ABSTRACT
              - This journal contains a series of articles dealing
with business education generally, and courses in Ohio particularly.
Included in the volume are the following articles: "Ohio Business and
Office Education: FY 82," by Daniel J. Vicarel; "Making a Guest
Speaker an Effective Experience," by Wilma Swearingen; "The Impact of
Today's Technology," by Anna Laura Bennington and Stanley Pogrow;
"Competition in the Typewriting Classroom," by Larry G. Siferd; "Your
Resource Files: System or Chaos?" by Ernestine A. Kyle; "The Older
Worker and Vocational Education," by Michael W. Galbraith and Jerry
G. Davis; "'You Viewpoint' Means You, Too, Business Teacher," by
Barbara Humphrys; "So You Think Shorthand is Not in Demand," by
Margaret A. Fulwiler; "Teaching the Art of Listening," by Betty H.
Hartley; "Meeting the Challenge of New Office Technologies," by M.
Lee Goodard; "Does the Office Copier Have a Place in Your
Curriculum?" by Dennis E. Bauer; "The Disabled Can Do the Job . . .
and Do it Excellently," by Frances Mostel Poggioli; "Simulation
Exercises: A Key to Approaching Reality in the Classroom," by Louis
Olivas and Barry L. Van Hook; "Try the Mirror Approach in
Accounting," by Charles Hamed; and "How to Get a Microcomputer in
Business Education," by Robert K. Eley. (MN)

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Manuscripts for THE OHIO BUSINESS TEACHER are now being accepted. All manuscripts must be submitted by December 1 for the next issue. Manuscripts must be typed (double-spaced) on 8½ by 11 inch paper using two-inch margins. Manuscripts may vary in length; however, manuscripts should approximate 2,500 words.

Topics of the manuscripts may be related to a variety of business education areas. For example, issues in business education, teaching and learning methods, research, curriculum, and administration are appropriate topics; however, articles should be suitable for general categories of theory, research, or practice. All art work (charts, diagrams, tables, etc.) should be camera-ready for duplication. Each piece of art must be on a separate sheet of paper. Use a numbering scheme, such as Fig. 1, Fig. 2 . . . , to show the location of the art in the manuscript.

The Publication Manual of the American Psychological Association (APA) should be used as a guide for footnotes and references. Manuscripts should be written with objectivity; constant use of the first person is not advisable.

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Editorial

THE ENTHUSIASM for *computer literacy* education is similar to the enthusiasm exhibited for other innovative ideas in education. Programmed learning, career education, competency-based education, and other "innovations" were in vogue for only a short time.

Is there an urgency to become involved in computer literacy? Are we tempted to "climb aboard the contemporary bandwagon" without giving much thought to the meaning of computer literacy? Perhaps we should look at the separate definitions of both *computer* and *literacy*.

A *computer* is a "device that processes information derived from coded data in accordance with a predetermined program." This definition, in its simplest form, applies to both humans and machines. *Literacy* is the "condition of being literate, the ability to read and write." One might assume, therefore, that *computer literacy* is a compilation of its two component definitions. This, however, is not necessarily so. *Computer literacy* must be defined on an individual basis, depending on one's background and experiences. Abilities to compute, read, and write are essential and are learned in business education.

Generally, people learn more about computers in informal situations rather than in formal classroom settings. We must teach students, therefore, to be literate; for once they are, they can then become computer literate. One fact is valid: *Computer literacy exists after a person is first literate!*

Ohio Business and Office Education: FY '82

Daniel J. Vicarel

OFFICE TECHNOLOGY—information proc₋ssing, microcomputers, lasers, fiber optics, bits, bytes, K's! What emotions do these terms evoke from today's business teacher? Fear, apprehension, revulsion? Excitement, anticipation, acceptance! Each of us must examine his/her professional commitment, which is the proud tradition in business education, and change with the demands of time to meet the needs of our students. The challenge is to accept these new tools, master their use, and employ them to improve the quality of student instruction.

> We need employees—not just management and not just engineers and research people—who can think conceptually, who can reason rigorously, who are not afraid of mathematics, who are not afraid of science.

(This assessment came from a recent speech delivered by Richard Hecket, vice president of E. I. du Pont de Nemours and Company.) By incorporating new technology in our instruction, we can strengthen the cognitive learning domain, which is so much in demand by employers today. For example, because of shorthand instruction, a peripheral benefit includes improved grammar, spelling, composition, and punctuation. Likewise, the "ability to think logically" is a side benefit of instruction, which harnesses microcomputers.

Lest we get lost with technological zeal, we must remember that students will continue to function in a business world that still requires an understanding of fundamental language and other basic skills. The written and spoken word, the precise rules of

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grammar, and the logic of math will be as important tomorrow as they are today. No amount of electronic wizardry will replace the need for human communication, for this is a basic survival requirement. Yes, it is a "brave new world" in a positive sense, and we must be equally strong to meet challenges and demands or risk extinction.

This article reports the current status of vocational business and office education in Ohio. The data from the past fiscal year, 1982, are presented in the following table.

The following table shows that last year's decline rate in secondary-level students has slowed dramatically over the figures of the past few years. This fact should be a signal to business educators that we have "turned the corner" in the steady decline in enrollments in vocational business programs and that students and their parents view occupational preparation in business as a solid decision for economic security in the future. Also, significant increases dominated post-secondary technical enrollments and part-time business education enrollments. The total number of full-time vocational business and office education teachers (discounting part-time instructors) increased by 35 over the previous year. However, enrollment in full-time adult BOE programs declined for the first time. This may be attributed to two major factors. First is the general economic decline resulting in difficulty in meeting tuition costs. Second, the de-emphasis of CETA participation has also contributed to the decline. However, participation in the new federal Jobs Training Partnership Act should renew increases in enrollment in business and office education. One figure that does not appear in the table, but in which we can all take pride, is that over 20 percent of the 1981 high school business graduates continued their education.

Much of the taxonomy and many of the occupational titles, which have been used more than a decade, no longer seem to attract students, counselors, and parents. These titles do not reflect technological changes in the modern office and in current curricular offerings. It has been Division policy to permit local agencies to title their programs in such a way that programs would be attractive to students, yet accurately reflect the level and scope of instruction. Program titles should not mislead students, parents, and employers. We have a responsibility to the public to be honest and accurate when we promote instructional programs.

Supplemental equipment funds, for the first time, from the federal and state levels for vocational business and office education have surpassed any other service area in the Division of

OHIO BUSINESS AND OFFICE EDUCATION
Year Ending June 30, 1982

STUDENTS SERVED:

Secondary			
11-12		(Inc. 3,957 Co-op)	26,100
Technical:		(Inc. 796 Co-op)	6,658
Adult:			
Full-Time	3,379		
Part-Time	25,092		28,471
TOTAL 1982 ENROLLMENT			61,229

COMPARISON OF 1981 WITH 1982:

	1981	1982	%
Grades 11-12	26,443	26,100	− 1.3
Technical	5,915	6,658	+12.6
Adult Full-Time	3,611	3,379	− 6.4
Adult Part-Time	22,879	25,092	+ 9.7

SUMMARY OF TEACHERS IN BOE:

Secondary	1491
Technical	326
Full-Time Adult	118
Part-Time Adult	664
Total Teachers	2599
−	161 (Double assignment (Sec./P.T. Adult)
Unduplicated TOTAL	2438

OCCUPATIONAL FIELD OF PREPARATION:

	Taxonomy/ Occupation	High School	Technical	P. T. Adult	F. T. Adult	TOTAL
14.0100	Accounting & Computing	3,642	1,181	3,947	184	8,954
14.0200	Business Data Processing	2,484	2,558	5,013	227	10,282
14.0300	Filing, Office Machines & General Office	7,845	--	2,032	1,436	11.313
14.0400	Information Communications	1,080	171	549	77	1,877
14.0700	Stenographic Secretarial	8,182	1.975	4,153	790	15,100
14.0800	Administrative Management	113	773	1,005	...	1,891
14.0900	Typing & Related	2,754	...	8,393	665	11,812
	TOTALS	26,100	6,658	25,092	3,379	61,229

Vocational Education, including Trade and Industrial Education. Furthermore, a screening of this year's supplemental equipment requests from local agencies showed that over 75 percent of the equipment requested for high technology included word processing equipment, software, and microcomputers. This speaks

well for local school leadership staying current with technological changes in business.

The Division of Vocational Education will concentrate on computer literacy and computer occupational competency for all vocational students beginning with the 1982–83 school year. This effort will continue until such time that vocational students receive computer literacy training in regular educational programs prior to selecting vocational education. On a long-term basis, vocational education has a mission to provide occupational competency-level training in each of the taxonomies.

At the local education agency level, a number of vocational business and office education supervisor positions have been lost in staff reductions and attrition. As a result, their unused funds are being allocated to supervisory positions at the technical institutes that offer significant business and office education programs. Several important concerns need to be addressed. First, we need to emphasize programs among the secondary, post-secondary technical, and four-year baccalaureate degree levels. There must be a smooth transition in skill level for vocational secondary school graduates entering technical institutions. At the completion of a two-year technical program, there must be smooth transition for those graduates to enter business education programs, if they so desire. Second, we must improve services to students currently in technical and four-year baccalaureate education programs through youth activities that are appropriate to their age and maturation level. Thus, these students reap the benefits of leadership training.

Recent changes have been made in extended service guidelines for vocational business and office education teachers. Under the Ohio Revised Code, Chapter 119, Section 3313.90, the following changes were adopted by the State Board of Education on November 8, 1982, effective on January 1, 1983:

The following provisions shall be applied in determining and granting extended service funding for vocational programs:

A. All approved vocational education instructional programs are eligible for extended service consideration and may be approved for state subsidy support based upon application from a local education agency. In addition, extended service shall be granted for selected vocational education instructional programs as follows.

B. Extended service shall be granted for vocational education

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instructional programs required by licensing agencies or boards to provide instruction that exceeds the time allotments within the regular school year.
C. Extended service for cooperative programs shall be provided for the following weeks beyond the regular school year:
1. Four weeks for new teacher-coordinators in a community and/or for the initiation of new programs in a community.
2. Four weeks for teacher-coordinators of programs having an enrollment of twenty-four or more students.
3. Three weeks for teacher-coordinators of programs having an enrollment of sixteen to twenty-three students.
4. Two weeks for teacher-coordinators of programs having an enrollment of fifteen or fewer students.

Approved extended service for teacher-coordinators shall not be in conflict with other school-related, non-cooperative education sanctioned duties and/or assignments, including professional education requirements for teacher certification.

Approved extended service employment shall be continuous and immediately prior to the regular school year teacher contractual obligations.

The above excerpt applies to business and office education teachers—both cooperative office education *and* intensive office education. Previous interpretations have excluded intensive office education teachers (in-school programs) from participating in vocational funding for extended service. Current interpretation will allow funding of any approved vocational program, provided it is requested by local administration and granted according to the above guidelines. Rates of reimbursement in effect at the time the request is made are determined by the Ohio School Foundation Support Program. Properly administered and effectively used, this feature could lead to significant improvements in vocational business and office education programs in Ohio.

The Constitution and By-Laws for a formal organization for vocational business and office education supervisors and teacher educators were ratified at the Directors'/Supervisors' Summer Conference at Capital University in August 1982. This organization has the potential of being an important force in helping to improve vocational business and office education in the state by speaking with a unified voice. This organization will also take an expanded role in planning in-service programs and conferences

for personnel at the supervisory level. We applaud the many supervisors who worked very hard in the formation of this organization and wish you well as you work toward effective leadership in our field.

We were saddened with the loss of our friend and colleague, Ross Barr, whose untimely death this past May was a shock to us all. Ross was an outstanding state supervisor and leader in many areas in business and office education.

Mr. Phil DeVeny transferred from the Distributive Education Service to the Business and Office Education Service. He has background and experience in business and office education, having been a vocational BOE supervisor at Buckeye Hills Joint Vocational School prior to working in adult Distributive Education. We welcome Mr. DeVeny to the staff. Please give him the same cooperation and support that you gave Mr. Barr. Mr. DeVeny will be State Supervisor for Southeastern Ohio and Supervisor for BOE technical education programs across the state.

In closing, it has been a very challenging year in business and office education, not without trials, tragedies, and disappointments—but with a bright outlook for the future! Business education is alive and well—and *getting better* in Ohio!

