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                Middle Schools; *Notetaking; Postsecondary Education;
                Skill Development; *Telecommunications

ABSTRACT
                This guide, which was developed by students enrolled
in a graduate-level course in improving instruction in basic business
subjects, consists of instructional units in the following seven
basic business skills areas: job skills/workplace basics, accounting,
desktop publishing, keyboarding/computer literacy, microcomputer
applications, notetaking, and telecommunications. The job skills
unit, which contains materials dealing with skills identified in the
Secretary's Commission on Achieving Necessary Skills (SCANS) and
similar reports as essential to success in the workplace, and the
microcomputer applications unit are both designed for integration
into secondary and postsecondary business curricula. The desktop
publishing and notetaking units are designed for use with students in
grades 10-12. The keyboarding/computer literacy unit is designed for
middle school students, and the telecommunications unit contains
materials for use with students in grades 9-12. Each unit consists of
some or all of the following: unit description, rationale, background
information from the literature on business education, list of best
practices, unit objectives, unit outline, rubric, suggested student
assessment techniques, learning activities, and student handouts.
Each unit contains references and recommended resource materials.
(MN)

CURRICULUM GUIDE FOR IMPROVEMENT OF INSTRUCTION IN BASIC BUSINESS SKILLS SUBJECTS

Accounting
Desktop Publishing
Job Skills
Keyboarding (Middle School)
Microcomputer Applications
Notetaking
Telecommunications

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INTRODUCTION

The purpose of this curriculum guide is to provide current, dynamic resources that reflect best practices and exciting activities related to six basic business skills areas: Accounting, Desktop Publishing, Keyboarding, Microcomputer Applications, Note-Taking, and Telecommunications. The idea for the booklet came out of class discussion in a graduate-level course in Improvement of Instruction in Basic Business Skills Subjects. The course was offered in the summer of 1995 in the Department of Practical Arts and Vocational-Technical Education in the College of Education at the University of Missouri-Columbia.

Eleven students enrolled in the class; they worked either individually or in groups to complete the research and content of the courses. Each of the students is identified in the section related to the specific course. As the instructor, I have been impressed with the self-imposed rigor, dedication, commitment, and quality of the work which resulted. We hope that the information and activities included in this booklet will enrich and enliven your classroom instruction.

The beginning for the development of this curriculum guide required an in-depth review of the competencies and skills that business and industry say they need as reflected in two important reports: *Learning a Living: What Work Requires of School* (known as the SCANS report) and *Workplace Basics* (the report from the Department of Labor and the American Society for Training and Development [ASTD]). The competencies included in the two reports are shown below:

<u>SCANS</u>	<u>WORKPLACE BASICS</u>
Basic skills	Reading, writing, computation
Thinking skills	Creating thinking/problem-solving
Personal qualities	Listening/oral communication
Resources	Knowing how to learn
Interpersonal skills	Interpersonal skills
Information	Teamwork/negotiation
Systems	Personal management
Technology	

Emerging technology, new work procedures and configurations, global economics, and expanding telecommunication capabilities are driving the need for these sophisticated competencies. Employers need employees who have attained these competencies, but who also can and will change as the workplace continues to evolve. It is imperative that teachers and instructors remain attuned to the ever-changing needs in the workplace. It is our hope that you will find that the course outlines and activities included in this guide reflect these workplace competencies and workplace knowhow which have been specified in the literature.

UNIT: JOB SKILLS

Table of Contents

UNIT OUTLINE: JOB SKILLS

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Unit description: The contents of this unit are designed to be used in various courses in the Business Education curriculum at the secondary or postsecondary levels. Students should be familiar with and gain experience in the workplace skills and knowhow which employers require for workers who will be entering and competing for positions in the emerging high performance workplace.

Rationale: Of necessity, any course which teaches improvement of instruction in the basic skills must be well grounded in an understanding of the competencies needed in today's global workplace. The purpose of this unit is to offer suggestions for infusing the non-technical skills into the courses which are included in this manual. Although it would be ideal to provide a total course focusing on activities which teach workplace skills, in most cases and schools it is neither practical nor possible. Fo. this reason, the competencies are offered in unit outline format so that you may select methods or activities which are appropriate in a specific course. Also, activities and methods are included in each of the specific courses in this guide.

Best practices: Because of the sophistication of the workplace basics and workplace knowhow, dramatic changes in approaches to teaching will be needed. Some of these teaching strategies must include:

- utilizing the experiences of students in the classroom
- creating self-directed learning through active learning techniques
- providing opportunities for students to work with others either collaboratively or in teams
- designing classroom experiences using emotion and thought (knowledge or facts) which rely on the senses and using intuition to facilitate learning
- helping students learn to motivate themselves, solve problems, and create answers
- giving students opportunities to learn to lead and to follow
- assisting students to acquire communication skills--especially oral, written, teaching, and presentation skills
- requiring students to learn to evaluate themselves and their peers, their learning, and their products
- reinforcing the basic skills of reading, writing, and computation

Ongoing evaluation is essential to the successful internalization of technical and non-technical skills. Authentic assessment techniques, such as portfolio development, rubrics, journals or logs, one-minute writings, etc., may assist teachers in reinforcing best practices. Throughout this curriculum guide are rubrics for at least one of the projects or activities in each of the

skills areas. An excellent resource for alternative classroom evaluation techniques is Angelo and Cross' *Classroom Assessment Techniques (1988)*.

<u>Unit objectives</u>: At the end of this unit, one should be able to:

- know the competencies (in part) that will be needed in the workplace
- select activities for reinforcing the competencies
- select and utilize the best practices in the business education classroom
- apply an alternative assessment technique to evaluate student learning.

<u>Unit outline</u>: This unit outline on Job Skills focuses on selected activities and workplace competencies for the purpose of increasing students' ability to compete for, attain, and advance in the global workforce.

I.   WORKPLACE KNOWHOW (the SCANS report)

    A.   **Resources:** Allocate time, money, materials, and people

        1.   allocate time: select relevant, goal-related activities, rank them in order of importance, allocate time to activities, and understand, prepare, and follow schedules. Examples of activities might include:

            - construct a timeline chart
            - estimate the time required to complete a project or task; evaluate the results
            - use computer software to plan a project
            - keep a time management log for a week to determine how time is spent; evaluate the results: Is time being spent doing the things that will aid students in meeting their goals?

        2.   allocate money: use or prepare a budget, including cost and revenue forecasts; keep detailed records to track budget performance; make appropriate adjustments. Examples of activities might include:

            - estimate costs for a student organization project
            - prepare a multi-year budget using spreadsheet software
            - do a cost analysis for a specific project

        3.   allocate materials and facilities: acquire, store, and distribute materials, supplies, parts, equipment, space, or final products in order to make the best use of them. Examples of activities might include:

- lay out a work space document with narrative and graphics using desktop publishing software
- demonstrate understanding of various inventory systems (FIFO, LIFO, Just In Time, etc.)
- design a request for proposal (RFP) process

4. allocate human resources: assess knowledge and skills and distribute work accordingly, evaluate performance, and provide feedback. Examples of activities might include:

- develop a plan to staff a student organization event
- write a job description
- conduct a performance evaluation

B. Information: Identify need for data, obtain it from existing sources or create it, and evaluate its relevance and accuracy.

1. acquire and evaluate information: identify need for data, obtain data from existing sources or create it, and evaluate relevance and accuracy. Examples of activities might include:

- develop a form to collect data
- research and collect data from appropriate resources (library, on-line databases, field research, etc.); conduct a survey needed by the school
- evaluate the data collected from the survey
- present the data from the survey

2. organize and maintain information: organize, process, and maintain written or computerized records and other forms of information in a systematic fashion. Examples of activities might include:

- develop a filing system for storing information (printed or computerized)
- develop an inventory recordkeeping system
- develop a bill processing system
- use the *Organizing a Database* exercise (in the Appendix)

3. interpret and communicate information: select and analyze information and communicate the results to others using oral, written, graphic, pictorial, or multimedia methods. Examples of activities might include:

- produce a report using graphics to interpret and illustrate the narrative information
- make an oral presentation using several different media to present information (transparencies, multimedia, audio, film, etc.)
- develop material for communicating information to be used during a conference call, videoconference, or on-line e-mail

4. use computers to process information: use computers to acquire, organize, analyze, and communicate information. Examples of activities might include:

- use spreadsheet software to develop a budget
- use graphics software to prepare transparencies for a report
- use on-line databases to research a report (Lexus, ERIC, Internet, etc.)

C. Interpersonal: Work on teams, teach others, serve customers, lead, negotiate, and work well with people from culturally diverse backgrounds.

1. participate as a member of a team: work cooperative with others and contribute to group with ideas, suggestions, and effort. Examples of activities might include:

- collaborate with group members to solve a problem
- develop strategies for accomplishing team objectives
- work through a group conflict situation

2. teach or help others learn. Examples of activities might include:

- teach another student how to complete a project on the computer
- explore possible solutions to a problem in a formal group situation

3. serve clients/customers: work and communicate with clients and customers to satisfy their expectations. Examples of activities might include:

- demonstrate an understanding of who the customer is in a work situation
- deal with a dissatisfied customer in person or in a role playing situation. If in a job situation, document the situation and how it was resolved and share with the class.

- respond to a telephone complaint about a product or service. If in a job situation, document the complaint and how it was resolve and share with the class.

4. exercise leadership: communicate thoughts, feelings, and ideas to justify a position; encourage, persuade, convince, or otherwise motivate an individual or group, including responsibly challenging existing procedures, policies, or authority. Examples of activities might include:

- use specific team-building concepts to develop a work group (see specific exercises in the Appendix)
- select and use an appropriate leadership style for different situations
- use effective delegation techniques

5. negotiate: work toward an agreement that may involve exchanging specific resources or resolving divergent interests. Examples of activities might include:

- develop an action plan for negotiating
- write strategies for negotiating
- conduct an individual and a team negotiation

6. work with cultural diversity: work well with men and women and with a variety of ethnic, social, or educational backgrounds. Examples of activities might include:

- demonstrate an understanding of how people with differing cultural/ethnic backgrounds behave in various situations (work, public places, social gatherings)
- demonstrate the use of positive techniques for resolving cultural/ ethnic problem situations

D. Systems: Understand social, organizational, and technological systems, monitor and correct performance, and design or improve systems.

1. understand systems: know how social, organizational, and technological systems work and operate effectively within them. Examples of activities might include:

- draw and interpret an organization chart
- develop a chart that illustrates an understanding of workflow

- draw a diagram that illustrates a technological problem definition and problem-solving process

2. monitor and correct performance: distinguish trends, predict impact of actions on system operation, diagnose deviations in the function of a system/organization, and take necessary action to correct performance. Examples of activities might include:

- generate a troubleshooting form for a specific process or piece of equipment
- develop a troubleshooting process for a specific piece of equipment

3. improve and design systems: make suggestions to modify existing systems to improve products or services, and develop new or alternative systems. Examples of activities might include:

- draw a diagram showing an improved system for turning in papers in the classroom
- choose a situation needing improvment, break it down, examine it, propose an improvement, and implement it

E. **Technology:** Select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot technologies.

1. select technology: judge which set of procedures, tools, or machines, including computers and their programs, will produce the desired results. Examples of activities might include:

- read equipment descriptions and technical specifications to select equipment to meet needs
- visit vendors to acquire information to select a computer system

2. apply technology to tasks: understand the overall intent and the proper procedures for setting up and operating machines, including computers and their operating systems. Examples of activities might include:

- set up/assemble appropriate equipment from instructions
- share with others how a computer system was assembled
- select appropriate software for specific tasks

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- maintain and troubleshoot technology: identify, prevent, or solve problems in machines, computers, and other technologies. Examples of activities might include:

  - read and follow instructions for troubleshooting and repairing relevant equipment
  - read and follow maintenance instructions for keeping relevant equipment in good working order

II. WORKPLACE BASICS (Department of Labor and ASTD)

   A. **Learning to learn:** Understand the nature of knowledge; organize learning activities; apply critical thinking skills; relate and recall information; use basic reading, writing, and computation skills; and utilize self-assessment. Examples of activities might include:

   - learn and practice active listening skills
   - take a learning styles inventory and develop an individualized training program
   - analyze and solve a case study and apply creative thinking skills
   - write the script for a role play situation, illustrating the proper way to criticize a subordinate
   - write a marketing plan for a product a student organization intends to sell (individual or group project)
   - devise a life goals map that includes personal, spiritual, educational, vocational, and recreational goals; add timelines; mail to students in a specified period of time for self-evaluation
   - develop a notetaking process for writing down important concepts, terminology, data (this might include taking a notetaking course)
   - keep a daily journal that reflects learning, goals, concerns, books and articles read

   B. **Communication:** Create awareness of importance of listening, written, oral, and non-verbal communication, as well as provide practice in developing these skills. Examples of activities might include:

   - role play to understand power: who sits where, who takes the initiative, who has what skills, the "pecking" order, and communication structure
   - evaluate and give feedback to peers on videotape or in class presentations
   - develop an evaluation form for in-class presentations or written assignments

- assess team exercises
- write memos, letters, reports, abstracts, book review, summaries, feasibility study, essays, speeches, agendas, case analyses, programs, flow charts, outlines—create an assessment instrument for evaluating these written exercises
- use *Listen Up!* and *Facial Expressions* exercises in the Appendix

C. **Critical Thinking:** Demonstrate why critical thinking is an essential element for success in the workplace. Examples of activities might include: _

- brainstorm
- invent a problem-solving system
- develop research techniques
- utilize the Socratic method to help students develop and evaluate their thinking with careful questioning and leading techniques
- utilize peer coaching
- evaluate group projects by asking, "What caused...?" "What evidence is there to show...?" "Can you agree with...?" "Compare and contrast..."
- utilize group tests that are open-book or memory, essay or objective, in which students are put into groups to discuss and debate answers; each student remains accountable for his/her answers. Students should be advised to think for themselves, weigh the comments of others in the group, and rely on their own judgment for the final answer.
- role play case studies
- teach observation techniques and assign projects, such as viewing videotapes, behavior, experiments, natural phenomenon, workers, etc. Assign specific elements to observe: handling customers, colors, cause and effect, tone of voice, customs, viewpoints, etc.
- develop tests in which students have to justify their responses to each questions or justify why an answer may be incorrect; this eliminates guessing
- require students to keep a "thinking" journal to analyze each project or assignment that they are asked to do during the semester. (See an example of a journal entry included from Linda Koffel's *Teaching Workplace Skills* book in the Appendix.) Students might be asked to highlight statements where assumptions have been made; they might be asked to verbalize what they have learned about their own thinking after reading their journals; etc.
- develop and use a decision-making model
- analyze fallacies in thinking: instances where one has jumped to conclusions, contradicted oneself in the same argument, asked loaded

and leading questions, applied the domino theory, made ambiguous arguments, used the halo effect, etc.

- write a letter to the editor, taking a stand for or against an issue that has arisen in the newspaper
- use the *Blooming Worksheets* exercise in the Appendix

D. **Basic Skills: Reading, Writing, Computation:** The foundation skills on which all other skills are built; reinforce the ability to read, write, and compute wherever and whenever possible. Infusing these skills will be easy in some courses and harder in others.

1. Reading. Examples of activities might include:

   - read and review articles pertaining to the subject
   - assign newspaper articles to be clipped and/or copied and put into a notebook for the duration of a project, a unit, or a semester
   - assign Mortimer Adler's book, *How to Read a Book*, for a book review
   - require students to outline a chapter in the textbook
   - require students to keep a list of words (and definitions) that they have had to look up in the dictionary

2. Writing. Examples of activities might include:

   - teach students to compose at the computer keyboard
   - keep a journal
   - write a letter to the teacher/instructor if students have questions or concerns
   - assign collaborative writing assignments (see a suggested activity in the Appendix)
   - ask students to summarize a lecture, a chapter from the textbook, etc.

3. Computation. Examples of activities might include:

   - use newspapers to find articles that include computations of some sort
   - require students to compute their own grade averages, using spreadsheet software or grading software
   - summarize statistical data from textbooks, articles, or other sources

Evaluation: Suggested evaluation techniques for these activities may include rubrics, portfolios, journals, essay and objective tests, case analysis, group testing, and other means. A suggested rubric for evaluating students' workplace skills is included in the Appendix. In addition, throughout this manual you will find rubrics that have been developed for specific projects and subjects.

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APPENDIX: ACTIVITIES

Organizing a Database
Survival in the Desert
The Sky's the Limit
Examples of an entry from a Thinking Journal
Listen Up!
Facial Expressions
Bloooming Worksheets
Cooperative Writing and Editing Pairs
Rubric: World of Work

Billy Joel's song, "We Didn't Start the Fire," offers a perfect opportunity for students to work in groups to develop a catalog of the 120 items that are included in the song. While this does not appear to be a pure applied communication exercise, it could require students to research, summarize, and report on how they have catalogued and/or highlighted the sheer numbers of important people, political events, arts, places, inventions, historical events, in the song. Library research also could be included in the assignment, since many of the 120 items in the song may need to be researched by students. Including the technology of working with a database to categorize the elements could be an option.

The words of the song are printed below.

We Didn't Start the Fire
Written by Billy Joel

To complete this assignment, students will have to set up the structure of their project, decide how to complete it, set up the reporting format, and present the results.

Survival In The Desert
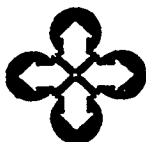
It is approximately 10:00 a.m. in mid July and you have just crash landed in the Sonora Desert in southwestern United States. The light twin engine plane, containing the bodies of the pilot and the co-pilot, has completely burned. Only the air frame remains. None of the rest of you have been injured.

The pilot was unable to notify anyone of your position before the crash. However, ground sightings, taken before you crashed, indicate that you are 65 miles off the course that was filed in your VFR Flight Plan. The pilot had indicated before you crashed that you were approximately 70 miles south-southwest from a mining camp which is the nearest known habitation.

The immediate area is quite flat and except for occasional barrel and saguaros cacti appears to be rather barren. The last weather report indicated that temperatures would reach 110 -- which means that the temperature within a foot of the surface will hit 130. You are dressed in light-weight clothing--short sleeved shirts, pants, socks and street shoes. Everyone has a handkerchief. Collectively, your pockets contain $2.83 in change, $85.00 in bills, a pack of cigarettes, and a ballpoint pen.

The Problem:

Before the plane caught fire your group was able to salvage the 15 items listed below. Your task is to rank these items according to their importance for your survival, starting with "1" the most important, to "15" the least important.

You may assume that the number of survivors is the same as the number on your team and the team has agreed to stick together.

Step 1: Stop or Go. Teams decide if they are to stay at crash site or go for help.

Step 2: Individual ranking. Each member of the team is to individually rank each item. Do not discuss the situation or problem until each member has finished the individual ranking. Once discussion begins do not change your individual ranking.

Step 3: Team ranking. After everyone has finished the individual ranking, rank in order the 15 items *as a team*.

Item															
.45 Caliber Pistole (loaded)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Book: "Edible Animals of the Desert"	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Bottle of Salt Tablets (1000)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Quart of Water per Person	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Red and White Parachute	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Compress Kit with Gauze	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2 Quarts of 180 Proof Vodka	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Sectional Air Map for Area	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Flashlight	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Jack knife	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Topcoat per Person	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Plastic Raincoat	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Two Pair of Sunglasses	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A Cosmetic Mirror	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Magnetic Compass	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Survival Expert's Ranking
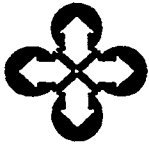
Source: Air Force Survival Training Manual
Teams should decide to stay at crash site.

1. **A Cosmetic Mirror**—In the sun, the mirror can produce bright light and be seen for several miles.
2. **1 Topcoat per Person**—Best thing to do is attempt to restrict the air flow around your body to decrease the amount of water evaporation that results in dehydration and death.
3. **1 Quart of Water per Person**—Will keep you "comfortable" for a while, however, there is a relatively short survival time with the water.
4. **Flashlight**—Helpful to aid searchers after dusk. Also with batteries removed the case can be used as a container for the plastic still.
5. **Red and White Parachute**—To produce shade by spreading parachute over the air frame of the plane.
6. **Jack knife**—Since cactus is available, you can use the knife to cut the cactus and use it in a homemade still to obtain moisture from the barrel and saguaros cacti.
7. **Plastic Raincoat**—Knife and raincoat go together to develop plastic still.
8. **.45 Caliber Pistol (loaded)**—Dangerous item to have because of physical and emotional stress of the group.
9. **Two Pair of Sunglasses**
10. **Compress Kit with Gauze**—Not needed since no one is injured and you should not be leaving the crash site.
11. **Magnetic Compass**—Not needed since you should not attempt to walk from the crash site.
12. **Sectional Air Map for Area**—Not needed since you should not attempt to walk from the crash site.
13. **Book: "Edible Animals of the Desert"**—Should not expend your energy attempting to leave the crash site to hunt.
14. **2 Quarts of 180 Proof Vodka**—Little value since the effects of alcohol on your system is to draw water in order to absorb the alcohol into your system.
15. **Bottle of Salt Tablets (1000)**—Will actually rob your body of moisture.

Rank Order of Items:

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
.45 Caliber Pistol (loaded)	1	2	3	4	5	6	7	(8)	9	10	11	12	13	14	15
Book: "Edible Animals of the Desert"	1	2	3	4	5	6	7	8	9	10	11	12	(13)	14	15
Bottle of Salt Tablets (1000)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	(15)
1 Quart of Water per Person	1	2	(3)	4	5	6	7	8	9	10	11	12	13	14	15
Red and White Parachute	1	2	3	4	(5)	6	7	8	9	10	11	12	13	14	15
Compress Kit with Gauze	1	2	3	4	5	6	7	8	9	(10)	11	12	13	14	15
2 Quarts of 180 Proof Vodka	1	2	3	4	5	6	7	8	9	10	11	12	13	(14)	15
Sectional Air Map for Area	1	2	3	4	5	6	7	8	9	10	11	(12)	13	14	15
Flashlight	1	2	3	(4)	5	6	7	8	9	10	11	12	13	14	15
Jack knife	1	2	3	4	5	(6)	7	8	9	10	11	12	13	14	15
1 Topcoat per Person	1	(2)	3	4	5	6	7	8	9	10	11	12	13	14	15
Plastic Raincoat	1	2	3	4	5	6	(7)	8	9	10	11	12	13	14	15
Two Pair of Sunglasses	1	2	3	4	5	6	7	8	(9)	10	11	12	13	14	15
A Cosmetic Mirror	(1)	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Magnetic Compass	1	2	3	4	5	6	7	8	9	10	(11)	12	13	14	15

THE SKY'S THE LIMIT

Experiential Training Activities for Outside and In, Carmine M. Consalvo

The next time you are looking for a really active exercise for a Friday before a holiday or a reward for hard work, try this one.

Divide players into two teams of about four to six people each. Set up a volleyball net (if practical and possible) or draw an imaginary line down the middle of your classroom and mark the limits. Give each team a giant beach ball (or the largest Nerf ball you can find). Their task is to hit the ball back and forth over the net as many times as they can without letting it hit the ground.

However, they must agree first on several goals:

1. **Minimum goal:** The fewest number of times they can hit the ball over the net before it hits the ground. Each time they fail to meet this goal, they lose one point.

2. **Target goal:** The number of times over the net that represents a reasonable, yet challenging goal. Each time they meet this goal, they will be awarded one point.

3. **Stretch goal:** The number of times over the net that represents a high-performance effort. Each time they meet this goal, they will receive two points.

Each team's mission is to score 10 points based on these three goals.

The groups also set goals for "rounds." Each time the ball hits the ground during a volley counts as one round. They should set a minimum, a target, and a stretch goal for how many rounds it will take them to score the 10 points to achieve their mission. (The fewer the number of rounds, the more difficult the goal.)

Allow them to handle the ball a bit before setting their goals.

Start the play, and once they score 10 points, congratulate them and note how many rounds it took.

You might play one last game: Ask them to set a target for the maximum number of consecutive times they can hit the ball over the net without its touching the ground. When they achieve their goal, congratulate them and ask if it was easy, or if they want to set a higher goal. Or, if they had problems, ask whether they want to lower it. Finally, ask them to discuss these questions about playing on a team:

a. Were the team's initial goals too conservative, on target, or too ambitious?

b. How would you describe your team's interaction during the goal-setting process?

c. How would you describe your team's interaction during the game itself?

d. Did you handle the second goal-setting activity differently? Why?

e. What would you do differently in the future?

f. How does the notion "when it's fun, it gets done" relate to goal-setting and work performance?

Let your imagination guide you from here!

Example of an entry from a Thinking Journal

8 Feb. 1991. Resume Writing Assignment. I was asked to write my own resume and then to use computer graphics to do a professional layout for printing. My first step was to locate an example of a resume I liked and which my resource *Resume Writing* (fictitious source) deemed an effective resume for obtaining employment. My choice was a chronological resume because I think (from experience) that more employers take an interviewer seriously with a chronological resume. In fact, I have heard that a functional resume may automatically mean that a person will not get an interview. Anyway, after I located an example, I looked up the exact dates I started and ended each of my jobs and then I wrote short descriptions of my responsibilities. I used a format example given to me by my instructor. It included such things as hobbies, achievements, and organizations. I included them and then looked up the awards I couldn't remember. Once I had a draft, I typed the whole resume in the computer. I did not take time to choose fonts and type styles as I wanted to see what it looked like in type. Once it was inputted, I edited it for grammar and style and then I went back and chose Geneva type and used different type styles, such as bold, and type sizes to organize it so it was easy to read. I had to edit it further in order to keep it to one page (which the author of my *Resume Writing* said was a must). I printed it out on the laser printer and reproofed it because I often see mistakes on the printed page which I don't see on the computer screen and corrected two items and reprinted it. I turned it in on Tuesday.

LISTEN UP!

Here are two simple tests that allow you to rate yourself as a listener. There are no correct or incorrect answers.

