forth detailed conditions and expectations for an outcome-based school. Outcome-based learning means that students must demonstrate what they have learned and know before they move forward. The goal is to prove active student competence and knowledge in diverse subjects rather than merely to record attendance and effort at learning (CCSA, 2003).

Charter schools are intended to be laboratories of educational experimentation, developing new teaching and learning strategies and approaches that can be utilized in other traditional public schools. Some charter schools are using computers and computer literacy to provide to students a diverse learning experience.

History of Computers

Computers had a humble beginning and history showed that many individuals played a major role in the development of the computer. In order to develop an efficient computer literacy curriculum one must have a solid foundation in the history and evolution of the

computer. A computer is a machine that accepts input, processes it according to specified rules, and produces output. A computer is also one who computes. Probably no other advancement since the telephone has changed the way humanity works quite as much as the computer (Computing Dictionary, 1998). The computer can be viewed as an extension of the human mind, much as the saw, hammer and spear is seen as an extension of the human body. The computer is a tool, which incorporates ideas from reading, writing, arithmetic, telecommunications and automation (Moursund, 1982).

Computers did not simply appear one night when Bill Gates awoke from a dream. Mechanical devices that could perform complex mathematical calculations faster than human began many generations ago. The ideas of mathematical calculations began with the Abacus, Napier's Logarithms, Pascal's calculator, Charles Babbage "Difference Machine" and Aiken's first computer also known as the Mark I which would later be refined and sold by International Business Machine (IBM). These pioneers and inventions were the foundation for the development of computers that are used today.

The first means of counting was possible due to the Abacus. The Abacus device evolved from a simple need to

count, as there was a time when written numbers did not exist. The Abacus (the name comes from the Greek word Abax, meaning "board" or calculating table). People used this device instead of working out their problems in writing because they could not "carry ten" (Compton Encyclopedia, 1990). The Abacus was last used in the 1500's but is still being used in many parts of China. Long after the Abacus, John Napier of Merchiston, Scotland developed what was termed "Napier's Logarithms." Napier's logarithms made it possible to do division and multiplications, which had been too numerous and lengthy to calculate on the Abacus. Napier's logarithms made it possible to do division and multiplication by performing subtraction and addition. Napier's contribution was considered a major milestone in humanity's struggle to improve methods of processing information (Holigon, 1977).

Many say that Pascal's mechanical calculator was a major advancement in the area of mechanical calculations. Blaise Pascal was born in 1623 to Etienne and Antoinette Pascal. Blaise Pascal detested the tedium of summing, multiplying, subtracting, and dividing the unending lists of numbers, which his father's work demanded. At the age of 19, Blaise Pascal began designing a machine that would do this hateful arithmetic for him. It took years for

Pascal to develop a working model of the machine, which he called the calculator (Holigon, 1977).

This was the beginning of mechanical calculations, which, perhaps most closely resemble current computers of today.

Charles Babbage was one of the founding father of computers. In 1822, Charles Babbage partially developed the "Difference Engine" but the engine was never completed due to Babbage need to constantly make improvements on the machine. During his lifetime, he constantly improved the machine and later called it the "Analytical Engine." Babbage said that the Analytical Engine would calculate and recalculate any formula used in the machine. His ideas about the Analytical Machine clearly expressed two fundamental ideas of today's digital computers: (1) the use of previously prepared set of instructions for the machine (which is today called the "program"), and (2) a place that stores intermediate as well as final results (which is today called "computer memory"). Babbage struggled to find supporters to support the development of the Analytical Machine but was not able to complete the machine in his lifetime (Holigon, 1977).

Another important figure in the computer revolution was Ada Augusta Lovelace (Countess of Lovelace). Ada

Lovelace was a 26-year old Englishwoman who was the only legitimate daughter of the famous poet, Lord Byron. Lady Lovelace was educated and showed an unusual ability in mathematics. She was fascinated with Baggage's Analytical Machine and later translated his works on the machine into English. Babbage and Lovelace secretly devised a scheme for picking winning horses using the Difference Engine (Holigon, 1977).

Some years later, a programming language called "Ada" was developed and named after Augusta Ada Byron, Countess of Lovelace. The Ada language based on the Pascal, a programming language developed for the U.S. Department of Defense (Dictionary.com, 2003).

Many consider that the modern computer era commenced with the first large-scale automatic digital computer, developed between 1939 and 1944. Howard Aiken was an American Mathematician who in 1944 with the engineers Clair D. Lake, B. M. Durfee and F. E. Hamilton, invented an early electromechanical computer, officially known as the IBM automatic sequence controlled calculator (ASCC), but more commonly referred to as the Harvard Mark I (Compton Encyclopedia, 1990). The Mark I was the first large-scale automatic computer.

There has been much debating over who was actually responsible for the development of the computer. Many proponents of Charles Babbage believe that Mr. Babbage was responsible for the development of the computer when he conceived his "Difference Engine" and the "Analytical Engine." The Difference Engine conceived in 1821 in an effort to mechanize the production of mathematical tables. Unlike the earlier calculators, the engine was not designed to perform basic arithmetic but to calculate a series of numerical values and automatically print the results. Difference engines were designed to calculate using the `method of finite differences', a well used principle of the time. The advantage of using the method of differences is that it eliminated the need for multiplication and division in the calculation of a particular class of mathematical functions called polynomials. Babbage had conceived of the Analytical Engine by 1834 after the Difference Engine project collapsed. It is the Analytical Engine more than the Difference Engine that showed Babbage's forward thinking regarding computers (Science Museum, 2004).

Others suggest Howard Aiken started the computer revolution between 1937 and 1944 when he developed the Mark I (Compton Encyclopedia, 1990).

In spite of discussions on which pioneer made the most significant contribution in the development of the computer, in the last two decades there has been a tremendous growth in the number of computers in existence.

The PC revolution has gone through many changes. The first electronic computer, which used vacuum tubes rather than mechanical relays invented by Alan Turing, was in operation by 1943 (Compton Encyclopedia, 1990). The invention of the transistor in 1948 brought about a revolution in computer development. The breakthrough in computer miniaturization came in 1958, when Jack Kilby, an American engineer, designed the first true integrated circuit. His prototype consisted of a germanium wafer that included transistors, resistors, and capacitors-the major components of electronic circuitry (Compton Encyclopedia, 1990).

IBM introduced the Personal Computer in 1981. Because of competition from the makers of clones (computers that worked exactly like an IBM-PC), the price of personal computers fell drastically.

Computers come in a variety of sizes and capabilities. Large versions called mainframes or "maxis" was in use in the Pentagon helping preserve the national security. Middle-sized computers called minicomputers or

"minis" and would be appropriate to keep personnel records and do the payroll for a small company. Nevertheless, it is neither the maxi nor the mini, which has sent waves of change, excitement and concern through the educational community. The hottest item on the school is the fledgling microcomputer, or "micro" for short. A micro works in principle the same as its bigger cousins, but it features a versatility and modest price tag that make it very attractive to schools. Having passed through eras of vacuum tubes and of transistors, we are now in a generation in which the highly miniaturized integrated circuit printed on a silicon chip has become the keystone. The advancement in technology over the years has drastically reduced the cost of microchips and microprocessors needed to run a computer. This wave of technology changes enables almost everyone the opportunity to afford a computer (Moursund, 1992).

Today, microchips that cover a fingertip contain thousands of paths that allow electrical currents to perform hundreds of mathematical operations literally in the blink of an eye. Today, a medium priced computer can perform about 10 million computations in a single second. Such a machine can continue at this speed hour after hour without making a mistake (Moursund, 1992).

Microcomputers are playing important roles in schools, businesses, classrooms and homes. Computers have the potential to substantially change the content and process of formal, industrial, and informal education at all levels. Computers have already changed what many millions of people do in their jobs and what they do for entertainment (Moursund, 1982).

The rapid spread of computers has generated a need for highly trained workers to design and develop new hardware and software systems and to incorporate new technologies (Occupational Outlook Handbook, 2003). It is projected that Systems analysts, computer scientists, database administrators and computer operators are to be among the fastest growing occupations as computer applications expand (Occupational Outlook Handbook, 2003).

According to the U.S. Department of Labor, Bureau of Labor Statistics (1994), typists, word processors, data entry clerks, who are in almost every business and school must possess computer skills as well as word processing skills. Since many of the jobs only require the employee to be a high school graduate it is imperative that computer skills and computer awareness become part of the high school curriculum.

Students are entering the workforce today in which many jobs require technological competency, and one of the responsibilities of schools and computer literacy programs is to prepare students for this reality. Many employers agreed that "computer literacy is important to all," and that "if a student graduates without any [skills], he/she will have a distinct disadvantage in the workforce"(Davis 2003). Therefore, computer literacy and advanced Information Technology skills are basic to the world of technology work. Students, teachers, parents and the general public must keep abreast of technology changes by updating and learning new skills necessary to use a computer in their daily lives. Employers have always relied on the public school system to teach computer literacy skills and many high schools and charter schools have been doing a poor job of fulfilling this goal.

Computer Literacy

Without a doubt, the newest topic among educators today concerns the use of microcomputers in the schools. Media advertisements encourage educators to train children for the future. The need for computer literacy skills was heavily debated in the early 1970's when Andrew Molnar of the National Science Foundation wrote a paper entitled "The Next Great Crisis in American Education: Computer

literacy" (Dutton & Anderson, 1989). Andrew Molnar and others agreed on one thing; everyone should have computer literacy skills, however the agreement stopped there because many disagreed in respect to what computer literacy should entail. The introduction of computers into classrooms since 1980 amounts to a quiet revolution that will help meet the demands of scientific and technological change as well as economic competition in world markets (Bencievenga, 1984).

There are many universal views on computer literacy but there is not a consistent, clearly defined national model for Computer literacy. Steen (1984) believed that a knowledge of algorithms and data structures, where "one who is truly computer literate must be able to 'do computing' - to conceptualize problems algorithmically, to represent them in the syntax of a computer language, and to express computational ideas clearly and with a high degree of organization and readability. Biermann (1994) pointed out that many traditional computer literacy courses emphasized learning the vocabulary of computing, gaining some experience with limited software packages such as word processing, spreadsheets, and database systems; and studying the history and social impact of computing, but does not provide students with an

understanding at a level that will engage them as a learner. Levin (1983), stated that computer literacy should include the ability to apply computer skills to information retrieval and communication in the process of problem solving, and decision-making. This includes the ability to use computers to access information that is unavailable or difficult to access via other means. Levin (1983) stated advances in software and hardware is making even simple programming skills less and less necessary for the average computer user and therefore for computer literacy programs as well. Lewis (1988) however stated, "being familiar with computer parts and knowing how to do rudimentary programming is important to any computer literacy program." Garret and Lundgren (1992) concluded that modern computer literacy requires an understanding of the role of the computer as a part of an overall computer literacy program. So there are many views and often-conflicting views regarding Computer literacy.