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Making a Guest Speaker an Effective Experience

Wilma Swearingen

Having a class speaker from the business community is good, but involving your class with that learning experience is even better. Involvement eliminates boredom, provides effectiveness, and all but ensures learning. And using a guest speaker is so easy. Every community has a smorgasbord of business people available to speak to a class and enrich student learning; choosing the right speaker can really stimulate learning, too. Business people are usually glad to speak for the asking. And when they are used effectively, the student learning environment has broadened. When outside speakers are used appropriately, the students realize learning is "for real," not just something with which the teachers are cluttering their minds. Outside speakers become anticipated and appreciative activities when the students become involved; then they do not complain, "Not a speaker again" but ask with excitement, "When's our next speaker?"

The first step in student involvement may be to have them suggest guest speakers during the course for the next several weeks. It is then a good experience for some students to actually extend the invitations to the speakers—by telephone, letter, or in person. Thus, the class already feels a sense of responsibility for and interest in the project.

Most secretaries, stenographers, and other business and professional people give their prepared remarks and then ask for questions. If there are none, the speaker may continue rambling or filling time until the end of the period, or he/she may just sit down and create dead time until the bell rings. But questions allow a guest speaker to get down to the practical side of his/

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WILMA SWEARINGEN

her work world, and from such knowledge the students really profit. Consequently, "arming" students with questions is the second part of their involvement.

The day before a speaker is due, think through a series of questions relating to the work of that particular speaker. Plan as many questions as there are students in the class. Type the numbered questions on a sheet of paper; cut them into narrow strips, one question per strip; and request each student to draw one. That same day review the questions with the students so each student is familiar with his/her question. Of course, both you and the students should make this practice session a well-kept secret. Also, make certain no little strips of paper are visible when the speaker arrives.

The next day the speaker arrives as scheduled, is introduced to the class, and presents the prepared material. The speaker finishes the presentation and asks for questions. The student who drew the first question asks it. As soon as the speaker has answered that one, the student with the second question comes bubbling forth with his/her question, and so it goes until the bell sounds, with student after student asking questions.

Should the speaker address one of the prepared questions during the presentation, the student with that question should either ask the speaker to explain that point in greater detail or independently form an appropriate question. Of course, every student should ask his/her own question, if something comes to mind, in preference to the one on the slip of paper.

Speakers are usually amazed at the amount of student interest. Speaking has seemed easy—a pleasure. And think of the public relations benefits for the school as the speaker carries back to work the comments from the pleasant speaking experience at the school. "That class is terrific, really on the ball." That business may eventually employ one or more of those students. Also, students will have heard not only the academic side of the work world but the practical side as well.

Students may consequently get "rooted and grounded" as a result of some remark the speaker made even though the teacher has made the same point time and again. Speakers who have been effective often spark a better outlook toward the educational process than teachers who work with the students day after day. I recall a speaker, a guidance specialist, for a general business class. Throughout the period, in various ways, he stressed how important a high school education is. He emphasized that high school

is the best place educational experts know to prepare teens either for college or for a job and adulthood. Later that same day, Cathy called to me across the hall and beamingly said, "Mrs. Swearingen, what that speaker said really makes sense, doesn't it?" Apparently she had never thought about it that way before. Students realize that what the speaker said was from the business world itself and decide it is something they may need to know. It might be important to know well after all.

Speakers who can relate to the various student interest levels are valuable aids in expanding the learning environment. And students who get involved in what the speaker is saying are apt learners. Thus, having class speakers regularly, with student participation, is a tonic for the students. Properly preparing for a guest speaker can make the speaking occasion an effective learning experience.

The Impact of Today's Technology

Anna Laura Bennington and Stanley Pogrow

HISTORICALLY, FAR MORE technologies have been proposed and available for public school use than have actually been adopted on a wide-scale basis. Educational television, teaching machines, and new math are examples of technologies which, despite aggressive advocates, have had little impact on schools. Why do so few technologies actually affect education, and what particular conditions determine whether they will, in fact, be adopted? The only hypothesis that seems to explain technology adoption decisions over the centuries is that high impact results only if they meet both of the following criteria:

- The technology is a cultural one (i.e., it is found in a large number of homes).
- The technology is a primary work tool.

The former factor reduces the tendency of parents and the general public to oppose the introduction of a given technology into the schools, while the latter factor generates a demand that the public adopt and provide training in it. The greater the extent to which microcomputers become both a cultural and work tool technology, the greater the demand and need for their use in the school.

Costs and Benefits

The growing capability of computer technology is best summarized by Robert Noyce (1977), the chairman of Intel Corporation:

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Today's microcomputer, at a cost of perhaps $300, has more computing capacity than the first large electronic computer, ENIAC. It is 20 times faster, has a larger memory, is thousands of times more reliable, consumes the power of a lightbulb rather than that of a locomotive, occupies 1/30,000 the volume and costs 1/10,000 as much.

If Morre's Law (as summarized by Robert Noyce above) continues to operate, then it will be possible to put today's most powerful computers on a chip by the end of this decade. The semiconductor industry which manufacturers the electronic chips is the most productive one in the U.S. today. Licklider (1980) noted that the amount of information processed by one dollar's worth of computer hardware has doubled approximately every two years since 1943 and has been doubling every 15 months since 1965. Noyce (1977) projects that the cost of computing per function will continue to decline at a rate of 25 percent per year through 1986.

Computer use is extremely price elastic; as the cost declines, use increases. The growing pervasiveness of affordable computers is further enhanced because all modern telecommunications and information-handling systems are based on electronic generation, transmission, storage, reception, and use of digital information. Virtually identical combinations of processors, memories, and 1/0 devices can be programmed to function as telecommunications and data or word processing systems (Kalba & Jakimo, 1980).

Technological Lifestyles

As their sophistication increases, it is possible for computers to simulate many of the human senses. Progress is advancing in using digital information to represent human senses of sight and touch. Most of the technical problems for designing low-cost computers capable of performing these functions should be solved by the early 1990's. Primitive (limited vocabulary) voice input devices and speech synthesizers are already available for under $400. Engineers have already learned how to use digital representations of pictures and music to provide better quality sound than traditional analog techniques, an achievement which will soon generate a new era in digital home stereo systems.

As a result of all these exciting and developing capabilities, computers are not only affecting computing; they are also changing the way we work and play and even the nature of the economy itself. Computers and the devices they control are, therefore,

going to have an increasing role in determining how we live. Assessment of adoption rates for microcomputers and intelligent video disk systems in *Business Week* (August 17, 1981) estimates computers to be a $62 billion business. The GAO estimates that the Federal Government alone spends about $20 billion a year for computers, software, and related services. The computer bill for top Fortune 500 companies can exceed $100 million annually.

Popular Interest

Business Week (August 17, 1981) also noted that in the last 3 years, 12 new computer journals (mostly for the non-computer scientist) were published, and advertising revenue for the 10 largest computing journals was up 50 percent from last year's levels. A recent minimally advertised, four-day institute on microcomputers in education, co-director Pogrow, drew 280 teachers and administrators (80–90 percent of whom had never touched a computer previously). An additional 200 had to be turned away for lack of facilities. The Nilles (1980) Study also estimated the number of programmers growing from 5 to 21 million during this decade—a growth rate which almost constitutes a cultural revolution.

Video Disk

While the educational potential of the microcomputer is very high, the potential of the computer controlled video disk system (intelligent video disk) is even greater. The video disk component adds the capability to store large amounts of data (54 thousand frames or pages on a single disk—enough to store the *Encyclopedia Britannica*); plus it can store still and motion pictures, text, data, and sound on the same disk. These different media are all stored in digital form and can be interspersed and selectively retrieved under computer control. The system can be programmed to make greater use of sound and pictures to instruct slow readers and to give greater reliance on text for fast readers. Lipson (1980) provides a more complete description of the educational potential of the intelligent video disk. Molnar (1979) estimates that these devices should be available for about $1200 by mid-decade. Further, Brittner, Chen, and Lientz (1981) cite industry projections that 400,000 regular video disk units will be in operation by 1982.

Robots

One consequence of computers that will have a major impact

on the labor force is robots. Whether one understands that robots are a "reprogrammable multifunctional manipulator designed to move material parts, tools, or specialized devices through variable programmed motions for the performance of a variety of tasks," it is clear that their use will accelerate in the 80's. The Robot Institute of America conservatively predicts the robot market to grow from $68 million to $210 million from 1980–85. Estimates are that sales could grow to between $700 million and $2 billion by 1990. Despite the fact that only 3,500 robots were sold in the past two decades, 1,850 were sold in 1980, and estimates are that annual sales will increase to between 23,000 and 200,000 by 1990.

Telecommunications

New telecommunication systems will use satellites, earth stations, digital networks, fiber optic telephone cables, microwaves, and/or coaxial cables. All these technologies provide the capability to transmit data at rates in excess of 56,000 bits/second, as opposed to the most commonly used speeds of 300–1,200 bits/ second over conventional telephone lines. In addition to high transmission speed, satellite 2 stations have the additional advantage of negating distance as a communications cost factor, while coaxial cable provides the potential for two-way communication. Low energy satellite stations offer the potential of a large increase in the number of frequencies available for satellite transmission. With the cost of earth stations that receive satellite signals expected to drop as low as $10,000 in the near future, satellite transmission potentially offers compelling savings compared to mail or regular telephone service. [The Yankee Group (1979) estimates that the cost of sending a 250-word letter in 1985, using XTEN, would be as low as 5–6 cents compared to the postal rate at the time of 50 cents.]

Office Automation

Office automation is to white collar work what robots are to blue collar work. Data and information are the most rapidly growing resources in organizations today. Typically, their management, acquisition, generation, distribution, and analysis are costly, inefficient, and undercapitalized. Office automation seeks to increase management efficiency of information flow for organizations. Applications consist primarily of word processing, electronic mail, teleconferencing, and facsimile (scanned documents)

transmission. The growth of office automation is linked to the continued technological development of the telecommunications industry, which provides the capability to link individual stations and services both within and between organizations.

Electronic Data Base

Whereas the printing press made possible the distribution of large numbers of physical copies of text, the electronic data base makes it possible to distribute text without having to distribute multiple physical copies, a form of electronic paper. *Business Week* (August 17, 1981) quotes an IBM analyst as predicting that the total number of characters stored electronically on-line will increase from the 1.7 trillion presently to 12 trillion by 1985. The French have announced the replacement of their phone books with videotex. Urrows & Urrows (1981) report that the French plan is to put 300 million free terminals in homes by 1992 at a cost less than the $230 million presently spent to supply printed telephone books. The most comprehensive videotex system to date is Prestel in Britain, which offers 200,000 pages of on-line information, much of it free to users.

Viewing the use of computers in the home and workplace as a phased-in process undergoing transition to more sophisticated applications leads one to question when this transition will occur. The date that keeps appearing in the literature as the one in which new technological opportunities or trends will arise is 1985. Markoff (1981) cites a recent report by Stanford Research that 1985 will be a watershed year in which the following will occur:
- The price of a computer equivalent to an Apple will drop to $500.
- Television sets will incorporate microcomputers.
- AT&T will sell data base services and home terminals.
- Home purchases of microcomputers will exceed those for business.

As a result, 1985 will be viewed as the key date separating the time spans for the projected technology events of this decade. 1985–87 will be the projected time when major educational needs, with respect to the use of technology, will culminate and when significant external demands to provide such training will impact the schools. This provides a cushion of three to four years for the public schools and federal policy to prepare for the needed adjustments.

Impact on Schools

What does this mean for schools? First, schools must begin to develop courses to provide skills in using specific office technology, such as word processors, electronic mail systems, and computerized business systems. More importantly, however, schools must do a better job of developing the general skills of linear logic thought process—since instead of taking dictation, the secretaries will be searching electronic data banks to answer questions. In other words, the work of secretaries in the 1990's will resemble many of the activities presently done by programmers. Simply stated, the work of the office worker and the work of scientists will begin to merge. Schools can no longer afford the luxury of promoting mathematical types of thought only among the "bright students" or those with aptitudes for science. The primary educational challenge of the 80's is how to prepare most students to participate in the computerized workplace.