1.   Circle the term that best describes you as a listener:

   Superior   Excellent   Above Average   Average

        Below Average   Poor   Terrible

2.   On a scale of 0-100 (100=highest), how would you rate yourself as a listener? ____

3.   On a scale of 0-100, how do you think the following people would rate you as a listener?

   Your best friend _____   Your boss _____
   Business/work colleague _____   A job subordinate _____
   Your spouse/friend _____   Your teacher _____

Discussion points:

1.   85% of all people rate themselves as average or less. Fewer than 5% rate themselves as superior or excellent. On the 0-100 scale, the average rating is 55.

2.   When comparing the listening self-ratings and projected ratings of others, most respondents believe that their best friend would rate them highest as a listener--and that rating would be higher than the one they gave themselves.

3.   People usually think their bosses would also rate them higher than they rated themselves. We tend to listen to our bosses better...whether it's out of respect or fear doesn't matter. The same things could be said for teachers: they are bosses--of a sort.

4.   The ratings for colleague and job subordinate are just about the same as the listeners rate themselves...around 55. But when you get to "spouse" or "friend," something really dramatic happens. The score here is significantly lower than the 55 average. And what's interesting is that the figure goes steadily downhill. Newlyweds tend to rate their spouse at the same high level as their best friend. As the marriage goes on, the ratings fall. So in a household where the couple has been married 50 years, there could be a lot of talk. But maybe nobody is listening.

(over)

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SOME FACTS ON LISTENING

- We listen at the rate of 500 words per minute.

- We talk at the average of 125 words per minute.

- That leaves a 375 words per minute gap. How are we filling this gap?

  - On the minus side: anxious, thinking about and formulating our response, judging, thinking, and waiting for an opening to talk.

  - On the plus side: concentrating, asking for clarification, observing speaker's gesture; establishing eye contact and nodding head, repeating and summarizing, contributing, etc.

- We remember only 20% of what we hear, 30% of what we see, but we remember 65% of what we see and hear. And that percentage increases when you add doing in the equation.

- 10 keys to developing good listening habits:

  √ find areas of interest in what you're hearing (WIIFM)
  √ judge content, not delivery
  √ hold your fire
  √ listen for ideas
  √ be flexible
  √ work at listening
  √ resist distractions
  √ exercise your mind
  √ keep your mind open
  √ capitalize on the fact that thought is faster than speech

Summary: Most people are inefficient listeners. Tests have shown that immediately after listening to a ten-minute oral presentation the average listener has heard, understood, properly evaluated, and retained approximately half of what was said. Within 48 hours that drops off another 50% to a final 25% level of effectiveness. In other words, unless you work hard at listening, you will probably only retain 25% of what you hear.

•THE POINT IS THAT WE DON'T LISTEN PASSIVELY!•

Facial Expressions

|	
Purpose:	To use graphic tools in a software program To draw facial expressions and to write sentences which describe the feelings of expressions
Software:	Graphics program with a text tool
Curricular Area:	Art: drawing faces; Language Arts: creative writing, spelling
Time:	Four 45 minute sessions
Goal:	A one page printout of a facial expression and personal statement
Computer Skills:	Mouse-work, using graphic tools, typing, saving, printing
Extensions:	Color the printouts; display these around the room or gather them into a class facial expression book. Encourage students to write a story explaining the situation which occurred causing the facial expression.

Procedure: It is best to finish the Shapes Activity before beginning this one. The students will then be familiar with the shape tools and the mouse, and thus, better prepared to draw the faces.

Read to the students a list of feelings like sad, happy, glad, gloomy, angry, scared, frightened, sleepy, bored, lazy, hungry. Have each child select a feeling. They then draw a round face that shows that feeling. Finally, the student types a sentence which describes an occasion for the feeling of the facial expression, such as "I feel hungry when I leave my lunch at home." If time permits, repeat this for another facial expression.

When students draw the face suggest that they use the oval tool for eyes and the line tool for mouth and nose. Other possibilities depend on your graphics program.

The time given for this activity is average. More time may be needed, depending on the ability of the students.

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Sample
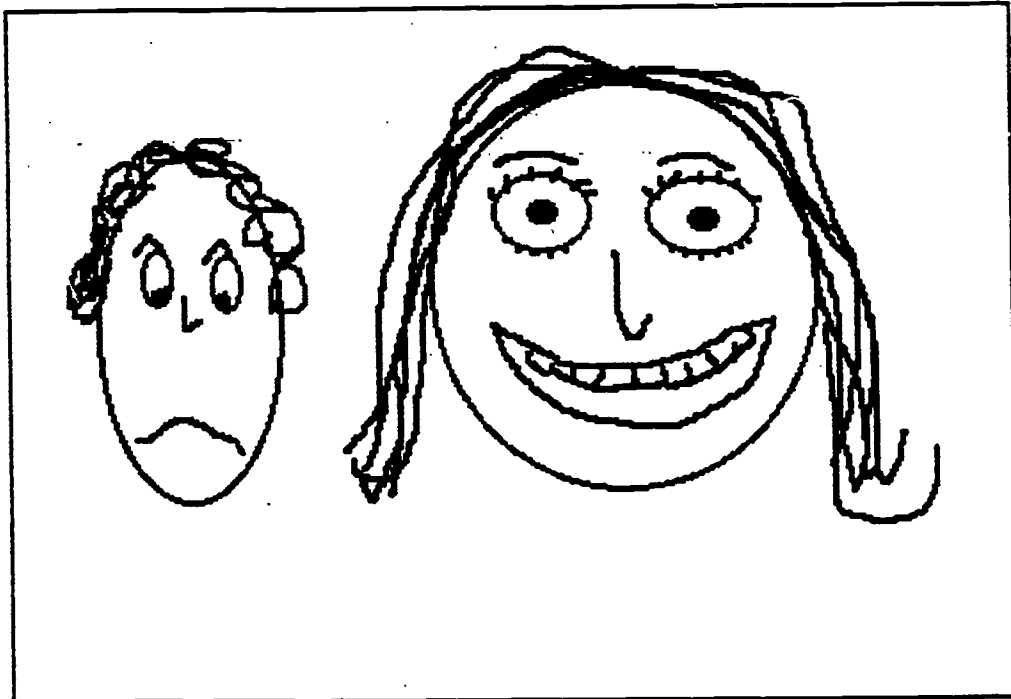
I feel sad when I get in trouble.

I feel happy when I get to play with the computers at recess. By Julie

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BLOOMING WORKSHEETS

Cooperative Learning, Spencer Kagan, 11:18+

Usually students work alone to complete worksheets that are either prepared by the teacher or provided by the textbook authors. The next time worksheets are provided for your students, consider using Bloom's Taxonomy to create a "Bloom"ing environment. Spencer Kagan suggests the following way to organize textbook materials with groups:

1.   **Knowledge.** Recall or recognize information: *Recall, define, recognize, identify...Who was...? What was...?*

2.   **Comprehension.** Organize learned material, rephrase it, describe it in his/her own words. *Describe, compare, illustrate, rephrase, explain, contrast... Why was...? What was the main idea of...?*

3.   **Application.** Use previously learned material to solve a problem. *Apply, classify, choose, use, select, solve... Use the principle of supply and demand to explain... Which of the following statements is an over-generalization...?*

     Application questions make particularly good worksheet questions. Having students **apply** text information to solve new problems is one of the best ways to lead them to deep and useful learning.

4.   **Analysis.** Identify reasons, causes, and motives; consider available evidence to reach a conclusion, inference, or generalization; analyze a conclusion, inference, or generalization to find supporting evidence. *Analyze, identify cause, infer, deduce, detect... Which was the cause of...? What can be concluded from...? Provide evidence for...*

5.   **Synthesis.** Combine ideas or related information; produce original communications, make predictions based on several bits of information, solve a problem using several sources. *Write, design, plan, construct, combine, develop... Construct a plan to satisfy the needs of all three... Combine the ideas of ... In an expanded view of...*

6.   **Evaluation.** Judge the merits of an idea, solution, or aesthetic work. *Judge, argue, appraise, criticize... How good, beautiful, useful, wise...? Which is better...?*

Combine several group techniques as these worksheets are completed, such as *Think...Pair Share*, or *Stand and Share*, or *Roundtable Brainstorming* (see Johnson, Johnson, & Holubec and Kagan for these exercises). Use **your** favorite group technique. Could this exercise be used for a chapter or unit test review?

COOPERATIVE WRITING AND EDITING PAIRS

Cooperative Learning in the Classroom, Johnson, Johnson, & Holubec

When your lesson requires students to write an essay, report, letter, or review of something they have read, use cooperative writing and editing pairs. Pairs verify that each member's composition is perfect according to criteria you explain; then they receive an individual score on the quality of their writing. You also can give a group score based on the total number of errors made by the pair in their individual compositions. This is a good composition exercise to be completed at the computer, also.

Here's how the process works:

- Assign students to pairs with at least one good reader in each pair. If you do this exercise at the computer, good keyboarding skills may be a factor.
- Student A describes what she is planning to write to Student B, who listens carefully, probes with a set of questions, and outlines (or keys) Student A's ideas. Student B gives the written outline to Student A.
- This procedure is reversed with Student B describing what he is going to write and Student A listening and completing (keying) an outline of Student B's ideas, which is then given to Student B.
- The students individually research the material they need to complete their writing exercise, keeping an eye out for material useful to their partner.
- The students work together to write the first paragraph of each composition to ensure that they both have a clear start on their compositions.
- The students write their compositions individually.
- When the students have completed their writing exercises, they proofread each other's compositions, making corrections in grammar, spelling, punctuation, language usage, and other aspects of writing you specify. Students also give each other suggestions for revision.
- The students then reread each other's compositions and sign their names to indicate that each composition is error-free.
- After the exercise, students discuss how effectively they worked together (listing the specific actions they engaged in to help each other), plan what behaviors they are going to emphasize in their next writing pair, and thank each other for the help and assistance provided.

Your role while students work in pairs is to intervene when appropriate to help students master the writing, keying or formatting, and cooperative learning skills.

WORLD OF WORK RUBRIC
35 points

COMPONENT	COMMENDABLE	ACCEPTABLE	NOT ACCEPTABLE
Organization	Well organized; materials and resources are easily located by student and instructor. (4 points)	Usually organized; locates materials and resources readily. (2 points)	Disorganized; few materials or resources can be located. (0 points)
Use of Resources and Information	Uses resources as they are intended to be used; knows where to get information; takes pride in work. (4 points)	Resources are used as they are intended but some may be wasted; uses little initiative to find information; not as attentive to quality of work. (3 points)	Little attention is given to the proper use of resources; no interest shown 'n finding information; no pride shown in work.(0 points)
Following Instructions (Listening)	Follows directions; asks good questions; retains information. (4 points)	Follows directions; does not ask enough questions; may have to ask for information to be repeated. (2 points)	Does not follow directions; requires repeated instruction; questions are redundant. (0 points)
Communication	Uses oral and written communication principles to produce mailable, usable, and relevant documents. (5 points)	Follows oral and written communication principles most of the time; docu- ments are usable with minor revisions. (3 points)	Does not know or use oral and written communication principles; documents are not usable. (0 points)
Punctuality	On time every day. (5 points)	Arrives late with acceptable excuse. (3 points)	Never on time; no explanation. (0 points)
Attendance	Understands and respects the need to be at work; makes up for absences. (3 points)	Makes up for most of the absences; understands the need to be at work. (1 point)	Frequently absent; no attempt to make up for absences. (0 points)
Interpersonal Skills	Works well alone or with others; learns and teaches; evidence of leadership and followership. (5 points)	Works well alone; may not work with others as well; can teach when prodded; some evidence of leadership and followership. (3 points)	Works well alone; no interest in working with others or teaching; not a leader or a follower. (0 points)
Critical Thinking	Asks good questions; evaluates self and others; utilizes technology wisely; evidence of thinking in work. (5 points)	Asks questions; evaluates self; utilizes technology appropriately; work is not as well thought out. (3 points)	Doesn't ask questions; work is not thought out; utililizes technology to play. (0 points)

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PRINCIPLES OF ACCOUNTING

PREPARED BY YUAN-PU, PHILIP, CHU
WAN-LING, AMY, HUANG

University of Missouri- Columbia
School of Accountancy

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PRINCIPLES OF ACCOUNTING

TEAM MEMBER: YUAN-PU, PHILIP, CHU
            WAN-LING, AMY, HUANG

SCHOOL AFFILIATION: SCHOOL OF ACCOUNTANCY
YEAR: GRADUATE STUDENT

SPECIALIZED AREA: ACCOUNTING

LEVEL: ACCOUNTING MAJOR AND NON-ACCOUNTING MAJOR COLLEGE STUDENTS

I. RATIONALE:

Principles of Accounting is a course appropriate for students from any college or department within the university--no matter what their major field of study. Principles of Accounting has traditionally been considered an integral part of the education of a learned person. Anyone who would consider themselves broadly or liberally educated should have a knowledge of business financial affairs.

Since Principles of Accounting is the building block of business knowledge, it not only provides the foundation for the future education of accounting majors, but also enables both major and non-major students to develop essential business skills including:

- Technical skills:(a) complete a manual accounting simulation- voucher, journal entries, general ledger, trial balance sheet, and financial statements and (b) an automated accounting simulation.
- Communication skills:(a) oral communication and (b) written communication.
- Intellectual skills:(a) logical reasoning ability and (b) problem-solving ability.

II. OBJECTIVES:

1. Students should be able to obtain a comprehensive understanding of accounting information, whether they are accounting majors or not.
2. Accounting majors should be able to obtain a sound understanding of financial accounting fundamentals.
3. Non-accounting majors should find the solid grounding in accounting and the explanations of the uses of accounting information presented in this course to be valuable in their future careers as managers, investors, bankers, or perhaps as owners of their own businesses.
4. All students should be able to analyze an accounting problem and correctly apply the quantitative skills to

solve it.
5. All students should be able to complete a manual
   accounting simulation and an automated accounting
   simulation.
6. All students should be able to recognize important issues
   and ask critical questions in accounting case problem.
7. All students should be able to research the answers to
   case questions in the authoritative literature.

III. EVIDENCE OF RESEARCH:

According to M. J. Albin and James R. Crockett's article--
"Integrating Necessary Skills and Concepts into the Accounting
Curriculum," accounting courses should prepare students to
develop the necessary skills that would be required in the
workplace. These skills include oral and written communication
skills, analytic skills, computer skills, and interpersonal
skills.

The best practice in teaching a one-semester course in
auditing is one that combines topical coverage of the conceptual
and technical aspects of accounting with a simulated real world
case, according to Barbara L. Adams's article-- "An Integrated
Approach to Teaching a One-Semester Course in Auditing. This
practice, in our opinion, could also be used in teaching
introductory accounting course.

In addition, according to "The Introductory Accounting
Course: Education Majors and Nonmajors," changes in accounting
education should begin with the first course in accounting
because it sets the tone and provides a foundation upon which
future accounting courses will be built. Therefore, the
introductory course should place greater importance on developing
students' intellectual and communication skills in addition to
their technical skills(Steven M. Mintz and Alan A. Cherry).

IV. SUGGESTED ACTIVITIES TO IMPLEMENT BEST PRACTICES MUST INCLUDE:

A. Cultural awareness and international/global
   considerations
   -- A brief introduction on accounting systems in the
      global environment
B. Cooperative/active learning/teambuilding
   -- Assign a group project to prepare financial documents
      and financial statements for a complete accounting
      cycle.
C. Internet activity
   -- Show students how internet works and how they can use
      Internet to locate resources for research
D. Computer activity
   -- Use the data generated from the manual accounting
      simulation to prepare financial documents and
      financial statements with *System Understanding Aid*

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for Micro-Computer Version package
  E. Critical-thinking
    -- Develope students' problem-solving abilities,
      logical reasoning ability, communication skills
      through case discussion and written reports.
  F. Real-world application
    -- Invite practitioner as guest speaker to the class.
    -- A field trip to public accounting firms.

V. **ASSESSMENT TECHNIQUES:**
  A. Assign a case for a written report(30 points)
  B. Assign an Internet Project for a written report(30
    points) and oral presentation(20 points)
  C. Assign a manual accounting simulation project(100 points)
  D. Assign an automated accounting simulation project(50
    points)
  E. Distribute a comprehensive final examination(120 points)

  Grade Scale:
  A 300-350 points   C 200-249 points   F Below 150 points
  B 250-299 points   D 150-199 points

TIME: ONE SEMESTER

MATERIAL NEEDED: <u>PRINCIPLES OF ACCOUNTING</u>, 3rd edition,
Loren A. Nikolai/John D. Bazley/James C.
Stallman(1990)
<u>SYSTEMS UNDERSTANDING AID FOR AUDITING--
ACCOUNTING PROCESS</u>, 3rd edition, Alvin A.
Arens/D. Dewey Ward(1990)
<u>SYSTEMS UNDERSTANDING AID FOR MICRO-COMPUTER
VERSION</u>, 3rd edition, Alvin A, Arens/D. Dewey
Ward/Dennis L. Kimmell(1990)

UNIT CONTENT

Unit One: Accounting Process(2 months)

    A. Accounting:Its Uses, Principles, and Practices
    B. Recording and Reporting Accounting Information
    C. Revenues and Expenses
    D. Adjusting Entries and the Worksheet
    E. Accounting for a Merchandising Company

Unit Two: The Balance Sheet(1 month)

    A. Assets
      1. Current Assets
        a. Cash and Marketable Securities
        b. Accounts Receivable and Notes Receivable
        c. Prepaid Expenses
        d. Inventories
      2. Property, Plant and Equipment and
        Depreciation
      3. Intangible Assets

    B. Liabilities
      1. Current Liabilities
        a. Accounts Payable and Accrued Liabilities
        b. Payroll
      2. Long-Term Liabilities

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C. Equity
1. Proprietorships and Partnerships
2. Corporations
    a. Common and Preferred Stock
    b. Retained Earnings
    c. Treasury Stock

Unit Three: Income Statement(2 weeks)

A. Revenues
B. Cost of Goods Sold
C. Operating Expenses
D. Other Revenues and Expenses
E. Earnings Per Share

Unit Four: Statement of Retained Earnings or Stockholders' Equity
(2 weeks)

A. Proprietorships and Partnerships
B. Corporations
C. Closing Entries
D. Evaluation of Post-Closing Trial Balance
E. Review

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UNIT PLAN

Unit One: Accounting Process (2 months)

A. **General Objectives:** After studying the sections in this unit, the student should be able to handle basic accounting process for a corporation

B. **Specific Objectives:** Upon completion of this unit, the student will be able to:

1. Define terminology
2. Record and post transactions in sales journal
3. Record and post transactions in purchases journal
4. Record and post transactions in general journal
5. Record and post transactions in cash receipts journal
6. Record and post transactions in cash payments journal
7. Analyze and record bad debts expense/direct write-off method
8. Analyze and record bad debts expense/allowance method
9. Analyze, calculate and record depreciation transactions
10. Maintain plant assets records
11. Record plant assets and depreciation transactions
12. Analyze and record notes receivable and notes payables transactions
13. Analyze and record adjustments for accrued revenue and expenses
14. Complete an eight-column worksheet
15. Record and post adjusting entries

C. Unit 1 Outline

A. Accounting: Its Uses, Principles, and Practices
B. Recording and Reporting Accounting Information
C. Revenues and Expenses
D. Adjusting Entries and the Worksheet
E. Accounting for a Merchandising Company

D. **Activities/Assignment:** (1) Handout a case problem extracted from FASB Case Book on Recognition and Measurement
Topic: Notes Receivable
(2) Field Trip to an Accounting Firm -- Any Accounting Firm in the Area

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Unit Two: The Balance Sheet (1 month)

A. Unit Objective: Upon the completion of this unit, the students should be able to classify the elements in the balance sheet and prepare a balance sheet

B. Unit 2 Outline

- A. Assets
    1. Current Assets
        - a. Cash and Marketable Securities
        - b. Accounts Receivable and Notes Receivable
        - c. Prepaid Expenses
        - d. Inventories
    2. Property, Plant and Equipment and Depreciation
    3. Intangible Assets

- B. Liabilities
    1. Current Liabilities
        - a. Accounts Payable and Accrued Liabilities
        - b. Payroll
    2. Long-Term Liabilities

- C. Equity
    1. Proprietorships and Partnerships
    2. Corporations
        - a. Common and Preferred Stock
        - b. Retained Earnings
        - c. Treasury Stock

C. Activities/Assignment:
    (1) Handout Manual Simulation Package
    (2) Demonstrate the Use of Internet Topic: How to find resources for researches on Internet (Netscape, Gopher, and Archie)
    (3) Students are divided into "cooperative learning" groups of 3-5 students. I will distribute a topic sheet to students and allow the groups to select the topic they are interested in doing a research. Students are asked to find 2-3 articles related to the topic they choose from Internet and turn in a group written report in Unit Two. Each group is also required to make a 5-10 minutes oral presentation for their paper in Unit Three.

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Unit Three: Income Statement (2 weeks)

A. Unit Objective: Upon the completion of this unit, the students should be able to classify the elements in the income statement and prepare the income statement.

B. Unit 3 Outline

        A. Revenues
        B. Cost of Goods Sold
        C. Operating Expenses
        D. Other Revenues and Expenses
        E. Earnings Per Share

Activities/Assignment:
(1) Group presentation on Internet assignment
(2) Invite guest speaker from one of accounting firms near the school area to class
Topic: Accounting systems in the global environment
(3) Assign *Systems Understanding Aid for Micro-computer Version* to complete an automated accounting simulation project

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Unit Four: Statement of Retained Earnings or Stockholders'
Equity(2 weeks)

A. **Unit Objective:** Upon the completion of this unit, the students should be able to (1) classify the elements in the stockholders' equity, (2) prepare the statement of retained earnings, (3) record and post closing entries, and (4) prepare and evaluate a post-closing trial balance.

B. **Unit 4 Outline**
        A. Proprietorships and partnerships
        B. Corporations
        C. Closing entries
        D. Evaluation of post-closing trial balance
        E. Review

C. **Activities/Assignment:** (1) Invite the president of **Accounting Student Association** to introduce the organization and activities of the association
                              (2) Explore the career opportunities in accounting with students
                              (3) Distribute a comprehensive final exam

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Manual Accounting Simulation Rubric

Component	Commendable	Acceptable	Unacceptable
Voucher	All of vouchers are neat with legible handwriting and figures.	Most of work throughout voucher is neat.	Work throughout voucher is sloppy and much is not legible.
Journal Entries	Work through all journals is accurate. No errors.	Most work throughout journals is accurate. (3 errors or less)	More than 3 errors in journals.
General/Subsidiary Ledger	Work throughout all ledgers is accurate. No errors.	Most work throughout ledgers is accurate. (3 errors or less)	Ledgers have more than 3 errors.
Trial-Balance Sheet	Work throughout trial-balance sheet is accurate.	Most work throughout trial-balance sheet is accurate. (3 errors or less)	Trial-balance sheet has more than 3 errors.
Adjusting Entries	Work throughout all adjusting entries is accurate. No errors.	Most work throughout adjusting entries is accurate. (2 errors or less)	Adjusting entries have more than 2 errors.
Adjusted Trial Balance	Work throughout adjusted trial balance is accurate. No errors.	Most work throughout adjusted trial balance is accurate. (2 errors or less)	Adjusted trial balance has more than 2 errors.
Income Statement	Work throughout income statement is accurate. No errors.	Most work throughout income statement is accurate. (2 errors or less)	Income statement has more than 2 errors.

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Manual Accounting Simulation Rubric

Balance Sheet	Work throughout balance sheet is accurate. No errors.	Most work throughout balance sheet is accurate. (2 errors or less)	Balance sheet has more than 2 errors.
Statement of Retained Earnings	Work throughout statement of retained earnings is accurate. No errors.	Most work throughout statement of retained earnings is accurate. (2 errors or less	Statement of retained earnings has more than 2 errors.
Closing Entries	Work throughout closing entries is accurate. No errors.	Most work throughout closing entries is accurate. (2 errors or less)	Closing entries have more than 2 errors.

Comments: _____ __Total points__

Points possible: 100

Commendable: 10 points
Acceptable: 7 - 9 points
Unacceptable: 4 - 6 points

* Two points will be taken away from the final grade for every one day the assignment is late

42

RESOURCES:

Adams, B. L. (May/June, 1992). An integrated approach to teaching a one-semester course in auditing. *Journal of Education for Business*, 67(5). 291-293.

Albin, M. J. & Crockett, J. R. (July/August,1991). Integrating Necessary Skills and Concepts into the Accounting Curriculum. *Journal of Education for Business*, 66(6). 325-327.

Atamian R. & Ganguli, G. (January/February, 1993). Teacher popularity and teaching effectiveness: Viewpoint of accounting students. *Journal of Education for Business*, 68(3). 163-169.

Beegle, J. & Coffee, D. (November/December, 1991). Accounting instructors' perceptions of how they teach versus how they were taught. *Journal of Education for Business*, 67(2). 90-94.

Business Curriculum Framework-- Integration Activities, October 1994.

Cahan, S. F. & Johnson E. N. (May/June, 1992). Transferring classroom knowledge to real-world accounting: The savings and loan crisis. *Journal of Education for Business*, 67(5). 282-286.

Gammill, L., Hansen, C., & Tinker, S. (July/August, 1992). Linked courses: A method to reinforce basic skills. *Journal of Education for Business*, 67(6). 358-360.

Johnson, L. T. (Ed.). (1991). *The FASB Cases on Recognition and Measurement*. Financial Accounting Standards Board, Homewood, IL: IRWIN.

Lin, Z. J. & Hunter, A. (September/October,1992). Accounting Education for the 21st Century: A Canadian Experiment. *Journal of Education for Business*, 68(1). 38-43.

Mintz, S. M. & Cherry, A. A. (May/June, 1993). The introductory Accounting course: Educating majors and nonmajors. *Journal of Education for Business*, 68(5). 276-280.

Missouri Business education-- Performance Standards and Competencies, Fall 1994.