Computer Literacy Defined

Andrew Molnar coined "Computer literacy," while director of the Office of Computing Activities at the National Science Foundation. "We started computer literacy in '72 [...] we coined that phrase. It is somewhat ironic. Nobody knows what computer literacy is; nobody can define

it. And the reason we selected [it] was because nobody could define it, and [...] it was a broad enough term that you could get all of these programs together under one roof" (as cited in Howe, 2004, ¶. 3).

Webpedia.com (2003) defined "Computer literacy" as the level of expertise and familiarity someone has with computers. Computer literacy generally refers to the ability to use applications rather than to program.

Computer literacy is the ability to operate a computer and to understand the language used in working with a specific system or systems (Dictionary.com, 2003).

Some authors define computer literacy in a myriad of other ways. Computer literacy has been stated in a simple, yet elegantly way as the ability to achieve desired outcomes via a computer (Anderson, 1982; Lockheed, 1983; Barger, 1984). The tasks comprising computer literacy vary from environment to environment. Engineering students, for example, may need to learn to produce statistical analyses and work with spreadsheets. Foreign language majors are more likely to need to learn how to use multilingual text editors, spelling checkers, and online concordances. For general users, computer literacy can be said to have at least the following components: (1) understanding basic computing principles, (2) knowing how to use at least one

computer operating system, and (3) proficiency with one or more software programs. Other proponents believe that computer literacy consist of more than the ability to know how to use an operating system, software program or having a basic understanding of computer principles.

Other authors defined computer literacy as that level of knowledge and understanding of the personal computer, desktop or laptop, beyond the mere utilization of word processing software or knowing computer principles. Some authors believe that word processing utilization is beginning Computer literacy. Students should possess skills beyond mere utilization of a word-processor. For an individual to be intermediate and advanced computer literacy skills one should be:

1. Comfortable with installation and configuration of common software (William, 1993).
2. Familiar and use regularly a computer modem.
3. Proficient in accessing a computer bulletin board or on-line service (William, 1993).
4. Skilled in the ability to send and receive messages via electronic mail (e-mail) (William, 1993).
5. Capable in uploading and downloading computer files with ease (William, 1993).
6. Able to print from the computer (William, 1993).

Teaching Computer Skills

Charter schools as well as public and private schools may be home to educators with a wide variety of skill levels in technology. Many may be computer gurus anxious to put the capabilities of the newest hardware and software to use or moderate technocrats, who implement basic computerized tasks. Charter schools also are faced with educators who are technologically limited, who had their professional training "when punch cards were for programmers and computers were for research scientists;" and teachers who are sitting back quietly waiting for the technology fad to pass (Williams, 1993). The problem faced by administrators and professional development staff of such a school is providing adequate training to bring teachers at every point of the continuum from techno-phobia to techno-mania to an adequate level of technical expertise so learning goals can be met for the student (William, 1993).

Summary

The literature review most important to the project was presented in Chapter Two. The findings from the literature review showed that there is not a solid and clearly distinct meaning for "Computer literacy." The computer literacy debate seemed to wane after the late

1980's. Thus, many educators are now moving away from the focus on computer literacy and moving in the direction of providing learners and teachers with skills in Information Literacy. Many proponents of computer literacy believe that students, teachers, and the public must acquire a myriad of computer skills. Many writers believe that computer literacy consist of (1) knowing how to use at least one computer operating system, (2) becoming proficiency with one or more software programs and (3) possessing a proficient understanding of computer principles.

Any efficient computer literacy curriculum must ensure that learners attain computer technology competency. An effectual computer literacy syllabus must provide a structure for keeping pace with the rapid changes in Information Technology.

Computer literacy must provide students with word processing; spreadsheet, database, desktop publishing, Internet and computer programming skills but the computer literacy curriculum should also include an awareness of computer history and vocabulary as well as an understanding of how computers influence individuals' lives on a daily basis. Teachers must be eager to update their skills in order to keep pace with changes in

computer technology. Educators must be prepared to teach the numerous skills which have been considered in this literature review but teachers should also be willing to expand their computer literacy core curriculum as computer technology changes. The study undoubtedly established that computer literacy must be designed to facilitate students in developing computer skills in addition to increasing the student's computing confidence, computer knowledge and aptitude. Computer literacy must teach students skills that will ensure that they will be employment, proficient in computing and have a solid foundation of how computers can improve their lives.

Anyone educator, curriculum designer or teacher who is considering designing a computer literacy program for charter schools should thoughtfully reflect on the findings that have been discussed in this research. They should seek out other information prior to developing a curriculum thereby ensuring that the computer literacy curriculum will be effectual for the teacher, student and the general public. They should prepare the learner for the world of work and academics by equipping the student with the most appropriate, up to date computer skills and computer awareness information necessary for the pupil who will use computers at work, school and in the home.

CHAPTER THREE

METHODOLOGY

Introduction

Chapter Three details the steps used in developing the project. Specifically, the population served was discussed. Next, the curriculum development process including curriculum structure and content validation was presented. The chapter concludes with a summary.

Population Served

The project was developed for students who are enrolled in charter schools throughout the state of California. It is specifically geared toward students at the high school level and who would like to become proficient in computer applications, the Internet and computer trouble-shooting. The course will allow students to learn basic and advanced functions of the computer as well as computer applications and hardware. Many businesses expect their employees to have some form of training or experience using computers. It is suggested that employees as well as individuals who want to continue their education at the college level have some awareness of computers and how they function and how to perform basic trouble-shooting of computers. Employers recommend

that students have at least six months of experience in the information technology field. This experience should include hands-on experience with computer hardware and software and the Internet. The Computer Basics Module will teach students basic computer repair, Students who enroll in this course will learn the necessary skills to enroll in the A+ examination offered by CompTIA, which will certify the student as a CompTIA A+ Technician. Many Information Technology companies require their technician and employees to be CompTIA A+ certified. Research show that employers want individuals who possess the ability to communicate and write effectively as well. Through hands-on assignments and presentations, students will gain proficient computer and communication and writing skills.

The six computer literacy modules in this curriculum are appropriate for use in any school where a current, computer literacy program is needed. The course can also be used as a tool for the School-to-Work program. It was developed in accordance with the guidelines and suggestions presented by parents, administrators, students and teachers in the public, and private school system. The curriculum was modeled after other curriculums currently being used by CompTIA, CSU Pomona, Mt. San Antonio College and San Bernardino Valley College as well as other private

institutes of learning such as Devry University and Net 10. The CompTIA A+ guidelines were developed with the cooperation of major companies such as Intel and other computer hardware companies.

Curriculum Development

The next section of the project provides an overview of the curriculum development process. Specifically, the curriculum structure and content validation process are reviewed.

Curriculum Design

This curriculum guideline was developed in alignment with the concepts, skills and information provided by teachers and administrators.

The course outline contains the following components: (1) lesson title; (2) lesson outline; (3) lesson objectives; (4) materials and equipment; (5) evaluation; and (6) comprehension. No prerequisites for this class will be required. However, a basic reading skill level will be strongly recommended. This course is basic computing course, therefore no previous work experience or computer skills are necessary but any student possessing computer or work experience will be able to perform advanced features of the course objectives.

The computer literacy curriculum includes six computer literacy modules; computer basics (CB), word processing (WP), spreadsheets (SS), data bases (DB), presentations (PR), and Internet (IN). The course will begin with an introduction of each literacy module. Each module will be discussed in detail throughout the course. The course will begin with a discussion of the rules and regulations of the classroom and the proper use of computers and student goals and expectations will be covered. Next, the course syllabus, assignments and projects will be introduced and a brief introduction from each student will be required.

Course Content (One Semester Program)

1. Classroom Regulations
    a) Safety
    b) Course Introduction
    c) Computer Lab procedures
    d) Overview of assignments
2. Computer Basics (CB) Module
    a) Brief History of Technology Education
    b) History of Computer Technology
    c) History of Computers
    d) Pioneers in Computers
    e) Generations of Computers

f) Transistors, vacuums tubes vs. integrated circuits

g) Parts of the computer

h) Input components

i) Output Components

j) Handling computer peripherals

3. Word-processing (WP) Module

a) Creating and Saving Simple Documents

b) Working with Text

c) Formatting Characters and Paragraphs

d) Previewing and Printing a Document

4. Spread-sheet (SP) Module

a) Working in the Spread-sheet Environment

b) Customizing Spread-sheets

c) Setting Up a Worksheet

d) Adding Formulas

e) Dressing Up a Worksheet

5. Database (DB) Module

Using Forms

a) Using Tables and Sub forms

b) Using Filters and Reports

c) Managing Database Change

d) Using Queries

6. Presentation (PR) Module

   a) Creating a Presentation

   b) Working with a Presentation

   c) Applying and Modifying Templates

   d) Producing a Slide Show

7. Internet Basic (In) Module

   a) Performing searches using Google, and others.

   b) Understanding Browsers and how to use them.

   c) HTML vs. HTM

   d) Finding and Managing Information

   e) Saving pages using Internet Explorer

   f) Printing Pages using Internet Explorer

   g) Designing a Simple Web page

   h) Planning a Web Site

   i) Do's and Don't when designing a website

   j) Creating a Web Site

   k) Linking Web Pages

   l) Adding Multimedia to Web Pages

   m) Publishing a Web

   n) Working with Pictures

   o) Working with Text

   p) Exploring the Web

Content Validation

Three methods of validation were applied to this curriculum. First, the final outline, objectives and skills were compared to the curriculums currently being used in high schools and colleges throughout the state of California. Teachers, administrators, students and parents reviewed and made recommendations for the curriculum. Second, instructors from California charter schools reviewed the contents and design of the curriculum and made recommendations. The major recommendations put forth were to implement the curriculum in some of the surrounding charter schools for one year and allow students and teachers to evaluate the effectiveness of the course to determine if students had obtain the goals and objectives described in the course outline. Another recommendation is to design the curriculum to include a tremendous amount of in class, hands-on assignments as well out of class assignments so that the students would become more comfortable with the computer. A third recommendation was to have instructors and businesses in the surrounding areas to review the contents of the curriculum to determine whether or not the curriculum contents matched the needs of businesses. Lastly, it was suggested that the schools labor diligently to establish

an internship program with businesses and other community colleges and universities in order that students can gain real-world work experience. Lastly, and based heavily on the literature review, the course should be reviewed on a yearly basis to keep pace with computer software, hardware information technology changes.

Summary

The steps used to develop this project were outlined. The target populations for this course are students who wish to gain experience in computer hardware, software and the Internet and who wish to learn computer trouble-shooting skills and techniques. The curriculum development process including curriculum layout, design and content was presented.

CHAPTER FOUR

CONCLUSIONS AND RECOMMENDATIONS

Introduction

Included in Chapter Four was a presentation of the conclusions gleaned as a result of completing the project. Further, the recommendations extracted from the project are presented. Lastly, the Chapter concludes with a summary.