TECHNOLOGY ASSESSMENT (TA) OF SOCIETAL USE OF MICROCOMPUTERS

	1980–1985	1985–1990	1990–
Cultural Technology	Increasing use for entertainment and simple applications.	Found in about 40% of homes, increasingly used for accessing electronic data bases and home education.	Extensive use accessing electronic data bases and home education. Found in the majority of homes.
Primary Work Tool	Extensive use for technicians and clerks. Minor implications for blue collar work.	Growing use by non-technician managers, some replacement of blue collar work.	Basic tool used for managing communications and conferences. Large scale replacement of blue collar and other routine work.

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Competition in the Typewriting Classroom

Larry G. Siferd

COMPETITION, A DEVICE routinely relegated by some educators exclusively to the athletic field, has traditionally been prized by business teachers as a method of fostering speed growth in the typewriting classroom. As early as 1937, E. G. Blackstone and S. L. Smith urged teachers of typewriting to employ "devices for securing competition." (Blackstone & Smith, 1937)

Both early and recent literature has divided competitive devices into three categories: individual, cooperative, and self. *Individual competition* is evidenced when each pupil strives to be the best or the fastest typist in the class. *Cooperative competition* involves grouping students in pairs or teams. Briefly, with pairs, each learner tries to do better than his or her partner, whereas with teams, each group of students endeavors to exceed the accomplishments of one or all other teams. (Blackstone & Smith, 1937) When using cooperative competition, the instructor should attempt to match both pairs and teams evenly by ability. *Self-competition* endeavors to have each pupil improve upon his or her past performance.

Current literature regards cooperative competition as more desirable than the individual variety, while self-competition is the most desirable competitive device of all. Because this type of activity is designed to have each student better his or her previous performance, it allows teachers to treat students "as the individuals they are" rather than as interchangeable and identical cogs in the wheel of the typewriting classroom. (Robinson, 1979)

Self-competition, while generally motivational, particularly benefits those at either end of "normal" distribution—the slow

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and the gifted. Self-competition encourages those with less skill or ability because it affords them the opportunity to succeed simply by doing better than they have done before. Gifted learners, on the other hand, are equally challenged to improve, for only through performance (speed) advancement do they experience "success."

Such an arrangement in self-competition stands in stark contrast to both individual and cooperative competition, which frequently frustrate the slower typist to the point of exasperation, and, at the same time, foster complacency in the superior typist who may need only to maintain rather than improve performance to win the competition. The self-competition environment is one in which each student has an equal chance to succeed and one in which most students do succeed. Therefore, as Leonard J. West has stated, it is highly motivational for all learners because "motivation is a consequence first and foremost of success at the task." (West, 1969)

Guided Writings

Most modern typewriting text manuals contain some method for inserting self-competition into the typewriting curriculum. One useful method is termed *guided writing*, which "consists of timing the student's performance and calling 'points of completion' based on the interval needed to reach a point in the copy when typewriting at a specified speed." (Wanous, 1981) The guided writing device requires copy marked with superior figures that indicate each four-word group (4, 8, 12, 16, 20, etc.) and with dots that indicate the in-between, two-word groups (6, 10, 14, 18, 22, etc.)

The teaching strategy for a guided writing employs, as its initial step, a one-minute timed writing over an appropriately marked paragraph. During this timing, the pupils establish individual "base rates," measured in gwam, upon which they need to improve. After establishing a base rate, each learner should add four gwam and thus create a "goal rate" for the next writing. This goal rate is then divided into four equal parts that become quarter-minute checkpoints. These checkpoints (8, 16, 24 and 32 for a goal rate of 32 gwam) should be noted in the paragraph just typed, perhaps with pencil marks that could later be erased. Finally, the teacher administers a one-minute guided writing over the same paragraph used to establish the base rate.

During this guided writing, the teacher "calls the guide" at

15-second intervals, generally by saying, "1, 2, 3, and time." The students, meanwhile, strive to reach their quarter-minute checkpoints (goals) exactly as the guide is called. In this manner, they seek to improve not only their gwam but also to control their rate of keystroking by slowing down or speeding up when the appropriate guide is called. Because the copy is marked with superior figures and dots, as well as by their pencil marks, monitoring quarter-minute goals is quite easy for the students and does not detract from their concentration on the copy.

Ideally, each student's speed will increase by precisely four gwam, thus allowing him or her to experience success in two ways. The first is through an increase in speed and the second through control of the keystroking rate. In fact, though some students may type the guided writing at a rate other than the intended four gwam, they will not "fail" the exercise as long as there is some improvement in speed.

It is this frequent success, based on individual student goals, that makes guided writings and self-competition so desirable and motivational.

> With success defined as the achievement of goals, the frequent experience of success is crucial. Further, general instructions to do one's best are not so effective as the setting of specific goals on an individual student basis. (West, 1969)

In my classroom, I have found the guided writing procedure especially useful for helping individual learners overcome the so-called "plateaus" of typewriting. When my students are successful at improving their gwam on a one-minute guided writing, it frequently gives them the confidence necessary to push for improvement on a five-minute timed writing.

Skill Comparison Writings

The guided writing exercise is by no means the only method of introducing self-competition into the typewriting classroom. One other way is through the use of skill comparison writings. Such writings are referred to as "consecutive writings on two or more copy selections of deliberately differing difficulty but of the same kind (straight copy, for example) following which performance scores are compared." (Robinson, 1979)

By arranging several sentences in ascending order of difficulty (for example, balanced hand followed by adjacent keys followed by direct reaches), the instructor can administer a series of short

timings where the gwam achieved on the first (easy) sentence becomes the goal on subsequent (more difficult) sentences, irrespective of the typing speeds of individual students. Many of the more recent typewriting textbook editions contain exercises designed specifically for self-competitive skill comparison writings.

Both kinds of skill comparison activities (sentences and paragraphs) begin with relatively easy copy followed by practice on copy of increased difficulty. Both kinds of skill comparison drills incorporate individual goal setting and self-competition. Used frequently, these exercises will help students develop progressively higher typewriting speeds. (Robinson, 1979)

Time Interval Pacing

A third activity, specifically designed for self-competition, is a strategy called time interval pacing or sentence guided writing. With this exercise, the pupil begins with a short sentence of perhaps six standard typewritten words. The pupil types it as many times as possible within 20 or 30 seconds (whichever time length the teacher prefers). After determining the number of times short sentence "A" was completed (four and one-half times, for example), the student moves on to longer sentence "B" and attempts to complete "B" the same number of times.

If, given the same time frame, the student succeeds in typing sentence "B" as many times as he or she did "A," then that student moves on to sentence "C," which is even longer. If, on the other hand, the student fails to type "B" as many times as "A," then he or she remains on sentence "B" until either experiencing success (frequently) or until concluding the drill (rarely). Usually, a sentence guided writing consists of between five and seven sentences of increasing length but consistent difficulty.

At the end of the drill, the most successful typists will be completing sentences "E" or "G" as many times as they did sentence "A," while others may be seeking this same goal on sentences "C" or "D." The important point is that all typists will have had the opportunity to experience success, irrespective of their starting speeds, simply by improving their individual past performances.

Conclusions

Competition, in general, should be a part of virtually all typewriting curricula because of its effectiveness, usefulness, and im-

portance in improving typewriting speeds. Of the three types of competitive devices frequently employed by typing teachers, competition with one's self is more desirable than either cooperative or individual competition.

This preference is based upon several observations about self-competition:

- It is student-centered rather than subject-centered.
- It permits each student to work toward progressively higher goals based upon his or her individual past performance.
- It is motivational because it allows widespread and frequent success with the task.
- It supplies immediate feedback to the typist.
- It is helpful in overcoming typewriting "plateaus."
- It provides goal-directed repetition for the student.
- It particularly benefits the slow and the gifted typists who are frequently frustrated or bored by traditional competitive devices.
- It allows learners to feel good about themselves—and about typewriting.

Your students have a desire to do *well*, a desire to *succeed*, and a desire to WIN. What's more, they have the right to an environment that encourages them to do *well*, helps them to *succeed*, and gives them the right to WIN. A competitive typewriting classroom, where self-competition is frequently employed, will nurture such an environment and will produce not only faster but also better typists.

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Your Resource Files: System or Chaos?

Ernestine A. Kyle

DURING THE FIRST FEW YEARS of teaching, the business education teacher acquires a wealth of resource materials. The usual procedure is to place it in folders and dutifully file in a filing cabinet or drawer shorthand materials behind "S," accounting materials behind "A," and so on, ad infinitum. However, as the materials increase with teaching experience, the files become fuller, the materials more varied, and the teacher more frustrated in attempting to locate filed materials for daily use. At this point, two things may happen. First, materials and folders are stacked at random on window sills, files, desks, and any vacant spot because it takes too long to decide where to file. This behavior is based on the theory that materials in sight will be easier to locate when needed. Second, specific, good materials are buried in the file drawers. So after a fruitless search, the teacher duplicates more copies because that is simply easier. This practice, over a period of years, becomes wasteful and expensive. In days of tight budgets and accountability, it is important to conserve duplication costs.

Here is a procedure for organizing business teaching materials and files for more effective and efficient use. This filing procedure can be tailored to *your* needs and is easy to set up, change, and expand. It is also easy to file papers and return folders to file drawers after use. Because it is based on a combination of numeric, subject, and alphabetic filing, it does take a quantity of good quality, reusable manila folders.

Make a master list of all the topics you use in teaching business education for which you are acquiring or may need to acquire

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materials. Use topics rather than courses because some topic materials may be used in several courses; for example, "Employment" materials may be used in Intensive Office Education (IOE), Cooperative Office Education (COE), Business English, or Communications. Also, courses by different names often have the same content. Next, arrange your list alphabetically.

Your list *may* look like this:

Topics

Accounting	Human Relations and Communication
Business English	Introduction to Business,
Business Law	General Business
Business Machines	Notehand and Abbreviated Writing
Computers	Personal Finance
Consumer Economics	Shorthand and Transcription
Data Processing	Typewriting
Employment	Miscellaneous

When you feel your list is complete, number each topic for a primary guide in your file drawer as:

No.	Topics
2	Accounting
4	Business English
6	Business Law
8	Business Machines
10	Computers
12	Consumer Economics
14	Data Processing
16	Employment
18	Human Relations and Communication
20	Introduction to Business, General Business
22	Notehand and Abbreviated Writing
24	Personal Finance
26	Shorthand and Transcription
28	Typewriting
40	Miscellaneous

Note that the numbering allows for addition of new guides as 3, 5, 7, etc. If you are not confident that your list is fairly complete and you might want to expand a great deal more, you can number as 4, 8, 12, 14, etc. The next step takes time, thought, and review of *your* needs based on *your* teaching.

What are *common* classifications *within each* topic needed for

filing and using your materials? Work and rework this list to make it as comprehensive as possible. Then the number and the title are typed on a file folder tab label. This might look as follows:

No.	Common Classifications
10	Catalogs and Advertising
15	Drills, Practice Materials
20	Equipment
25	Reports, Articles, and Correspondence
30	Teaching Plans and Aids
35	Tests
40	Quizzes
45	Visual Aids—Bulletin Boards
100	Miscellaneous

Note that this numbering, too, allows for expansion. If that becomes necessary, remember that each topic will carry the expansion.

Finally, sort your accumulated materials according to your list of *topics*. Then, take the materials in each topic and resort, according to your *classification* list. If there appears to be a great deal of "miscellaneous," rethink and revise your classification list.

When this is completed, type tab labels, and attach them to file folders. Using numbers in conjunction with typed topics makes a quicker double check for filing now and in the future. Proceed by labeling a topic guide; follow it with a set of classification folders. Start the next topic guide; follow it with classification folders, and so on. Insert materials into folders. Check and recheck the arrangement of folders. Thus, a workable system of keeping materials is established.

Reinsert folders into drawers quickly after use. Purge folders of outdated materials as you use them, or go through and purge at least yearly. Your classroom and files will reflect the neatness and orderliness of the most organized business offices where your students aspire to work.

The illustration on the opposite page shows how folders for the topic "Accounting" will appear in this system.