Nikolai, L. A., Bazley, J. D., & J. C. Stallman. (1990). *Principles of Accounting* (3rd edition). Boston, MA: PWS-KENT Publishing Company.

12

43

NETSCAPE

Robinson, T. R. & Munter, P. (n.d.). *Instructional Case: Cineplex Odeom--Phantom Profits?* University of Miami. Available Netscape:
http://www.rutgers.edu/accounting/raw/aaa/teach/cases.htm

Scott, R. A. (n.d.). *Commerce 201: Introductory Financial Accounting.* University of Virginia. Available Netscape:
http://www.rutgers.edu/accounting/raw/sources/virginia/scott/comm 20

13   44

PRINCIPLES OF ACCOUNTING

Prepared by Amy Huang
& Philip Chu

Best Practice

- Evidence of Research
  - Develop the necessary skills that would be required in the workplace. These skills include:
    - Oral and Written Communication Skills
    - Analytic Skills
    - Computer Skills
    - Interpersonal Skills
    - Intellectual Skills
    - Technical Skills
  - Combines topical coverage of the conceptual and technical aspects of accounting with a simulated real world case

Principles of Accounting

Suggested Activities

- Cultural Awareness and International/Global Consideration
- Cooperative/Active Learning/Teambuilding
- Internet Activity
- Computer Activity
- Critical-Thinking
- Real-World Application

Principles of Accounting

- Student level: Accounting Major & Nonmajor College Students
- Rationale/Course Description
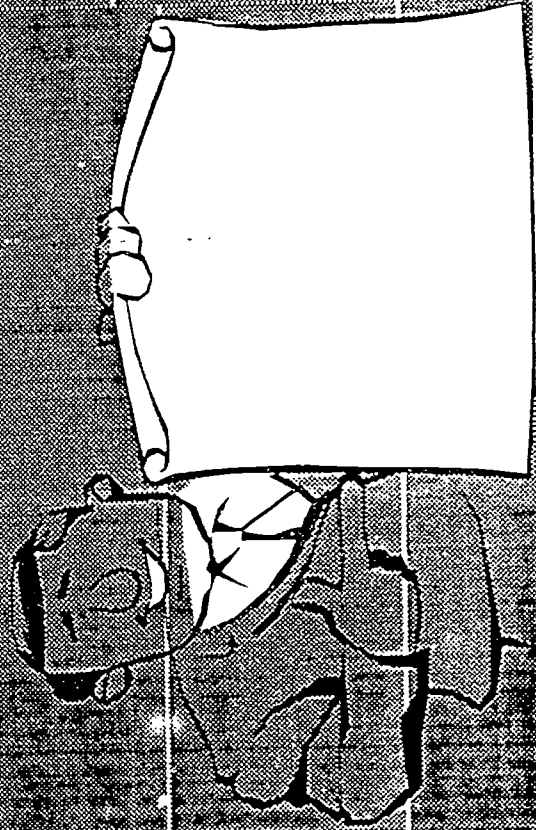
Principles of Accounting

Objectives

- All Students Obtain a Comprehensive Understanding of Accounting Information

- Accounting Majors Obtain a Sound Understanding of Financial Accounting Fundamentals

- Non-Accounting Majors Utilize Accounting Information Present in This Class to Their Future Careers

Principles of Accounting

Objectives

- All Students Can Analyze an Accounting Problem and Correctly Apply the Quantitative Skills to Solve It

- All Students Can Complete a Manual and an Automated Accounting Simulation
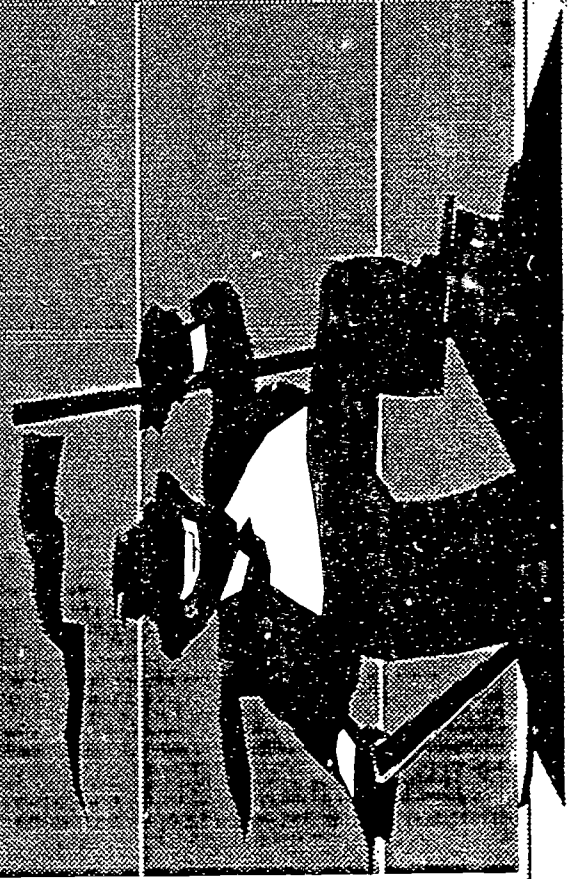
Principles of Accounting Objectives

- All Students Can Recognize Important Issues and Ask Critical Questions in Accounting Case Problem
- All Students Can Research the Answers to Case Questions in the Authoritative Literature

Principles of Accounting

Assessment Techniques
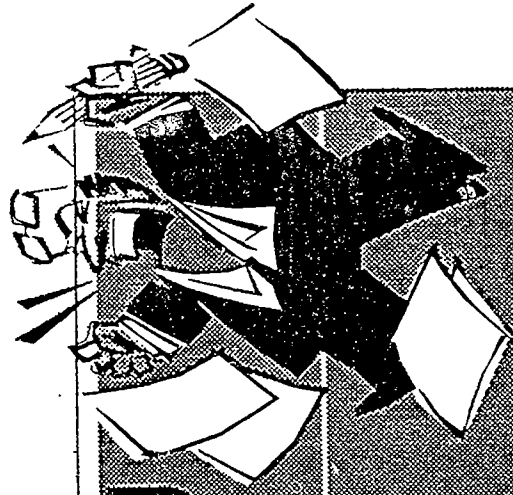
- Assign a Case for a Written Report
- Assign an Internet Project for a Written Report and Oral Presentation
- Assign a Manual Accounting Simulation Project
- Assign an Automated Accounting Simulation Project
- Distribute a Comprehensive Final Exam

Principles of Accounting Assessment Techniques

■ Grade Scale
- A 300-350 points
- B 250-299 points
- C 200-249 points
- D 150-199 points
- F below 150 points
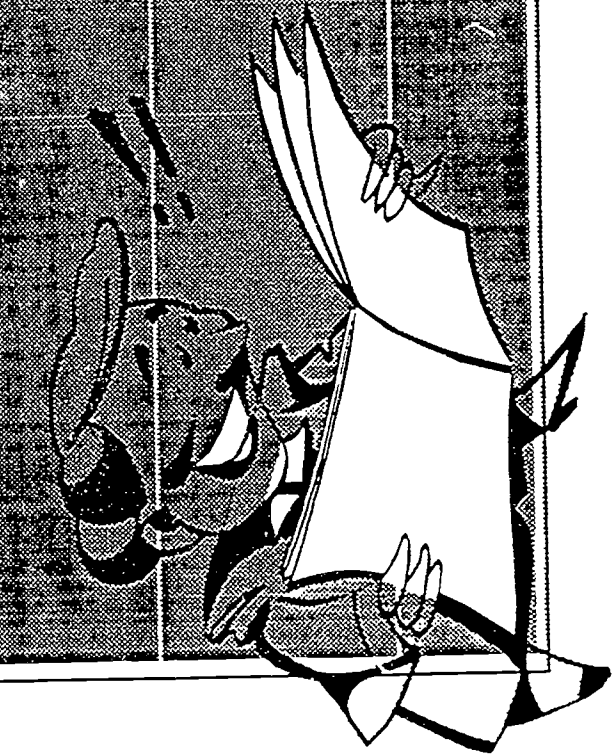
Principles of Accounting
Unit Content

- Time: One Semester
- Material Needed
  - Principles of Accounting, 3rd edition, Nikola/Bazley/Stallman (1990)
  - Systems Understanding Aid for Auditing, 3rd edition, Alvin A Arens/D. Dewey Ward
  - Systems Understanding Aid for Micro-Computer Version, 3rd edition, Alvin A. Arens/D. Dewey-Ward/Dennis L. Kimmell

Unit Content

- Unit One: Accounting Process (Two months)
  - Accounting: Its Uses, Principles, and Practices
  - Recording and Reporting Accounting Information
  - Revenues and Expenses
  - Adjusting Entries and the Worksheet
  - Accounting for a Merchandising Company

$ ¥ £ DM
£ ¥ SYSTEM

Unit Content

- Unit Two: The Balance Sheet (1 month)
  - Assets
  - Liabilities
  - Equity

Unit Content

- Unit Three: Income Statement (2 weeks)
  - Revenues
  - Cost of Goods Sold
  - Operating Expenses
  - Other Revenues and Expenses
  - Earnings Per Share

Unit Content

- Unit Four Statement of Retained Earnings (2 weeks)
  - Proprietorship and Partnership
  - Corporations
  - Closing Entries
  - Evaluation of Post-Closing Trial Balance
  - Review

Unit Plan

Unit One: Accounting Process (2 months)

- Unit Objective
- Unit One Outline
- Activities/Assignment
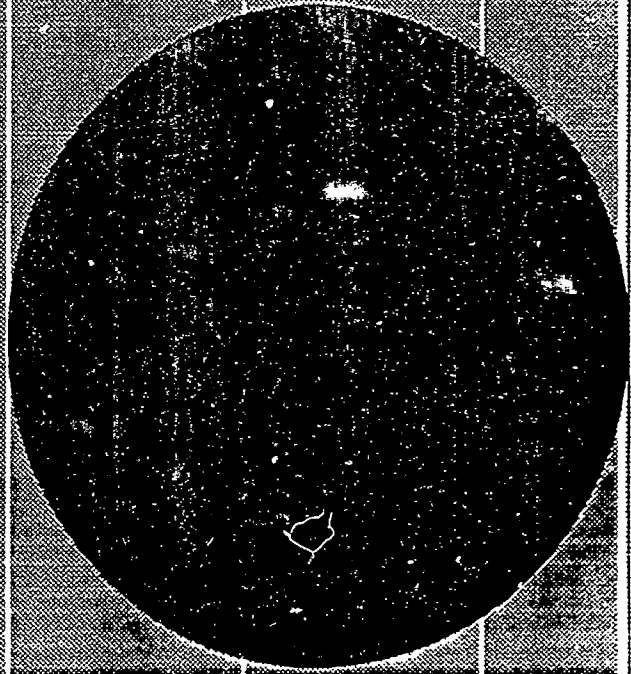
UNIT PLAN

Unit Two: The Balance Sheet (1 month)

- Unit Objective
- Unit Two Outline
- Activities/Assignment
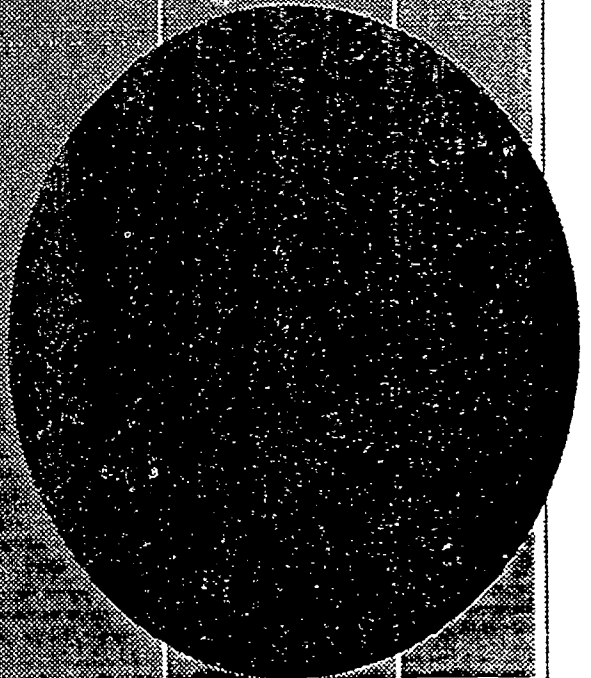
UNIT PLAN

Unit Four: Statement of Retained Earnings (2 weeks)

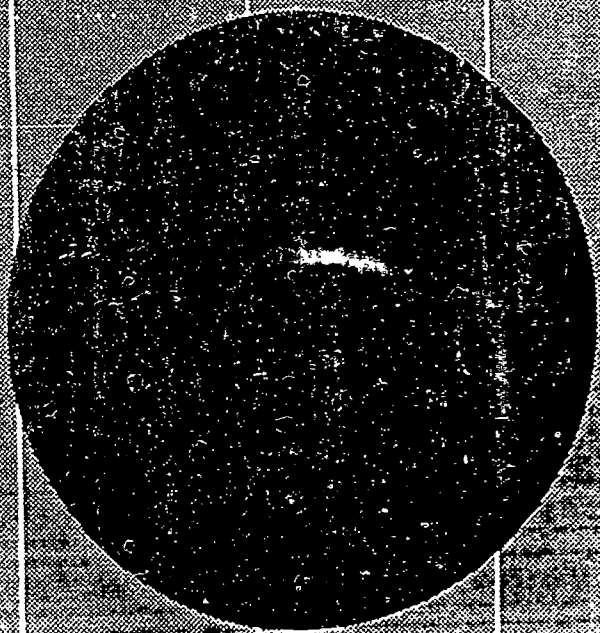- Unit Objective
- Unit Four Outline
- Activities/Assignment
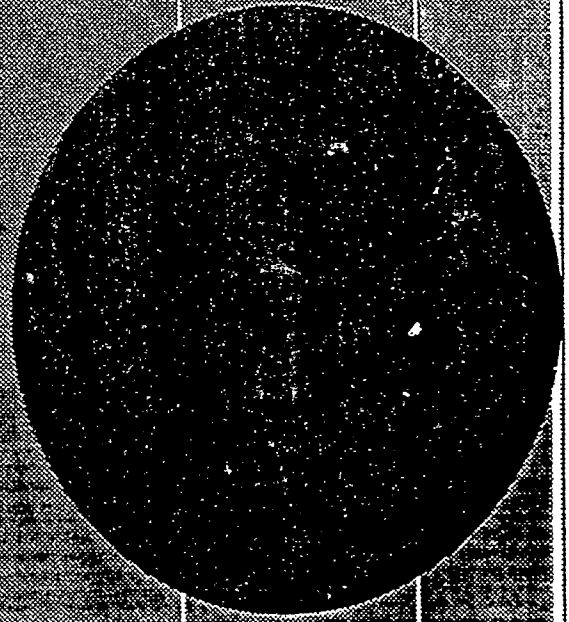
UNIT PLAN

Unit Three: Income Statement (2 weeks)

- Unit Objective
- Unit Three Outline
- Activities/Assignment

Thank You for Your
Participation

Bye-Bye

Desktop Publishing

By: Srunya Phornprapha, University of Missouri-Columbia
David Schneider, Slater High School

Table of Contents

DESKTOP PUBLISHING

DESKTOP PUBLISHING is the use of sophisticated page-layout software to drive a personal computer and a laser printer to create near-typeset-quality documents. Desktop Publishing helps managers and other workers surpass simple word processing by using typography, design elements, and even graphic images to create communications that are persuasive and professional looking.

GRADE LEVEL- 10-12

Desktop publishing for education can be seen in the many forms of communication that are sent to parents and the community on a daily basis. Quality documents assist the administration in communicating internally and externally.

Desktop publishing in today's office is a valuable tool. Desktop publishing can provide and answer to the requirements of the office--letterhead, business cards, daily planners, calendars, invoices, time sheets, labels, reports, charts, and more.

Students use desktop publishing to implement many of the ideas presented to enhance their assigned projects, assist with personal development, and enhance career advancement (Bauer & Boger, 1992).

Course Objectives: The student will be able:

1. To learn desktop publishing concepts and methods.

2. To create professionally looking newsletters, reports, brochures, and intructional materials.

3. To demonstrate a knowledge of desktop publishing terms by creating documents containing the terms in the specifications.

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4. To design his/her/own project using proper desktop design techniques and considerations.

5. To analyze how desktop publishing systems affect the cost and quality of printing.

Unit Outline

Unit 1-Introduction

    A. Publishing history.

    B. The desktop publishing workstation

    C. Career opportunities

Unit 2-Page Composition

    A. Discuss document defaults.

    B. Insert and delete pages.

    C. Construct columns.

    D. Create uneven columns

Unit 3-Tool Palette Graphics

    A. How to use tool palette

    B. Cut, copy, and paste objects

    C. Vertical and horizontal rulers

    D. Rotate, reflect and skew objects

    E. Print a document

Unit 4-Graphics

    A. Discuss four types of graphics with PageMaker-PICT, EPS, TIFF, and PAINT

    B. Apply colors

    C. Size, scale, crop, and move graphics

    D. Compress graphics and discuss how PageMaker establishes links with graphics

    E. Create libraries for graphics

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Unit 5-Text

A. Discuss proper layout and typographical concepts and terms

B. Type text into the layout view and the story view

C. Import and export text

D. Apply type specifications and paragraph specification

E. Introduce and explain the optional characters and symbols that are available in

various fonts (Whittrock, 1995)

3

"Best Practices" of Desktop Publishing

What are the "best practices" for teaching desktop publishing? I wish it were that simple. When presenting new material to the students, three methods were mentioned the most in my research of desktop publishing.

Demonstration- Explain and discuss the concepts and commands through lecture and modeling. If and LCD panel is available, it is a wonderful learing tool. The students should observe and then duplicate the actions that are being performed (Whittrock, 1995).

Guided practice- This can be done in the form of lecture instructions or hand-outs. The handouts can simply be duplicated or they can provide the steps in achieving a goal. "They follow the written or oral instructions in order to complete the job (Echternacht, 1995)."

Team practice- Teamwork is a major component in businesses today. "In the business world students must be able to work with other people in order to complete a task (Golden, 1995). There are students who grasp information quickly, and these exceptional students can collaborate with other students who need more guidance.

"The majority of students prefer teacher-directed instruction using the demonstration and duplication method. Secondly, students prefer guided handouts (also prepared by the teacher). Guided handouts give students written reference for future use and they can also make the class much more enjoyable (Whittrock, 1995)." Lab projects seem to make desktop publishing a favorite among students. It allows them to be creative and then produce a hard copy of their business artwork.
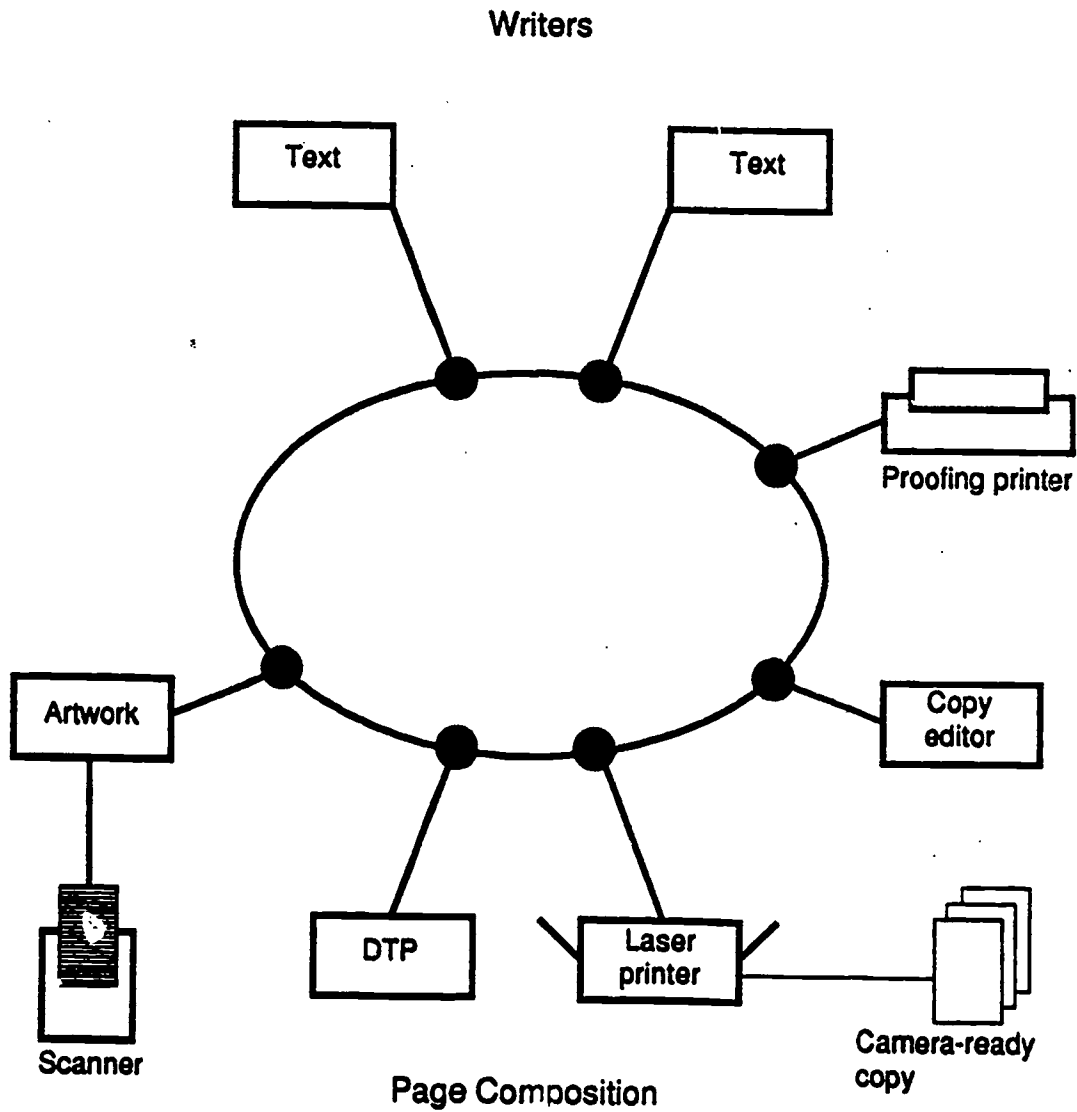
Desktop Publishing Circle

Objectives: Students will recreate the desktop publishing circle, reinforcing the process of desktop publishing.

Procedures: Discuss the handout with the student and then have them recreate it. This is a great handout for introducing the course.

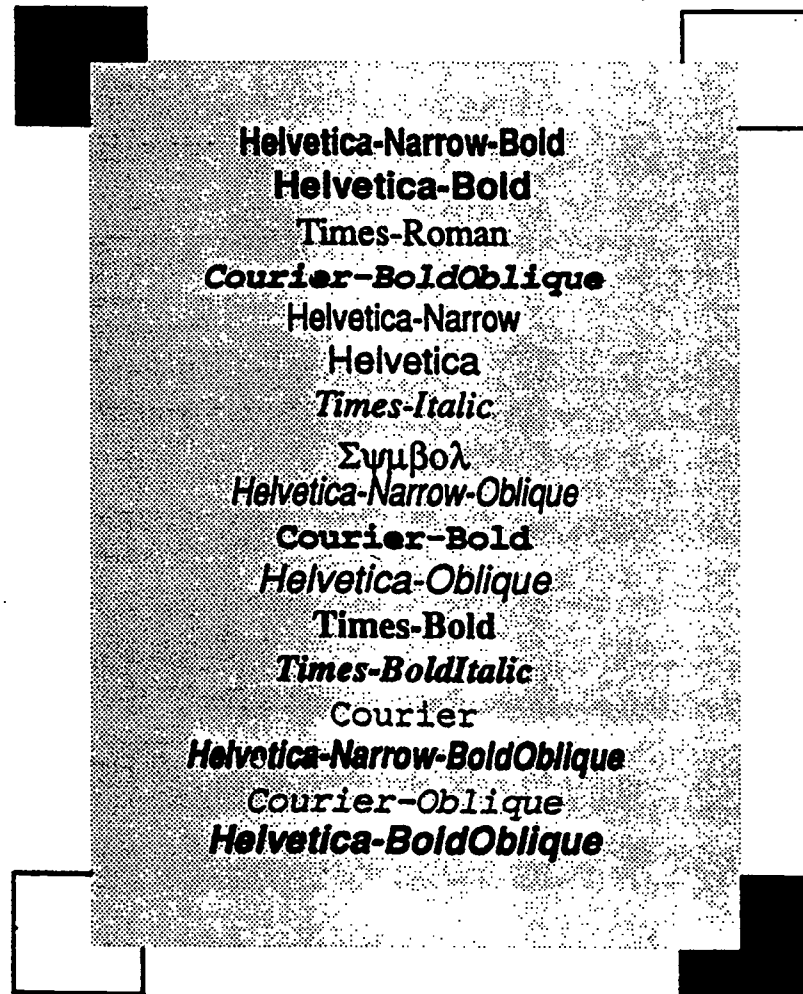**Materials needed:** Handout is provided.

Desktop Publishing Circle

Writers

Text

Text

Proofing printer

Artwork

Copy
editor

Scanner

DTP

Laser
printer

Camera-ready
copy

Page Composition

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Resident Font Outlines

Objectives: Students will learn to use the different fonts and character features.

Procedures: Students can use the handouts and replicate them. This will allow the students to see the different typefaces and can be used as a guide for later use.

Materials needed: Handouts that require the students to use all the fonts and character features.

Resident Outline Fonts

Helvetica-Narrow-Bold
Helvetica-Bold
Times-Roman
Courier-BoldOblique
Helvetica-Narrow
Helvetica
Times-Italic

Σψμβολ
Helvetica-Narrow-Oblique
Courier-Bold
Helvetica-Oblique
Times-Bold
Times-BoldItalic
Courier
Helvetica-Narrow-BoldOblique
Courier-Oblique
Helvetica-BoldOblique

PostScript Laser Printers

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Travel Brochure

Objectives: The students will research a country and design a travel brochure.
The students will use clip art and the toolbox to make graphic designs.