Conclusions

The conclusions extracted from the project follows.

1. The current curriculums being used in California charter schools are out dated.
2. A computer literacy curriculum does not exist in many charter schools.
3. There is no consistency with what is being taught at the various charter schools.
4. Many students do not graduate with the computer skills necessary to obtain entry-level computer related jobs nor are they able to complete assignments that require the use of computers at the college level.

5. Computers play a major role in every aspect of our lives yet there is a huge shortage of workers who can use a computer efficiently.

Recommendations

The recommendations resulting from the project follows.

1. The curriculum should be reviewed annually and updated as needed to keep pace with changes in the computer hardware software industry.
2. A special funding source should be sought out to provide monies for necessary upgrades and repair to computers in the classroom and to purchase necessary supplies such as diskettes, CD-ROMs, etc.
3. Computer software should be updated as new versions are released.
4. Establish a committee of business leaders, teachers, administrators and students to recommend and suggest improvements to the curriculum.

Summary

Chapter Four reviewed the conclusions extracted from the project. Lastly, the recommendations derived from the project were presented.

APPENDIX

COMPUTER LITERACY CURRICULUM

A California Charter School

Computer literacy Curriculum

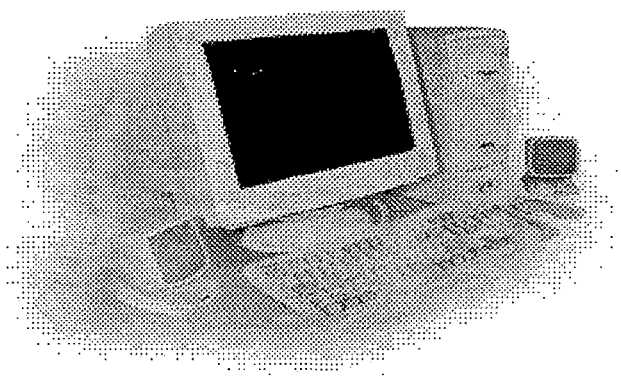
Designed for Grades 9-12

Developed by

Barbara A. Mobarak

February 19, 2004

CSU San Bernardino, California



Teaching our students

Computer Skills Today

To Empower for Tomorrow

Introduction

Welcome to Computer Literacy Curriculum 2004 for Charter Schools, a practical guide for educators, students and parents. This computer literacy curriculum consists of six modules. The student will gain practical skills to master a variety of software applications, such as: word processing (for letter and documents), spreadsheets (great for budgets and other financial reports). Database programs (for organizing and reporting brochures), and presentation (for preparing presentations). The student will also gain skills in Computer Basics and the Internet. The following is a brief description of each modules:

- Computer Basics (CB) Module – Allows the student to learn the hardware and software components and how these components work together. Basic troubleshooting and upgrades will also be explored in this module.
- Word-processing (WP) Module - provides everything the teacher and student need to learn how to use word-processing to create professional-looking documents.
- Spreadsheet (SP) Module - makes it easy to use, share, and analyze the data, as well as provide reports and presents data graphically.
- Presentation (PR) Module - allows the teacher and student to organize, illustrate, and present ideas in a multimedia presentation. Presentation software gives the student the tools to communicate with influence, whether to the student, parent or educator.
- Database (DB) Module - lets the teacher and student develop and use databases to store, manipulate, and share information.
- Internet (IN) Module – teaches the student and teacher how to use the Internet to perform searches, view and download web pages.

With hands-on instruction, detailed handouts, and step-step guidance through a variety of projects, assignments and exercises, the student will get a basic, working knowledge of the most widely used software application programs currently being used in the workplace, school and home.

How the course will benefit the student and teacher:

- Teach and Expand computer skills with hands-on-practice
- Teach the latest application concepts and features
- Perform a variety of interrelated program tasks
- Maximize the performance of PC
- Become a proficient user of computer application programs

TABLE OF CONTENTS

California Charter School

Computer Literacy Curriculum

Grade 9-12

Developed: February 2004

Course Objectives

This computer literacy skills curriculum aspire to breed an awareness of the impact of computers and provide students with computers skills that will facilitate the student in becoming proficient in their place of work, home and school. The goals of this curriculum are (1) Provide to the student a concrete foundation in the area of information technology. (2) Teach essential computer familiarity and skills in order that students will appreciate how computers influence every facet of their lives. (3) Prepare students for computer technology and job advancement. (4) Assist the student in becoming at ease with using computers. Students will gain a concrete foundation in the use of computers. Students will learn how to proficiently use computer applications through hands on experience. Students will also become aware of the capabilities a computer system and understand what the computer can and cannot do. Through hands on exercises and projects students will expand their experience which will lead to proficiency in using standard software applications. The curriculum teaches the student from a user's perspective how the computer can be a powerful tool to be used in their work, school and home.

In addition to the lectures on computer hardware and software, word-processing, spreadsheet, Internet, and presentation, students will perform hands-on assignments and projects. Hands-on assignments will enable the student to solidify their understanding of computers, hardware, software, and technology, as computer literacy skills are essential for success in higher education and the workforce.

Pre-requisite

This subject makes no assumption about a student's background. This course is intended for students having no prior familiarity with computers or computer hardware and software. Students will do well in this class by having a basic reading level. Any student who has the motivation and perseverance to stick to the task when the task becomes difficult will do extremely well in this course. These

Unexcused absence from test or examination will get zero mark.

A failure grade F will be assigned to those whose final examination scores are under 30 (out of 100) marks.

Application Tests

Students must also take a hands-on test for each of the 4 module applications (Word –processing, Spread-sheet, Database and Presentation) that are part of complete computer literacy course. These tests are "hands-on." Students will carry out tasks in a Windows environment using a widely used software suite. For each task, students will execute the necessary steps to fulfill the requested task as if he or she were doing one of the Project labs assignments. These tests measure the students' ability to carry out the tasks that were mastered in the Project and Lab assignments.

The instructor will administer each application test during class time. The instructor will announce the exact class time the exam will be given. Again, students are strongly encouraged to be in attendance for these test days.

Computer literacy Web Site

Any announcement and information related to this subject will be posted on the school's web site. Site to be determined at a later date. It will be imperative that students, especially home-schooled and independent study students visit the website frequently.

Mail to Instructors

An email address will be established for the course instructor at a later date. At that time students will be able to email any questions they may have to their instructor for feedback. When emailing any instructor students must include the following information: name, student ID, and section number in your mail.

Grade Assessment

Practical Tests:	40%
Final Examination:	60%
Total:	100%

Module Projects and Lab Assignments

The computer literacy Module Projects and Lab Assignments must be originated and completed using a personal computer in classroom or lab, and must be maintained in a folder assigned to the student. Projects and Assignments must be the students' original work (started, completed, and corrected by only the student) or it will be considered cheating.

Class Projects are normally completed in class with instructor supervision. A Lab Assignment follows each Class Project. Lab Assignments are normally completed without instructor supervision. Printed output from each Module Assignment and is submitted for grading by the due date. Projects and Lab Assignments submitted for the first time but after the due date are considered late and are not accepted for grading. Class Projects and Lab Assignments will be checked for accuracy of detail and for compliance with project instructions.

Class Project and Lab Assignment Redo

Class Projects and Lab Assignments unsatisfactorily completed will be returned upgraded with corrections indicated. If the project or lab assignment has errors, the student must make the necessary corrections and resubmit both the corrected version and the incorrect version to receive credit. To be graded, the corrected version must be stapled on top of the incorrect version. For full credit, a "redone" version must be resubmitted by the due date and graded as correct. For partial credit after the due date, a "redone" version must be resubmitted by the last due date for all class projects and lab assignments and graded as correct. Due dates will be determined by the instructor.

Computer Lab

A computer lab will be setup prior to the teaching of this course so that students will have access to a computer outside of class. Lab hours will be determined at a later date.

To Turn in a Project or Lab Assignment

Students should perform the following instructions:

1. Before printing documents, follow instructions given by the instructor.
2. Arrange pages in the sequence in which they were generated (must be in correct order).
3. Confirm the correctness of the assignment and make any corrections before submitting for a grade (reprint if needed).

4. Using a pencil or pen, on the first page at the top-right corner, write: Name (should be on each page), write instructor's last name; Section number of class, name and number of this project or lab assignment.

5. Staple multiple pages for one project or one lab assignment together once at the top-left. Do not staple more than one project or lab assignment together.

6. Submit the document(s) to the instructor:
Give it to the instructor in class or
Take assignment (s) to the instructor's office

Course Content

1) Classroom Regulations:

- **a) Safety**
- **b) Course Introduction**
- **c) Computer Lab procedures**
- **d) Overview of assignments**

2) Computer Basics (CB) Module

- **a) Brief History of Technology Education**
- **b) What is computer literacy ?**
- **c) History of Computers**
- **d) Pioneers in Computers**
- **e) Generations of Computers**
- **f) Transistors, vacuums tubes vs. integrated circuits**
- **g) Parts of the computer**
- **h) Input components**
- **i) Output Components**
- **j) Description of computer parts**

k) Handling computer peripherals

3) Word-processing (WP) Module

a) Creating and Saving Simple Documents

(1) Using Word to Create Simple Documents
(2) Starting a Word-processing document
(3) Navigating the Document Window
(4) Using Toolbar Buttons
(5) Creating and Editing Basic Word-processing Documents

b) Working with Text

(1) Opening Documents
(2) Selecting a View for Working in a Document
(3) Moving and Copying Text Using the Mouse
(4) Moving and Copying Text Using Buttons
(5) One Step Further: Linking Two Documents

c) Formatting Characters and Paragraphs

(1) Changing the Appearance of Text
(2) Using Additional Text Effects
(3) Applying Repeated Formatting
(4) Changing Paragraph Alignment
(5) Justifying Text by Clicking the Insertion Point
(6) Changing the Spacing of Paragraphs
(7) Setting Additional Paragraph Rules
(8) Adding Borders and Shading to Paragraphs

d) Previewing and Printing a Document

(1) Previewing Documents
(2) Editing While in Print Preview
(3) Inserting Page Breaks
(4) Adjusting Margins with the Ruler
(5) Printing Documents
(6) Printing Envelopes