EXAMPLE

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┌─────────────────────────────────────────┐
│ 2 - 100 Miscellaneous                    │
    ┌─────────────────────────────────────────┐
    │ 2 - 45  Visual Aids/Bulletin Boards      │
    │      1  Start of Year                    │
        ┌─────────────────────────────────────────┐
        │ 2 - 40  Quizzes                          │
        │       1  Posting Sequence                │
    ┌─────────────────────────────────────────┐
    │ 2 - 35  Tests                            │
    │      2  Workbook                         │
    ┌─────────────────────────────────────────┐
    │ 2 - 35  Tests                            │
    │      1  General Journal                  │
        ┌─────────────────────────────────────────┐      CAN EXPAND
        │ 2 - 30 Teaching Plans and Aids           │      INDEFINITELY
        │      3 I D E A S                         │ ◄─── BY THIRD
        │   ┌─────────────────────────────────────────┐   DIGIT
        │   │ 2 - 30  Teaching Plans and Aids          │
        │   │       2  Past Daily Lesson Plans         │
        │   ┌─────────────────────────────────────────┐
        │   │ 2 - 30  Teaching Plans and Aids          │
        │   │       1  Course of Study                 │
    ┌─────────────────────────────────────────┐
    │ 2 - 25  Reports                          │
    │      1  Articles and Correspondence      │
        ┌─────────────────────────────────────────┐
        │ 2 - 20  Equipment                        │
        │       1  Calculator Instructions         │
    ┌─────────────────────────────────────────┐  ◄─── EXPANDS INDEFINITELY
    │ 2 - 15  Drills                           │       BY THIRD DIGIT
    │      2  Rapid Calculating                │
    ┌─────────────────────────────────────────┐
    │ 2 - 15  Drills                           │
    │      1  Payroll                          │

┌─────────────────────────────────────────┐
│ 2  ACCOUNTING                            │  ◄─── PRIMARY GUIDE
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FRONT OF FILE DRAWER

Folders are arranged from front to back.

The Older Worker and Vocational Education

Michael W. Galbraith and Jerry G. Davis

THE OLDER ADULT is an important resource. With nearly 26 million Americans 65 years and older, the nation is finally recognizing their potential contribution to society. The vast reservoir of talent and expertise that older Americans have to offer to the social and economic development of our nation has been given little attention (Rother & Edwards, 1982). A shortage of skilled labor and a corresponding need to retain older workers are projected within the decade (U.S. Department of Labor, 1981). These facts have an important implication for vocational education and its priorities. Older persons will become considerably more important in the market for vocational programs if their needs receive priority (Lecht, 1981). Additional vocational programs may be needed to retrain the older adult not only for their present labor situation but also for preparing a second career.

This article presents an overview of vocational education programming as it relates to the older adult. An older adult is an individual who is 65 years old or older. The demographics of the population 65 years and older and the factors affecting labor force participants in the age group are also presented. Implications for vocational education because of these factors are subsequently explored, as well as constraints and barriers to planning vocational education programs for the older adult. Solutions for eliminating these barriers along with recommendations for vocational education are ultimately provided.

Delivery systems are an important component in the vocational education concept. However, it is beyond the scope of this article

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to present specific ones in the area of vocational education for older adults.

Demographics of the Population 65 Years and Older

The population 65 years and over in America constitutes 11.3 percent of the total population. A woman reaching age 65 today can expect to live an additional 17.5 years, a man 13.4 years. By the decade 2010–2020, the number of adults 65 years and over will approach 50 million (U.S. Department of Commerce, 1981).

The educational level of all adults is rising; however, the educational level of adults 65 years is well below that of the overall adult population. In 1980, about 40.7 percent of people 65 and older were high school graduates. Seventy-two percent of all adults 25 years or older hold a high school diploma (U.S. Department of Commerce, 1981).

According to the Bureau of the Census, the median income of families headed by a 65-year-old or older adult was $12,881. There are 3.8 million older adults below the poverty level, or 15.7% of the total population. Those under 65 years below the poverty level are 13.0 percent of the total population (U.S. Department of Commerce, 1981).

The Harris Survey (1975) offered some interesting clues on the work interests of Americans 65 and over. The survey showed that of 21 million Americans 65 and older, 2.8 million were working; 4.0 million who were not working said they wanted to work; 4.5 million were working as volunteers; and another 2.1 million who were not working said they were interested in volunteer service.

People age 65 and older who continued to work full- or part-time were involved in the following occupations: 18 percent were managers, officials, or proprietors; 17 percent were service workers; 15 percent were operatives or unskilled laborers; 11 percent were skilled craftsmen or foremen; and 10 percent were professionals and clerical workers. In proportion to the total labor force participation, the older worker had low representation in skilled craftsmen or foremen, professional and clerical work occupations.

A more recent Harris Survey (1979) of current employees and retirees found 51 percent of the employees surveyed want to continue working in some capacity; 48 percent in the age group 50–64 wish to continue working after age 64; 46 of those already retired would prefer to be working; and 53 percent of those retired wish they had never done so. Perhaps whether older adults would

really respond to work opportunities depends on whether work options are present, absent, or limited for them (NCOCOA, 1979).

Factors Affecting Labor Force Participants Over Age 65

Many factors affect changes in the number of potential labor force participants over age 65. The demographics of this age group indicate an increase of potential workers because of longer life spans and lower birth rates. Other factors include inflation, health, and passage of the Age Discrimination in Employment Act.

Inflation is an important factor; individuals on fixed incomes are seriously affected by high inflation rates. Too many retiree assets and resources are depleted trying to survive. One alternative has been to delay retirement for economic reasons or to seek job opportunities after retirement.

Health is the second factor. Because of increased lifespan and better medical/health care, the older adult can remain in the work force longer.

The third factor that has increased the older worker's interest in remaining in the labor force is the passage of the Age Discrimination in Employment Act (ADEA) of 1967 (P. L. 95–256), an amendment to the Older Americans Act. Specifically, the ADEA ended mandatory retirement for federal workers and raised the retirement age to 70 for nonfederal employees, encouraging workers to remain on the job past the usual retirement age.

Although ADEA sought to end age discrimination by employers in hiring, firing, training, and other detrimental employment conditions, the law is incomplete and is not fully reinforced. (Meier, 1978) It does not cover smaller businesses with fewer than 20 employees or employment agencies and labor unions that refer workers to the smaller employers.

A major omission of the ADEA is affirmative action. No positive action is required by law, unlike the requirements for such action for minorities and women. The responsibility for enforcing the ADEA shifted in 1978 from the U.S. Department of Labor to the Equal Employment Opportunity Commission. Through this shift, workers seeking to file charges of age discrimination lost access to 300 office and outreach stations. (DeGooyer, 1982) The Equal Employment Opportunity Commission has only 22 district and 27 area offices throughout the U.S. where the older worker can receive assistance. (U.S. Senate, 1981)

Thus, inflation, improved health care, and the ADEA all have

implications for vocational education planning and training for the older worker. They suggest that more time and resources should be directed to train and retrain older workers, which will allow them to remain productive within the labor force. Major implications for vocational educators are whether they are prepared to provide the necessary training and what delivery system or systems will be appropriate for this age group.

Barriers and Constraints

Currently, many potential barriers and constraints to vocational programming for the older worker exist. Included are stereotypes and myths, job placement, retirement policy, and the present definition of vocational education.

Stereotypes and myths persist about the job performance of older workers. Sonnenfield (1978) conducted a survey of *Harvard Business Review* readers and discovered that managerial decision-making was still affected by age stereotyping. His research challenges age stereotypes in relation to job performance with the following findings:

- Age appears as an asset in sales performance as reported by insurance companies, auto dealers, and large department stores.
- Age minimally affects manual workers with great variations within age groups.
- Age does not significantly affect output, according to a major study of government and industrial office workers.
- Older decision-makers tend to take more time to make decisions but evaluate new information more accurately.
- The performance of older workers is as good as if not better than that of younger people not under time pressure. (Sonnenfield, 1978)

A second barrier to vocational programming is the difficulty in job placement of the older worker. According to Ossofsky (1976), those over 65 received the least number of services. Job referral and placement decline as age increases. The 1975 Harris Survey found that the lack of job opportunities was a moderately serious problem for approximately 25 percent of both employed and retired people over age 65. Matching older workers with the right jobs should be a major concern in vocational programming. Ossofsky (1976) reported that older workers properly placed have greater stability, fewer accidents, and less time lost than younger workers.

Retirement policies are another barrier to programming vo-

cational education for older adults. Presently, many retirement policies are more appealing than employment policies and programs that create an extended work life. (Rother & Edwards, 1982) Vocational educators may be reluctant to provide the necessary planning and programming if this current trend does not change.

A final constraint to vocational programming involves the definition of vocational education. Presently, vocational education focuses at the secondary level where preparation and training are directed toward attaining full-time, paid employment. If vocational educators are to serve the older worker, they must reexamine the definition and purpose of vocational education.

Solutions To Eliminating Barriers And Constraints

Vocational educators can have a significant impact in eliminating barriers to vocational planning for older workers. However, an attitudinal change must first occur if the majority of stereotypes and myths of the older worker are to be eliminated. Initially, they should be educated about the characteristics of aging. Programs about older people and the aging process should be a component of vocational education. This would enable the vocational educator to design training programs that fit the older worker's abilities and skills.

In addition, vocational educators should be involved with advocacy groups and organizations that represent the older person. Groups such as the Gray Panthers, American Association of Retired Persons, National Council on Aging, Gerontological Society of America, and the National Caucus on the Black Aged are important sources of information and participation. To understand the needs, attitudes, and abilities of older workers, it is important to be personally involved. Literature from these advocacy groups will also add a new dimension to the knowledge base that vocational educators can use in vocational planning and programming for older adults.

An accurate understanding of the older worker will allow the vocational educator to assist employers with their training requirements. They can help educate employers that older workers are productive and important resources. This may also minimize conflict between the younger and older employees and create more workforce stability and continuity.

In addition to stereotype and myth barriers, job placement for older workers has been a difficult problem for vocational pro-

grammers. Solution to this concern may lie in vocational guidance. This requires understanding the circumstances and characteristics of the aged as well as skilled vocational guidance found in proper counseling. Vocational guidance personnel can also assist the older worker in job development and referral. Working closely with employers, vocational guidance personnel can orient and educate employers to the important resources of the older worker.

Vocational educators can train and retrain older workers while assisting in developing retirement policies that encourage older worker employment. Working with employers and older employees, vocational educators may adjust current policies by establishing items, such as phased retirement and expanded work options that include flex-time, shared jobs, and job redesign and reassignment. In turn, these adjustments would demonstrate additional need for vocational training and increase the amount of vocational programming for older workers.

The Vocational Education Act of 1963 (P.L. 88–210) and the 1968 amendments (P.L. 90–576) provide for educating people of all ages below the baccalaureate degree. Additionally, opportunities for vocational development and a definition of lifelong learning for other educational levels can be found in the Education Amendments of 1976 (P.L. 94–482) to the Higher Education Act of 1965 (P.L. 80–329). The law includes " . . . job training programs . . . pre-retirement and education for older and retired persons . . . " (P.L. 94–482).

Vocational educators must evaluate the legislation in terms of developing a broader definition of vocational education. The legislation provides the foundation. Now, there is a need for vocational programming to focus additional attention on the older worker. With a broader definition of older workers, employers, vocational education, and society will realize the benefits.

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"You Viewpoint" Means You, Too, Business Teacher

Barbara Humphrys

ANY GOOD BUSINESS communications student knows the importance of stressing the "You Viewpoint"; and certainly business *teachers* would be the group who would most often demonstrate the "you" attitude while teaching their classes. Right? Well, this is not necessarily so, as revealed in a recent project carried out in a business education methods of teaching class at East Tennessee State University.

On a day when the class was performing small practice-teaching demonstrations for evaluation by group members, most of the verbal instructions were as follows:

> Class, I want you to take out a clean sheet of paper .... Now, I want you to type the date on .... I want you to use two-inch margins ....

Each demonstration followed a similar beginning pattern; almost every sentence started with "I." The teacher later asked for class comments concerning the problem. Everyone agreed that recognizing the need and revising for the "You Viewpoint" in *written* communications are simpler than in *verbal* communications. This is true especially when one is preoccupied with a new experience, such as teaching a class. Here is one example. "I-centered" statements were recorded during peer teaching demonstrations in our methods of teaching classes. Students were asked to suggest (and record for future reference) the remedy that could replace the "I-centered" statements. The remedy, of course, would be the best "You-centered" statements.