Procedures: Have the students research a country through the internet and library. The students can collect sample travel brochures and critique them aloud. Next, have them design a travel brochure for their selected country.

Materials needed: Travel brochures
Clip art

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School Programs

Objectives: Students will create a program to be used at school events.

Procedures: Students will be responsible for developing programs for school events. This can be done by breaking the students into groups and have each group responsible for certain events.

Materials needed: Information on the events (rosters, agenda, etc.)
Clip art

Advertisement

Objectives: The students will design and create an advertisement for their selected products or services.

Procedures: Divide the class into groups of three or four. Each group will develop a product or service to market. The students will first develop the advertisement on posterboard, then they will produce the ad with the desktop publishing software.

Materials needed: Magazines
Posterboard, rulers, and markers
Clip art

Greeting Cards with Internet

Objectives: The student will browse through the Internet and locate clip art.
The student will then use that clip art to create a greeting card.

Procedures: Clip art can be located throughout the Internet or through home pages. This process allows the students learn about the Internet through desktop publishing. The clip art that they find should be transferred to their desktop publishing document. Have the students then make a greeting card of any kind. This is a good activity around the holidays.

Materials needed: Sample greeting cards
Clip art

Find Your Way Home

Objectives: Students will chart a map on the computer using the graphic features in the toolbox.

Procedures: Students will use the features in the toolbox to make a map from the school to their home. The map should designate features such as streets, trees, houses, etc.

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Birthday Calender

Objectives: Using graphics and fonts the students will develop a birthday calendar.

Procedures: The students can set up a basic grid using the toolbox features. Once the students birthdays are listed this is a great way to make some money for desktop publishing group.

Materials needed: Sample calendars
Clip art

Menu

Objectives: Students will develop a menu for a restaurant.
Students will use different fonts and graphics.

Procedures: Put the students into groups of three or four. The students will then decide what type of restaurant they want. They will then begin the layout of the menu.

Materials needed: Sample menus
Restaurant owner (Talk about the development of a menu)
Clip art

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Poisson de la Mer

Fresh Fish Daily

SOUPS

New England
Fish Chowder
3.25

New England
Clam Chowder
3.50

Gazpacho
with Shrimp
4.50

SALADS

Fresh Lobster
Salad
11.75

Shrimp Salad
7.25

Crabmeat
Louis Salad
8.00

ENTREES

Cajun Market
Fish
9.75

Charcoal-grilled
Tuna Steak
13.25

Shrimp Kebob
7.50

Lobster Royale
16.00

Portugese Style
Scallops
11.50

Seafood and Pasta
6.75
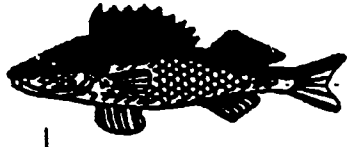
DESSERTS

Custard Cream
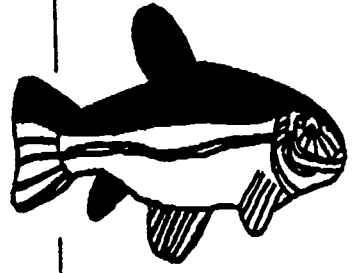Pie
3.50

German Chocolate
Cake
3.25

Fresh Strawberries
2.50

Apple Pie
3.00

BEVERAGES

Soft Drinks
1.00

American Coffee
.75

Milk
.75

100

Bookmark

Objectives: Students will design a bookmark using graphics and text.

Procedures: Sample bookmarks should be brought in by the students. The students can then begin designing their own. Have the class vote on the best bookmark--this can be a motivational factor in the activity.
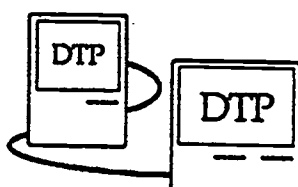
Materials needed: Bookmarks
Clip-art
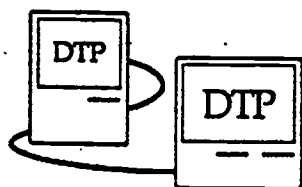
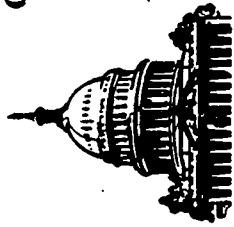| Desktop Publishing Services	Desktop Publishing Services	Desktop Publishing Services
· Consulting · Resumes · Graphics · Layout · Brochures · Flyers · Scanning · Pickup/Delivery	· **Consulting** · **Resumes** · **Graphics** · **Layout** · **Brochures** · **Flyers** · **Scanning** · **Pickup/Delivery**	· Consulting · Resumes · Graphics · Layout · Brochures · Flyers · Scanning · Pickup/Delivery
Jane E. Smith Phone: 123-4567 Fax: 987-6543	*Jane E. Smith* Phone: 123-4567 Fax: 987-6543	Jane E. Smith Phone: 123-4567 Fax: 987-6543

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Resources

Brownell, T. (1991). <u>Desktop Publishing Using PageMaker</u>. Cincinnati: South-Western.

Busche, D. (1991). <u>Desktop Publishing Using PageMaker on the Macintosh</u>. New Jersey: Prentice Hall.

Davis, B.J. & Redmann, D.H. (1993, January). Strategies for teaching international concepts in business courses. <u>Delta Pi Epsilon</u>, Vol. 9, Num. 1.

Echternacht, L. (personal communication, August 1, 1995).

Golden, C. (personal communication, August 3, 1995).

Graves, P.R. & Murry J.E. (1990, Summer). Enhancing communication with effective page design and typography. <u>Delta Pi Epsilon</u>, Vol. 6, Num. 3.

Henry J.S. & Perrault H. R. (1988, Fall). Guidlines for helping business education teachers choose a desktop publishing system. <u>Delta Pi Epsilon</u>, Vol. 4, Num. 4.

Henry J.S. & Perrault H.R. (1989, Winter). Guidlines for choosing and using desktop publishing software. <u>Delta Pi Epsilon</u>, Vol. 5, Num. 1.

Hinkle, D. (1993). <u>Desktop Publishing Using PageMaker</u>. Columbus: Glencoe.

Hunter, J. (1992, January). Teaching higher-level thinking skills. <u>Delta Pi Epsilon</u>, Vol. 8, Num. 1.

Merril K. P. (1995, January). Best shot makeover. <u>WordPerfect</u>, pp. 27-32.

Nelson, E. (1995, June). 3 hot letterhead designs, <u>WordPerfect</u>, pp. 37-45.

Olivo, J. (1990, January). Desktop publishing: beyond hardware and software. <u>Business Education Forum</u>, pp. 12-15.

Walker, P.J. (1992). <u>Desktop Competencies Needed in the Business World</u>. Unpublished doctoral dissertation, University of Missouri, Columbia.

Youth, H. (1990). <u>100+ Desktop Publishing Excercises</u>. New Jersey: Prentice Hall.

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COMPONENT	SUPER-DUPER 10-8	COOL 7-4	BOGUS 3-0
CONTENT	Directly tied to topic/subject of the class.	Somewhat related to topic/subject. Need to expand more.	Unrelated to material discussed in class or project instructions.
VISUAL QUALITY	Attractive use of text. Included appropriate graphics. Very attractive page layout, balanced.	Needs minor text changes. Graphic is vaguely related. Page layout is fairly balanced.	Major text revisions needed. No graphics or those used are inappropriate. Page layout needs major revisions, unbalanced.
GRAPHICS SELECTION	Graphics appropriate for subject in content and size.	Graphics not related to subject or inappropriate size.	No graphics used.
SPELLING	No mispelled words or grammatical errors.	One grammatical or spelling error.	Misspelled words, failure to use spellchecker.
Total Points (40)			

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Desktop Publishing

▲ The easy way to create your own publication world.

What is Desktop Publishing?

▲

▲ Typography, design elements, and graphic images are also used to create persuasive and professional looking communications.

Improvement of Instruction of Business Skill Subjects
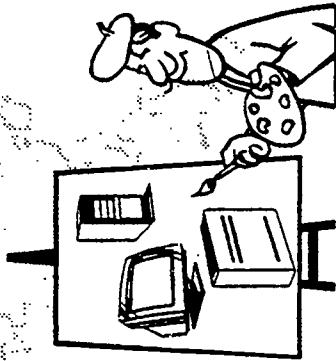
By: David Schneider
Srunya Phornprapha

Presented to: Dr. Donna R. Everett
University of Missouri-Columbia
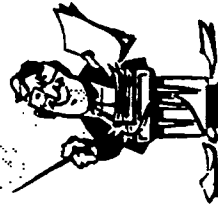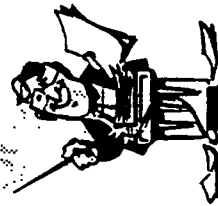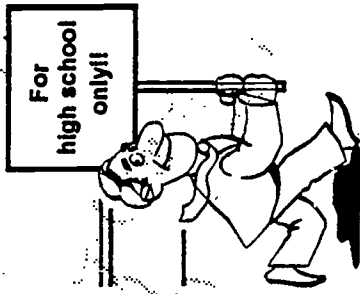College of Education--PAVTE

Summer 1995

What is Desktop Publishing?

▲ It is the using of page-layout software to create near-typeset-quality documents.

Who will be suitable for this course?

- In this curriculum, we will emphasis on students grade 10-12 only.

For high school only!

Rationale for this course:

- Desktop publishing for education
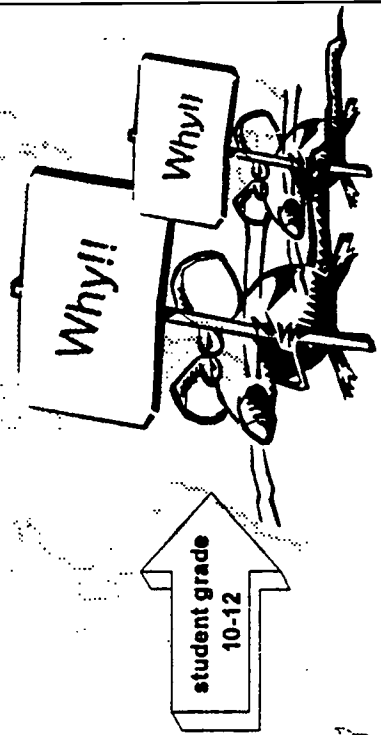 - Quality documents assist the administration in communicating
    - internal
    - external

Who will be suitable for this course?

- Actually, anyone who interested can take this course.

For high school only!
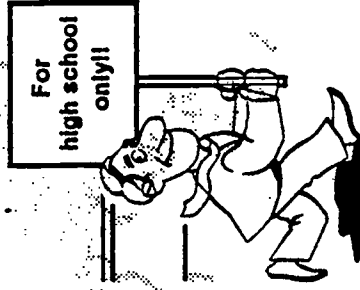
Why do we have to learn this course?

Why!!   Why!!

student grade 10-12

Rationale (continue)

▲ Desktop Publishing in today's office
  ▲ is a variable tool to provide the requirements of the office
    ▲ letterhead
    ▲ business cards
    ▲ calendars
    ▲ labels, etc.

Course Objectives

■ The students will be able to :

▲ Students use desktop publishing
  ▲ Many of the ideas are presented to enhance the assigned projects
  ▲ assist with personal development
  ▲ enhance career advancement

I am a "student"

Course Objectives

■
  – To learn desktop publishing concepts and methods.

Course Objectives

- To demonstrate a knowledge of desktop publishing terms by creating documents containing the terms in the specifications.

Objectives (continued)

- To analyze how desktop publishing systems affect the cost and quality of printing.

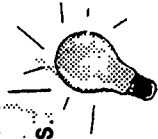## Course Objectives

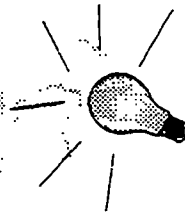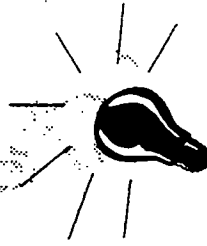- To create professionally looking newsletters, reports, brochures, and instructional materials.

Objectives (continued)

- To design his or her own project using proper desktop publishing techniques and considerations.

Unit Outline

- Unit 1-Introduction

Unit Outline

- Unit 2-Page Composition

Unit Outline

- Unit 3-Tool Palette Graphics

Unit Outline

- Unit 4-Graphics

Unit 1--Introduction

- A. Publishing history
- B. The desktop publishing workstation
- C. Career opportunities

Unit 3--Tool Palette Graphics

- A. How to use tool palette
- B. Cut, copy, and paste objects
- C. Vertical and horizontal rulers
- D. Rotate, reflect and skew objects
- E. Print a document

Unit Outline

Unit 1-Introduction
Unit 2-Page Composition
Unit 3-Tool Palette Graphics
Unit 4-Graphics
Unit 5-Text

Unit 2--Page Composition
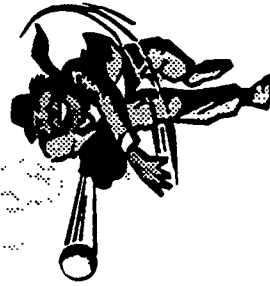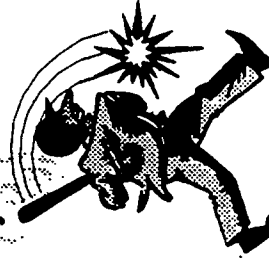
- A. Discuss document defaults
- B. Insert and delete pages
- C. Construct columns
- D. Create uneven columns

Unit 5--Text

▲ A. Discuss proper layout and typographical concepts and terms

▲ B. Type text into the layout view and the story view

▲ C. Import and export text

▲ D. Apply type specifications and paragraph specification

▲ E. Introduce and explain the optional characters and symbols that are available in various fonts (Whittrock, 1995)

Best Practices

▲ Guided practice
  ▲ The students will follow the written or oral instructions in order to complete the job.
    ▲ lecture instructions
    ▲ hand-outs

Unit 4--Graphics

▲ A. Discuss four types of graphics with PageMaker-PICT, EPS, TIFF, and PAINT.

▲ B. Apply colors

▲ C. Size, scale, crop, and move graphics

▲ D. Compress graphics and discuss how PageMaker establishes links with graphics

▲ E. Create libraries for graphics

Three methods for "Best Practices" of DTP

▲ Demonstration
  ▲ The students can observe and duplicate the actions of the instructor.
  ▲ Explanation and discussion through the lecture.

"Best Practices" for DTP

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The examples of DTP activities

- ▲ Travel Brochure
- ▲ Map
- ▲ Greeting cards with Internet
- ▲ Birthday Calendar
- ▲ School Programs

Desktop Publishing...

- A way for being professional publisher for a business world.

Best Practices (continued)

- Team practice
  - Major component in businesses today.
  - The students must be able to work with other people in order to complete a task in a real life.

Activities (continued)

- ▲ Menu
- ▲ Resident Font Outlines
- ▲ Advertisement
- ▲ Bookmark
- ▲ Desktop Publishing Circle
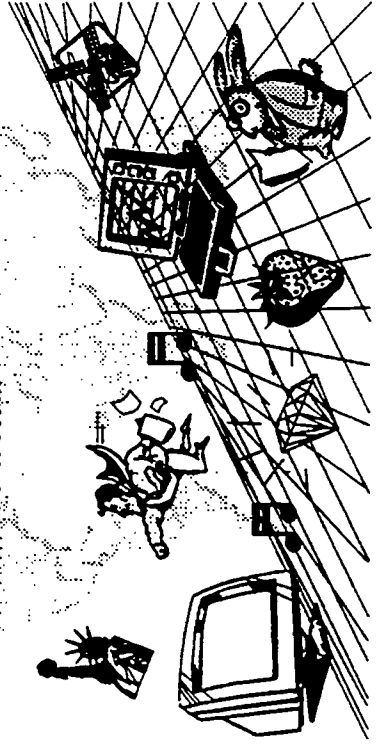
CURRICULUM GUIDE FOR
IMPROVEMENT OF INSTRUCTION
IN BASIC BUSINESS SKILLS SUBJECTS

Middle School
Keyboarding & Computer Literacy
by
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Highland High School
Ewing, Missouri

Summer 1995
University of Missouri-Columbia

Table of Contents

Curriculum Guide
Improvement of Instruction in Basic Business Skills Subjects
Summer 1995

I.   KEYBOARDING & COMPUTER LITERACY IN THE MIDDLE SCHOOL

II.   RATIONALE

Because of the continuing increase in the use of computers in our personal,
educational, and professional lives, good keyboarding skills are more important
than ever. Despite recent technological advances in such areas as optical-character
and voice recognition, the keyboard is and will continue to be (at least for the
foreseeable future) the most widely used input device in communicating with
computers. Therefore, keyboarding can no longer be considered a secretarial skill—
it is a basic communication skill needed by all individuals. (Wiggs, 1993, 29).
Keyboarding skill is valuable for facilitating students' progress in reading, language
composition, spelling, vocabulary, creative writing, proofreading and revision,
neatness and accuracy, punctuation, listening skills, and other elements of language
arts (Toppe, 1991, 23).

III.   COURSE DESCRIPTION

Keyboarding is defined as the act of placing information into the computer through
the use of a typewriter-like keyboard, involving the placement of fingers on
designated keys on the middle or "home" row of the keyboard and moving fingers
as needed to depress other keys. This method, often called "touch typing," is in
contrast to "hunt & peck" typing. The speed improvement associated with touch
typing is obvious. Ten fingers will get data into the computer faster than two
fingers will (Wentling, 1992). Also, with hunt & peck, typists are not able to
concentrate on what they are inputting because all their attention is focused on
their fingers.

In this semester of middle school keyboarding, students will learn proper touch
techniques for operating the keyboard, become familiar with basic computer
terminology, review and improve language skills, learn to format documents for
personal and school use, and learn basic concepts of word processing.

IV.   OBJECTIVES FOR MIDDLE-SCHOOL KEYBOARDING (1 SEMESTER)

*   To demonstrate the correct "touch" method for operating the
    alphanumeric keys.
*   To demonstrate proper keyboarding techniques and be aware of
    ergonomic considerations pertaining to keyboarding.

- To demonstrate proficiency in the use of hardware and software (parts of computer, how to handle diskettes, use of software, saving to diskette, printing).
- To demonstrate ability to enter information from straight copy and rough-draft material.
- To demonstrate straight-copy speed of 20-25 words a minute (1st quarter) and 25-30 words a minute (2nd quarter) within an acceptable error limit.
- To apply proofreading/editing skills.
- To improve language skills (capitalization, abbreviations, word division, number expression.
- To learn to compose at the keyboard.
- To prepare simple personal-business documents (business letters, envelopes, reports, outlines).
- To demonstrate knowledge of basic word processing concepts.
- To demonstrate the ability to follow oral and written directions.

V. BEST PRACTICES

From a review of current literature concerning keyboarding, in particular keyboarding at the middle-school level, here is a summary of "best practices."

A. Students should be taught keyboarding as soon as they are physically and intellectually ready (Ober, 1993, 36). Studies indicate the ideal age for effective keyboard learning is 10-12 (*Elementary/Middle School Keyboarding Strategies Guide*, 1992, 43), while others maintain keyboarding should be taught in 4th grade or even earlier.

B. The first semester of keyboarding should be devoted to personal-use skills, (Ober, 1993, 36) with the first eight to nine weeks focused on development of correct technique (*Elementary/Middle School Keyboarding Strategies Guide*, 1992, 5). Good technique is critical not only for productivity but also for health reasons (Ober, 1993, 37). After the first eight to nine weeks of instruction, students should be expected to be keying at a rate of about 25 gwam with no more than two to three errors in a one-minute timing. Keying with complete accuracy should not yet be a goal because it would inhibit the development of speed. Introduction of the correction key should be delayed until students have achieved about 20 gwam. (*Elementary/Middle School Keyboarding Strategies Guide*, 1992, 5-6). Stopping often to correct can inhibit the development of speed (Frankenburger, 1990, 24).

C. Word processing has eliminated many formatting considerations that used to detract from keying speed such as page-ending decisions and centering. This means operators spend more time keying. Therefore, straight-copy

keyboarding skill is becoming more important and should receive greater emphasis in keyboarding classes (Ober, 1993, 37).

D. Instructional software that is flexible and easy to use allows beginning keyboarders to focus on reaches and technique rather than operation of the program. Word processing skills should be integrated into the keyboarding course, with concepts introduced on an as-needed basis (Ober, 1993, 38).

E. Simplified formats should be taught that promote productivity and efficiency and efficiency by requiring fewer hardware or software adjustments. (Ober, 1993, 38).

F. The most important learning style factor in keyboarding is persistence. To overcome students' lack of persistence, teachers should provide realistic, short-term goals and concrete feedback. Also, providing meaningful practice on meaningful tasks helps students to persist longer at tasks. For elementary/middle school students meaningful practice might be the integration of other subject matter into keyboarding activities (Sormunen, 1993, 36).

G. Keyboarding courses should promote language arts skills in areas such as proofreading, spelling, punctuation, and word usage. Students should be required to apply these skills in producing documents from unedited copy (Ober, 1993, 37).

VI. COURSE OUTLINE/UNIT OBJECTIVES

A. Unit 1

1. Introduce equipment and instructional software (how to power up, load program, handling diskettes, managing the printer)
2. Keyboarding techniques/ergonomic concerns
3. The alphabetic keyboard, space bar, enter, shift, caps lock, tab key, backspace, and punctuation marks
    a. spacing with punctuation
    b. line spacing
    c. capitalization
    d. abbreviations
4. Parts of the computer, basic computer terminology

Suggested Activities for Unit 1

a. Crossword puzzle on machine parts, terminology
b. Rubric for evaluating keyboarding technique

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B. Unit 2

1. Numbers and symbols
2. Introduce cursor movement keys, insert key, function key
3. Proofreader's symbols, proofreading and editing copy
4. Typing from rough-draft copy
5. Language skills
   a. capitalization
   b. spacing with punctuation marks
   c. abbreviations
6. Composing at the keyboard
7. Skill building on alphabetic keys...
8. 1-minute timed writings

Suggested Activities for Unit 2

   a. Play vocab bingo to review for quiz on proofreader's marks, terms.
   b. Students create articles, etc., in Lang. Arts class to be keyed in
   c. Keyboarding class. (These will be used in an activity in Unit 3.)

C. Unit 3

1. Introduce word processing software
2. Use of function keys and/or pull-down menus and common word processing concepts
   a. saving to diskette
   b. retrieving files from diskette
   c. page break
   d. block, move, and copy
   e. bold and underline
   f. spell checker
   g. thesaurus
3. Setting margins (1-, 1 ½-, 2-inch margins)
4. Formatting simple business letters and envelopes
   a. word division
   b. address format
   c. expressing numbers
5. Skill building on alphanumeric keys and keying from rough draft
6. 2-minute timed writings

Suggested Activities for Unit 3

    a. Computer Ethics activity (unauthorized copying of software).
    b. Margin & word division worksheets.
    c. Compose personal-business to principal or to parents.
    d. Key personal-business letters & envelopes using international addresses.

D.   Unit 4

1. Formatting unbound reports and outlines
2. Word processing concepts
    a. centering
    b. indent & hanging indent
    c. left, right, and full justification
    d. search & replace
    e. double spacing
    f. setting tabs
3. Introduction to E-mail
4. Using the mouse to draw and move objects (using Paintbrush)
5. Miscellaneous computer applications (graphs, Print Shop, etc.)
5. Skill building on alphanumeric keys and keying from rough draft
6. 3-minute timed writings

Suggested Activities for Unit 4

    a. Type an unbound report about racism.
    b. E-mail keypals.
    c. Tic-Tac-Geo using the mouse to draw and move objects.
    d. Create (compose) a 3-column table using left, right, and decimal tabs.
    e. Create a pie, line, or bar graph using information from another subject area.

Miscellaneous Activities (can be done anytime)
    Listening for directions.
    Vocabulary review game.

VOCABULARY REVIEW GAME

Supplies Needed:

Two cups, stop watch, strips of paper

Organization:

1. Divide the class into two teams.
2. Assign team captains.
3. On strips of paper, write each term to be reviewed.
4. On separate strips of paper, write the definition for each term.
5. Place terms and definitions into two separate cups.

Rules of the Game:

1. Players may not use their books or notes.
2. No one may help another when it is his/her turn.
3. Bonus points for test or quiz will be given to the winning team.
4. One point is given to the team for giving the correct term when the definition is read aloud to the individual.
5. Two points are given to the team for giving the correct definition when a term is read aloud to the individual.
6. One point is given for a team challenge--one point will be deducted if the challenging team does not give a correct response.
7. Individuals are allowed 15 seconds to give an answer. If no answer is given or if the answer is incorrect, the other team may challenge.

Playing the Game:

1. Ask the first player on Team 1 if he/she wants a term or definition.
2. If the player requests a term, draw a term out of its cup and the player must answer with the definition to the term.
3. If the player requests a definition, draw a definition out of its cup and the player must answer with the correct term.
4. The opposing team may challenge if the wrong answer is given or if no answer is given within 15 seconds.
5. The team challenging may discuss their possible answers out loud. The team captain must respond with an answer within 15 seconds.

Note: Terms and definitions can be returned to the cups to allow for repetition and reinforcement.

Source: Business Education Summer Workshop. (1995). University of Missouri-Columbia.

KEYBOARDING BINGO

This is used to review for a test or quiz, so make up the test or quiz first. Then write answers at random on the Bingo sheets. You have to write out a different Bingo sheet for each student, so they take some time to prepare. Ask questions orally in class to review, and have the students cover the correct answers on their Bingo sheets. You will need to get small pieces of paper or some other objects for students to cover their answers.

Play several games, using various ways of winning--standard Bingo (vertical, horizontal, or diagonal), black-out, four corners, etc.

Source: P. Gordon. (1995). Centralia High School. Business Education Summer
            Workshop, University of Missouri-Columbia.