4) Spread-sheet (SP) Module

a) Working in the Spread-sheet Environment

(1) Getting Started with Spread-sheets
(2) Navigating Easily in a Workbook
(3) Navigating Easily in a Worksheet
(4) Entering Information
(5) Changing and Correcting Information
(6) One Step Further: Customizing Spread-sheets

b) Setting Up a Worksheet

(1) Setting Up a New Workbook
(2) Setting Up an Invoice
(3) Previewing and Making Additional Adjustments
(4) Adding Other Useful Features to an Invoice
(5) Changing Cell Alignment and Wrapping
(6) Printing an Invoice
(7) Adding a Picture to a Worksheet

c) Adding Formulas

(1) Opening an Existing Workbook Using File Properties
(2) Making Formulas Easier to Understand and Use
(3) Entering Calculation Formulas
(4) Displaying Special Messages on Invoices

d) Dressing Up a Worksheet

(1) Formatting Cells to Create a Professional Look
(2) Using Styles
(3) Formatting Numbers to Create a Professional Look
(4) Adding Custom Headers and Footers
(5) Changing Page Margins
(6) Saving an Invoice as a Template
(7) One Step Further: Editing a Template

5) Database (DB) Module

a) Using Forms

(1) Opening a Database
(2) Understanding Forms
(3) Entering and Updating Data
(4) Entering Data Efficiently and Correctly
(5) Finding Records
(6) Adding and Removing Record Text
(7) One Step Further: Replacing Data

b) Using Tables and Sub forms

(1) Viewing a Datasheet
(2) Viewing Multiple Tables with a Sub form
(3) One Step Further: Refining Datasheet Views

c) Using Filters and Reports

(1) Refining Your View of the Data
(2) Preserving Your View in a Report
(3) Creating Mailing Labels
(4) Creating More Complex Filters

d) Managing Database Change

(1) Modifying Database Tables
(2) Changing a Table in Design View
(3) Improving Data Entry and Display
(4) Connecting a New Table to a Database
(5) Combining Data from Related Tables Using a Query

e) Using Queries

(1) Understanding Queries
(2) Creating a Query with the Query Wizard
(3) Modifying a Query in Design View
(4) Refining a Query with Criteria
(5) Presenting a Query More Effectively
(6) Joining Related Tables in the Query Window
(7) One Step Further: Fine-tuning Queries

6) Presentation (PR) Module

a) Creating a Presentation

(1) Starting PowerPoint
(2) Understanding the PowerPoint Startup Dialog Box
(3) Using the AutoContent Wizard
(4) Understanding the Presentation Window
(5) Moving Around in a Presentation
(6) Changing Text in the Outline Pane
(7) Changing Your Mind
(8) Changing and Adding Text in the Slide Pane
(9) Understanding PowerPoint Views
(10) Changing Presentation Views
(11) Previewing Slides in Slide Sorter View
(12) Saving a Presentation & Changing Presentation Properties

b) Working with Presentation software

(1) Starting a New Presentation Using a Design Template
(2) Entering Text in the Slide Pane
(3) Creating a New Slide
(4) Entering Text in the Outline Pane
(5) Editing Text in Normal View
(6) Entering Text in the Notes Pane
(7) Using Notes Page View
(8) Inserting Slides from Other Presentations
(9) Rearranging Slides in Slide Sorter View
(10) Showing Your Slides in Slide Show View
(11) Customizing PowerPoint

c) Applying and Modifying Templates

(1) Understanding and Applying Templates
(2) Understanding PowerPoint Masters
(3) Changing the Display Using the Master
(4) Modifying Master Placeholders
(5) Formatting Master Text
(6) Adjusting Master Text Indents
(7) Reapplying a Slide Layout
(8) Saving a Presentation as a Template
(9) One Step Further: Hiding Master Objects

d) Producing a Slide Show

(1) Navigating in Slide Show View
(2) Annotating Slides during a Slide Show
(3) Setting Slide Transitions
(4) Animating Slide Text
(5) Animating Slide Objects
(6) Animating Chart Objects
(7) Hiding a Slide during a Slide Show
(8) Creating and Editing a Custom Show
(9) Dimming Animation Text

7) Internet Basic (IN) Module

a) Performing searches using Google, Yahoo and other search engines

b) Understanding Browsers and how to use them.

(1) Internet Explorer
(2) Netscape
(3) AOL
(4) Others

c) **HTML vs. HTM**
   (1) Definitions
   (2) When to use HTML vs. HTM

d) **Finding and Managing Information**
   (1) Determining your keyword
   (2) Evaluating sound information
   (3) Understanding peer-reviewed, journal, and Internet sources of information
   (4) Other Sources of information

e) **Searching for Information on the Web**
   (1) Creating a Favorites List
   (2) Using Favorites
   (3) Managing Your Favorites List
   (4) Using the History Folder

f) **Saving pages using Internet Explorer**
   (1) Using File Menu
   (2) Using Shortcuts

g) **Printing Pages using Internet Explorer**
   (1) Using File Menu
   (2) Using Shortcuts

h) **Designing a Simple Web page**
   (1) Planning a Web Site
   (2) Do's and Don't when designing a website

i) **Creating a Web Site**
   (1) Creating a Web Site Using a Wizard
   (2) Creating a Web Site Using a Template
   (3) Creating and Importing Webs
   (4) Creating a Home Page and Adding Text
   (5) Adding, Formatting, and Previewing a Marquee
   (6) Adding Web Pages
   (7) Inserting a File into a Web Page
   (8) Changing Web Page Properties
   (9) Organizing Your Web

j) Linking Web Pages

(1) Creating Text Hyperlinks
(2) Creating a Link to an Electronic Mail Address
(3) Editing Hyperlinks
(4) Creating Bookmarks on a Web Page
(5) Creating Image Map Hyperlinks

k) Adding Multimedia to Web Pages

(1) Using Images on Web Pages
(2) Editing Images on Web Pages
(3) Adding Sound Effects and Music to Web Pages
(4) Adding Video to Web Pages
(5) Using Style Sheets to Position Web Page Items

l) Publishing a Web

(1) Checking the Spelling on Web Pages
(2) Publishing a Web
(3) Updating and Maintaining a Web
(4) Using FTP to Upload a Web
(5) Working with Pictures

m) Working with Text

(1) Typing Text in a Text Frame
(2) Creating a Text Frame
(3) Picking Up and Applying Existing Formats
(4) Working with Columns and Auto flow Text
(5) Disconnecting and Reconnecting Frames
(6) Rotating Text
(7) Editing Text in Microsoft Word
(8) Adding a Drop Cap
(9) Creating WordArt

n) Exploring the Web

(1) Starting Microsoft Internet Explorer
(2) Browsing a Web Site
(3) Creating a Desktop Shortcut to a Web Page
(4) Printing Web Page Information
(5) Saving Web Pages

Course Equipment

(1) Diskettes
(2) Paper
(3) Pencils/Pen
(4) Overhead Project
(5) Folders

Computer Basics
Lesson Plan

Lesson Title **Computer literacy 2004 Computer Basics (CB) Module**

Teacher Name To be determined

School Name To be determined

Grade Level **9-12**

Length of Lesson **1 hour**

Introduction/Purpose of Lesson

The Purpose of this lesson is to teach computer basics. The students take a Computer Basic quiz at the end of the lesson to verify that the student has achieved the desired outcomes.

Course Goal

1) Explain the seven basic components of the computer and their functions.
2) Identify each component on the computer.
3) Show the function of a floppy disk, kinds of floppy disks, and how to care for a floppy disk.
4) Explain the difference between a impute and output devices.
5) Describe where data can be stored.
6) Describe the function of a modem.
7) Show various types of operating systems.
8) Describe different software platforms and give examples.
9) Teach the basic terminology and buzzwords used by computer users and authors.
10) Use a standard application to teach computer literacy skills.
11) Use technology to increase student achievement.
12) Utilize technology to manage and communicate information.

Objective(s)

At the conclusion of this lesson, students will be able to:

1) Identify and explain the seven basic components of the computer and their functions.
2) Identify each component on the computer.
3) Know the function of a floppy disk, kinds of floppy disks, and how to care for a floppy disk
4) Explain the difference between a input and output devices
5) Describe where data can be stored.
6) Understand the function of a modem.
7) Know the various types of operating systems
8) Describe different software platforms and give examples.
9) Be familiar with terminology used by computer users and authors

Lesson Assignment

1) Explain the seven basic components of the computer and their functions.
2) Identify each component on the computer.
3) Show the function of a floppy disk, kinds of floppy disks, and how to care for a floppy disk.
4) Explain the difference between a impute and output devices.
5) Describe where data can be stored.
6) Describe the function of a modem.
7) Show various types of operating systems.
8) Describe different software platforms and give examples.
9) Teach the basic terminology and buzzwords used by computer users and authors.

Required Teaching Resources for Lesson

- ☐ Opened computers for viewing components inside of the computer.
- ☐ LCD projector
- ☐ Floppy Disks and CD-ROM

Required Media – Hardware Software for Lesson

- Computer(s)
- LCD projector

Classroom Pre-lesson Inspection List:

- ✓ Check to make sure all of the computers and programs are setup and functioning properly before starting the presentation.
- ✓ Check to verify that there are adequate opened computers.
- ✓ Each student should have his or her own computer.
- ✓ Teach a part of the lesson and ask student question to verify understanding prior to continue the lesson.

References for Lesson

To be determined by Instructor.

Activity Description

With the computer connected to a LCD projector, and with the use of demo computers, instructor should teach each on each component outlined in lesson plan. Instructor should check for understanding by eliciting student's feedback before continuing with the lesson.

Activity Objective(s)

The student will:

- ❒ Explain the seven basic components of the computer and their functions.
- ❒ Identify each component on the computer.
- ❒ Show the function of a floppy disk, kinds of floppy disks, and how to care for a floppy disk.
- ❒ Explain the difference between a impute and output devices.
- ❒ Describe where data can be stored.
- ❒ Describe the function of a modem.
- ❒ Show various types of operating systems.
- ❒ Describe different software platforms and give examples.
- ❒ Teach the basic terminology and buzzwords used by computer users and authors. Explain the seven basic components of the computer and their functions.
- ❒ Identify each component on the computer.
- ❒ Show the function of a floppy disk, kinds of floppy disks, and how to care for a floppy disk.
- ❒ Explain the difference between a impute and output devices.
- ❒ Describe where data can be stored.
- ❒ Describe the function of a modem.

- ❒ Show various types of operating systems.
- ❒ Describe different software platforms and give examples.
- ❒ Teach the basic terminology and buzzwords used by computer users and authors.

Assessment Strategy

Students completed the quiz successful by passing with at least 80 percent correct?

Grading Skills

- ❒ Explain the seven basic components of the computer and their functions.
- ❒ Identify each component on the computer.
- ❒ Show the function of a floppy disk, kinds of floppy disks, and how to care for a floppy disk.
- ❒ Explain the difference between a impute and output devices.
- ❒ Describe where data can be stored.
- ❒ Describe the function of a modem.
- ❒ Show various types of operating systems.
- ❒ Describe different software platforms and give examples.
- ❒ Teach the basic terminology and buzzwords used by computer users and authors. Explain the seven basic components of the computer and their functions.
- ❒ Identify each component on the computer.
- ❒ Show the function of a floppy disk, kinds of floppy disks, and how to care for a floppy disk.
- ❒ Explain impute and output devices.
- ❒ Describe where data can be stored.
- ❒ Describe the function of a modem.
- ❒ Show various types of operating systems.
- ❒ Describe different software platforms and give examples.
- ❒ Teach the basic terminology and buzzwords used by computer users and authors.