The project was intended for use in just that context—to learn

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through peer evaluation. However, once students were sensitive to the "You Viewpoint" in verbal communications, they observed other teaching situations. After students observed secondary school classroom teaching and attended their college classes, they returned to our methods of teaching class with a new list of "You Viewpoint" violations. It is important to note that the students imposed the guideline that no example of a "violation" could be cited unless a remedy was suggested. The list of violations and remedies compiled by each student became a part of the teaching notebook. After a review of examples collected by class members, at least four areas emerged as ones where the "You Viewpoint" (or *student* viewpoint) appeared to need strengthening.

Less Use of "I"

The students brought to class many examples of the extreme overuse of "I-centered" statements.

They dubbed this the "Iwanchata" syndrome. (Translated as "I-want-you-to.") The suggested remedies are all worthwhile. Here are just two examples:

I Viewpoint	You Viewpoint
I want you to turn to page 34.	Look at the letter shown on page 34.
I want this copy double spaced.	Use double spacing so you can proofread easily.

The group agreed that avoiding "Iwanchata" involves considerable effort and concentration. This helped to confirm the importance of detailed lesson plans for student teaching situations—with even simple class instructions included.

The negative effects of verbally using too much "I" are the same as those in written communications: that is, the sentences and instructions become monotonous. Thus, students concentrate less; also, the focus fades from the student and his or her accomplishments.

More Use of Praise

Teachers are involved in constant evaluation, which, in turn, means criticism. While most like to think of their remarks as constructive criticism, examples from this class project yielded some negative remarks and very few items of praise.

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In shorthand classes, dictation transcripts, for example, must be 95 percent accurate to be "counted" or, in other cases, must be of mailable quality. Some unusable papers reported by the observers yielded hugh red "X" marks over the entire copy. Others bore these written comments:

"Too many errors!"
"Proofread!"
"No!"

All agreed that the exclamation point was an unnecessary and rather cruel addition to written comments. Many usable papers, in contrast, were marked simply "Okay."

The favorite suggested remedies for unusable papers were:

"Not quite; try again."
"Almost. Keep trying."
"Come on. You can do better."

For the usable papers, the class suggested:

"Good!" (*with* exclamation point)
"I'm proud of you."

One class member observed a teacher adding "smile" faces to papers that were especially good—a definite addition to the praise category.

Management studies have shown that praise and positive feedback can have a favorable impact on actual job performance. (Levine, 1980) Since performance goals in business classes are closely aligned with production standards, teachers would do well to heed this practice.

Drawing Students into All Activities

Giving directions is certainly a teacher-centered activity. Yet those teachers who involve class members in giving even simple instructions find that students both listen more attentively and follow directions better than when the instructor does all the talking. The methods class members discovered that many directions preceding typewriting problems are most effective in question form:

"How many blank lines do you see following the main heading of the table"?
"This manuscript is left bound; what will your margins be?"

To maintain the positive tone, one observer decided that even if the typewriting students responded incorrectly, the teacher could *pretend* hearing the correct answer and reply, "That's right, one and a half inches at the left and one inch at the right."

Many teachers of business skill subjects have learned that the simple act of writing all page numbers on the chalkboard saves answering the same question ("What page did you say?") several times during each activity. This also teaches students to find the information themselves.

Suggesting Positive Results

Negative statements seem to flow easily, especially when teach-ers must refer to many types of student errors.

"Please keep the carbon smudges off your original . . . . "
"No messy erasures, please."
"Don't place this short letter too high."

Thus, the student is faced with a gloomy picture and little expectation of positive results. The best remedies suggested here were plenty of teacher demonstration to show proper "protection" from carbon paper and good supplies, such as extra erasers and emery boards for cleaning them. Painting the positive verbal picture always helps, too:

"Use a three-inch top margin so the white space makes a nice frame for your letter."

Educators have long known that students perform at a higher standard when they feel the teacher expects that of them.

Summary

The business teacher, by using the "You Viewpoint" at every opportunity, can come closer to achieving his or her goals and can raise the production levels of the business classes.

In addition, some less tangible but important advantages may result:

1. While concentrating on the students' actions and reactions, the teacher puts his or her feelings in the background; the entire class seems to run more smoothly.

2. The whole process of stressing the verbal "You Viewpoint" results in an important overall positive climate in the classroom. Since "enthusiasm"—defined as awakening interest and instilling self-confidence—has been identified as an important communi-

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cation element for effective teaching, surely students will accomplish more both in and out of the classroom when made to feel "I am important, and I can do this task well." (Hildebrand, 1973)

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So You Think Shorthand is Not in Demand!

Margaret A. Fulwiler

THE NUMBER OF OFFICE WORKERS grows at the astounding rate of 1.3 million a.year; as a matter of fact, office workers compose 65 percent of the nation's work force. In addition, the Department of Labor projects 295,000 job openings every year between now and 1985 for applicants with secretarial skills; thus, clerical and secretarial workers ·comprise the largest occupational group. Average openings in this field projected over the next twelve years will rise to 305,000 a year. Consequently, school administrators (and especially business teachers) will be responsible for equipping students with the required, employable skills.

Overwhelmingly, employers in business and industry still require applicants with shorthand skills. Those with shorthand skill can handle business correspondence efficiently and effectively. They are accurate and obtain quicker results. Another benefit is that the mechanics of English and the development of shorthand speed proceed side by side. Secretaries with shorthand skill are able to communicate accurately, clearly, and effectively. Secretaries who have learned shorthand have developed diligence, self-discipline, and an ability to concentrate on the job. As a result, most employers still use shorthand skills as a deciding factor in screening job applicants.

Problem Statement and Purpose of the Study

Much has been written about the advent of word processing as a replacement for shorthand use in offices. In order to be relevant, office education programs must reflect the office envi-

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ronment that exists in the real business world. Programs need to identify new and emerging office occupations, to analyze the circumstances preceding such an occupational shift, and to determine the effects of the findings on the business education curriculum. Therefore, this study is based on the following assumption: Shorthand needs in the business world are great enough to warrant keeping shorthand in the curriculum; and, in fact, shorthand study should be vastly promoted as a very desirable and valuable skill.

As a result of the findings of this study, shorthand, as a skill, will be emphasized even more in the future than it is today. By showing career opportunities and advancement, monetary gains, and job opportunities for those with shorthand skill, curricular designs will stress the importance of shorthand for future employment.

Procedures

This study employed personal interviews and questionnaires. Participants were personnel/human resources people, secretaries, and administrative assistants in business firms in the Dayton and south-suburb area. The classified want ads from June 28 to July 18 were tracked in relation to clerical, word processing, and shorthand-skilled secretaries. The specific procedures were as follows:

A. A survey/questionnaire or personal interview was completed of 16 companies (from very large companies to one-girl offices). Questions related to the use of shorthand in hiring, promoting, and salary benefits; the speed required; and the companies' ability to find qualified personnel.

B. A survey/questionnaire or personal interview was completed with 20 secretaries regarding their use of shorthand, their present positions, and their salary level.

C. The track consisted of the *Dayton Journal Herald, Sunday Dayton Daily News, The Centerville-Bellbrook Times* for Wednesdays and Saturdays, from June 28 to July 18. The classified ads were read and random dates selected to avoid an overlap of available jobs.

Findings

Data From Companies

L. M. Berry: Shorthand is sometimes required, sometimes used

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as a screening tool. There is a salary difference for those with shorthand skill, and the amount varies with the job. Shorthand is a consideration for promotions, and all executive secretaries use shorthand.

Cox Heart Institute: Shorthand is required for secretarial employment, yet there is not necessarily a salary differentiation. Shorthand is used as an overall evaluation basis for promotions, but *all* executive secretaries use shorthand.

CPA Firm: Shorthand is not necessary for all jobs in the company, yet it is desirable and used in screening.

Doctors' Offices: There is a secretary who takes shorthand as part of her job.

Duriron Company: Shorthand is necessary for some jobs and is used in screening. Additionally, there is a salary difference for those with shorthand skill. Shorthand may be used as a promotional basis, yet executive secretaries are required to use shorthand.

Law Firms: Shorthand is necessary and used in screening. Additionally, salaries reflect skill level.

Manpower Inc.: Shorthand is required for secretarial jobs, and there is a salary difference for those with shorthand skill. Many temporary jobs cannot be filled because of a lack of people with shorthand skill.

Manufacturer's Representative: Shorthand is required. The greater the skill, the higher the salary.

Mead Corporation: Shorthand is required for secretarial employment. The salary difference is 15 to 20% higher per week for those with shorthand skill. It is also used in screening, yet all executive secretaries are required to use shorthand.

E. F. McDonald: Initial employment is in the typing pool, but because they like to promote from within, they prefer shorthand skill. To be promoted, shorthand is necessary. Additionally, executives' secretaries use shorthand.

Miami Valley Hospital: There are two levels—Secretary II and Secretary III. Secretary III requires shorthand with a speed of 100 wpm and over; the pay is $30 more a week and up for starting secretaries with shorthand skill.

Newspapers Inc. (Dayton): All upper-level jobs require shorthand with speeds of 100–120 wpm. Additionally, it is used in screening

and is considered as a promotional basis. Executive secretaries use shorthand, and the salary difference is from $25 to $150 more per week for those with shorthand skill.

Smith & Schnacke Law Firm: Shorthand skill is required for secretarial employment and used in screening. Additionally, there is a difference in weekly salary for someone with shorthand skill, depending on experience. Lawyers' secretaries use shorthand, and often they have trouble finding people with the skill.

Standard Register: Shorthand is usually required and used in screening some jobs. Additionally, it is considered a basis for promotions. Executive secretaries are required to use shorthand.

University of Dayton: Of 264 positions, shorthand skill is necessary for some, and there is a salary difference, depending on the importance of shorthand in the job. In some cases, it is also used as a basis for promotion. Some executive secretaries use shorthand.

Wright-Patterson AFB: Shorthand skill allows a person to enter federal service as a GS3; those without the skill enter as a GS2. The salary difference is $30 a week with speeds varying from 80 to 110 wpm. Many jobs require shorthand, especially at the upper levels, and it is required for some promotions.

General Overview of Companies

Entry-level proficiency of 80, 90, or 100 wpm is expected. The salary difference for those with shorthand varies from $25 to $150 a week. Companies are equally divided in their ability to find people with shorthand skill. The larger companies with higher pay scales do not seem to have the problem. Executive secretaries, including those of lawyers, do use shorthand, and it is necessary for promotion to upper-level jobs.

Data from Secretaries

The survey was concerned with the frequency (very frequently, sometimes, rarely, or never) of shorthand usage on the job. Responses were divided at 70% for very frequently and 30% for sometimes. Results additionally showed that shorthand was used in the following ways: 90% personal notes, 90% telephone messages, 50% letters, 70% memos, 100% instructions, 50% minutes, 30% editing, 70% reports, and 50% letter composition. Required speed varied from 80 to 110 words per minute, with great proficiency. One hundred percent of the secretaries made more mon-

ey because of their shorthand skill. Either they had been promoted or they expected a promotion based on their shorthand ability. The salary differences paralleled the company differences, from $30 to over $100 per week.

General Overview of Secretarial Data

Shorthand skill is frequently used; however, speed varies. Shorthand skill is used as a basis for promotion. In addition, per week salary differences appear to exist because of shorthand skill, varying from $30 to over $100. Moreover, there is a variety of shorthand uses, depending on the job. Shorthand skill in secretarial opportunities is necessary for employment.

Data from Newspapers

A track of newspapers was completed from June 28 to July 18. The following dates were used: June 28 and 30, July 1, 3, 4, 7, 11, 14, 15, and 18. The newspapers included: *Dayton Journal Herald, Sunday Dayton Daily News,* and *Centerville-Bellbrook Times.* The jobs tracked were for office personnel (excluding receptionists, typists, bookkeepers/accountants, part-time jobs, and temporary employment agencies). Only employment agency jobs with full job descriptions were used. *Clerical Job Classification:* These jobs require good or excellent office skills. However, they did not necessarily specify the skills. Forty-six jobs were found. If a salary was listed, it was minimum wage to $4 an hour. *Word Processing Jobs:* Over half the jobs listed specified a particular machine, usually IBM. Nine jobs were found. No wages were specified. *Secretarial Job with Shorthand Specified:* If a salary was mentioned, it was $4.50 to $6.00 an hour to start. Twenty-three jobs were found.

General Overview from Newspapers

Thirty-four newspapers were studied. Ten were chosen for analysis as office-job classified ads. Seventy-eight jobs in the areas listed (clerical, word processing, and secretarial) were available. The jobs with shorthand that listed a salary were all listed at above or well above minimum wage.