KEYBOARDING BINGO

		FREE		

KEYBOARDING BINGO

		FREE		

MIDDLE SCHOOL NEWSPAPER PROJECT
(Ethics & Software)

Part 1 (Unit 2--after students have typed from rough draft)

2-3 class periods.

The first part of this project is intended to be a cooperative effort between the keyboarding and language arts teachers. With the cooperation of the language arts teacher, students create articles, stories, poems, cartoons, etc., to be included in a class newspaper. They would work on their articles during language arts class and key their work into the computer during keyboarding class. If possible, they can also create the layouts, add graphics, design a cover, etc. It should be stressed that this newspaper is a reflection of them and their creative abilities. (If students have been using keyboarding instruction software and are not familiar with a word processing package yet, the teacher will have to assist in compiling and laying out the articles.)

Part 2 (Unit 3--before introducing students to word processing software)

Day 1

After the newspaper is compiled, the teacher(s) will duplicate them and distribute them to the students. However, before duplicating, the names of the students should be removed. Be sure to omit any and all mention of student contributors and any reference to the class.

After the copies have been distributed and the students have had an opportunity to examine their product, lead a class discussion that focuses on intellectual property issues. Questions might include:

> *How does it feel to have your work distributed without you receiving any credit?
> *How could this newspaper be revised?
> *Suppose we were going to sell this paper to students and parents. Who should receive the money from the sale?
> *If the newspaper is published and people copy it rather than pay for it, who loses? Why?
> *What guarantee do you have that the journal will not be copied by others? How can you ensure it will not be copied by others?

Introduce the concept of "intellectual property" and have students relate it to their experiences with the newspaper. Then move the discussion to other situations in which the students have experienced people copying the work of others without permission. (Likely examples include: homework, music cassette tapes, video cassettes, pages from books, computer software.)

Show the video *Don't Copy That Floppy!* * (9 minutes). After the students have viewed the video, have them relate its message to their experiences with the newspaper.

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Day 2 (review & reinforcement)

Show students a computer disk from a published software package and a blank disk. Ask students or inform them of the typical price of each. Then ask them to explain why the publishedsoftware disk costs so much more than the blank disk. Identify the copyright symbol and explain what it represents. Discuss copyright laws as a means of protecting intellectual property. Obtain copies of software publishers' licensing agreements to share with the class. Now might also be a good time to bring up plagiarism.

*Available from: Software Publishers Association, 1739 M Street NW, Washington, DC 20036 Telephone (202)452-1600 ext. 326. Cost: $10.

Sources: Kidlink Ethics Series. Gopher to: Kids.ccit.duq.edu

C. Albertson. (1995) Linn County Junior High School, Browning, Mo. Business Education Summer Workshop, Kirksville, Mo.

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CLASS ACTIVITY FOR KEYBOARDING

Students are instructed to type a letter addressed to themselves. They are asked to think about their future and predict where they will be two years from today. The letter is to be at least three paragraphs long. In the first paragraph they are instructed to include the reason for the letter (because they are completing this for a keyboarding assignment), in the second paragraph they should give some current information about themselves (their current likes, dislikes, friends, favorite activities, etc.), and in the third paragraph they should tell their goals for the future. Students should use the correct format for a personal letter, and the letter should be mailable--any and all mistakes corrected. The students are to address an envelope to themselves. Instruct the students not to seal the envelope.

The students' letters are then placed in a manilla envelope labeled with the date that they are to be mailed (two years from now). When mailing the letters, a short personal note from the teacher can be inserted.

Source: C. Layne. (1995). Business Education Summer Workshop, University of Missouri-Columbia.

KEYBOARDING/E-MAIL ACTIVITY

To introduce students to the miracles of E-Mail (as opposed to traditional "snail mail"), while at the same time promoting multicultural awareness, search the internet for international keypals for your keyboarding students. You can assign students a country, or give them a list of countries available and let them choose. There are several sites you can utilize in tracking down keypals for your students including:

1. Gopher to: wealaka.okgeosurveyl.gov\K12\keypals wanted
2. Gopher to: kids.ccit.duq.edu
3. Gopher to: nysernet.org\special collections: K12
4. Gopher to: gopher.undp.org (Login as "gopher")\other United Nations & related gophers\UNICEF

This activity is also a good opportunity for students to practice composing at the keyboard. Topics to be addressed in the messages could include information about the course they are in, the school that they attend, the city in which they live, the activities in which they participate inside and outside of school, etc. I would recommend that the teacher approve all messages before they are sent. When students get responses, they should print them out and hand them in. The teacher could offer bonus points to the student who gets the most responses.

Sources: L. Rawlings. (1995). Business Education Summer Workshop, University of
            Missouri-Columbia.

            A. M. Tenglund. (1993). *Multicultural education*. (AskERIC InfoGuide).
            Gopher to: ericir.syr.edu\AskERIC InfoGuides.

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KEYBOARDING TECHNIQUE RUBRIC
Beginning Keyboarding - 1st Quarter

CRITERIA	OUTSTANDING 10-9 pts.	SATISFACTORY 8-7 pts.	INADEQUATE 6-5 pts.	POINTS
Body Position (Posture)	Feet on floor, sitting erect; body aligned w/ keyboard; arms relaxed at sides	Feet sometimes crossed; occasionally slouches in chair; occasional variations in arm/elbow position	Feet often crossed, wrapped around chair legs or not under desk; regularly slouches in chair; doesn't sit squarely behind keyboard	
Hand/Finger/ Wrist Position	Fingers curved correctly over home row; wrists straight & low, but not resting on frame of keyboard	Fingers occasionally drift away from home row; wrists occasionally rest on keyboard or are raised too much	Fingers flat, not over home row keys; wrists normally rest on frame of keyboard	
Eye/Head Position	Eyes consistently stay on copy; head elevated & chin up	Occasionally checks fingers (1-2 times per line)	Frequently looks at fingers (3+ times per line); head down	
Keystroking Technique (Alphabetic keys)	Strikes keys with snappy, rhythmic strokes; consistently uses correct fingers, shifts with opposite hand	Occasional hesitation in striking keys; moves hand (not just fingers) when reaching to 1st or 3rd row	Frequent hesitation; shifts with same hand; does not use correct fingering	
Reaches to Service Keys (Tab, return, space bar, etc.)	Reaches with fingers, not hands; does not look at fingers	Occasionally looks at fingers	Moves hands; frequently looks at fingers	
Attitude/ Work Habits/ Attendance	Comes to class prepared; uses class time productively; 0-2 times absent; 0-1 times tardy	Unprepared 1-2 times; occasionally off task; 3-4 times absent; 2 times tardy	Unprepared 3+ times; often off task; 5+ times absent; 3+ times tardy	

100 - 92% = A
91 - 82% = B
81 - 70% = C
69 - 60% = D

Total Points   _____/60

_____%

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Tic-Tac-Geo

Purpose:	To explore methods for drawing, copying, pasting, and moving an object To develop ability to recognize and to invent strategies
Software:	Graphics program with drawing tools
Curricular Area:	Math: strategies, recognition of geometric shapes.
Time:	One session of 15 - 30 minutes
Goal:	A drawing of a tic-tac-toe board on the screen and shape for each player to copy and move into place
Computer Skills:	Drawing shapes, drawing lines, grouping lines, copying and pasting
Extension:	Have students play the Tic-Tac-Geo game with various partners; suggest that they use a variety of geometric shapes.

Procedure: After the board is drawn, this activity is ideal for pairs. If students are familiar with a drawing tool you can give them the sample and general directions. The typical tools needed are the line tool, any shape tool, and the copy and paste, or copy and move, techniques.

If your drawing tool allows, suggest that students use the Group function to make the Tic-Tac-Geo board one object. If your focus in this activity is on the computer moves, you might suggest that students use the traditional X and O. In this case, students should create the X and O as graphics, not as letters, and group the two lines that make the X so it can be copied and pasted. Directions follow.

1. Open a drawing or paint application.

2. Select the line tool.

3. Draw the crossbar frame. (Hints: Choose a moderately thick pen width. To keep the lines identical, copy your first line and paste it.)

4. If available, use the Group function to group these lines.

5. Draw two shapes, such as a square and a circle, or a hexagon and a triangle.

6. Take turns and play the game. Choose a shape. Copy and paste it for each turn. Can you find some strategies so you'll always win?
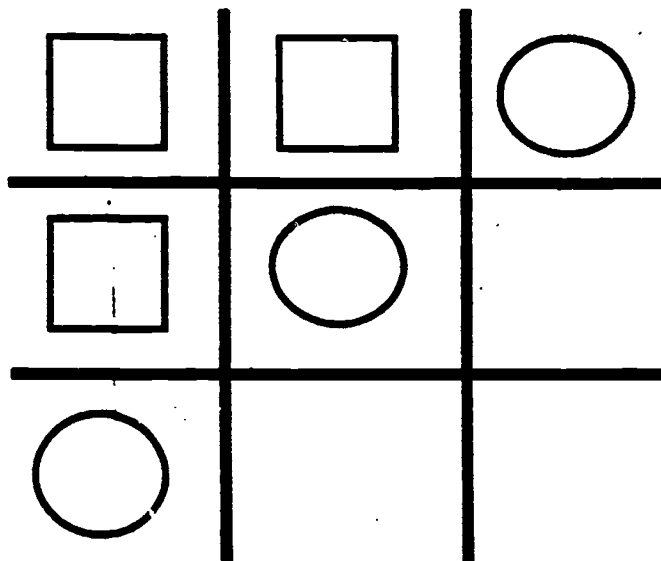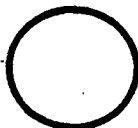
Sample - Tic-Tac-Geo

Here is a sample screen for the Tic-Tac-Geo Game. If you want, use the traditional tokens of X and O. Remember to draw them as graphics, not as letters.
If you use geometric shapes, label them.

Tic-Tac-Geo

square   circle

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LISTENING FOR DIRECTIONS*

Because workers often receive directions orally, students need to practice hearing complicated directions, interpreting them, and taking appropriate action. Educators can develop exercises to enhance listening skills.

Example: Read the following directions for students to follow. Read slowly, but no directions should be read more than once. Students should be told to rewrite the new configuration of letters with each change.

1. Write down the words GEORGE WASHINGTON.

2. Take out all the E's.

3. Count the remaining letters, and add an L after each seventh letter.

4. Move the second G to the beginning, and move the last letter in its place.

5. Whenever three consonants appear together, change them in order so that the first consonant in the group becomes the last, the one in the middle becomes the first, and the last becomes the middle.

6. Take out the last two vowels.

7. Where a double letter appears, take out both letters.

8. Beginning with the third letter from the left, interchange each two letters.

9. Take out the last two letters.

10. Move the last letter so it will be the first letter.

11. Add a D after each fourth letter.

12. Add a D at the beginning.

13. Replace every S with an N.

14. Take out the middle three letters.

15. Take out the final letter, and put the first letter in its place.

(The outcome of these instructions should be the word HOLLAND.)

*Taken from Instructional Strategies, Delta Pi Epsilon, May, 1992.

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Keyboarding & Computer Literacy

Middle School Level

Rationale

Because of the continuing increase in the use of computers in our personal, educational, and professional lives, good keyboarding skills are more important than ever. Despite technological advances in optical-character and voice recognition, the keyboard is, and will continue for some time to be, the most widely used input device in communicating with computers.

(continued)

Rationale (cont.)

Therefore, keyboarding can no longer be considered a secretarial skill.

It is a basic communication skill needed by all individuals.

Course Description

Keyboarding is defined as the act of placing information into the computer through the use of a typewriter-like keyboard, involving the placement of fingers on designated keys on the middle or "home" row of the keyboard and moving fingers as needed to depress other keys. This method, often called "touch typing," is in contrast to "hunt & peck" typing.

(continued)

Course Description (cont.)

The speed improvement associated with touch typing is obvious. Ten fingers will get data into the computer faster than two fingers will. Also, with hunt & peck, typists are not able to concentrate on what they are inputting because all their attention must be focused on their fingers.

(continued)

Course Description (cont.)

In Middle School Keyboarding & Computer Literacy students will:

- learn correct keyboarding techniques.
- learn basic computer terminology
- learn to format documents
- learn the basics of word processing
- improve language skills

Best Practices

- Teach students to keyboard as soon as they are physically & intellectually ready--age 10-12.
- Devote first 8-9 weeks to developing technique; devote remainder of the semester to personal-use skills.
- Use flexible, easy-to-use software that will not detract from learning keys. Word processing concepts should be integrated as needed.

Best Practices (cont.)

- Teach simplified formats
- Teach/review language arts skills and provide opportunities for students to apply them
- Emphasize straight-copy skill
- Provide meaningful practice on meaningful tasks to promote students' persistence
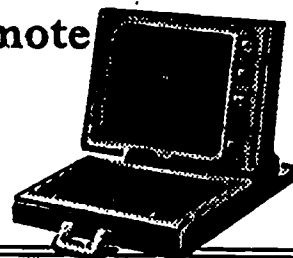
Best Practices (cont.)

- Do not allow use of correction key until students achieve 20 gwam.
- Give opportunities for "real world" practice--illustrate how key-boarding benefits the students.
- Teach word processing concepts after students have mastered the keys.
- Review language skills

Course Objectives

- To demonstrate correct "touch" method for operating alphanumeric keys.
- To demonstrate proper keyboarding techniques and be aware of ergonomic considerations pertaining to keyboarding.
- To demonstrate proficiency in the use of hardware and software.

Course Objectives (cont.)

- To demonstrate ability to enter information from straight copy and rough-draft material.
- To demonstrate straight-copy speed of 25-30 words a minute in a 3-minute timing with no more than 5 errors.
- To improve language skills.
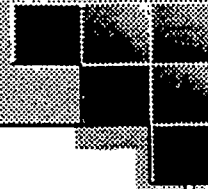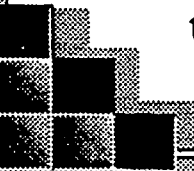 - capitalization, abbreviations, word division, number expression.

Course Objectives (cont.)

- To apply proofreading/editing skills.
- To prepare simple personal-business documents.
- To demonstrate knowledge of basic word processing concepts.
- To demonstrate proficiency in composing at the keyboard.
- To demonstrate the ability to follow oral and written directions.
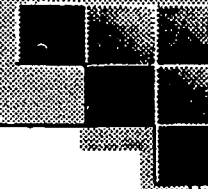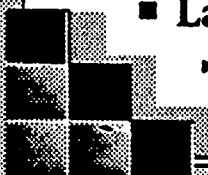
Unit Outline

Unit 1

- Introduce equipment/class
- procedures/ keyboarding software
- Keyboarding techniques/ergonomics
- Alphabetic keyboard
- Parts of computer,
    basic computer
        terminology

Unit Outline (cont.)

Unit 2

- Numbers & symbols
- Misc. service & function keys
- Proofreader's symbols,
    proofreading, editing copy
- Composing at the keyboard
- Keying from rough draft copy
- Language skills
    ‣ capitalization, punctuation,
        abbreviations

Unit Outline (cont.)

Unit 3
- Introduce word processing software
- Use of function keys and pull-down menus
- Calculating & setting margins
- Formatting personal-business letters and addressing envelopes
- Language skills
  - word division, addressing, number expression

Unit Outline (cont.)

Unit 4
- Formatting unbound reports, outlines, tables
- More word processing concepts
- Skill building on alphanumeric keys and rough-draft copy
- Using the mouse to draw and move
- Misc. computer applications
  - graphs, Print Shop, etc.

Examples of Keyboarding Activities

- Crossword puzzles and bingo for review on terms
- Create a class newspaper (in cooperation w/ Lang. Arts)
- Lesson on copyrighted software (incorporates their newspaper)
- International E-mail keypals
- Creating (composing) tables and graphs incoroprating other subject areas

Take the fast track to success with keyboarding.

A Curriculum Guide:
Microcomputer Applications

Presented to:
Dr. Donna R. Everett
August 3, 1995

Michael McDonald

Hui-Haisang Chang

By:
Hui-Haisang Chang
and
Michael L. McDonald

Microcomputer Applications
Table of Contents

Microcomputer Applications

Rationale: Few skills are recognized around the globe as necessary as computer skills. We use computers in business, most professions, and our personal lives. Word processing, spreadsheet applications, and database applications are three of the most used applications of computers. *Microcomputer Applications* is a class designed to offer training in these areas. This class is an important step for persons wishing to make their microcomputers work efficiently and effectively for them.

COURSE DESCRIPTION: In this course students will be introduced to application software for the microcomputer. The software employed are word processing, database management, and spreadsheet programs (including graphics). They will use applications that may be incorporated into students future personal, academic, and professional responsibilities.

COURSE OBJECTIVES: To provide students with the skills, techniques, and knowledge of application software that will allow students to:

1. Prepare reports, manuscripts, letters, and other documents using word processing software.

2. Design spreadsheet applications and create graphs using appropriate software.

3. Generate columnar reports and labels using database management software.

<u>BEST PRACTICES</u>: This course should involve the use of a variety of teaching practices. Some suggested practices are:

☺   hands-on training,
☺   using students experiences in the class and exercises,
☺   assignments that mirror the workplace and "real world,"
☺   reflection of current and future trends, and
☺   encouragement of transfer of knowledge beyond the technology presented in this class.

WORD PROCESSING

Word Processing Objectives

After completing this unit students will:

1. Identify the various parts of an open document window in WordPerfect.
2. Identify the buttons on the button bar and on the ruler.
3. Use the on-line help in a WordPerfect document.
4. Retrieve and open an existing document.
5. Define word-processing terms.
6. Split and combine paragraphs.
7. Select and deselect text.
8. Delete and restore text.
9. Enhance text.
10. Insert special codes and use Reveal Codes.
11. Use spell-checking.
12. Insert and format the date.
13. Set margins.
14. Indent and align paragraphs.
15. Adjust line spacing.
16. Set and clear tab stops.
17. Construct a table.
18. Move and copy text.
19. Work with multiple document windows.
20. Search for and replace text and codes.
21. Number pages and suppress numbering.
22. Use headers and footers.
23. Choose fonts and point sizes.
24. Use the various printing options found in WordPerfect.

Word Processing Activities

Activity	Students will:
Application 1: Practicing Basic Windows Skills	Work with program group icons. Change the size of windows. Open applications. Switch between applications, and close applications.
Application 2: Opening WordPerfect.	Continue practice of Windows skills. Cascade and tile program groups. Open WordPerfect. Choose menu options. View a dialog box. Identify the various options on pull-down menus.
Application 3: Exploring and Moving Within the WordPerfect Screen	Explore parts of the WordPerfect screen. Key a document. Practice Moving the insertion point.
Application 4: Keying and Editing Text	Key a short document and edit it. Use typeover and insert mode. Delete and insert text.
Application 5: Saving a Document and Using Help	Key a short document. Open a second document window. Use WordPerfect's on-line *Help*. Save the document.
Application 6: Working with an Existing Document	Open a document. Scroll through the document. Insert special codes. Combine and split paragraphs. Show and hide reveal codes. Spell-check, save, print, and close the document.
Application 7: Selecting a Deleting Text	Open a document. Select and deselect text. Scroll through a document. Delete and undelete text. Spell-check, save, print, and close the document.
Application 8: Creating and Editing a Document	Create a new document. Key text. Retrieve a file. Apply attributes to text. Spell-check, save, print, and close the document.
Application 9: Editing a Document	Open a document. Apply attributes to text. Edit text. Insert special codes. Use reveal codes. Spell-check, save, print, and close the document.
Application 10: Spell-Checking and Inserting the Date	Open a document. Format text. Add the date. Spell-check, save, print, and close the document.
Application 11: Justifying and Indenting Existing Text	Create a new document by keying text and retrieving an existing document. Change the margins. Justify and indent paragraphs. Spell-check, save, print, and close the document.

Application 12: Creating and Formatting a New Document	Create a new document. Change the margins and line spacing. Create a numbered list; Create a hanging-indent list. Spell-check, save, print, and close the document.
Application 13: Formatting a Memo and Setting Tabs	Create a new document. Change the margins. Insert tabs. Justify Paragraphs. Spell-check, save, print, and close the document.
Application 14: Formatting a New Document	Create a new document. Change the margins. Format text as you key it. Spell-check, save, print, and close the document.
Application 15: Cutting and Pasting Text and Finding and Replacing Text	Open a document. Change font and point size. Cut and paste text. Search for and replace text. Spell-check, save, print, and close the document.
Application 16: Working with Multiple Documents	Open two documents. Set and use tabs to key columns of text; copy and paste text between two documents. Spell-check, save, print, and close the document.
Application 17: Creating and Editing Headers and Inserting Page Numbers	Open a document. Create and edit a header. Insert page numbers. Go to different parts of the document. Search for codes and text. Print selected text. Insert a hard page break. Spell-check, save, print, and close the document.
Application 18: Controlling Page Breaks and Creating Headers and Footers	Open and combine two documents. Create different headers for different sections. Create a footer. Insert page numbers. Insert hard page breaks. Control the location of soft page breads. Spell-check, save, print, and close the document.
Application 19: Business Letter Projects	Creating a block-style and modified block style business letter with appropriate formatting, spacing, and grammatical rules. Spell-check, save, print, and close the document.
Application 20: Word Processing Internet Project	Select an article from a current journal on the subject of the Internet. Key in the article using appropriate formatting, spacing, and grammatical rules. Spell-check, save, print, and close the document.

Word Processing
Application 19
Business Letter Project

↕ [2 Inches]

July 23, 1995

[DS]

Ms. Genevieve Alexander
Park Medical Center
4500 Pard Boulevard
Tacoma, WA 98450
[DS]
Dear Ms. Alexander
[DS]
During the entire month of January, our laser printer, Model No. 34-454, will be on sale. We are cutting the original price by 33 percent!
[DS]
When you Purchased your computer system from out store last month, you indicated an interest in a laser printer. Now is your chance, Ms. Alexander, to purchase a high-quality laser printer at a rock-bottom price.
[DS]
Once you have seen the quality of print produced by a laser printer, you will not be satisfied with any other type of printer.
[DS]
Visit our store at your convenience and see a demonstration of this incredible printer. We are so confident you will purchase the printer that we are enclosing a coupon for a free printer cartridge worth over $100.
[DS]
Very truly yours

[QS]

Roland Prasad, Manager
[DS]
mm [Keyboarder's initials in lowercase]
[DS]
Enclosure

Application 20
Word Processing Internet Project

Select a article from a current journal which will meet the following criteria. Key the article in WordPerfect 5.2 using the guidelines below.

1.   The article must deal with the subject of the *internet.*

2   The text of the project is to be a minimum of five pages in length when printed out.

3   The project will include an appropriate cover page.

4   The project will include a bibliography of no less than five entries.

5   The body of the text will contain a table of at least three columns and four rows.

6   The body of the text will be double-spaced.

7   Top, bottom, and margins will be one inch and a left margin of one and one-half inches.

8   Pages will be numbered.

9   The page number of the first page of the body will be suppressed.

10   The body of the text will use a twelve point font.

11   The text will be left justified.

12   The document will be free of spelling errors.

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Application 20
Word Processing Internet Project
Grading Rubric

COMPONENT	MAXIMUM COMPETENCE 5 points	COMMENDABLE 3 points	LACKS SUFFICIENT PROFICIENCE 0 points	POINTS
Length	Five pages or more.	Three or four pages.	Under three pages	
Table	Three columns and four rows or more.	Two columns and three rows.	Less than two columns and three rows.	
Margins	Top = 1", botom = 1", right = 1", left = 1.5".	Top, botom, right, and left = 1".	Any deviation.	
Page numbering	Page numbering begins with page 2 and continues.	Page numbering begins with page 1 and continues.	Any deviation.	
Spelling	100% as checked with the spell checker.	Less than 100% as checked with the spell checker.	No spell checker used.	
Appropriate subject	Deals with the internet. Less than five years old.	Deals with the internet. More than five years old.	Does not deal with the internet.	

TOTAL POINTS POSSIBLE = 30

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SPREADSHEETS

Spreadsheet Objectives

After completing this unit students will:

1. Identify the following terms:

Range	Relative Addressing	Absolute Addressing
WYSIWYG	formulas	cell address
macros	headers	footers
cell	label	value

2. Enter numbers as labels (text).
3. Enter values.
4. Activate a menu.
5. Choose menu functions.
6. Describe the purpose of the Add-In menu command.
7. Navigate in the worksheet.
8. Describe the various parts of the worksheet screen.
9. Describe the status line.
10. Clear the current worksheet from current memory.
11. Explain the action of pressing F1 at the Worksheet command point.
12. Edit a cell.
13. Explain the difference between moving and copying.
14. Identify prefix labels.
15. Activate the WYSIWYG menu.
16. Adjust column width in WYSIWYG.
17. Center text over multiple columns.
18. Preview a document before printing.
19. Explain the purpose of the "BSOLVER" add-in.
20. Explain what is meant when a cell is "protected".
21. Use the functions: SUM, COUNT, AVG, MAX, MIN.
22. Explain reasons software piracy is unethical.

Spreadsheet Activities

Activity	Students will:
Application 1: Creating and Printing Templates With Headers and Footers	Prepare a template. Use a header and a footer. Print the template.
Application 2: Entering Data, Formulas, and Functions	Recall a template. Entering data, formulas, and functions. Using absolute and relative values. Use a header and a footer. Print the spreadsheet.
Application 3: Absolute and Relative Values	Recall a template. Entering data and formulas. Use a header and a footer. Print the spreadsheet.
Project 1: Creating a New Worksheet With Title, Formatting Text and Numeric Data and Copying the Spreadsheet to a new location.	Create a spreadsheet. Create an appropriate title. Entering data, formulas, and functions. Using absolute and relative values. Format the spreadsheet using centering column headings and formatting numeric entries for the number of decimal places. Copy the spreadsheet. Use a header and a footer. Print the spreadsheet.
Project 2: Creating a New Worksheet Dealing With Students Lives	Create a spreadsheet dealing with their life (i.e. checking account, student's grades). Create an appropriate title. Entering data, formulas, and functions. Using absolute and relative values. Format the spreadsheet for easy reading. Use a header and a footer. Print the spreadsheet.
Readings: Problems of Software Piracy	Read assigned readings. List problems caused by software piracy. List ways software piracy is being fought.