Each item is worth 2 points each. For a total of _____/36

Database
Lesson Plan

Lesson Title Computer literacy 2004 Database (DB) Module

Teacher Name To be determined

School Name To be determined

Grade Level 9-12

Length of Lesson 30 Minutes

Introduction/Purpose of Lesson

The Purpose of this lesson is to teach the basics of Database software. Microsoft Access will be used for this lesson.

This lesson will allow the student to learn how most database software application breaks down a database. Some keywords involved in this process are: Database File, Table, Record, Field, and Data-type. This lesson will teach the student the hierarchy that Microsoft Access uses in breaking down a database.

Course Goal

1.) Teach students how most Database software is designs it's database application.
2.) Use Database software to teach computer literacy skills.
3.) Use technology to increase student achievement.
4.) Utilize technology to manage, manipulate and store data.

Objective(s)

At the conclusion of this lesson, students will be able to:

1. Describe a Database File:
2. Describe a Table
3. Explain what a Field is
4. Explicate Data types
5. Start Microsoft Access
6. Create a New Database
7. Open an Existing Database

Lesson Assignment

1.) Create a new Database and open an existing database.
2.) Describe the following terms in detail and give examples.

1. Database File:
2. Table
3. Field is
4. Data types
5. Access
6. Database
7. Database

Required Teaching Resources for Lesson

- ❑ Computer(s) with database software installed for each student.
- ❑ LCD projector
- ❑ Disks to save work to after completion of lesson

Required Media – Hardware Software for Lesson

- ❒ Computer(s) with database for each student.
- ❒ LCD projector

Classroom Pre-lesson Inspection List:

- ✓ Check to make sure all of the computers and programs are setup and functioning properly before starting the database lesson.
- ✓ Each student should have his or her own computer.
- ✓ Teach a part of the lesson and ask student question to verify understanding prior to continue the lesson.

References for Lesson

To be determined by Instructor.

Activity Description

Through use of the computer connected to a LCD projector, instructor should explain the terms the student will learn and give examples. The instructor should then show the students how to create a new database and save the database. It is important that the teacher checks for understanding prior moving forward in the lesson. The following terms are to be explained:

1. Database File
2. Table
3. Field is
4. Data types
5. Access
6. Database

Definitions of Terms:

Database File:
This is your main file that encompasses the entire database and then save the file to your hard-drive or floppy disk. Example) CompaniesDatabase.mdb

Table:
A table is a collection of data about a specific topic. There can be multiple tables in a database. Example #1) Employees: Example #2): Employers.

Field:
Fields are the different categories within a Table. Tables usually contain multiple fields. Example #1) Employee LastName: Example #2) Employee FirstName.

Data-types:
Data-types are the properties of each field. A field only has one data-type. FieldName) Employee LastName: data-type) Text.

Activity Objective(s)

1. The student can create and save a database.

Starting Microsoft Access

Two Ways

1. Double click on the Microsoft Access icon on the desktop.
2. Click on Start --> Programs --> Microsoft Access

   The following options are available:
   1. Create a New Database from scratch
   2. Use the wizard to create a New Database
   3. Open an existing database
   4. The white box gives a list of the most recent databases used.

5. Otherwise, choose the database previously used and click OK.

Create a database using the Database Wizard

1. When Microsoft Access first starts up, a dialog box will automatically display with options to create a new database or open an existing one. If the program shows a dialog box, then click **Access Database Wizards, pages, and projects** and then click **OK.** If the database has already been opened or closed, the database program will display a dialog box. The student will need to click **New Database** on the toolbar.
2. On the **Databases** tab, double-click the icon for the kind of database you want to create.
3. Instructor/Student should specify a name and location for the database.
4. Click **Create** to start defining your new database

Create a database without using the Database Wizard

1. When Microsoft Access first starts up, a dialog box will automatically display with options to create a new database or open an existing one. If the dialog box is displayed, click **Blank Access Database**, and then click **OK.**

   If the student previously opened or closed the database, the dialog box that displays when Microsoft Access starts up will open, the student should click **New Database** on the toolbar, and then double-click the **Blank Database** icon on the **General** tab.
2. Direct the student to specify a name and location for the database and click **Create.**

2. The student can describe and explain the following terms:

   A. Database File
   B. Table
   C. Field
   D. Data types
   E. Access
   F. Database

Assessment Strategy

Were the students able to explain what the terms were and give examples?

Could the students create and save a database?

Content Outline

Can the students

1. Explain the terms for this lesson and give examples?
2. Create a database
3. Save the database?

Grading Skills Sheet

❑ Create a database	_____/10
❑ Save a Database	_____/10
❑ Database File	_____/ 5
❑ Table	_____/ 5
❑ Field	_____/ 5
❑ Data types	_____/ 5
❑ Access	_____/ 5
❑ Database	_____/ 5
❑ Total	_____/50

Presentation Lesson Plan

Lesson Title Computer literacy 2004 Presentation (PR) Module

Teacher Name To be determined

School Name To be determined

Grade Level 9-12

Length of Lesson 30 Minutes

Introduction/Purpose of Lesson

The Purpose of this lesson is to teach the basics of presentation software. Microsoft Power Point will be used for this lesson. This lesson will allow the student to produce a PowerPoint presentation. The students will follow along with the teacher and create a 2 –slide demonstration presentation with several basic components. Then the student will create a presentation by following the project assignment requirements to show that they have achieved the desired outcomes.

Course Goal

1.) Use a standard application to teach computer literacy skills.
2.) Use technology to increase student achievement.
3.) Utilize technology to manage and communicate information.

Objective(s)

At the conclusion of this lesson, students will be able to:

1.) Open a Power Point presentation using two different options.
2.) Creating and opening a PowerPoint presentation.
3.) Describe the menu bars, save and close a PowerPoint presentation.
4.) Navigate menu bars, insert text in placeholder, and insert clip art.
5.) from gallery, format text, copy and paste text into the PowerPoint slide
6.) Add transition/effect to slide, save presentation as PPT file, save a presentation.

Lesson Assignment

1.) Create a two slide PowerPoint presentation that uses the following operations and or contains the following components:
   - ❑ Navigate menu bars
   - ❑ Insert text in placeholder
   - ❑ Insert Word Art
   - ❑ Insert clip art from gallery
   - ❑ Format text, format picture,
   - ❑ Insert hyperlink
   - ❑ Copy / paste
   - ❑ Add transition / effect to slide
   - ❑ Save presentation on hard disk
   - ❑ Save presentation on floppy drive

Required Teaching Resources for Lesson

- ❑ Computer(s) with presentation software installed for each student.
- ❑ LCD projector
- ❑ Disks to save work to after completion of lesson

Required Media – Hardware Software for Lesson

- ❑ Computer(s) with Power Point for each student.
- ❑ LCD projector

Classroom Pre-lesson Inspection List:

- ✓ Check to make sure all of the computers and programs are setup and functioning properly before starting the presentation.
- ✓ Each student should have his or her own computer.
- ✓ Teach a part of the lesson and ask student question to verify understanding prior to continue the lesson.

References for Lesson

To be determined by Instructor.

Activity Description

Through the use of the computer connected to a LCD projector, instructor should take the students through a simple 2-slide presentation; demonstrate, as they follow along, use the needed commands. Check for understanding and continue.

- ❑ Navigate menu bars
- ❑ Insert text in placeholder
- ❑ Insert Word Art
- ❑ Insert clip art from gallery
- ❑ Format text, format picture,
- ❑ Insert hyperlink
- ❑ Copy / paste
- ❑ Add transition / effect to slide
- ❑ Save presentation on hard disk
- ❑ Save presentation on floppy drive

Activity Objective(s)

1.) The student can open a PowerPoint presentation and create 5 slides from a Blank presentation.
2.) The student can navigate menu bars, insert text in placeholder, insert Word Art, insert clip art from gallery, format text, format picture, insert hyperlink, copy/paste.
3.) The student can add transition/effect to slide, save presentation as PPT file, save presentation as PPS file (show)

Assessment Strategy

Did everyone complete the guided practice presentation according to the skills sheet?
Were they able to complete a similar plan of their own design and save the presentation?

Content Outline/Teaching Notes

Can the students work through the program on their own after the demonstration and the guided practice?
Cover any of the commands that seem to give them trouble during the guided practice portion.

Can the student:

1. Open a Power Point presentation and create 2 slides from a blank presentation?
2. Navigate menu bars and insert text in placeholder?
3. Insert clipart from gallery, format text, copy and paste?
4. Add transition and effect to slide?
5. Save presentation as PPT file on to the hard drive and floppy?

Grading Skills Sheet

❑ Open Microsoft PowerPoint 2000	_____/ 2
❑ Create new presentation	_____/ 2
❑ Navigate menu bars	_____/ 2
❑ Navigate views –outline, slide, notes, slide sorter	_____/ 2
❑ Insert text in placeholder	_____/ 2
❑ Insert clip art from gallery	_____/ 2
❑ Format text, Insert bullets	_____/ 2
❑ Copy / paste	_____/ 2
❑ Add transition / effect to slide	_____/ 2
❑ Print handouts	_____/ 2
❑ Save presentation show	_____/ 2
❑ Total	_____/22

Spreadsheet
Lesson Plan

Lesson Title Computer literacy 2004 Spreadsheet (SP) Module

Teacher Name To be determined

School Name To be determined

Grade Level 9-12

Length of Lesson 30 Minutes

Introduction/Purpose of Lesson

The Purpose of this lesson is to teach the basics of using Spreadsheet software. Microsoft Excel will be used for this lesson.

This lesson will teach students about the elements which make up Microsoft Excel's window.

This lesson will allow the student to learn how applications such as Microsoft Excel function.

Course Goal

Teach students the main elements of a Spreadsheet window.
Use Spreadsheet software to teach computer literacy skills.
Use technology to increase student achievement.

Objective(s)

At the conclusion of this lesson, students will be able to:

1.) Describe Title Bar:
2.) Describe a Menu Bar
3.) Explain what a Standard Bar is
4.) Describe the Formatting Bar
5.) Describe the Name Bar
6.) Locate and explain the purpose of the Function placeholder
7.) Identify the status, Workbook and Scroll Bar

Lesson Assignment

1. Identify Title Bar and it's elements:
2. Describe a Menu Bar and components of the Menu Bar
3. Explain what a Standard Bar is
4. Detail some of the Formatting Bar element and how they can be used.
5. Describe and type information into the Name Bar
6. Locate and explain the purpose of the Function placeholder and create a basic function
7. Point out the status, Workbook and Scroll Bar

Required Teaching Resources for Lesson

- ❑ Computer(s) with Excel Spreadsheet software installed for each student.
- ❑ LCD projector
- ❑ Printer to print out assignment
- ❑ Disks to save work to after completion of lesson

Required Media – Hardware Software for Lesson

- ❒ Computer(s) with Spreadsheet software installed for each student.
- ❒ LCD projector

Classroom Pre-lesson Inspection List:

- ✓ Check to make sure all of the computers and programs are setup and functioning properly before starting the spreadsheet lesson.
- ✓ Each student should have his or her own computer.
- ✓ Teach a part of the lesson and ask student question to verify understanding prior to continue the lesson.