Conclusion

Shorthand skill is in demand and is consistently used for selecting secretarial employees. In addition, it is used in determin-

ing promotion. Having shorthand skill will secure the secretarial applicant a better-paying job. A person with good shorthand skill and some understanding of word processing equipment can qualify for 100% of clerical/steno jobs available in the job market surveyed.

Shorthand skill requires proficiency, at least 100 words per minute for five to ten minutes. Approximately two years of training are needed to achieve mastery level.

A student with the ability to learn shorthand should be encouraged to do so, for employment, promotion, and financial opportunities await the person with shorthand skill.

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Detailed information is given on page ii.

Teaching the Art of Listening

Betty H. Hartley

ALL TOO OFTEN THE art of listening is taken for granted. In the classroom, discussions, explanations, questions, answers, and directions all require listening; but no one gives students tips on how to become efficient listeners. Effective communications require both a "sender" and a "receiver." In addition, feedback is an integral part of communications, and it occurs only when listening is an active and aggressive act.

Faulty Listening

The classroom teacher knows only too well that students can tune out explanations and lectures that have been carefully planned and are important for successfully completing course materials. *Every* student spends more time listening than reading, writing, or speaking combined. In spite of this, listening, as an important component of learning, is generally ignored. Teachers automatically assume that if students are seated and not doing anything else that listening is taking place. Yet contrary evidence is abundant; take, for example, the number of times a teacher must repeat directions. Further evidence of faulty listening is seen in assignments not completed as specified despite their clear instructions.

Far too long educators from the first grade through college believed statements such as: "Listen," "Pay attention," and "Did you get this?" were enough to sharpen listening skills. Also, there was an assumed connection between low intelligence and listening ability; bright students listened well, and dull students listened poorly. Obviously, these are myths. One must acquire certain

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skills to attain listening ability either through specific learning steps or from experience. Another common myth is that a good reader is a good listener. Listening is a different activity entirely and requires quite different skills. Schools traditionally concentrate on reading skills, and in American society, where the typical student will listen three times more than read, the fair reader and bad listener will surely falter.

Tips on Improving Listening

Students enrolled in sequential courses from Shorthand I to Advanced Dictation and Transcription have learned from experience the art of intensive listening. This is because acquiring these skills is dependent upon students' abilities to accurately record what they hear. This listening skill is gradually developed to a high degree, as it is an inherent requirement in mastering dictation.

However, one of the greatest barriers to effective listening is mental; most people think faster than they talk. This phenomenon decreases concentration because the brain is constantly responding to stimuli in addition to the speaker's words. Also, listening requires the brain to process words at an extremely slow rate compared to its capability. Most speech occurs at 125–130 words per minute, significantly below the brain's capacity of 300–400 words per minute. Therefore, when listening, we continue to think at a higher rate because there is spare time as words are spoken. Yet students can be taught to use this spare thinking time to listen more efficiently. Four mental activities can use this spare time and improve listening:

1. While the speaker talks, the listener should try to think ahead, anticipating a conclusion from the speech content.
2. The listener needs to note carefully the nonverbal signs of facial expressions, gestures, body language, and eye contact in searching for support to reinforce the spoken word.
3. The listener must weigh the evidence presented to decide whether the content is valid.
4. The listener should mentally review the major points internally and summarize what the speaker said.

Because of lag time in speaking compared with thinking rate, there is plenty of time to concentrate on these four activities. These tasks require practice for mastery. Students can learn and practice these four steps if they know that the outcome will measurably affect their success in completing their course work. Im-

provement in listening will depend on the conviction that the "pay off" is worth the effort to try these four steps.

Controlling Emotions

In addition to practicing these four mental tasks to improve listening, the emotions must be under control. Emotions directly affect listening. Whenever the listener doesn't want to hear what is being said, the listener can mentally "turn off" the speaker. The opposite can just as easily occur. If the listener truly wants to hear what is being said, everything the speaker says—truths, half-truths, or fiction—is accepted. So if the listener holds the speaker or the subject in low esteem, usually poor reception occurs. Students are not aware of the impact their feelings have on listening. Being emotional has certain consequences upon listening. Negative emotions require a change in attitude, that is, a belief that something can be learned from everyone and from all subject matter.

Attitudes, feelings, prejudices, convictions, and mores have a bearing not only on the quality of listening but also upon understanding content. Without self-discipline, the ears can block listening. Disciplining emotions will not only improve listening but will also make the listener more receptive to good ideas, answers, and solutions, which have the power to determine success not only in the classroom but also on the job as well.

Listening in the Work Environment

Students are very job conscious and recognize the importance of being able to hear and understand correct numbers, names, dates, places, and appointments because they know errors can be costly. Students also know that frequent mistakes can result in job loss. Teachers can, therefore, reinforce the importance of listening by relating listening skills to occupational needs. Business dependence on communications cannot be over emphasized.

Oral communications require more human senses than written communications require. It is quicker and cheaper to reach a large audience orally than with written messages. However, this communication process requires good listening skills. Faulty listening has produced a fear of using oral communication. This fear has consequently generated a false need to produce "mountains" of business office correspondence. Proper awareness of the usefulness of listening can untangle this artificial reliance on written communication, and the place to start is in the classroom.

Meeting the Challenge of New Office Technologies

M. Lee Goddard

MANY EDUCATORS, administrators, and business leaders believe that the challenge of new office technologies (which has been surfacing over the past two decades) will have the most profound effect on our discipline of any event in the past century or perhaps in our entire history. This article, therefore, is concerned with the changing office environment, the need for a new generation of office workers, and the role of business education in meeting the challenge of the new office technologies.

The Changing Office Environment

The office serves as the central nervous system and communications center for organizations throughout the globe. Staffing these complex organizations are millions of office workers, clerks, typists, stenographers, secretaries, and word processing personnel. Booz, Allen & Hamilton, management and technology consultants, estimated in 1981 that U.S. businesses spend more than a trillion dollars annually on office-based, white-collar workers. Arthur D. Little Inc., a management and technical research consulting organization, recently estimated that some 324 billion documents exist in American business offices and that 4,000 pieces of paper are added each year for each of the 52 million office workers. *The Occupational Outlook Handbook (1980)* estimated that secretaries and stenographers will have the most job openings per year between now and 1990—305,000.

Today, office workers represent the largest segment of the work force in the U.S. and are threatening to strangle the nation's productivity. For the first time, business executives are zeroing

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in on the idea that America's productivity problems lie among its white-collar workers. As improved performance and lower operating costs in the office are reported through the use of electronic office systems, business executives are also taking a second look at the figures for capital investment in U.S. workers: office worker, $3,000; factory worker, $35,000; farmer, $50,000.

The realities of today and tomorrow are that the office must undergo revolutionary changes in the next couple of decades if American business is to remain competitive in world markets. The technology for tomorrow's integrated office information system is rapidly developing, and business organizations are becoming increasingly receptive to adopting it. The question is: Is business education ready to accept this new challenge and prepare the next generation of office workers?

The Next Generation of Office Workers—A Profile

A reveiw of the changing office environment leaves little doubt that the next generation of office workers will be vastly different from the present one. In fact, more change is expected in the office in the new decade than has occurred in the past century. Some of the more obvious changes that will occur deal with new job skills, worker attitudes, job satisfactions, career growth patterns, and level of professionalism required to handle the new responsibilities.

The future office configuration shows the merging of technologies, such as data processing, micrographics, electronic mail, and telecommunications, with word processing serving as the catalyst in integrating these technologies into a completely integrated information system. Understanding the relationship of these new technologies and the development of skill in their use are essential for working in tomorrow's office.

Along with the development of the new technical skills comes the necessity for acquiring new attitudes toward both work and fellow workers. The ability to accept the challenge of (constant and sometimes major) change in work requirements and responsibility levels and the need to understand the interrelation of the new technologies require a new application of teamwork and the development of both oral and written communication skills.

While job satisfaction for office workers has been given varying degrees of attention over the decades (with many choosing to ignore it entirely because of the difficulty in measuring performance), techniques are now available to precisely measure many

forms of output. Office workers want and need to know what the job standards are and how they may meet those standards in order to advance. Systematic evaluation programs based on carefully developed standards will enable office workers to establish realistic objectives and constantly monitor their performance. In addition, new technologies enhance and facilitate the need for office workers to feel a sense of accomplishment and job satisfaction.

The old idea of "once an office worker, always an office worker" has given way to new career paths growing out of the new office technologies. Major corporations are envisioning this approach as an important step in attracting the next generation of office workers and developing both horizontal and vertical career paths.

The attitudes, types of knowledge, skills, and competencies required for successful performance in tomorrow's office also point to a higher level of professionalism of office workers. Organizations that are divided into small, integrated, professional work groups, created to more efficiently and effectively accomplish increasing amounts of work, mean higher levels of training for initial employment and a commitment to continuing education programs. Flexibility and curiosity will be necessary as office workers are required to constantly adjust to a changing office environment.

Business Education Meeting the Challenge

Will business education be at the forefront in meeting the challenge of the new office technologies, or will it be some other existing or yet unknown academic area that accepts the challenge? Business education must seize this opportunity to prepare future generations of office workers by recognizing word/information processing as the catalyst for integrating new office technologies, engaging in a massive program to upgrade instructional staff, modifying existing subject matter, and developing new programs that emphasize the new office technologies.

Recognize Word/Information Processing as the Catalyst for the Integration of New Office Technologies. As the new office technologies emerge, office workers must have knowledge and skills in human relations, communications, records management, and electronic systems, such as electronic mail, telecommunications, optical character readers, intelligent copiers, and computerized phototypesetters. While each of these areas seems to have operated somewhat separately in the past, they are rapidly

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being fused by word/information processing. Early recognition of the integrating force of word/information processing is essential if business education is to assume an expanded role in preparing office workers.

Engage in a Massive Program to Upgrade Instructional Staff. Not since the initial formal preparation of business teachers has the need been so great as now for both pre- and in-service teacher education programs on office technologies. The combined efforts of higher educational institutions, professional associations, and business and industry are needed.

Modify Existing Subject Matter and Develop Programs which Emphasize the New Office Technologies. Predictions are that ninety percent of business and office education's present course content will be outdated in ten to fifteen years; it is imperative, therefore, that current offerings include new job skills, attitudes, job satisfaction, career growth expectations, and professionalism. Studies of new and future technologies need to be conducted to assist in the revision of course content and to teach about originating, producing, reproducing, storing, retrieving, and distributing information. Cooperation between education and business will help provide new programs to prepare office workers for new office technologies.

Does the Office Copier Have a Place in Your Curriculum?

Dennis E. Bauer

COPIERS, ALONG WITH THEIR USE and misuse, have become a permanent fixture in today's office. Because of this increased usage, it is imperative that the classroom teacher incorporate copier instruction in the business education curriculum.

Simple copiers have been on the market about one decade; quick-copy offsets, about seven years; and automated offset systems, just over four years. Statistics show that "The growth of high-speed copiers per year is expected to be 14 percent, while the use of the quick-copy offset is expected to grow 30 percent per year, and some hybrid copiers are projected for an 88 percent growth rate."

The copier is a viable "tool of the office"; however, it can also drain thousands of dollars from monthly overhead through its misuse. Factors such as which copying process to use, anticipated copying volume, and quality of copy have a direct bearing upon the effective use of the simple office copier.

Where Should Copiers be Taught?

The most likely place to find an instructional unit on copiers is the office reprographic class. After all, a copier is a duplicating process and should be taught along with fluid, stencil, and offset. Other alternatives might include clerical practice, secretarial procedures, office practice, Typing II, and office machines.

Content

Students need to be aware of the features of a copying process

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before they can make an accurate decision about which copier makes the best copy, is the least expensive to operate, and is the easiest to maintain.