Spreadsheet Applications

You are an employee of Northeast Generic County School District and need to file a Travel Expense Report for your recent trip to the NBEA National Convention.

Application 1:

Prepare a template (a spreadsheet which is ready for values to be inserted and computed) like the blank Travel Expense Report on the following page. Print this template as well as a print-out of the cell formulas. Make sure your name and the date is in the header and that SS Exercise 1 is in the footer.

Application 2:

Using the template worksheet prepare a travel expense report for yourself (similar to the one for Patricia Tipton) using the following data:

Dates of your trip: 5/2-5/7/94

Transportation: You did not drive but rather traveled by plane. Your plane ticket was $235.00. When you arrived at the airport you took a taxi to the hotel and back which cost $17.00.

Hotel: $125.65 per day for the nights of 5/2, 5/3, 5/4, 5/5, and 5/6
Breakfast: You breakfasted with Ms. Tipton and she picked up the bill.
Lunch: 5/3 $7.80; 5/4 $6.50; 5/5 $15.90; and 5/6 $8.50
Dinner: 5/3 $75.00; 5/4 $8.50.
Tips: 5/2 $8.00; 5/3 $10; 5/4 $3.00; 5/7 $8.00
Misc: 5/2 $25.00; 5/6 $38.00

Travel Advance: $500.00

Print out a completed Travel Expense Report and a cell-formulas print-out. Be sure to include your name and the date in the header and the exercise number in the footer.

Spreadsheet Reading Activity

1. Read the two of the following articles included in your text:

    Becker, Gary. *Software Copyright Looks Fuzzy, But Is It?* Electronic Education, October 1984, 4(2), p.p. 18-19.

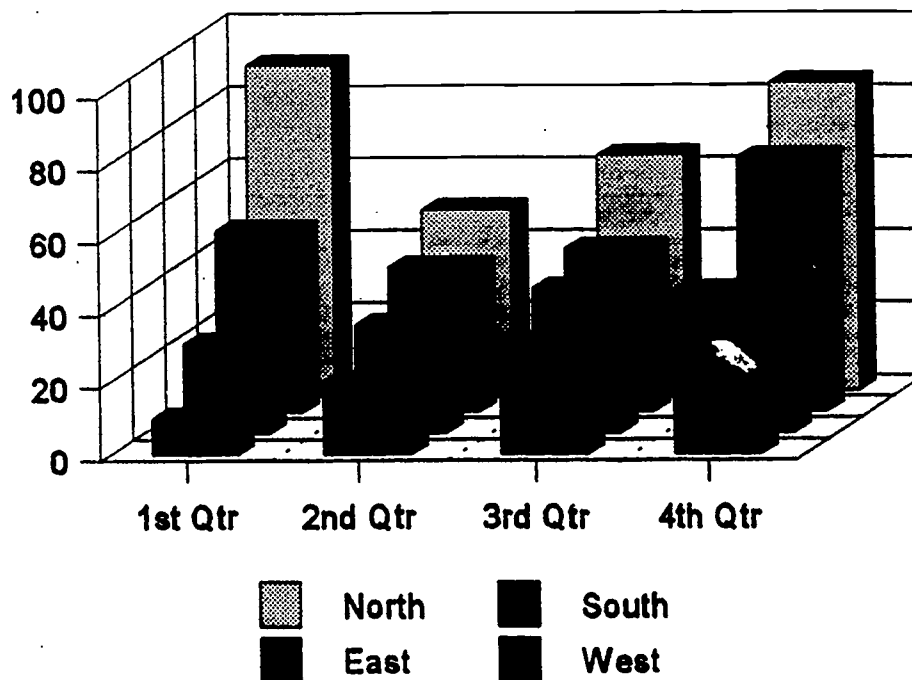   *The Long Arm of the Software Industry.* Information Week.

    Software use and the Law. Software Publishers Association.

    Is It Okay to Copy My Colleague's Software. Software Publishers Association.

2. List 10 problems generated by software piracy.

3. List 5 ways the software/computer industry is fighting software piracy.

GRAPHICS

Title of Chart

Legend:
- North
- East
- South
- West

Categories: 1st Qtr, 2nd Qtr, 3rd Qtr, 4th Qtr

Y-axis: 0, 20, 40, 60, 80, 100

Graphing Objectives

After completing this unit students will:

1. List the three basic steps in creating a graph.
2. Explain the difference between the x-axis and the y-axis of a graph.
3. Demonstrate the difference between the first title and the second title of a worksheet.
4. Define a graph.
5. Create a bar graph, a pie chart, a multi-range graph, a stacked bar graph, a mixed graph, and a line graph.
6. Explain the purposes of the "A-F" data ranges.
7. Create a legend.
8. Add a graph to the worksheet and re-size the graph on the worksheet.
9. Explode a pie chart.
10. Graph multiple data ranges.
11. Display exposure to an international event graphically.

Graphing Activities

Activity	Students will:
Application 1: Various Graphs, Labeling Axes, Moving Onto the Worksheet	Create a spreadsheet. Prepare a bar graph, stacked bar, pie chart and a line graph. Title each graph. Label the X and Y axes. Move graphs onto the worksheet using WYSIWYG. Use a header and a footer. Print the worksheets.
Application 2: Various Graphs, Emphases, Titles, Legends, Moving Onto the Worksheet	Create a spreadsheet. Prepare a bar graph, stacked bar, pie chart and a line graph. Emphasize the largest section of the bar chart. Title each graph. Label the X and Y axes. Create legends and data labels. Move graphs onto the worksheet using WYSIWYG. Use a header and a footer. Print the worksheets.
International Project: Research and Graphing Cultural Diversity	Research information concerning some aspect of U.S. relationships with another country or countries. Look for quantitative data that can be graphed. Create a graph that compares the data of the countries.

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Graphing
International Project

1. Conduct research for information concerning comparing some aspect of the U.S. with another country or countries. It is necessary the data be expressed quantitatively (numbers).

2. Create at least two types of graphs to visually display the relationship.

3. Create appropriate titles and legends for ease of understanding.

4. Use appropriate formatting for ease of reading.

5. Prepare a short (one to two pages) report about what the graphical information relays to you.

6. Use appropriate headers and footers to indicate your name and the activity.

7. Print the graphs and spreadsheet.

DATABASE

Database Objectives

After completing this unit students will:

1. Define a database.
2. Distinguish between a database record and a database field.
3. List the general rules for creating a database.
4. Demonstrate the difference between the primary key and the secondary key when used in reference to sorting a database.
5. Demonstrate the difference between ascending and descending order.
6. Perform a one level sort.
7. Demonstrate the use of delete, find, extract, and unique options.
8. Create field names.
9. Distinguish between the criteria range and the output range.
10. Define "wildcard."
    List the three types of wildcards and their functions.
11. Construct a search criterion for an "and" condition.
12. Construct a search criterion for an "or" condition.
13. Demonstrate the use of the common logical operators.
14. Set up the criteria range and criterion to perform a specified query.
15. Complete a one-level and a two-level sort.
16. Design the required sort and/or query to produce a desired report.
17. Execute a one level sort, a two level sort, and a data query of find, extract, and unique.
18. List future trends of the computer world.

Database Activities

Activity	Students will:
Application 1: Construction of Databases, Titles, Formatting, Headers and Footers	Construct a database. Create a appropriate title. Center title. Print the database. Use a header and a footer.
Application 2: Sorting	Using the database created in Application 1: Sort the database by number in ascending order. Print the database. Use a header and a footer.
Application 3: Extracting and Sorting	Using the database created in Application 1: Perform an extract. Sort the database in descending order. Print the database. Use a header and a footer.
Application 4: Extracting and Sorting	Using the database created in Application 1: Perform an extract. Sort the database within a field in ascending order. Print the database. Use a header and a footer.
Database Project 1: Extracting and Sorting	Construct a database. Create appropriate title. Include the criterion range. Use a header and footer. Sort alphabetically by last name. Sort by grade level. Extract by bus number. Extract by grade.
Database Project 2: Creating a Unique/Personal Database	Construct a database dealing with some part of the student's life (i.e. baseball card collection, grades...).
Class Discussion: The Future with Microcomputers	Discuss the trends and developments of the microcomputer world.

Personal Database Project

1. Ascertain a part of your life that a electronic database could help you organize. (i.e. baseball card collections, recipes, address books...).

2. Create a database for the area in number 1.

3. Create appropriate field and record names for ease of understanding.

4. Perform two one-level sorts and one two-level sorts.

5. Perform a extract.

6. Print the database sorts and extract.

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Microcomputer
Applications
Presentation

Microcomputer Applications

Technology for Everyone

Rationale for Learning Microcomputer Applications

- Virtually no technology has become as important part of:
  - The Workplace
  - Our Personal Lives
  - Our Recreation
  - Education

Course Description

Students will be introduced to application software for the Microcomputer.

- Word Processing
- Spreadsheets
- Graphing
- Database

Course Objectives
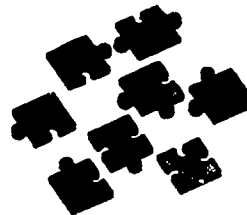
- To Provide Students with the Skills to:
  - Prepare reports, manuscripts, letter, and other documents in Word Processing
  - Design Spreadsheets and create Graph
  - Generate columnar reports and label using Database

Best Practices

- Hands-on training
- Using students experiences
- Assignments that mirror the workplace and "real world"
- Reflection on current and future trends
- Encouragement of transfer of knowledge

WORD PROCESSING

Word Processing Objectives

After completing this unit students will:

- Retrieve and open an existing document
- Split and combine paragraphs
- Enhance Text
- Insert special codes
- Use spell-checking

Word Processing Objectives Cont.

- Set margins
- Align paragraphs
- Adjust line spacing
- Construct a table
- Move and copy Text

Word Processing Activities

Activity	Students Will:
Application 1	Practice basic windows skills
Application 8	Creating and editing a document
Application 10	Spell-checking

Application 2 Internet Project

1. Article must deal with the Internet
2. Minimum of 5 pages
3. Cover page
4. At least 1 table
5. Double spaced
6. Page numbering...

SPREADSHEETS

ACCOUNT	AMOUNT
Tom	$50.00
Fred	$15.00
Susan	$76.00

Spreadsheet Objectives

- Enter numbers as labels
- Enter formulas
- Demonstrate SUM, COUNT, AVG, MAX, & MIN functions
- Edit and format the spreadsheet
- Activate the WYSIWYG menu

Spreadsheet Activities

ACTIVITY	STUDENTS WILL
Application 1	Create a template
Application 2	Enter data, formulas and functions
Application 3	Use absolute and relative values
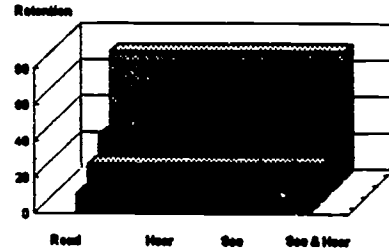
Graphing

Graphing Objectives

- Create a bar, pie, and line graph
- Create a legend
- Explode a pie chart
- Add a graph to the worksheet
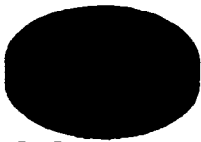
Graphing Activities

ACTIVITY	STUDENTS WILL
Application 1	Create bar, pie, & line graphs
Application 2	Create legends
Application 3	Move a graph to the worksheet

Graphing International Project

- Conduct research concerning a comparison of the U.S. and another country(ies).
- Graph the data.
- Utilize titles, legends, and formatting.
- Prepare a short paper explaining your findings.
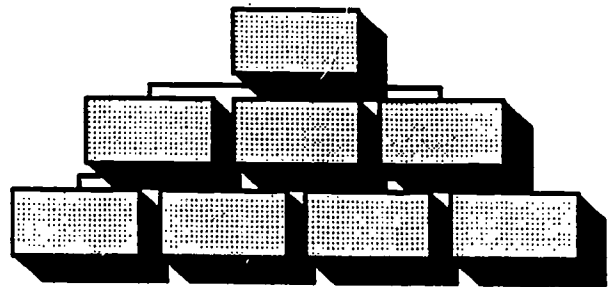
DATABASE

DATABASE OBJECTIVES

- Create a Database
- Perform a one-level sort
- Perform a extract
- Perform a two level sort

DATABASE ACTIVITIES

ACTIVITY	STUDENTS WILL
Application 1	Construct a Database
Application 2	Sort in ascending order
Application 3	Extract by number

Personal Database Project

- Think of a subject in your life (i.e. hobbies) that needs organization.
- Create a Database.
- Perform two one-level sorts.
- Perform a extract.
- Print the Database.

Thank You!

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NOTETAKING SKILLS IN TODAY'S WORLD

A Course Outline Prepared by
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New Haven High School
New Haven, MO

Prepared for:
Dr. Donna R. Everett
University of Missouri-Columbia
August 4, 1995

TABLE OF CONTENTS

SKILL AREA: Notetaking

LEVEL: Grades 10-12

COURSE DESCRIPTION: *SuperWrite* is an abbreviated writing system based primarily on longhand and secondarily on phonetics. It is a quick, easy-to-learn writing system that is easy to write and read.

This system of writing uses the characters of the alphabet—there are no special symbols used, as there are with Gregg shorthand. There is no change in your writing size or slant, and no changes in penmanship are required (as long as it's legible!). Also, there is no phrasing (writing two or more words together), and all punctuation marks are the same as those used in longhand (Lemaster and Hankin, 1991; 5).

SuperWrite is not designed for extremely high writing speeds. However, you should be able to increase your writing speed significantly. Homework will be assigned nearly every class period, and, to do well in this class, you will need to spend about as much time on homework as you do in class.

RATIONALE: This class is designed to supply the knowledge of a fast and legible writing system that can be learned quickly by word processor operators; to assist business executives and students to make legible notes at a faster speed; and to give the entering, prospective, or returning secretary the ability to take notes from dictation

The skill of notetaking can be used as a vocational skill or a personal-use skill. If a student is planning to go to college, into journalism, or to work in an office, he/she can use the notetaking skill to make him/her a better student, to take good interviewing notes, to take dictation of correspondence, or minutes of a meeting.

The skills of formatting, proofreading, error correction, spelling, word division, and punctuation will be reviewed and applied in the transcription process. Students will also utilize the skills of listening, reading, composing, making decisions, and human relations. These abilities strengthen the communication skills of all students, in addition to providing promotional opportunities for those who will enter business (Imel, 1994).

PREREQUISITE: Keyboarding.

COURSE OBJECTIVES: By the end of the course, the student should be able to:

1. Write correct *SuperWrite* outlines at an acceptable speed and legibly.
2. Read *SuperWrite* notes rapidly and accurately.
3. Transcribe *SuperWrite* notes rapidly and accurately.
4. Apply the skills of formatting, proofreading, error correction, spelling, word division, and punctuation in the transcription process.
5. Produce mailable copy for new-matter dictation.
6. Apply listening, organizational, and rapid writing skills in generating *SuperWrite* notes.
7. Describe current technological advances in dictation/transcription methods.

1

BEST PRACTICES:

It has been found that notetaking, like many other hands-on skills, takes dedicated practice time to develop and improve upon. Practice outside of the classroom is necessary for the student to achieve an acceptable level of notetaking skill that is conducive to a work environment (Brendel, 1987, 1).

Practices that have been found to work best in the classroom setting are:
► Overlapping of theory presentation
► Homework preparation of text plates
► Fluent reading of text plates
► Review of vocabulary used in dictation
► Edit transcription from the beginning
► Utilize different styles of dictation
► Utilize different people to give dictation
► Simulate real office situations as often as possible
► Incorporate problem-solving and decision-making activities into classroom
► Use situations that involve teamwork to complete activities

Within the notetaking class, the importance of good interpersonal skills will also be stressed, as without them, good technical skills will get you nowhere!

EVALUATION:

1. Theory Tests
    a. Transcription of a word list written in *SuperWrite* using words selected from those covering the principles with a few added from the *word families*.
    b. Transcription of words which were dictated to the student using related words selected from theory rules covered.

2. Transcription Tests
    a. Unit 1 - Transcription of two to four assigned homework plates.
    b. Unit 2 - Transcription of dictated material from previewed material and new material.

3. Reading Grades

4. In-Class Activities

5. Homework

UNIT I — Principles of Construction

I. **Overview**: Unit I deals with the abbreviating principles upon which *SuperWrite* is based. Special abbreviations for several words are taught. Rapid reading of *SuperWrite* notes is also stressed. Transcription of the *SuperWrite* notes will begin during this unit but more emphasis on that will begin during Unit II.

II. **Student Performance Objectives**—The learner will be able to:
A. Explain the benefits of an alphabetic shorthand system.
B. Compare and contrast the writing of *SuperWrite* and longhand.
C. Develop words by employing the *SuperWrite* principles.
D. Identify and write the *SuperWrite* abbreviations.
E. Demonstrate accurate and legible writing of words using *SuperWrite*.
F. Demonstrate accurate and rapid reading of *SuperWrite* copy.
G. Demonstrate proper *SuperWrite* techniques when taking dictation.

III. **Student Learning Activities**:
A. Students will brainstorm to come up with possible benefits of knowing an alphabetic shorthand writing system.
B. Students will demonstrate on the board the writing of words using *SuperWrite* principles.
C. Students will demonstrate from words on the board, in the textbook, and from copy in homework notebooks the reading of text written in *SuperWrite*.
D. Students will observe words written on board by teacher using *SuperWrite* principles and write same words in notebook.
E. From a worksheet of longhand words, students will mark the sounds that are silent.
F. Students will pronounce the letters and sounds which would be written to form the word using *SuperWrite* principles.
G. Using flash cards, an overhead projector, or the board, students will identify SuperWrite abbreviations.
H. From dictation by the instructor, students will write abbreviations in SuperWrite and then transcribe them at the computer.
I. Students will write the words, sentences, and letters from the plates of the textbook as homework
J. From dictation of homework copy as well as new dictation matter, students will write copy using *SuperWrite* principles.
K. Students will divide into groups of 3 or 4. Using a deck of *SuperWrite* cards, each group will play *Rummy*, matching *SuperWrite* words with longhand words (Gordon).
L. Using the Internet and *World Classroom* connection, students will communicate with students in other countries regarding the business curriculum in their countries. Each student will then be required to compose a short report at the computer and present the information orally to the class.
M. An area businessperson will be invited into the classroom to discuss how notetaking skills are used in today's workplace.

UNIT I OUTLINE:

A. Silent Letters/Sound Spell

B. Theory Rules
    1. Long vowels
    2. Short vowels
    3. Word beginnings
    4. Word Endings
    5. Prefixes
    6. Suffixes

C. Abbreviations

D. Personal Titles and Names

E. Salutations and Closings

F. Geographic Names

G. Quantities

H. Punctuation Rules

I. Capitalization Rules

J. Days of the Week

K. Months of the Year

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UNIT II — Beginning Transcription

I. **Overview**: Learning to transcribe usable and mailable documents is a primary goal during Unit II. Also, achieving higher speeds in taking dictation is the purpose of taking lots of dictation during this unit.

II. **Student Performance Objectives**: The learner will be able to:
   A. Demonstrate a knowledge of mailable business documents.
   B. Demonstrate a knowledge of standard business letter styles, memos, and related business documents.
   C. Transcribe *SuperWrite* matter, both from the textbook and from their own dictation notes, accurately and at an acceptable speed.
   D. Display use of an extensive business vocabulary.

III. **Student Learning Activities**.
   A. From a worksheet, students will identify what is right and what is wrong with various types of business letters and other business-related documents.
   B. Using their homework notes, students will transcribe material into mailable business documents.
   C. From activity sheets, students will match new vocabulary words with definitions, and compose sentences at the computer using new vocabulary words.
   D. Discuss in groups the importance of transcribed material being *error free*, including formatting, punctuation, spelling, and word division errors.
   E. Take dictation using a variety of speed building activities such as the pyramid plan, the one-minute speedbuilder, the stair-step plan, accelerated dictation, and spurt dictation.
   F. Read aloud from homework notes.
   G. Videotapes of school board meetings will be shown from which students can take minutes. Students will then prepare reports from those notes.
   H. A foreign exchange student will be invited into the classroom to dictate a letter to students. The letter will contain personal names and geographic locations related to the exchange student's home country. Students will transcribe the letter including an envelope to the foreign location.
   I. Students will be divided into partnerships. Partner 1 will dictate a letter to Partner 2, and then vice versa. Each partner will transcribe a mailable document from their notes which in turn will be edited by the other partner. Each partner will critique the other on dictation style, transcription accuracy, etc (Chapman, Cooper, and Moody, 1993, 31).
   J. A letter will be dictated to the class that contains a problem situation. Students will transcribe the letter in mailable form. Students will then break into groups of 3 or 4 and brainstorm for the best possible solution to the problem in the letter. Each student will then compose on the computer a letter in reply to the original letter.
   K. Viewing a videotape of a school board meeting, students will write main points in *SuperWrite* and then transcribe in report format.

UNIT II OUTLINE:

A.   Review Standard Letter and Memorandum Formats

B.   Review Standard Report Format, Including Reference Page

C.   Develop Increased Writing Speed Through Extensive and Different Types of Dictation

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UNIT III — Advanced Technology in Dictation

I.   *Overview:* Unit III covers technological advancements that are being implemented in today's offices for dictation/transcription purposes. Different brands of voice/recognition software will be discussed.

II. *Student Performance Objectives*—The learner will be able to:
     A.   Describe what a voice recognition system is and the advantages this technology can have in industry.
     B.   Name three different brands of voice recognition software and something specific to each.

III. *Student Learning Activities:*
     A.   Students will be divided into groups of 2-3. Each group will contact several area businesses to see if voice recognition software is being used in their offices, and if so, the brand and satisfaction level of the user.
     B.   As a class field trip, students will go to an area business to see voice recognition software demonstrated.

UNIT III OUTLINE:

     A.   Voice Technology - Description and Advantages

     B.   Types of Voice Recognition Software

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Rubric for Evaluation of Dictation, Transcription, and Editing Activity

Objectives:
- Students will demonstrate a proficient dictation style.
- Students will transcribe SuperWrite notes taken from dictation into mailable copy.
- Students will detect all errors in transcribed copy.
- Students will edit transcribed copy with appropriate proofreader's marks.

COMPONENT	COMMENDABLE (18-20)	SATISFACTORY (15-17)	UNACCEPTABLE (0-14)	POINTS
DICTATION STYLE	Dictated using a consistent pace (not choppy), and audible, well-articulated speech was used.	Dictation rate was somewhat varied. Speech was soft or somewhat muffled.	Dictation was choppy and inconsistent. Speech was too low or jumbled.	
TRANSCRIBED DOCUMENT— ACCURACY OF DICTATED MATERIAL	Transcription of copy was almost verbatim—with no more than 2 word substitutions and those were acceptable.	Transcription of copy had more than 2 words substituted, but all substitutions were acceptable.	Transcription of copy had words left out or substitutions that were not acceptable.	
TRANSCRIBED DOCUMENT— PRESENTATION	Transcribed document was mailable—no errors in format, capitalization, punctuation, or spelling.	No more than 2 errors regarding format, capitalization, punctuation, or spelling.	More than 2 errors regarding format, capitalization, punctuation, or spelling.	
EDITING— COMPLETENESS OF PROOFREADING	Indicated all errors made.	No more than 2 errors were missed.	More than 2 errors were overlooked.	
EDITING— USE OF PROOF-READER'S SYMBOLS	Proper proofreader's symbols were used for all corrections indicated.	Proper proofreader's symbols were used on some but not all corrections.	Student used their own secret language to edit.	

TOTAL POINTS:

8

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Notetaking Skills for Today's World

A Course Outline
Prepared by Debbie River
Grades 10-12

Rationale:

This class is designed to supply the knowledge of a fast and legible writing system that can be learned quickly. The skill of notetaking can be used as a vocational skill or a personal-use skill.

The skills of formatting, proofreading, error correction, spelling, word division, and punctuation will be reviewed and applied in the transcription process.

Students will also utilize the skills of listening, reading, composing, making decisions, and human relations. These abilities strengthen the communication skills of all students, in addition to providing promotional opportunities for those who will enter business.

Course Description:

- Abbreviated Writing System
- Based on Longhand and Phonetics
- Quick, Easy to Learn
- Uses Characters of the Alphabet
- No Changes in Penmanship
- Increases Writing Speed Significantly

Course Objectives:

- Apply the skills of formatting, proofreading, error correction, spelling, word division, and punctuation in the transcription process
- Produce mailable copy for new-matter dictation

Examples of Best Practices

- Overlapping of theory presentation
- Review of vocabulary used in dictation
- Edit transcription
- Utilize different styles of dictation
- Simulate real office situations as often as possible

Course Objectives:

- Write correct SuperWrite outlines at an acceptable speed and legibly
- Read SuperWrite notes rapidly and accurately
- Transcribe SuperWrite notes rapidly and accurately

Course Objectives:

- Apply listening, organizational, and rapid writing skills in generating SuperWrite notes
- Describe current technological advances in dictation/transcription methods

UNIT I - Principles of Construction

Unit 1 deals with the abbreviating principles upon which SuperWrite is based. Special abbreviations for several words are taught. Rapid reading of SuperWrite notes is also stressed. Transcription of the SuperWrite notes will begin during this unit but more emphasis on that will begin during Unit II.

Unit I Objectives (cont.)—

✦ Demonstrate accurate and legible writing of words using SuperWrite

✦ Demonstrate accurate and rapid reading of SuperWrite copy

✦ Demonstrate proper SuperWrite techniques when taking dictation

Overview of Units

Unit I Objectives—
The learner will be able to:

✦ Explain the benefits of an alphabetic shorthand system

✦ Compare and contrast the writing of SuperWrite and longhand

✦ Develop words by employing the SuperWrite principles

✦ Identify and write the SuperWrite abbreviations

Unit I Outline (cont.)