References for Lesson

To be determined by Instructor.

Activity Description

1. Through use of the computer connected to a LCD projector, instructor should explain the lesson objectives and terms the student will learn and give examples. The instructor should then demonstrate to the student each component on the screen that the student will be expected to learn. It is important that the teacher checks for understanding prior moving forward in the lesson.

Definitions of Terms:

Title Bar:

The title bar displays Excel's name, the control menu, and the control buttons (the minimize, maximize/restore, and close buttons).

Menu bar:

The commands are organized into related groups called menus. Excel's standard menus are located on the menu bar, directly below the title bar. To open a menu with the mouse, you simply click on its name.

Activity Objective(s)

1. The student can put out each menu component as the instructor explains and indentifies each.

Assessment Strategy

Were the students able to identify, explain and define the lesson plan objectives and give examples?

Could the students name each component of the menu bar and other elements?

Content Outline

Can the students

1. Explain the terms for this lesson and give examples?

Grading Skills Sheet

❑ Identify Title Bar and it's elements:	_____/ 5
❑ Describe a Menu Bar and components of the Menu Bar	_____/ 5
❑ Explain what a Standard Bar is	_____/ 5
❑ Detail some of the Formatting Bar element and it's use	_____/ 5
❑ Describe and type information into the Name Bar	_____/ 5
❑ Locate and explain the purpose of the Function placeholder	_____/ 5
❑ Create a basic function	_____/ 5
❑ Point out the status, Workbook and Scroll Bar	_____/ 5
❑ Total	_____/40

Word-Processing
Lesson Plan

Lesson Title **Computer Literacy 2004 Word-processing WP) Module**

Teacher Name To be determined

School Name To be determined

Grade Level 9-12

Length of Lesson 1 hour

Introduction/Purpose of Lesson

The Purpose of this lesson is to teach the basics of Word-processing software. Microsoft Word will be used for this lesson.

This lesson will allow the student to learn how most word-processing program and applications function.

Course Goal

1. Teach students how most word-processing software functions.
2. Use word-processing software to teach computer literacy skills.
3. Use technology to increase student achievement.
4. Utilize technology produce documents, letters, form letters, etc.

Objective(s)

At the conclusion of this lesson, students will be able to:

Create and Save Simple Documents

1) Use Word to Create Simple Documents
2) Start a Word-processing document
3) Navigate the Document Window
4) Use Toolbar Buttons

5) Edit Basic Word-processing documents

Lesson Assignment

1. Use Word to Create Simple Documents
2. Start a Word-processing document
3. Navigate the Document Window
4. Use Toolbar Buttons
5. Create and Edit Basic Word-processing Documents

Required Teaching Resources for Lesson

- ❑ Computer(s) with word-processing software installed for each student.
- ❑ LCD projector
- ❑ Disks to save work to after completion of lesson

Required Media – Hardware Software for Lesson

- ❒ Computer(s) with database for each student
- ❒ LCD projector

Classroom Pre-lesson Inspection List:

- ✓ Check to make sure all of the computers and programs are setup and functioning properly before starting the lesson.
- ✓ Each student should have his or her own computer.
- ✓ Teach a part of the lesson and ask student question to verify understanding prior to continue the lesson.

References for Lesson

To be determined by Instructor.

Activity Description

Through use of the computer connected to a LCD projector, instructor should explain the terms the student will learn and give examples. The instructor should then show the students how to perform each of the tasks outlined. The teacher should check for understanding prior moving forward in the lesson.

Activity Objective(s)

The student should be able to:

1. Use Word to Create Simple Documents
2. Start a Word-processing document
3. Navigate the Document Window
4. Use Toolbar Buttons
5. Create and Edit Basic Word-processing Documents

Assessment Strategy

Were the students able perform the objectives outlined in the lesson plan?

Content Outline

Can the students

1. Use Word to Create Simple Documents
2. Start a Word-processing document
3. Navigate the Document Window
4. Use Toolbar Buttons
5. Create and Edit Basic Word-processing Documents

Grading Skills Sheet

- ❑ Create a simple document _____/10
- ❑ Start a Word document _____/10
- ❑ Navigate the Document Widnows _____/10
- ❑ Use the Toolbar Buttons _____/ 5
- ❑ Edit a documentField _____/ 5
- ❑ Total Points: _____/40

Internet Basics (IN)
Lesson Plan

Lesson Title Computer literacy 2004 Internet (IN) Module

Teacher Name To be determined

School Name To be determined

Grade Level 9-12

Length of Lesson 1 hour

Introduction/Purpose of Lesson

The Purpose of this lesson is to teach computer literacy Internet basics. Microsoft Internet Explorer will be used as well as other browsers and search engines.

Course Goal

1. Perform searches using Google, Yahoo and other search engines.
2. Understand Browsers and how to use them
3. Find and Manage Information on the Internet.
4. Use technology to increase student achievement.
5. Utilize technology to manage, manipulate and store data.

Objective(s)

At the conclusion of this lesson, students will be able to:

1. Perform a basic and advance search using Google.
2. Describe how many browsers function.
3. Find and save information from the Internet

Lesson Assignment

1.) Open a browser and key in a word to search.
2.) Type the address of Google.com into the address of the browser.

Required Teaching Resources for Lesson

- ❑ Computer(s) with Internet Explorer installed for each student.
- ❑ LCD projector
- ❑ Disks to save work to after completion of lesson

Required Media – Hardware Software for Lesson

- ❒ Computer(s) with Internet Explorer loaded for each student.
- ❒ LCD projector

Classroom Pre-lesson Inspection List:

- ✓ Check to make sure all of the computers and programs are setup and functioning properly before starting the database lesson.
- ✓ Each student should have his or her own computer.
- ✓ Teach a part of the lesson and ask student question to verify understanding prior to continue the lesson.

References for Lesson

To be determined by Instructor.

Activity Description

Through use of the computer connected to a LCD projector, instructor should explain how to key in a term to search, give detailed steps on how to type in the address information. Allow students to perform their own searches. It is important that the teacher checks for understanding prior moving forward in the lesson.

Activity Objective(s)

1. The student identify and type a term to be search in the search box.
2. The student can explain what a search engine does.
3. The student can give examples of search engines.

Assessment Strategy

Were the students able to explain what the terms were and give examples?
Could the students perform a search on any given term?

Content Outline

Can the students

1. Explain the terms for this lesson and give examples?
2. Perform a search.
3. Identify the address area of a browser.

Grading Skills Sheet

- ❑ Perform a search _____/10
- ❑ Explain a browser _____/10
- ❑ Identify the address area of a browser _____/10
- ❑ Total _____/30

Computer Basics Module

Sample Assignment

Computers Basics Handout

1. **The main activity area or brain of the computer is called:** _____
   _____
2. **Give an example of an Output Device:** _____
3. **Give an example of an Input Devices:** _____
4. **What feature improves the display on a monitor?** _____
   _____
5. **What size of floppy disks is most commonly used?** _____
6. **List one procedure to follow when using a floppy disk.** _____
7. **Data is stored on (circle all that apply)**
   (a). Floppy, (b) hard drive, (c) printer, (d) mouse, (e) CD-ROM
8. **Name the Device converts digital and analog signals, which allows computers to communicate over telephone wires.** _____
9. **Name the seven basic functions of a computer.**
   1. _____
   2. _____
   3. _____
   4. _____
   5. _____
   6. _____
   7. _____
10. **Name two Operating systems:**
    1. _____
    2. _____
11. **List two Platforms:**
    1. _____
    2. _____

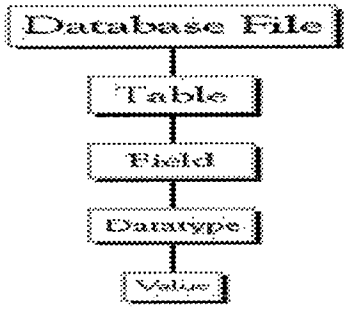
Database (DB) Module

Sample Assignment

Microsoft Access Description

Access is a powerful program to create and manage databases. It has many built in features to assist the student in constructing and viewing information.

In order to create a database, the student must first understand how many database applications are broken down. Some keywords involved in this process are: *Database File, Table, Record, Field, Data-type*. Here is the Hierarchy that Microsoft Access uses in breaking down a database.



Database File:

This is your main file that encompasses the entire database and then save the file to your hard-drive or floppy disk. Example) CompaniesDatabase.mdb

Table:

A table is a collection of data about a specific topic. There can be multiple tables in a database. Example #1)

Employees: Example #2): Employers.

Field:

Fields are the different categories within a Table. Tables usually contain multiple fields. Example #1) Employee LastName: Example #2) Employee FirstName.

Data-types:

Data-types are the properties of each field. A field only has one data-type. FieldName) Employee LastName: data-type) Text.

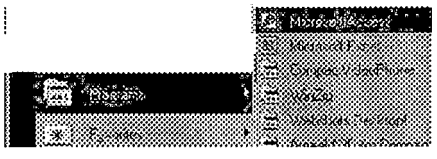
Starting Microsoft Access

- Two Ways

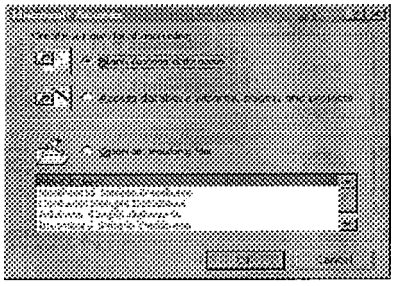
  1. Double click on the Microsoft Access icon on the desktop.

Microsoft Access.lnk

  2. Click on Start --> Programs --> Microsoft Access



Creating New: (and Opening Existing Databases)



The above picture gives the option to:

- Create a New Database from scratch
- Use the wizard to create a New Database
- Open an existing database
  - The white box gives the most recent databases that have been used. If you do not see the one you had created, choose the More Files option and hit OK. Otherwise choose the database you had previously used and click OK.