The following outline should be helpful in preparing an instructional unit on copiers:

I.   Copying Processes
      A. Electrostatic
      B. Thermographic
      C. Diazo
II.   Wet Process Copiers
III. Dry Process Copiers
IV.   Decision Making (Suitability of Copiers for Jobs)
      A. Copier vs. fluid process
      B. Copier vs. stencil duplicator
      C. Copier vs. offset
      D. Copier vs. carbon copies
V.   Special Features
      A. Thermal fluid masters
      B. Thermal fluid stencils
      C. Offset masters
      D. Overhead transparencies
VI.   Illegal Copying
VII. Paste Up
      A. Correcting single words and making copies
      B. Paste up for copying

Preparing Overhead Transparencies

As top- and middle-management employees continue traveling from company to company and communications remains one of their main objectives, the use of the overhead will continue to increase. The secretary is generally responsible for preparing the original and transferring it to an acetate sheet through the use of a thermal copier. Carbon or mylar ribbons will reproduce the best image and should be used for all typing when preparing the original copy. The primary size typewriter, which types six spaces per horizontal inch and four lines per vertical inch, projects well and can be read easily. The orator print element may also be used, which uses pica spacing.

Carbon Copies

As the copier is being used more and more to replace carbon paper, the carbon copy (cc) notation is being replaced with the

photocopy notation (pc). As copiers become more sophisticated in their capabilities, it becomes more important for students to become familiar with and use critical thinking when deciding to use the copier. Many copiers will print on any letterhead or stationery, use various paper colors, print in color, and use double-sized copying.

Copy Decisions

The following four guidelines (Bauer and Strahl, 1975) should be considered when determining the proper copying equipment for a given activity:

1. If more than 10 copies are needed, investigate other duplicating processes, which might be less expensive per copy.
2. Inexpensive copiers will do a satisfactory job for intra-office needs.
3. When quality is important in a single copy, the electrostatic copier should be considered since many brands reproduce on bond paper.
4. Total copying needs should be considered when purchasing copiers. Some copiers will transfer originals to offset masters, transparency film, colored paper, mimeograph stencils, fluid masters, gummed lables, and letterhead stationery.

Copier Misuse

The availability of copiers in today's office provides a temptation to copy materials that are protected under copyright law. Permission should be obtained from publishers and authors before copies are made of any copyrighted materials. Federal law also forbids the copying of many documents, such as a passport, driver's license, draft card, government securities, and immigration papers. More information about the New Copyright Law may be obtained by writing Educational Research Service, 1800 North Kent Street, Arlington, VA 22209.

Other misuses of the copier include non-business copying, copying internally produced documents, making more copies than required, using the copier as a printing press, recopying, and operator errors.

The copier is quickly becoming an integral part of office operations, improving both speed and breadth of communications and records maintenance, while at the same time its misuse can add hundreds of dollars to monthly overhead. It is necessary, therefore, that business education teachers begin to educate their students about the "office copier."

Equipment

Should the classroom teacher purchase a variety of copiers for instructional purposes? Definitely not! In many cases no new equipment will be needed for classroom use. Most schools today already have thermal copiers and a plain paper copier that can be used quite effectively by the business education students. The market reflects over 100 copiers now being manufactured, most of which fall into one of the three categories: electrostatic, thermographic, or diazo. Students may be introduced to all three types of copiers by using copiers presently available in the school and by visiting local businesses that use copiers.

Prepare today's students to be effective users of copy equipment. The student will benefit from the information, and business will profit by having efficient copy users who will save the company both time and money.

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The Disabled Can Do the Job ... and Do It Excellently!

Frances Mostel Poggioli

Janie has scoliosis, a disorder of the spine that causes her back to curve and gives her a slightly stooped appearance. Tom has paraplegia, a paralysis of the body caused by damage to the spinal cord through injury or disease. Marie lost the use of her left hand as a result of an accident. Jim lost one hand and part of his lower arm and was fitted with a prosthesis. These individuals are identified as "disabled"; however, they are employed as bookkeeper/typist, accountant, medical secretary, and computer salesman, respectively.

What do all the above-mentioned people have in common? They are all disabled or handicapped who are gainfully employed. In spite of their respective disability or handicapping condition, however, through the traditional education system, they have gained the skills, attitudes, and values necessary to be gainfully employed.

Types of Disabilities and Handicaps

There are many types of disabilities and handicaps. Some of the most prevalent in the United States, as reported by Lomastro and Meadows (1979) are: neurological, special sense organ, respiratory, cardiovascular disabilities, digestive, skin, mental disorders, mental retardation, emotional illness, mental illness, learning disability, drug abuse and alcohol abuse, and psychological disorders.

Disabled persons exceed four million worldwide (Serenity, 1981). In the United States alone, there are some 250,000 persons who

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are paraplegic, and 10,000 people become paralyzed each year through injuries inflicted in auto, sports, and other types of accidents (U.S. Technology and Research Foundation, 1980).

A basic principle that must be clearly and firmly stated is that the disabled person is fully human with corresponding innate rights. Handicapped people must, therefore, be assisted in taking their full place in society at all levels, as far as is compatible with their capabilities (Serenity, 1981). Accordingly, education for and employment of the handicapped must be provided.

Rehabilitation Medicine

Enormous strides have been made since World War II in mainstreaming the handicapped, both educationally and vocationally. Rehabilitation medicine has become an accepted specialty at bringing the disabled person to the maximum functioning level. It aims to restore the handicapped to the fullest physical, mental, social, vocational, and economic usefulness of which they are capable. It makes each disabled person and the persons in his or her environment aware of one's potential and ways to help achieve it. This specialty offers the handicapped an opportunity to explore the possibilities of a new vocation. "Vocational training is actual training for competitive employment." (Handbook of Services, 1980). Options for training include four-year colleges, community colleges, rehabilitation centers, technical or trade schools, on-the-job, and private foundations.

Educational Programs

Over 100 colleges in the United States have programs designed to accommodate "special students." For example, Bakersfield College in California provides audio cassettes for blind students, television screens with enlarged print size for dyslexic students, and interpreters for the deaf. This college integrates these "special students" into normal classes. (Levine, 1981)

The New York Daily News (November 21, 1981) reports a unique program for training handicapped in operating word processors offered by the Federation Employment and Guidance Services of New York. Trainees have equipment installed in their homes, and instructors are then sent there to conduct the training.

Ramsey (1980) reveals that rehabilitation centers, through educational therapy, offer courses in typewriting, shorthand, bookkeeping, and accounting. These subjects will always stand in good stead and almost always assure future employment. Training in

peg typing is used by those with limited hand and upper extremity function.

Many disabled, especially the paraplegics and quadriplegics, are often unable to return to their former occupations. Retraining and vocational rehabilitation centers are necessary to re-equip this "new minority" with employable skills. Additionally, many senior and community colleges have made their facilities accessible to handicapped individuals.

Employment

Rehabilitation centers and educational institutions aid the handicapped in opening doors through business, secretarial, and vocational training and re-training; this assistance enables the handicapped to ultimately find their respective places as fully qualified workers. In addition, a new affirmative action program (Section 503 of the Rehabilitation Act) is assisting handicapped people in greater numbers than ever before to find employment in businesses and industries across the United States.

One inherent weakness is that many employers lack direct experience with handicapped employees. The employment market must be apprised of the potential of the handicapped work force. Employer attitude, however, frequently blocks current placement attempts despite the availability of information on how well the handicapped can perform when given an opportunity.

As disclosed by Turner (Spring, 1981), a Civil Service Commission study found " . . . that disabled workers had a lower rate of attrition, had less time lost due to accidents, and had their absentee record compare favorably with the records of non-disabled." The United States Office of Vocational Rehabilitation conducted a survey involving 100 large corporations. They compared the disabled to able-bodied employees and reported (Tombari, Autumn, 1979) the following:

	No Difference	Disabled Lower	Disabled Higher
Job Productivity	66%	10%	24%
Accident Rates	41%	57%	2%
Absentee Rates	40%	55%	5%
Turnover Rates	16%	83%	1%

Considering these figures, are employers overlooking many potentially good and reliable employees? The oversight by hiring personnel is attributable to a lack of knowledge concerning the

work potential of the handicapped. Negative attitudes and misconceptions about the handicapped worker must be erased.

> People with disabilities keep proving that they are as capable as other workers. As reliable. As ambitious. And just as likely to succeed. At IBM the proof is everywhere, in every part of our business. Yet some people just won't believe that the disabled can do the job. It has to make you wonder who's handicapped. (*New Yorker*, July 8, 1981).

As cited by Linscott (November 3, 1981), some of the training programs and employment practices of large institutions are:

- Chemical Bank hires handicapped workers for 12 weeks of formal and on-the-job training.
- McGraw-Hill runs consecutive 12-week secretarial and clerical training programs for the handicapped.
- Equitable Life Assurance, Private Industry Council, Brooklyn College, and Wang Lab are running a pilot program to train 15 homebound severely disabled in word processing. Equitable expects to hire most of them.
- Manufacturers Hanover Bank hires and trains 6 to 8 blind computer programmers a year.
- IBM has implemented a program designed to teach severely handicapped individuals to program via on-line terminals which are installed in their homes.

Other businesses and industries aggressively pursuing the handicapped, as revealed by the U.S. Committee on Employment of the Handicapped (1979), are: DuPont in Maryland, Horne Storage of North Carolina, John Hancock Mutual Life Inc. of Boston, Control Data Corporation of Minnesota, Cross Manufacturing of Kansas, GPK Products Inc. of North Dakota, and U.S. Steel Corporation.

In honor of the United Nations' 1981 Year of the Disabled Persons, a Job Fair for the disabled was held at the Los Angeles Convention Center in the spring of 1981. Almost 300 of Southern California's largest employers were represented, and they were ready to employ the qualified disabled job seeker.

Summary

Through education and vocational rehabilitation, the disabled are gaining visibility in the business and industry worlds. They are emerging as a growing minority; they are no longer hidden. "Handicapped people don't want separate but want equal treat-

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ment. They want the same opportunity given to others." (U.S. Committee on Employment of the Handicapped, 1979).

Perhaps the following comments by Dr. Harold Yukor, provost, Hofstra University of Long Island, will enlighten many concerning the word *disability*:

> Disability is an unfortunate word. It would be improved by a hyphen—*dis-ability*. The word *disability* implies a negative: what people cannot do (U.S. Committee on Employment of the Handicapped, 1979).

He does not agree that he is a "disabled provost . . . rather a provost who happens to have a disability"—cerebral palsy.

Employers must realize that disabled/handicapped people have skills and talents, and they initially require an opportunity to prove that they are qualified and capable of performing as competent employees.

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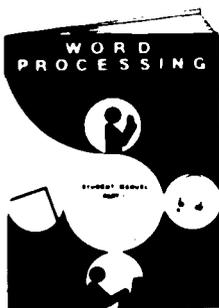Presents the **Philosophy, Procedures** and **Language** of the field.

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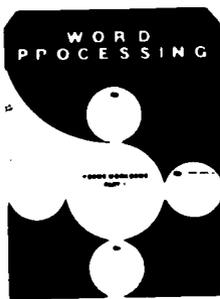- A teacher's manual (guide, projects and tests)
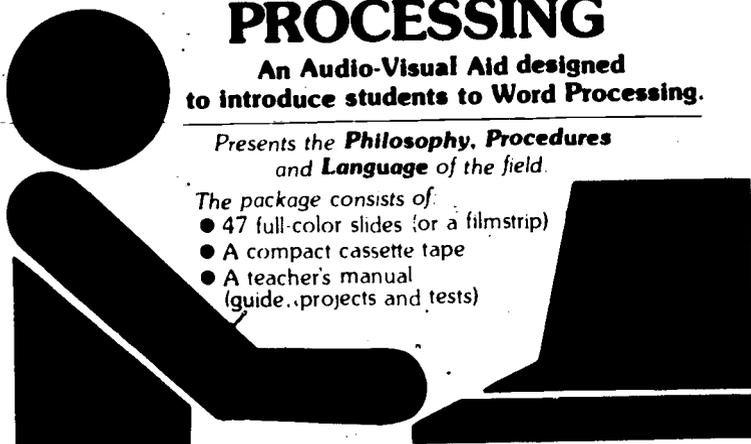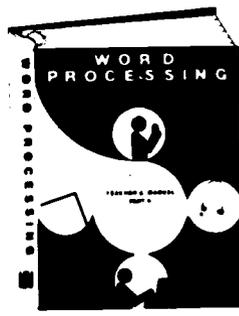
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Simulation Exercises: A Key to Approaching Reality in the Classroom

Louis Olivas and Barry L. Van Hook

ONE OF THE MOST CHALLENGING and stimulating teaching methods used by educators today is the simulation exercise. Nesbitt (1971) defines simulation as "a selective representation of reality that the designer deems relevant to his purpose." In other words, simulations reduce situations in both size and complexity so that basic elements can be recreated in the classroom. A review of teaching materials available to business educators indicates a growing trend in using simulations. This article provides a rationale and expresses the advantages and implications of simulation games in the classroom.