- Geographic Names
- Quantities
- Punctuation Rules
- Capitalization Rules
- Days of the Week
- Months of the Year
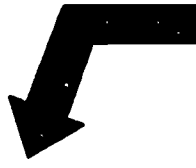
Unit II Objectives--

The learner will be able to:

- Demonstrate a knowledge of mailable business documents
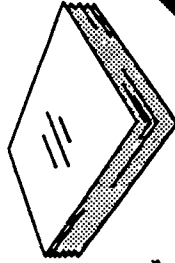- Demonstrate a knowledge of standard business letter styles, memos, and related business documents

Unit I Outline

- Silent Letters/Sound Spell
- Theory Rules
- Abbreviations
- Personal Titles and Names
- Salutations and Closings

UNIT II--BEGINNING TRANSCRIPTION

Learning to transcribe usable and mailable documents is a primary goal during Unit II. Also, achieving higher speeds in taking dictation is the purpose of taking lots of dictation during this unit.

UNIT II OUTLINE

- Review Standard Letter and Memorandum Formats
- Review Standard Report Format, Including Reference Page
- Develop Increased Writing Speed Through Extensive and Different Types of Dictation

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Unit III Objectives --

The learner will be able to:

- Describe what a voice recognition system is and the advantages this technology can have in industry
- Name three different brands of voice recognition software and something specific to each

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Unit II Objectives-- *(cont.)*

- Transcribe *SuperWrite* matter, both from the textbook and from their own dictation notes, accurately and at an acceptable speed
- Display use of an extensive business vocabulary
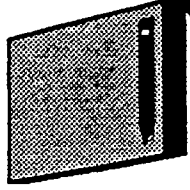
UNIT III -- Advanced Technology in Dictation

Unit III covers technological advancements that are being implemented in today's offices for dictation/transcription purposes. Different brands of voice-recognition software will be discussed.

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Sample Activity:

A letter will be dictated to the class that contains a *problem* situation. Students will *transcribe* the letter in mailable form. Students will then break into groups of 3 or 4 and *brainstorm* for the best possible solution to the problem in the letter. Each student will then *compose* on the computer a letter in reply to the original letter.

Unit III Outline --

Voice Technology - Description and Advantages

Types of Voice Recognition Software

THE END!!!

Introduction to Telecommunications

BY
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Kittiya Nimmolrat

Graduate Students
University of Misouri-Columbia

Summer 1995

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COURSE RATIONALE

"Telecommunication is defined as the electronic communication information over distance" (Oliverio et. al., 1993, 630). Due to acceleration of technological advancements throughout the world, global phenomenon has resulted in an interdependent world community. Telecommunications is the thread that connects the various systems in business, industry, education, and government. Moreover, telecommunications is an integral and essential part of our lives. Because telecommunication systems affect nearly every facet of our daily activities, it is essential that we teach this technology to students at all levels of education. In addition, business and industry expect graduates to be experienced in the use of telecommunication systems and equipment, thus, as educators we must produce these job ready graduates. We are offering Introduction to Telecommunications to keep abreast of these developments and to prepare students for challenging careers in business and industry.

COURSE DESCRIPTION

An introductory telecommunications course for grades 9-12

This course is an introductory view of telecommunication concepts and technology, including: Internet, e-mail, facsimile (FAX) transmissions, voice mail, computer networking, trends and issues in telecommunications, as well as other communication services. The course facilitates learning through lecture, discussion, hands-on-activities, group/teamwork, guest speakers, and oral and written presentations.

BEST PRACTICES

Telecommunications is a continually growing and dynamic field; thus, we as educators must not only teach our students how to use telecommunication technology, but also teach them why we use such technology. Students need the opportunity to problem solve and work with others

so that knowledge today may be applied to create new technology tomorrow. The instructional techniques need to emphasize application to the real world, as well as foster the individual learning styles of students. Best practices include lecture, discussions, hands-on activities, group/team work, guest speakers, field trips, and oral and written presentations.

COURSE OBJECTIVES

Students will gain an understanding of concepts of exchanging data through telecommunications media, such as electronic mail, computer networking, voice mail, facsimile transmissions, and Internet explorations. Upon completion of this course, students will be able to:

*   define the major telecommunications concepts of encoding, transmitting, receiving, decoding, storing, and retrieving with business and industry application
*   explain the fundamental workings of voice mail and telephone systems
*   identify trends and cite examples of future developments in information and telecommunication technology along with likely business applications
*   use, locate, and discuss Internet sites and gather information from those sites
*   transmit and receive facsimiles
*   discuss the purpose of computer networks and apply network concepts beyond the classroom
*   communicate with others via electronic mail
*   be aware of other kinds of telecommunications media, such as teleconferencing (video and audio), telex, pagers, cellular technology, etc.

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Unit 1: Telecommunications Overview

Unit Name: Telecommunications Overview

Unit Objective: After completion of this unit on telecommunications, students will:

*   have a basic understanding of telecommunication systems and equipment
*   be aware of the importance of telecommunications in Business and Industry
*   be able to discuss the current debate concerning regulations in the use of telecommunications
*   be able to discuss the growing gap among those who have access to telecommunication resources and those who do not

Unit Outline:

I.   Telecommunications: What is it?
    A.   Terms and definitions
    B.   Telecommunications equipment
    C.   Concepts in telecommunications
    D.   Trends and Issues
        1.   Regulation and deregulation
        2.   Who has access? The haves and the have nots

Unit Activities:

Telecommunications Bulletin Board

    This activity is great reinforcement to the introductory lecture on telecommunication systems, equipment, and issues. Students will look through magazines and find pictures of telecommunication systems, equipment, media, and advertisements. They will take these pictures and (as a group) create a collage on a classroom bulletin board. The class should be encouraged to make slogans to explain a picture or group of pictures. This activity not only encourages teamwork, but is a fun way to learn more about the wonderful world of telecommunication technology.

Telecommunications in the Newspaper

    This activity encourages students to implore an everyday resource read by many Americans for information (newspapers) to find articles on telecommunication issues. Students should be given at least two-three weeks to look through daily and weekend newspapers. The teacher may also want to make a few newspapers available for those who do not receive the paper at home. Students will select and article of interest dealing with topics and issues in telecommunications (new mergers/buyouts among telecommunication companies, as well as, new products/services would make for excellent articles if available). They will write a one page summary of the article including the subject, major findings, and the students reaction and recommendations. The summary will be submitted for a grade.

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Telecommunications Around Us

       This is a class discussion activity with the teacher as a facilitator. The teacher will throw out a topic to the class. For example, What telecommincation systems, equipment or technology affect the way: we get to school each morning? we communicate with friends? our favorite movie was made? get computers, televisions, video games, etc? Students will discuss such topics openly and cite examples of the impact of telecommunications.

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Unit 2: Internet Explorations

Unit Name: Internet Explorations

Unit Objective: By the completion of this unit, students will be able to:

* apply knowledge of Internet terms and concepts
* locate various Internet sites
* gather and analzye information from Internet sites
* discuss current trends and issues in Internet use

Unit Outline:

I.   What is the Internet?·
       A.   Terms and definitions
       B.   History of the Internet
       C.   Advantages and disadvantages
       D.   General Internet concepts

II.   Acceptable Use Policy

III.   Connecting and Accessing Information
       A.   Basic Internet Tools
             1.   Telnet
             2.   Gopher and the World Wide Web
             3.   FTP (File Transfer Protocol)

       B.   Internet Search Tools
             1.   Archie
             2.   Veronica

IV.   Trends and Issues in Internet Use

Unit Activities:

The Internet Scavenger Hunt

One great way for students to gain experience in discovering internet capabilities is to have they do a scavenger hunt. In the hunt, the teacher will give students a handout a varies sites the students are to find and explore to find the proper clues. Students write the clues for each site down on the handout. At the end of the scavenger hunt the clues will help them solve a puzzle. Web sites and be varied or focus on a specific subject such as sports, movies, current issues, etc. In every case, however, students should be expected to gopher, explore the World Wide Web, FTP, and perform Telnet operations. The scavenger hunt takes a great deal of planning on the part of the educator, but once done teachers can see the benefits of exposing

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students to many internet resources while playing an educational game.

"Net" sumers

In an attempt to help our students "surf the net" and become better consumers, they will Gopher to: consumer.ftc.gov. Here they will select a consumer article, print and read the article, as well as, design five questions or discussion items from the article. The class will discuss the topics and questions as they affect and apply to their daily lives.

Visit India Via the Internet

Students will connect to India via URL: http://IndiaOnline.com. Here they will explore information on India including demographic information, Indian society, religion, and customs. This exploration may be more interesting if done in pairs or groups of three. Each group will compile their findings and present them in a five-seven minute presentation to the class. Assessment may be done using a rubric similar to the one attached.

Create a Home Page

Let students create a home page on the internet advertising the school. The home page may illustrate a new program in the school such as distance learning, a school project such as focusing on cultural/international awareness, or any or school activity or theme in which the class feels pride and would like to highlight on the home page.

"Health Matters"

As a way to integrate internet exploration with health and physical education, students can gopher to: kids.ccit.duq.edu. The teacher may provide they with a handout where they answer questions covering preventive health care, immunizations, and educational rights in health. Another activity may be to have students write a 2-3 page report using information on the internet regarding how health issues in the U.S. differ from those of underdeveloped nations.

Black History 365 Days of the Year: An activity in cultural diversity

As a way to integrate science, Black history , and resources on the internet students can FTP to: vela.acs.oakland.edu. Students can pick his/her favorite Black scientist or inventor and write a brief biographical sketch and section on the scientist/inventor's major accomplishment. These skeckes may be displayed with the person's picture around the classroom for a lesson in Black history year round.
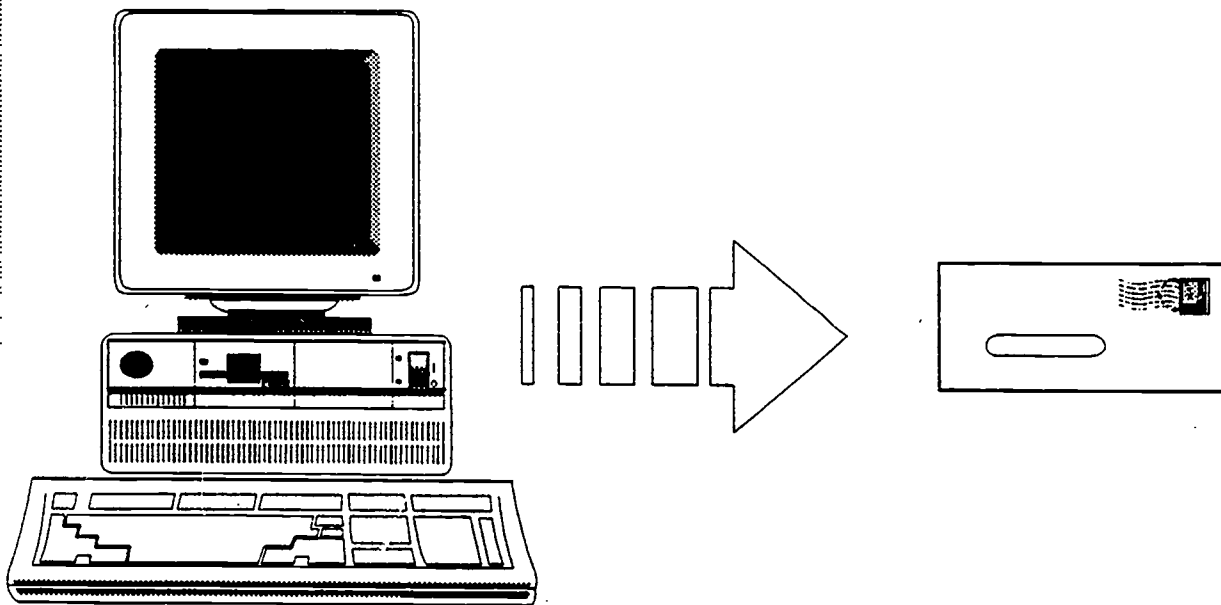
Semester Project

Students may select a topic or current issue of interest and "serf the net" for information

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on the subject. Students will write a brief report discussing the Area/Subject, major findindings, and applications to daily life or the future of his/her life.

NOTE: See additional activities in the Supplement Section.

Unit 3: Electronic Mail (E-Mail)

Unit Name: Electronic Mail (e-mail)

Unit Objective:

* To learn electronic mail concepts, commands and terminology.
* To participate communication among group members and others.
* To use electronic mail to expand learning beyond the classroom and enhance students to think globally.
* To understand ethics and privacy issues relating to electronic mail.

Unit Outline:

I.   Overview of electronic mail
    A.   Definition, terminology, and concept of e-mail
    B.   Current uses of e-mail
    C.   Basic command
        -Sending mail
        -Editing mail
        -Reading mail
        -Reply mail

II.   Netiquette of e-mail operation
III. Ethics and privacy issues relating to electronic mail

Unit Activities:

The following activities assume that electronic mail is available in the classroom.

"First e-mail message"

Have students send the instructor messages at the beginning of the semester telling what they expect to get from the class and introduce themselves. The instructor will also use e-mail to respond to the students and to keep them informed. Some examples of e-mail communications by the instructor include the following:
    - Report of test scores
    - Provide grade reviews
    - Discuss missed assignments and makeup work
    - Obtain feedback on class progress

" Send letter to Santa"

Students will send a letter to Santa for special Christmas event between November 1-December 20. The e-mail address will be provided by the instructor.

" Explore the Internet"

The students will locate specific information on the Internet such as weather reports, sport schedules, or upcoming events in other countries that are of interest to them. Students have to send messages to communicate with students in other sections of the same course, or to students in another school.

"Cable to Cable"

In this activity, the instructor can simulate electronic mail use in the classroom so that students can gain experience using electronic mail.

*First, the instructor must have a cable that goes out of the modem or serial port for each computer. The instructor must then connect these two cables using what is called a null modem. Perhaps the easiest way to accomplish this task is to have a cable from each serial port that ends in an RS232 male end.

*The instructor will attach a female null modem to each cable. This gives the instructor a cable that runs directly from one modem or serial port to another. A null modem is not really a modem it simply reverses a couple of "pins" in the cable so that information is sent and received as if there were a modem present.

*Finally, the instructor uses communications software to make the communications connection. The instructor sets one system to upload a file and the other to download. If all of the instructor's connections are made correctly, the instructor will see the information from one computer appearing on the screen of the other.

NOTE: See diagram in the Supplement Section

Unit 4: Computer Networking
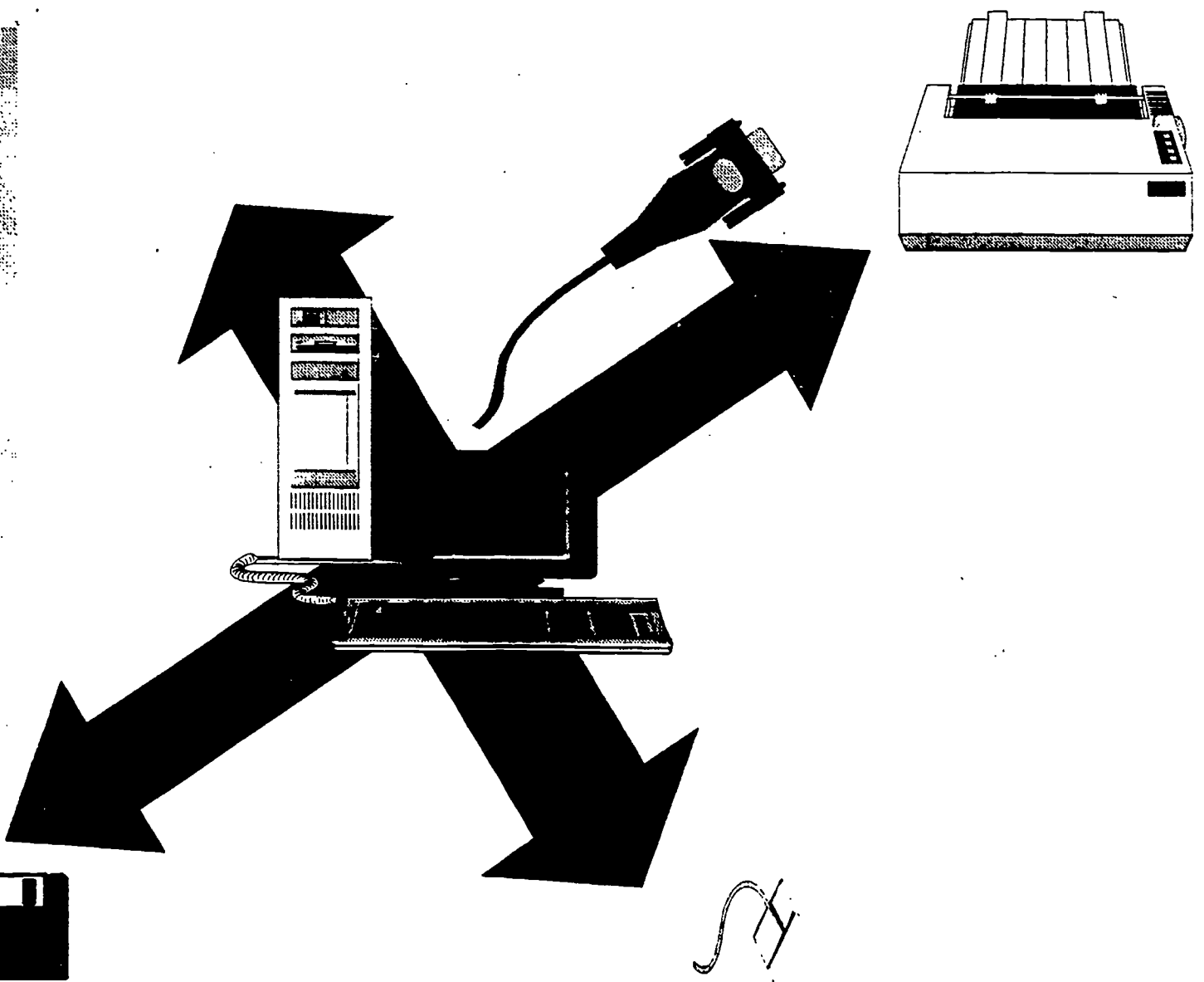
Unit Name: Computer Networking

Unit Objective:

* To define and understand the fundamental concepts and terminology used in of computer networking.
* To understand the advantages and disadvantages in establishing a network.
* To understand the concept of network topology as it applies to local area networks (LAN), wide area networks (WAN), and metropolitan area network (MAN).
* To understand the issues of controlling network.
* To understand the components and concepts of the classroom network if available (hardware, software, password, etc.).

Unit Outline:

I.   Purpose of networking
II.   Differentiate between LAN, WAN, and MAN
III.   The advantages and disadvantages in networking
IV.   Networking topology

Unit Activities:

"Guest Speaker"

         Have a guest speaker from an organization which utilizes telecommunication networking equipment such as AT&T, MCI Inc., GTE, US Sprint or a local organization to demonstrate installing software and other networking responsibilities and duties. Assign the students to take notes citing major discussion points for class. Have students prepare specific questions to ask the speaker.

"Outside readings"

         Have the students acquire outside readings from recent computing magazines, the Internet and other literature specifically related to networking (network systems, hardware and software, network management, network configurations, and network standards). Each student will write a written report and make an oral presentation to the class.

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Unit 5: FAX (Facsimile) Transmissions
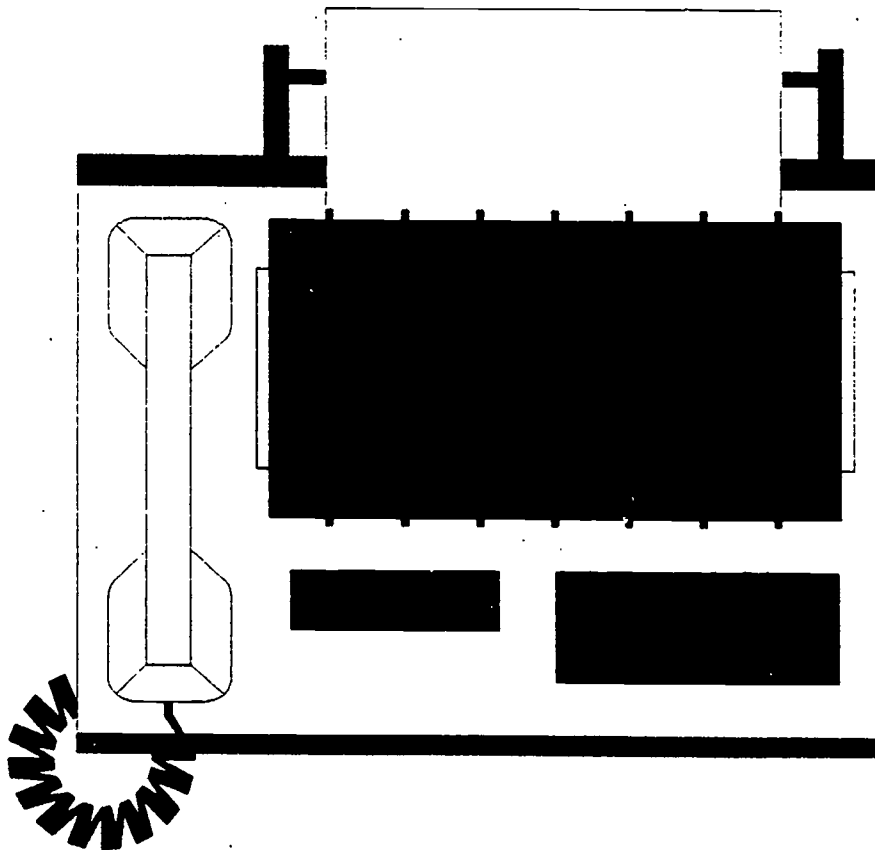
Unit Name: Facsimiles (FAX) Transmissions

Unit Objective: The student will be introduced to FAX communication process and will learn common procedures for using FAX.

Unit Outline:

I.   What is facsimile (FAX) transmission?
    A. Define
    B. Hardware and software needed
II.   Overview of PC fax communication process
    A. Computer based fax process ·
    B. Telephone based fax process

III. Trends and issues in fax transmission
    A. Uses
    B. Abuse
    C. Ethics of fax communications

Unit Activities:

Work with the local telephone company or campus telecommunications coordinator. Set up several phone lines using conventional twisted pair copper wire or fiber optics. Give students various devices such as PCs, printers, fax machine, modems, telephone instruments and cellular phones. Students will be able to use this lab for simulating different activities and will gain understanding of how these instruments work.

Scenario 1

Students working in cooperative groups will role play sending and receiving a fax in a simulated office lab. The simulated office will be equipped with the necessary equipment (telephones, fax machine and cover pages) to complete the assigned task. The students will create a message to be faxed with a cover sheet to their partners. The students will turn in both the fax and cover sheet for teacher approval before transmission.

The objective of this activity is to help students develop cooperative learning skills.

Scenario 2

Ask students to bring articles to class from newspapers, magazines, or journals that relate to the use and abuse of fax technology. Have them turn in the article for a check-off grade. Also have the students write an abstract of the article or a reaction to the contents using a word

processor. (These article also can be used to stimulate discussion about current developments in fax usage. .

The objective of this activity is to help students develop writing and reading skills and to enhance their word processing skills.

Unit 6: Voice Messaging
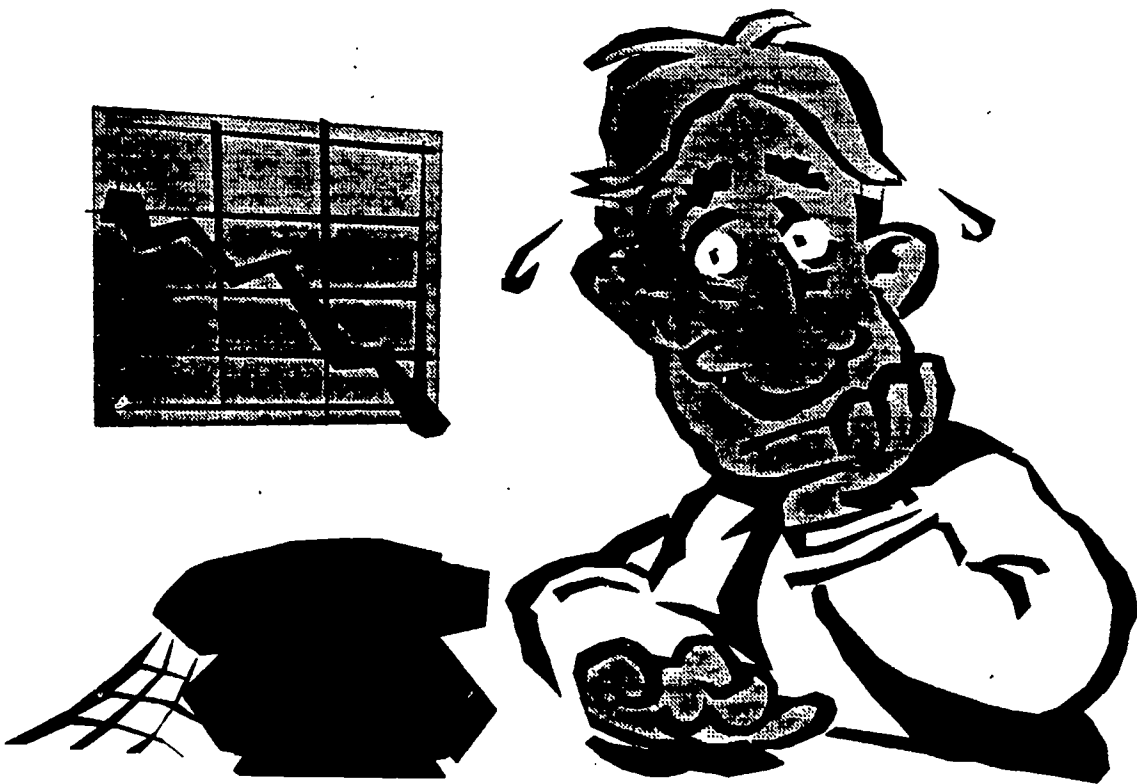
Unit Name: Voice Messaging

Unit Objective: The students will be introduced to and will learn to use voice mail systems to send and receive messages.