Create a database: *(using the Database Wizard)*

1. When Microsoft Access first starts up, a dialog box is automatically displayed with options to create a new database or open an existing one. If this dialog box is displayed, click **Access Database Wizards, pages, and projects** and then click **OK.**

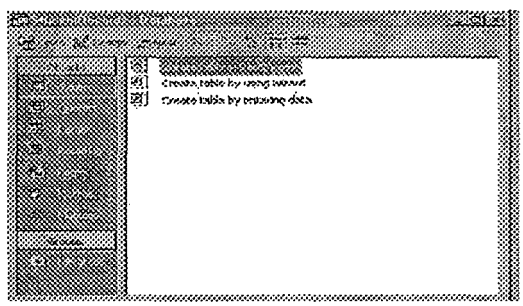
   If you have already opened a database or closed the dialog box that displays when Microsoft Access starts up, click **New Database** on the toolbar.

2. On the **Databases** tab, double-click the icon for the kind of database you want to create.
3. Specify a name and location for the database.
4. Click **Create** to start defining your new database

Create a database: *(without using the Database Wizard)*

1. When Microsoft Access first starts up, a dialog box is automatically displayed with options to create a new database or open an existing one. If this dialog box is displayed, click **Blank Access Database**, and then click **OK**.

   If you have already opened a database or closed the dialog box that displays when Microsoft Access starts up, click **New Database** on the toolbar, and then double-click the **Blank Database** icon on the **General** tab.
2. Specify a name and location for the database and click **Create** (Below is the screen that shows up following this step).



PowerPoint Module

Sample Assignment

Introduction into Microsoft PowerPoint

Microsoft PowerPoint is a powerful tool to create professional looking presentations and slide shows. PowerPoint allows the student to construct presentations from scratch or by using the easy to use wizard.

This module will help the student to get started with Microsoft PowerPoint. This lesson will cover the following:

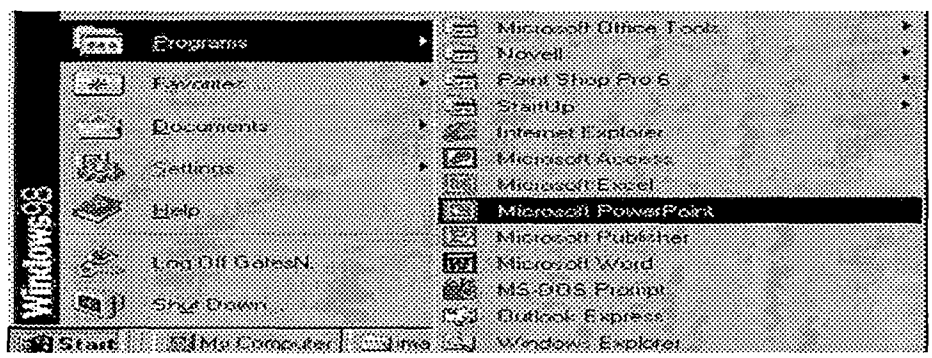
Starting Microsoft PowerPoint

1. Two Ways

    1. Double click on the Microsoft PowerPoint icon on the desktop.

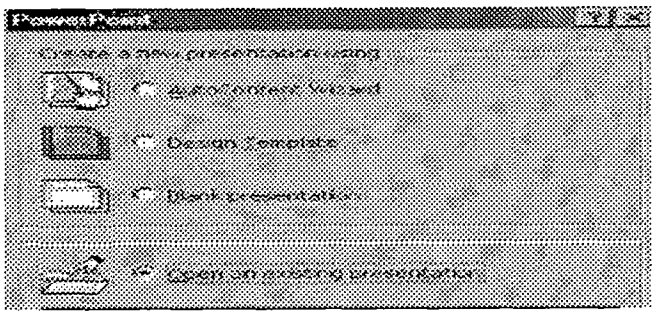
Microsoft PowerPoint.lnk

    2. Click on Start --> Programs --> Microsoft PowerPoint

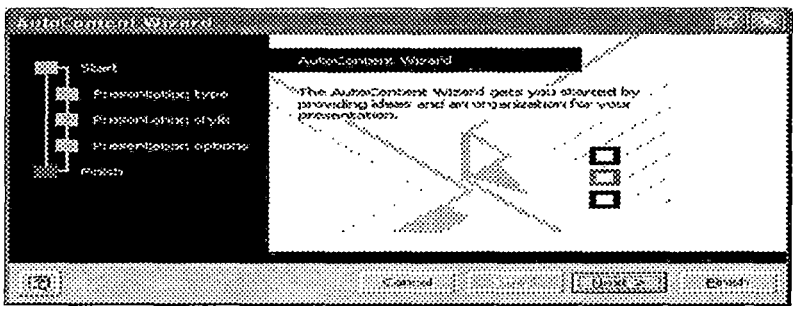


Creating & Opening a Presentation

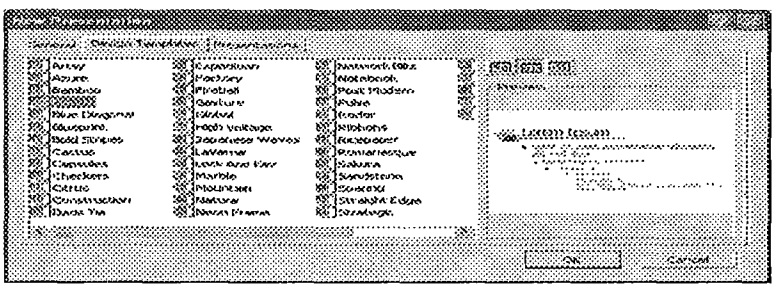
After you open up Microsoft PowerPoint, a screen pops up asking if you would like to create a New Presentation or Open An Existing Presentation.



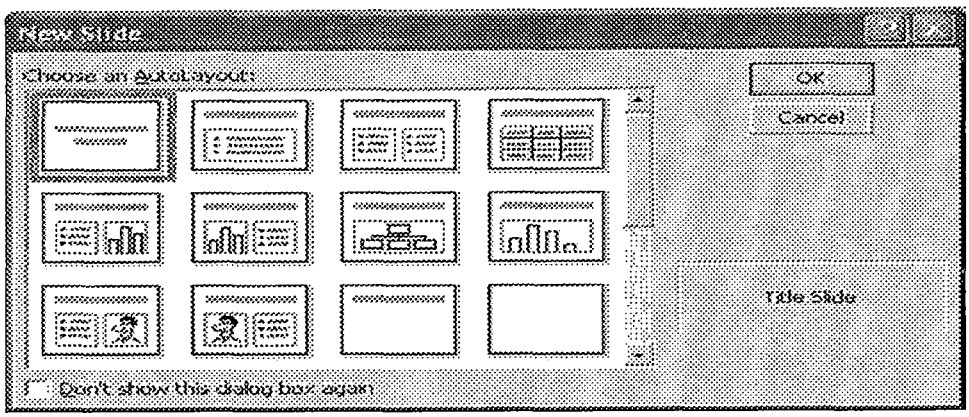
- ***AutoContent Wizard***
  - Creates a new presentation by prompting you for information about content, purpose, style, handouts, and output. The new presentation contains sample text that you can replace with your own information. Simply follow the directions and prompts that are given by Microsoft PowerPoint.



- ***Design Template***
  - Creates a new presentation based on one of the PowerPoint design templates supplied by Microsoft. Use what is already supplied by Microsoft PowerPoint and change the information to your own.

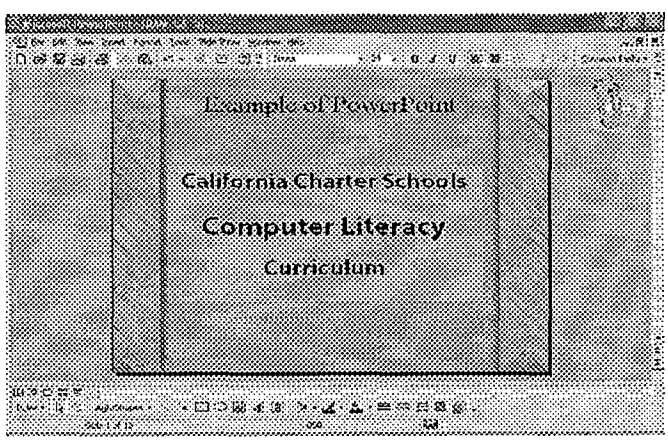


- ***Blank Presentation***
    - Creates a new, blank presentation using the default settings for text and colors. Go to next step:



Opening An Existing Presentation

1. Select **Open An Existing Presentation**
2. Click on your presentation in the white box below step 1
    - If you do not see your presentation in the white box, select **More Files** and hit OK.
3. Locate you existing Presentation and hit the Open button



NOTE: Instructor will give handout for all objectives listed on lesson plan. This handout comprises only a few of the lesson plans' objectives. Students will be given handout as each objective is covered.

Spreadsheet Module

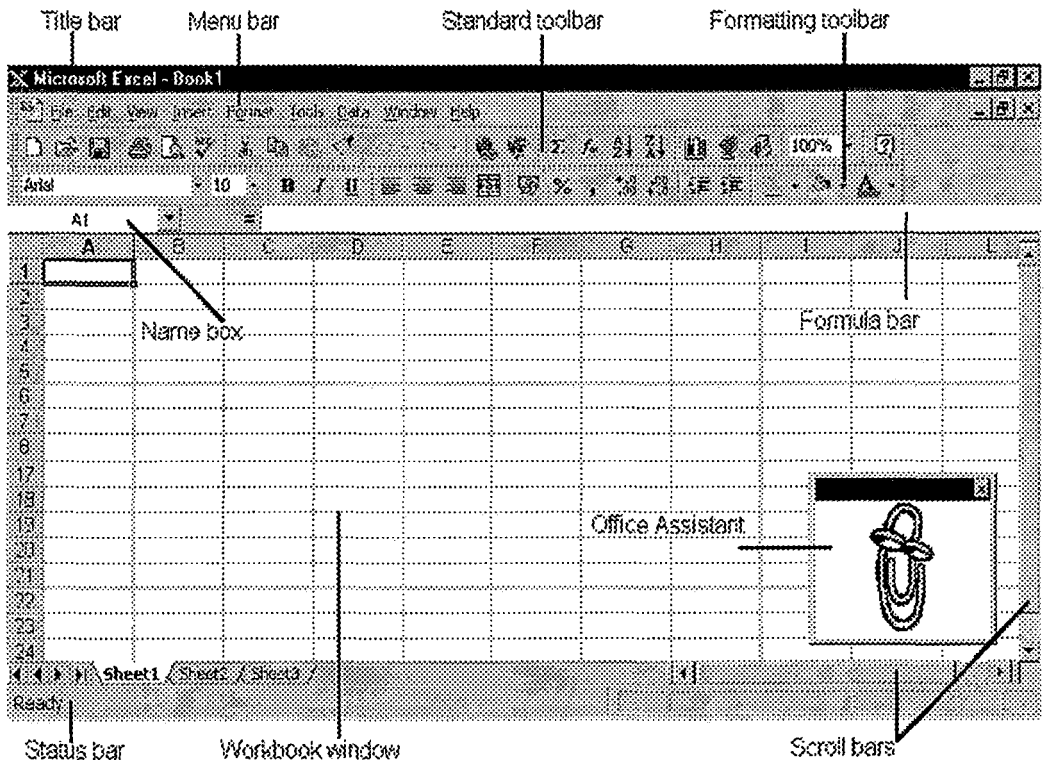
Sample Assignment

Microsoft Excel Description

This systematic lesson will teach the student about the elements which make up Excel's window. Once the student knows the names of the window elements, it will be much easier for him or her to use any spreadsheet program. This lesson has been designed for use with Microsoft Excel.

Excel's Window

Figure 1. This figure labels the elements of Excel's window which are introduced in this lesson.



Title bar

Figure 2. This figure shows Excel's title bar, which is at the top of the Excel window. The title bar displays Excel's name, the control menu, and the control buttons (the minimize, maximize/restore, and close buttons).

Menu bar

Figure 3. To perform actions in Excel, the mouse is used to select commands. The commands are organized into related groups called menus. Excel's standard menus are located on the menu bar, directly below the title bar. To open a menu with the mouse, you simply click on its name.

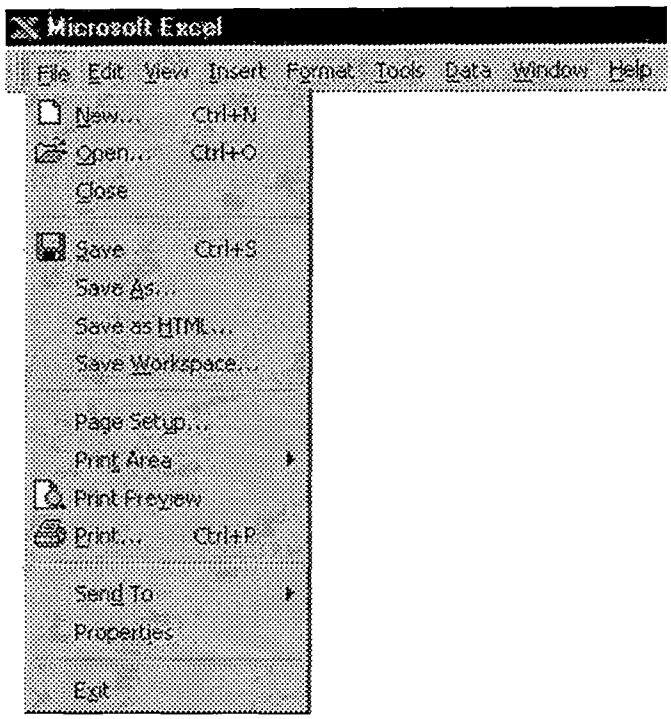


Figure 4. In this figure we have clicked on the **File** menu to open it.

Many menu commands simply perform the named function, for example, the *Close* command closes a file. A menu command followed by an ellipsis (...) opens a dialog box relating to the command. For example, when you select the *Open* command, Excel opens the **Open** dialog box.

Beside some menu commands, there are keyboard shortcuts. For example, if you look at the *Open* command in this figure, you can see that its shortcut is Ctrl+O. This simply means that you can also activate the *Open* command by holding down the Ctrl key while pressing the O key. Some people prefer to use keyboard shortcuts instead of the mouse.

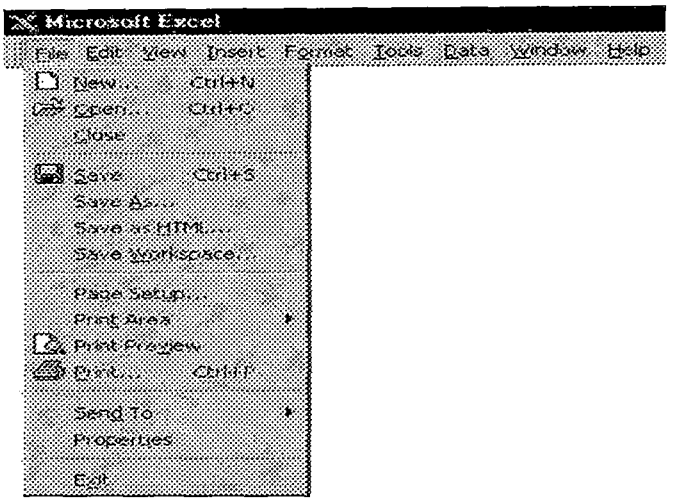
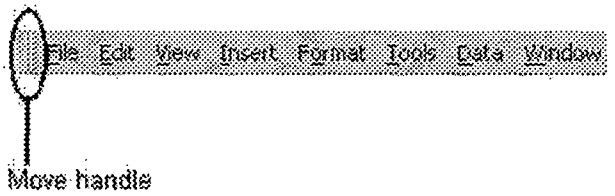


Figure 5. In previous versions of Excel, you couldn't move the menu bar, but in Excel 97, the menu bar is like the toolbars-you can move it wherever you want within the program window. To move the menu bar, click on its move handle and drag it to where you want it, then release the mouse button.



Word-processing Module

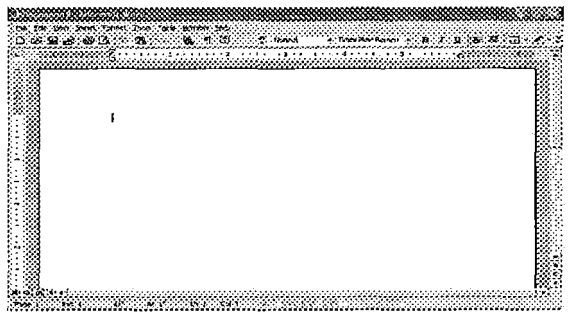
Sample Assignment

Microsoft Word Description

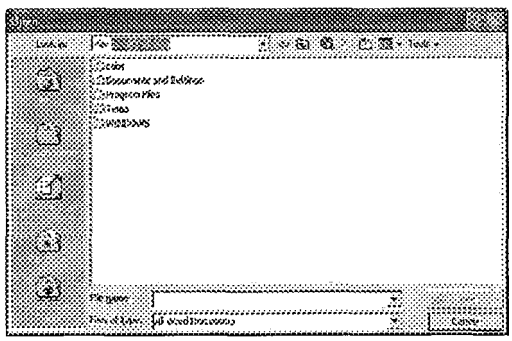
This systematic lesson will teach the student how to open a Word document. The student will also learn how to create and save a Word document. This lesson has been intended for use with Microsoft Word.

Opening a Word Document:

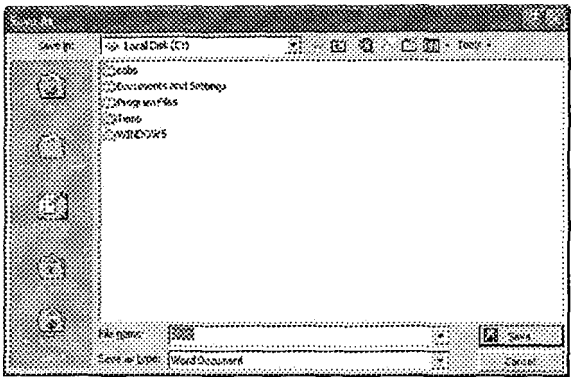
1. Click File and select New to create a New Word document (see below example).



2. Click File and select Open to open an existing Word document.



3. Click File and select Save to save your Word document.



NOTE: Instructor will give handout for all objectives listed on lesson plan. *This handout comprises only a few of the lesson plans' objectives. Students* will be given handout as each objective is covered.

Internet (IN) Module

Sample Assignment

Internet Description

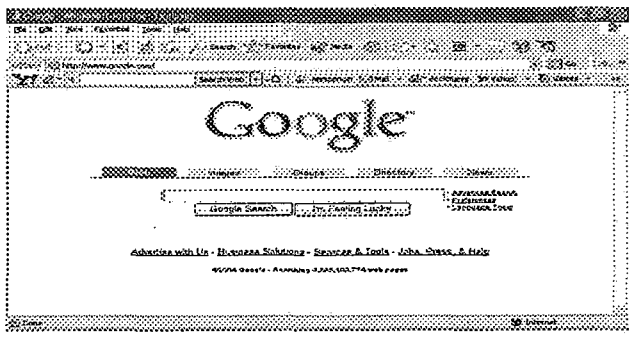
This systematic lesson will teach the student how to perform a search using Google. This lesson is for Internet Explorer.

Performing a Search Using Google:

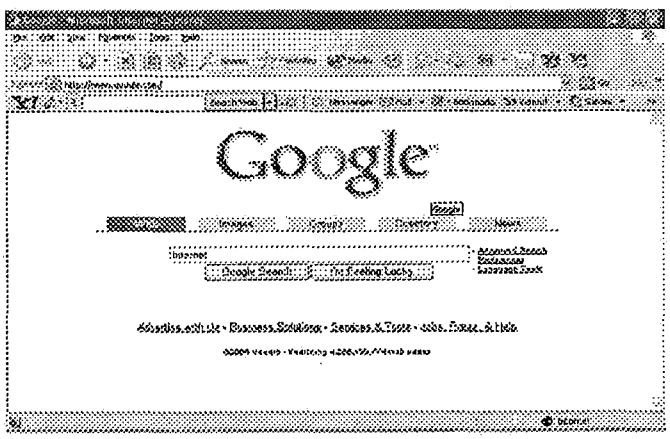
Search engines use a program called a spider. The spider actually goes out and searches the Web and adds what it finds to its database. Google, Alta Vista, and Yahoo are commonly used search engines.

Let's do a search for internet using **Google**.

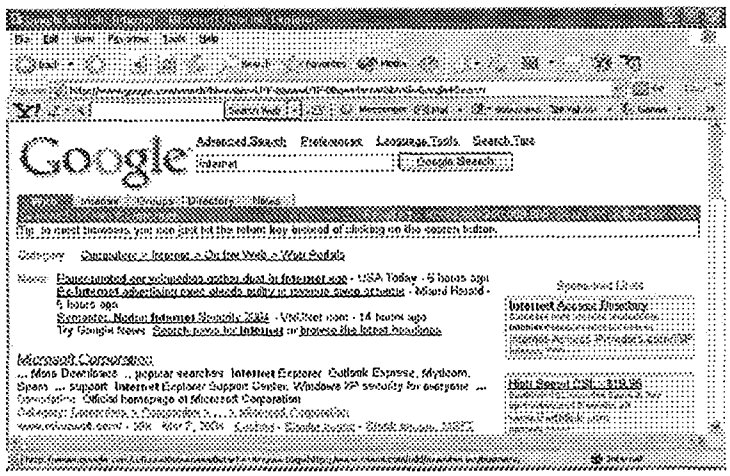
1. Go to the Google website: http://www.google.com/



2. Type in the search term.



3. The resulting websites that match your search term will be displayed.



4. Simply click on the ones you want to view.

End of lesson

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