Unit Outline

I. Using a voice mail system
   A. Reviewing the basic features of a voice mail system
   B. Establishing voice mail protocol guidelines
   C. Determining if voice mail is the appropriate medium

II. Sending messages
   A. Planning the content of a message
   B. Speaking naturally using voice intonations
   C. Speaking slowly and enunciating carefully avoiding small talk

III. Receiving messages
   A. Providing outgoing messages to callers
   B. Taking responsibility for acknowledging/listening to calls
   C. Listening for content and feeling

Unit Activity

Using a standard tape recorder students can practice leaving voice messages. The instructor will provide students with an easy scenario that requires them to plan and send a voice message.

* Have the student list the information needed to send a complete message.
* Next, have the student simulate a voice message using a tape recorder.
* The instructor and/or the students will listen to the message and indicate if all the required information (content) is provided.
* After students have demonstrated a proficiency in organizing the message, they will be evaluated on content and delivery.

The objective of this activity is to aid students in building confidence and to develop organizational and speaking skills.

Unit 7: Telephone Communications

Unit Name: Telephone Communications

Unit Objective: Students will be able to identify the voice telecommunications systems and services and be able to recommend the best selection for a particular business systems.

Unit Outline

I.   Telephone system
     A. The 1984 break-up of AT&T
     B. Telephone services
     C. Mobile communication systems
         * cellular phones
         * mobile telephones
         * two-way radio
         * pagers

II. Selecting telephones systems and services

Unit Activity

This activity may help you incorporate multicultural awareness to the learning process. Have students select an international penpal. The instructor will design specific questions for the students to ask their pen pals concerning telephone etiquette in their country and questions concerning their culture. The students will share the same information with their pen pals. Then have students participate in some situational telephone conversations reflecting how people from different cultures use the telephone based on their cultural values.

Gopher Sites

Keypals listing for electronic penpals (or keypals)

If you have a Gopher client:
* Gopher to: wealaka.okgeosurvey.gov
* K/12
* Keypals wanted/

or open a Gopher session and choose:
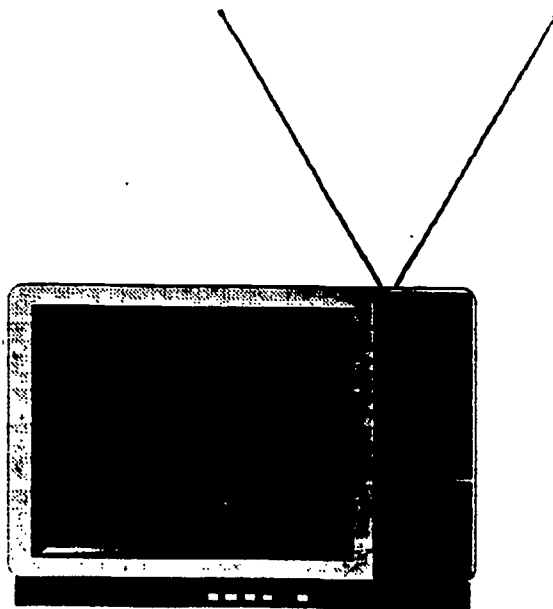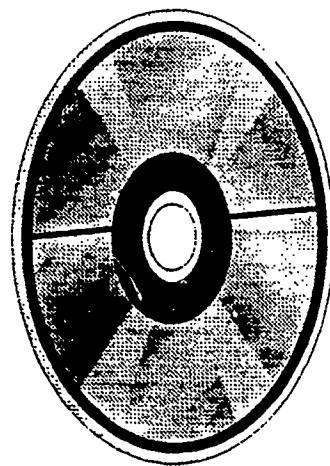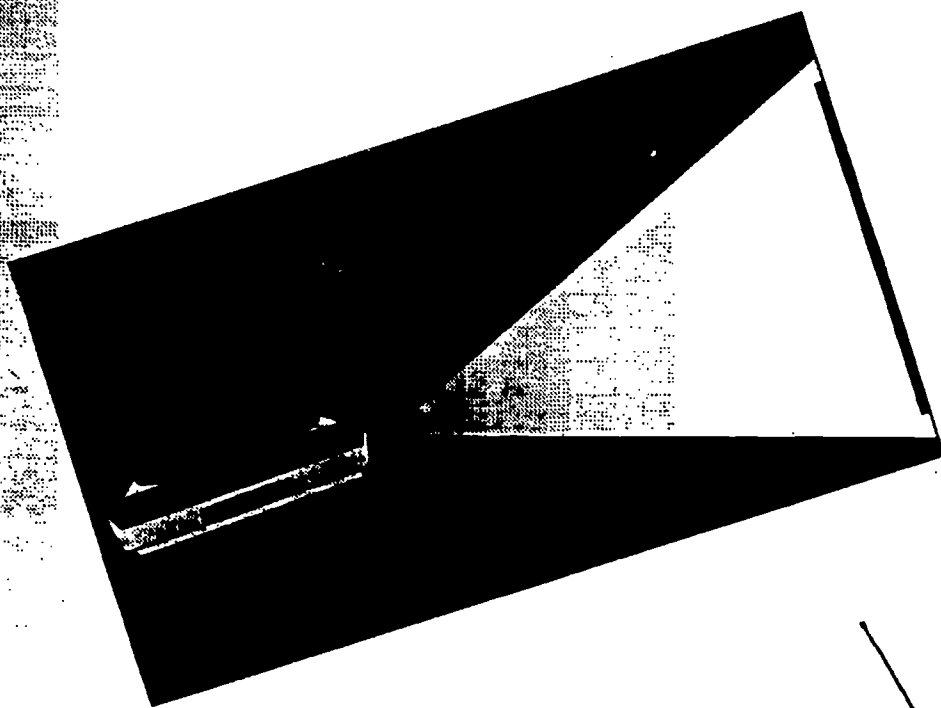* Other Gopher and Information Servers/
* North America/
* USA/
* Oklahoma/
* ONENet Networking Information/
* Gopher Servers within Oklahoma/
* Oklahoma Geological Survey/

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* K12/
* Keypals wanted/

The objective of this activity is to help students communicate with people of diverse backgrounds.

Unit 8: Other Communication Services

Unit Name: Other Telecommunication Services

Unit Objective: To demonstrate the use of various communication equipment and to familiarize students with the advances made in communication technology. Students will be introduced to other telecommunication systems, such as, telex and teleconferencing—audio, visual, and computer—to insure the proper sending of communication and receiving of information to individuals in the business community.

Unit Outline

I.   What is telex?
    A. Definition of telex
    B. Equipment needed

II.   What is teleconferencing
    A. Definition of teleconferencing
    B. Equipment needed
    C. Video teleconferencing
    D. Audio teleconferencing
    E. Computer teleconferencing

Unit Activity

Scenario 1

    This task will simulate the use of a TTY (teletypewriter number), a mailgram, and fax machine. The goal of this scenario is to demonstrate the use of various communications equipment and familiarize the student with the advancement made in communication technology.
    The first student will send a message to his/her partner in the adjoining office using the TTY, the instructor will provide a verbal message for one student to send. The instructor will verbally question the student receiving the message to insure it was completed properly.

    Mailgrams will be provided for creating a message to be telephoned to a partner who is simulating a Western Union operator. The operator keyboards the message as it is being received and pretends to transmit it to the nearest post office. All messages will be approved by the instructor.

    A student will create a message to be faxed with a cover sheet to their partner. All messages and cover sheets must be approved by the instructor.

Scenario 2

To demonstrate video teleconferencing, the instructor can check with the phone company or some large hotels to see if they have this technology. If so, a field trip would be helpful. However, if this is not feasible, a video of teleconferencing can be used.

Unit 9: Telecommunications in the 21st Century
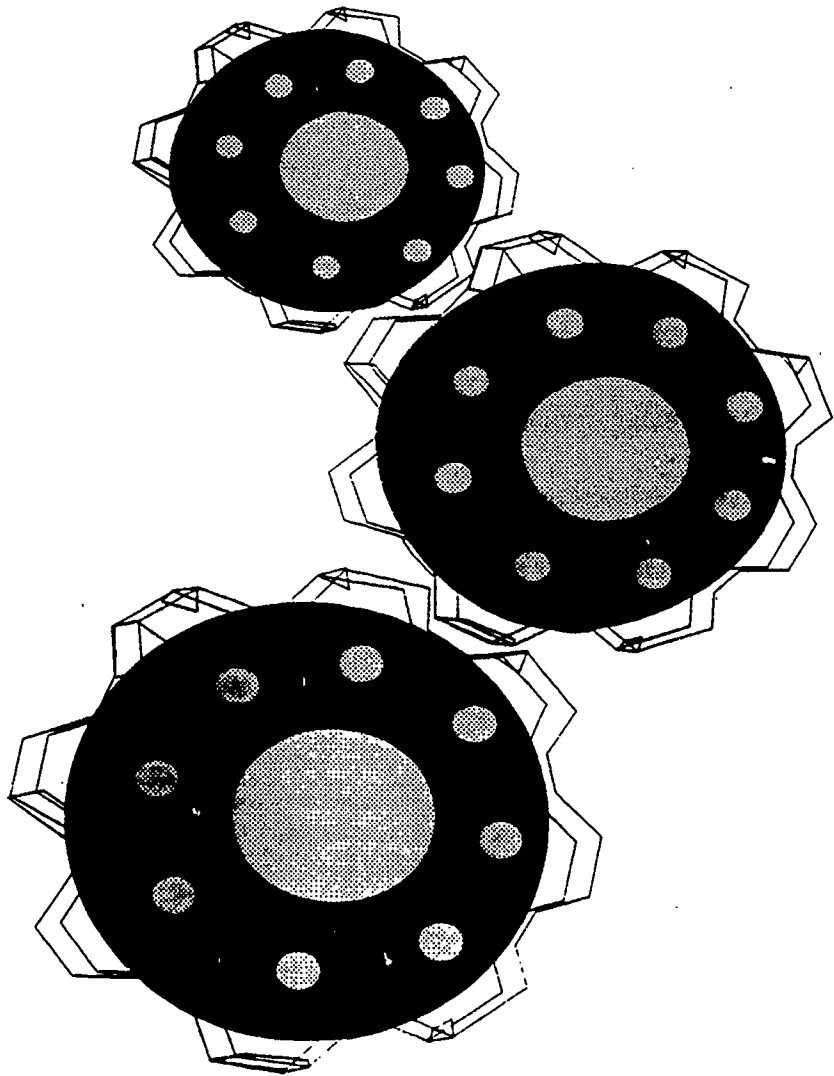
Unit Name: Telecommunications in the 21st century

Unit Objective:

* To offer representative scenarios for future short-term (i.e., five years) and long term (i.e., ten years) developments in the telecommunications industry.
* To examine general short-term and long-term trends in local and long-distance transmission and switching services.
* To examine representative future trends in international telecommunications.
* To project how developments in telecommunications will change the way we work.
* To identify technological developments affecting telecommunications in the 21st century.
* To illustrate the need for sound human communication skills to augment telecommunications services.

Unit Outline:

I. Short term trends for telecommunications
II. Long-term trends
III. International trends
IV. Human communications

Unit Activities

"Student Dream Project"

This activity will encourage student to think critically about future developments in telecommunications. The following can be simulate in a mock lab.
    * In the future students will be able to automatically translate their papers from English into Japanese and vice versa.
    * Students can discuss each others countries, their religious beliefs, their voting rights, their governments, and how their school systems are setup. Also have students find out about the Japanese job market and the salary ranges.
    * Have students ask their Japanese penpals specific questions about the customs and the Japanese culture. One such question could be about their dating practices.
    * Let students teach each other the language of their own countries, not every word but just the frequently used words. The computer will translate the words into English or Japanese as is appropriate to the situation.
    * Encourage students to find out what the environment is like in Japan. Does the country have cities, or is the country like a village? Do the people trade goods, or do they go to a grocery store to buy their food? Do people have freedom to do everything that they want?
    * Using the modem and communications software can make this communication possible. Have students type information into their computer (using word processing software) and save it on diskette. Plug in the modem, load the diskette onto the computer, and then send the

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information through the modem to Japan. Ask the teacher in Japan to save the information onto a disk to give students the next day. These students will be assigned to work in groups and will create their own "Dream Project" for telecommunication in the future.

"Develop a Bulletin Board"

Every two weeks a group will be assigned to develop a bulletin board about another culture or a bulletin board related to international telecommunications.

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SUPPLEMENT SECTION

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RUBRIC: Visiting India Via the Internet				
CRITERIA	Demonstrated Competence (18-20 pts.)	Satisfactory (15-17 pts.)	Inadequate (12-14 pts.)	Points
Retriving the site	Can successfully retrieve the WWW site URL:http://India Online.com independently.	Can retrieve with some assistance.	Cannot retrieve independently; must be guided through the process.	
Locating demographic information	can discuss population, cultures, languages, and economy.	Can discuss three out the four major demographics.	Can only discuss zero to two of the major demographics.	
Indian Society	Can describe and differentiate the 5 castes in Indian Society.	Can describe and differentiate 3 castes in Indian Society.	Can descibe and differentiate zero to one castes in Indian Society.	
Religion	Can differentiate among the three major religions in indian Society.	Can differentiate between two two of the major three religions.	Cannot differentiate or identify the major religions.	
Customs	Can list and briefly explain 10 customs.	Can list and briefly explain five customs.	Can only list zero to three customs.	

Internet Treasure Hunt

Select ten items from those listed below. Record the steps you go through to locate the information. Key your information using a word processing package and print your answers. When possible, print a copy of the information obtained through your Internet search.

1. What are the weather conditions in the following locations on
   _____, _____, 1994:
   (month) · (day)

   Dallas, Texas; Unionville, Missouri (Putnam County); and a location of your choice.

2. List two electronic education journals available through the Gopher server at Arizona State University:

3. Find and record a joke you could use in a speech.

4. Look up a reference on a topic of your choice in the University of Missouri-Columbia library catalog.

5. Choose a topic you are interested in and record one or more listserves you COULD subscribe to.

6. List one FAQ and answer about the Internet:

7. What does Veronica stand for?

8. Find and print a recipe you might want to try.

9. Select a topic of your choice. Locate and print three items of information about this topic you could use in a research paper.

10. Access an Internet service through another country. What do you find there?

11. Locate the current edition of the Chronicle of Higher Education. Briefly summarize one of the main articles in this edition (give publication date, p. no., title of article, etc.).

12. Send your summary of the article in Item 11 to your instructor using e-mail.

13. What is ENIAC?

14. Find and print a famous poem or short story.

15. Use Gopher Jewels to locate some bit of information you find interesting.

Source: Dr. Rebecca Limback
Central Missouri State University
Warrensburg, Missouri

e-mail: Limback@CMSUUMB.cmsu.edu.

Source: Submitted by: Heidi Perreault, Southwest MO State University

Background:

Roadmap is the name of workshop available through the Internet.
Roadmap provides Internet training. The workshop ran twice and
had an incredible response rate. Over 80,000 people from 77
countries subscribed to the lessons.

Although the workshop will not be run a third time, the lessons
are available through the University of Alabama. To obtain the
lessons you send an e-mail message requesting the lessons. The
following is a sampling of the lessons you (your students) will
receive.

Listservs	FTP
Netiquette	Archie
Usenet	Vernoica
Internet Security	Gopher
Telnet	WWW
MUDS/MOOS	The Future

My Experience:

The students find the lessons easy to follow. Optional homework
assignments accompany some lessons and even have levels--just
learning to advanced. Most students are doing the homework
whether I ask them to or not. They are gaining confidence with
"surfing" the Internet.

Classroom Objectives:

Use the Internet.
Evaluate an alternative teaching method.

Directions for obtaining the lessons:

Send an e-mail message to:

LISTSERV@UA1VM.UA.EDU

Include only one line in the body:

GET MAP PACKAGE F=MAIL

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Serial port

Cable

RS232 Male

Null modem

RS232 Male

cable

Serial port
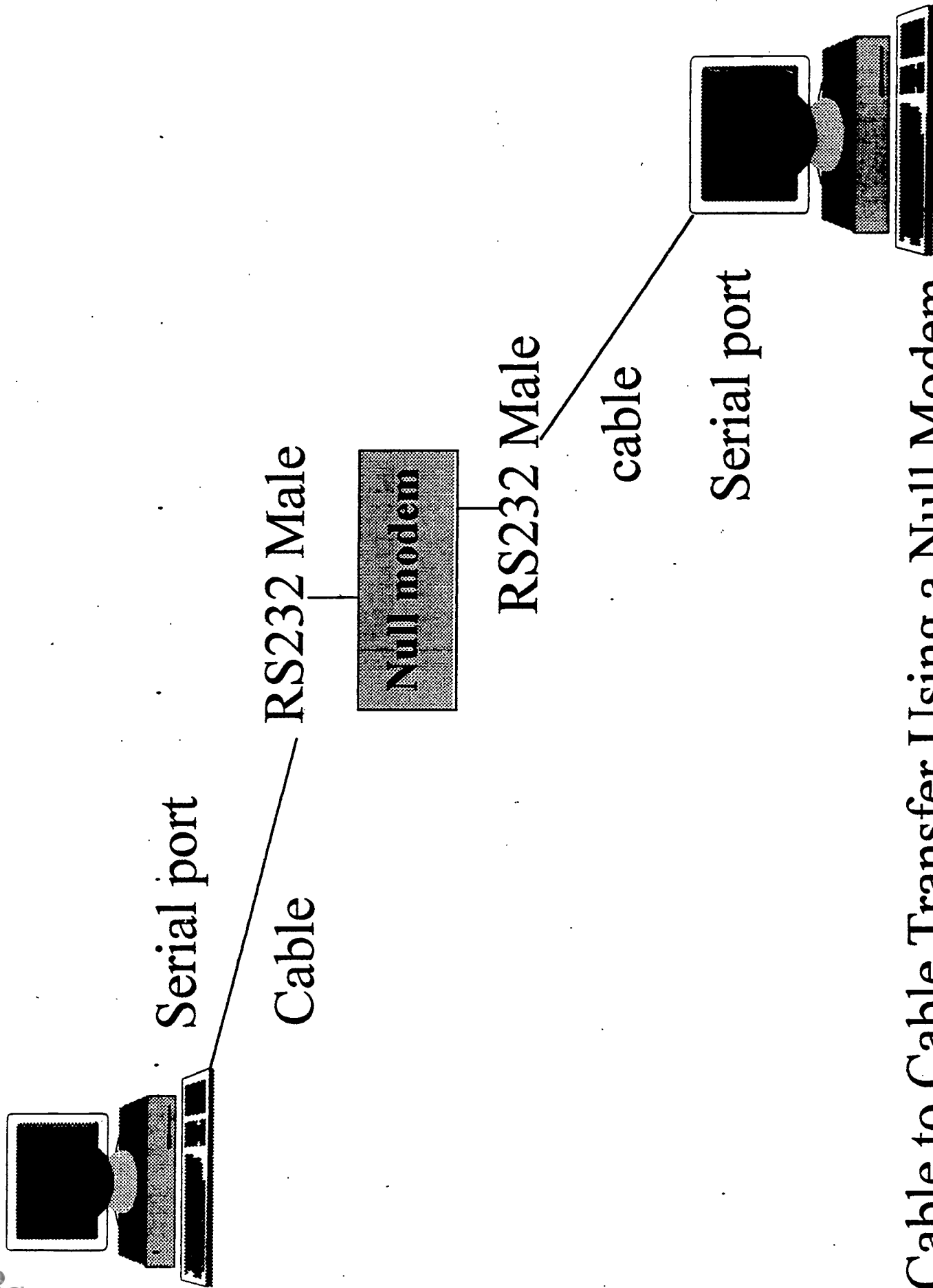
Cable to Cable Transfer Using a Null Modem

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Course Rationale

- Telecommunications connects the various sytems in business, industry, education and government
- Business expects job-ready gradutaes, thus education must produce the workers of tomorrow
- Telecommunications prepares students for challenging careers in business and industry

Best practices in the teaching of Telecommunications

- ✓ Lecture
- ➤ Discussion
- ➤ Hands-on-activities
- ➤ Demonstrations
- ➤ Guest Speakers
- ➤ Oral and written presentations
- ✓ Group/teamwork

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Introduction to Telecom-munication

"Preparing the youth of today with technology to make them the leaders of tomorrow"

Course Description

This course is an introductory view of telecommunication concepts and technology, including: Internet, e-mail, facsimile transactions, voice mail, computer netwoking, trends and issues in telecommunications, as well as, other communication services.

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Introduction to Telecommunications...
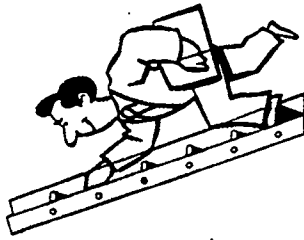## Units of Study

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Unit 2...
Internet Explorations

I. What is the Internet?
   A. Terms and definitions
   B. History of the Internet
   C. Advantages and disadvantages
   D. General Internet concepts

II. Acceptable Use Policy

Course Objectives

Upon completion of this course, students will be able to:

■ define the major telecommunication concepts of encoding, transmitting, receiving, decoding, stroing, and retrieving with business and industry applications
■ explain the fundamental workings of voice-mail and telephone systems
■ identify trends and cite examples of future developments in information and telecommunication technology along with likely business applications
■ use, locate, and discuss internet cites and information gathered from those cites.
■ transmit and receive facsimiles
■ discuss the purpose of networking and apply networking concepts beyond the classroom
■ to communicate with others via electronic mail

Unit 1...
Telecommunications Overview

What is it?

I. Telecommunications:
   A. Terms and definitions
   B. Telecommunications equipment
   C. Concepts in telecommunications
   D. Trends and Issues
      1. Regulation and deregulation
      2. Who has access (the have and the have not)

Unit 3...
Electronic Mail (e-mail)
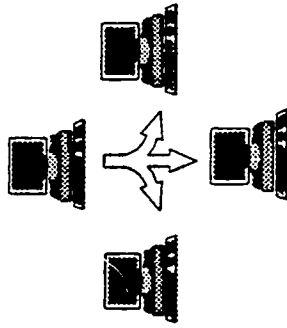
I. Over view of e-mail
    A. Terms and definitions
    B. Current uses of e-mail
    C. Basic commands

II. Netiquette of e-mail

III. Ethics and Privacy
     Issue relating e-mail

Unit 5...
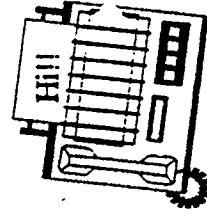## FAX Transmissions
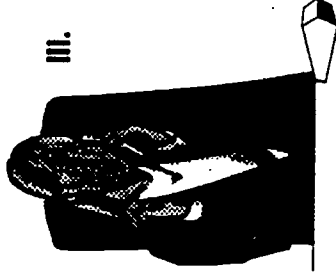
I.   What is a facsimile (FAX)
     transmission?

II. Overview of PC fax
     communication process
     A. Computer based fax process
     B. Telephone based fax process

III. Hardware and software needed
     for PC fax communication.

IV. Trends and issues in FAX
     transmission

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Unit 2... Internet Explorations cont'd

III. Connecting and Accessing
     Information
     A. Basic Internet Tools
        1. Telnet
        2. Gopher and World Wide Web
        3. FTP (File Transfer Protocal)
     B. Basic Search Tool
        1. Archie
        2. Veronica

iv. Trends and Issues in Internet
     Use

Unit 4...
Computer Networking

I.   Purpose of Networking
II. Difference between
     LAN, WAN, MAN
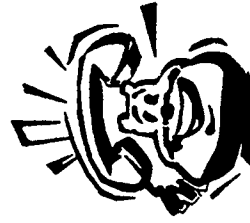III Advantages &
     Disadvantages
IV. Network topology

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Unit 6... Voice Messaging cont'd

III. Receiving Messages
   A. Providing outgoing messages to callers
   B. Taking responsibility for acknowledging/listening to calls
   C. Listening for content and feeling

Unit 8... Other Telecommunication Services

I. What is telex?
   A. Definition of telex
   B. Equipment needed
II. What is teleconferencing?
   A. Video teleconferencing
   B. Audio teleconferencing

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Unit 6... Voice Messaging

I. Using a Voice Mail System
   A. Reviewing the basic features of a voice mail system
   B. Establishing voice mail protocal guidelines
II. Sending Messages
   A. Planning the content of a message
   B. Speaking naturally/using voice intonations
   C. Speaking slowly and enunciating carefully
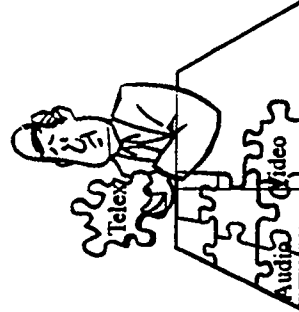
Unit 7... Telephone Communications

I. Telephone System
   A. The 1984 break-up of AT&T
   B. Telephone services
   C. Mobile communication systems
      1. cellular/mobile telephones
      2. two-way radio
      3. pagers
II. Selecting Telephone Systems and Services
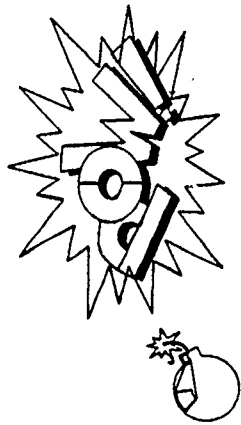
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Short-term Trends
Long-term Trends
International Trends
Human Communication

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Unit 9...

Telecommunications in the 21st Century

Thank You..
Have a great break..

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