Applications For Business Instruction

Many applications for using simulation exercises in the teaching-learning process exist, but perhaps the greatest benefit of simulations to the business curriculum lies in their application to virtually all content areas. An instructor's familiarity with course content will suggest many simulation opportunities ranging from simple to complex. Below are listed several suggested applications.

1. Advanced clerical courses can be structured as administrative service pools. At least one institution, a Colorado university, has established such an arrangement. This pool serves many of the correspondence and clerical needs of the business school.
2. Business law classes can also be enhanced through simulation. Mock trials can add a sense of realism to course

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content and, at the same time, maintain student interest.

3. In-basket exercises can be used in many office-related classes. In baskets provide practice in decision-making, work flow, and office procedures.

4. Marketing students, who have learned personal sales techniques, can practice these techniques through simulation. Sales demonstrations allow students to polish and perfect their art.

5. Consumer educators who seek to realistically augment instruction, or buymanship, can structure simulated "buying sprees." Once students have selected a particular commodity for "purchase," they could then opt for a single brand based upon price, quality, service, warranty, etc.

6. Collegiate-level courses for advanced small business students can use the Small Business Institute concept of business consulting. Although more realistic than typical simulations, this concept places student teams with actual clients. Thus, students bring all their resources to bear on the client firms' problems.

7. Data processing students can apply their theoretical knowledge to actual problems. Students can turn their attention to real data handling difficulties in the school or community.

8. Introduction to Business students at Arizona State University regularly participate in a computer-assisted management decision game. Armed with basic data about cost, demand, regulation, etc., student teams make product-related decisions affecting the production, price, and marketing of hypothetical consumer commodities. The object is to increase each firm's net worth and to illustrate a variety of business principles and practices.

9. Advertising students in many American colleges and universities engage in regional and national competition simulating ad campaign development. After researching a specific product and its market, basic decisions are made relative to media choice, strategies, and format. Student teams then prepare professional-appearing presentations for the product.

10. Many business courses could use a modified Junior Achievement concept to infuse a degree of realism to education. Products can be designed and produced, financing arranged, marketing and distribution planned and executed, and financial records maintained. This simulation ex-

ercise can provide both breadth and depth of experience.

11. <u>Both general business and consumer education classes can capitalize on student interest in motor vehicles.</u> Given a sum of simulated money and a source of periodic income, students "purchase" a vehicle from classified ads. They must budget their resources to cover all expenses—payments, insurance, maintenance, fuel, etc. Unexpected crisis, instigated by the instructor, can add spice and uncertainty, not to mention realism, to this simulation.

12. <u>Teaching students to properly use and maintain personal checking accounts is an educational task that lends itself quite well to simulations.</u> Deposits, payments, service charges, and reconciliation activities can be directed through a practice set approach.

The preceding examples are by no means complete or exhaustive; they are merely commonly used techniques. The instructor, when armed with minimal imagination, can surely devise many other examples. Complexity is not essential; relevance is. Briefly stated, simulations can enrich any educational environment.

A Rationale For Using Simulation Games

Although current research yields no significant improvement in the learning outcomes when using simulation, some research indicates that students using simulation learn as much as those not using simulation. (Kidder, 1971, and De Kock, 1969) Simulation provides the following benefits:

- Both teacher and student break from the traditional text/lecture method.
- Simulations promote a relaxed atmosphere but one where learning occurs.
- Students become excited, actively participating in the learning process, especially with peer interaction.
- All students, regardless of learning ability, can participate in the simulation.
- Students' attitudes toward subject matter change positively. (Livingston, 1970)
- The teacher can better observe and supervise the activity of separate groups rather than devote time to one instructional method.
- This allows more time for an attention span of a small ratio from teacher-to-student. Thus, the teacher can more closely observe productivity and quality of student interaction.

- Teachers can either develop or purchase simulations custom tailored to a particular learning activity.

Implementing the Simulation Exercise

The teacher should first allow proper time for getting to know the students and then allow the students to feel comfortable with each other. This time frame will vary, of course, depending on the class size, subject matter, and experience of the teacher. The first direction is to develop a viable objective for the simulation exercise. In other words, what advantages and learning outcomes will the students derive as a result of the exercise? Having a viable objective will also provide a method of measuring the learning outcome(s).

Once this objective is developed, the teacher must then become acquainted with the structure, procedures, roles, and class organization necessary for conducting the exercise. Gillespie (1972) suggests that teachers should ask the following questions about a simulation before designing or implementing it:
—Is the exercise interesting?
—Is the exercise workable in the classroom?
—Does the exercise have a sound knowledge base?
—What is the central problem to be explored?
—What choices do participants have?
—What are the rules?
—How is the exercise organized?
—What summary activities are suggested?

Before attempting to design your own exercise, become acquainted with as many commercially produced simulations as possible. Such a review will give you a perspective of what to design (or not to design), the problems associated with simulation design, length, style, format, and most importantly, the instructor's guide. If you do purchase a simulation, do not hesitate to change it to meet specific needs.

Teacher's Role

In using a simulation, allow for as much creativity as possible, but be careful not to lose sight of the learning objective. Play your role, but do not interfere with the students more than necessary. After the exercise, you *must* analyze the simulation; otherwise, educational gains may be lost. Again, your pre-established objective will be your measure of changed behavior and indicate if re-teaching is necessary. Note the following illustration used

for the Elements of Business Enterprise Class, Arizona State University (Freshman-Sophomore level).

ELEMENTS OF BUSINESS ENTERPRISE
COMPREHENSIVE TERM PROJECT

The project is designed to give you an opportunity to develop a business model based on the information presented in class, your case studies, term paper, management decision game, and text. You, as a member of a team, will create, design, and structure a "company" of the team's choice. The project must include:

1. Type of ownership and name of the company.
2. Product(s) or service(s) you will offer.
3. Location(s).
4. Size. (Include organizational chart of major divisions, departments, etc.)
5. Budget needed to begin and operate the company (for at least one year).
6. Company philosophy on: social responsibility, energy, pollution, and unions.
7. Preferred management style and reasons.
8. Personnel:
   a. Who will be hired? From where will they come? (recruitment)
   b. Management levels
   c. Salaries
      -Senior Managers
      -Middle managers
      -Employees
   d. Company benefits, holidays, vacation, sick leave.

Your team will be required to present to the class (in 20 minutes) all of the information outlined above. Be creative! Use poster boards, chalkboard, overhead transparencies, handouts, etc., in your presentation.

Note: A written report is *NOT* required. Follow the above criteria as a basic outline when you present your company. In order to accomplish this task, you will meet as a team the following class dates:

April 26, April 28, April 30, and May 2

Team presentations will be made to the Chairman of the Board (Professor) May 5 and 7. A minimum of three team members must present the "Company." It will be the team's responsibility

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to inform me about those students who *did not participate* or *show up* for team meetings.

Maximum points allowed for this project: *75 points*

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Try the Mirror Approach in Accounting

Charles Hamed

HIGH SCHOOL ACCOUNTING STUDENTS are usually proficient at developing correct journal entries, but they may lack a real understanding of the interrelationship of ledger accounts. Accounting textbooks typically present and analyze business transactions from only one set of accounting records. I believe students would gain a better understanding of certain transactions if such transactions were shown affecting more than one business firm since any external transaction involves more than one company or one individual. This teaching method is the *mirror approach*.

Let us assume that your students have completed chapters on merchandise purchases and sales on account, along with discounts. They would then be ready to analyze selected transactions simultaneously from both the buyer's and seller's perspective by keeping two sets of accounting records. To illustrate this mirror approach, let us have ABC Company purchase merchandise on account from XYZ Company. Using one-half of the chalkboard or overhead projector transparency, make a general journal entry in ABC's accounting records:

Purchases	2,000	
Accounts Payable/XYZ		2,000
Invoice 7653, terms 2/10, n/30		

Then, on the other half of the transparancy, make this entry in XYZ's accounting records:

Accounts Receivable/ABC	2,000	
Sales		2,000
Invoice 7653, terms 2/10, n/30		

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Students immediately see the relationship of the entries and how the entries "mirror" each other. What is a debit in one set of records must be a credit in the other set of records. Follow this entry with another transaction. ABC Company pays the liability within the discount period. Make the general journal entry. (The cash journal could be used, but the debit-credit comparisons are better illustrated with general journal entries.)

Accounts Payable/XYZ	2,000	
Cash		1,960
Purchases Discount		40
Paid in full within discount period, Check G4566		

Request your students to immediately make the entry which would appear in ABC's accounting records as follows:

Cash	1,960	
Sales Discount	40	
Accounts Receivable/ABC		2,000

You should also use both companies' related ledger accounts, including subsidiary ledgers. Each company's general journal entries can be posted separately, or posting can be performed simultaneously for both companies. For example, when you post the debit to Purchases for $2,000 in ABC's accounting records, follow it by a credit to Sales for $2,000 in XYZ's accounting records—and vice versa with the other·items in the entries. This technique enables learners to clarify the meanings of debit and credit in a way they may not have understood before. *Please remember that transactions used in the mirror approach are used only after students have learned these transactions using one set of accounting records.*

Here is another example, showing the entry on two different sets of accounting records.

Sales Returns & Allowances	60		Accounts Payable/XYZ	60	
Accounts Receivable ABC		60	Purchases Returns		
Returned two A-43			& Allowances		60
			Returned two A-43		

Here are additional suggestions and considerations when using the mirror approach:

1. If you attach dates to the same transaction on both sets of records, you must realize that the dates will not be the same. For example, XYZ company may journalize the sales transaction days before ABC Company shows the merchandise purchase on its

records. When you begin the mirror approach, use the same dates for the same transactions to avoid confusion.

2. Different colored chalk or transparency markers can enhance teaching the mirror approach; you have, therefore, many options to visualize both companies' entries. For example, you can use one color to identify the purchaser's transactions and another color to flag the seller's records. If you prefer, you can use the same color to match a transaction on both sets of records.

3. Have two students go to the board. One student will work with the internal company's records; the other student will handle the external company's records. Give them a transaction to complete, either using the general journal or T accounts. This method can be of striking benefit in showing the close (but reverse) relationship between the two sets of records.

4. If students have difficulty grasping basic debit and credit concepts, I do not recommend the mirror technique until much later in the course.

5. You can easily create transactions and/or business forms that provide realism and practice for your students by using two sets of accounting records. By pairing students, one pupil can represent the external company and the other the internal company. This routine enlivens the learning process, and students can easily check the "other" records to see if the transactions are correctly mirrored in reverse form. Or, if you prefer, the same student can journalize and post the transactions for both companies.

The mirror approach works best on selected occasions. Again, this teaching method should not be introduced until the students are well along in the course. They should better understand the interdependence of business transactions. They will certainly get a clearer picture of the meaning of debits and credits.

Job training now...
real job
success later.

How to Get a Microcomputer in Business Education

Robert K. Eley

COMPUTER TECHNOLOGY is a phenomenon we have come to accept and one about which the majority of us are at least conversationally literate. Few of us, however, have recognized the emerging, essential nature of computer skills in either the personal or occupational lives of our students. This is evidenced by the very low percentage of programs that include computer learning and skill development as a basic component in a well-rounded business education curriculum.

Issues

Two issues appear to be responsible for the current curriculum dilemma. First is the initial equipment expense. Yet one need only look at any computer-oriented periodical or an evening of television commercials to recognize the rapidly declining effect of this factor. Microcomputers are affordable for educational training!

The second issue is one not so easily overcome—teacher apprehension. Teachers appear to be apprehensive for several reasons. Initially, they are concerned about finding the time in an already-heavy schedule to incorporate microcomputer learning activity into the business course. Also, teachers admittedly have limited confidence in their ability to understand and effectively use a microcomputer in the classroom. Finally, for those who are willing to try, the marketplace is confusing with the myriad of microcomputer makes, models, and options.

In response to these concerns, time must be provided to realign both departmental and individual teacher goals. Business teach-

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ers must recognize that computer skills are an essential technological component of any business education curriculum. They should recognize that the teaching-learning objective is to know *how* to operate and use the microcomputer but not necessarily *what* makes the microcomputer work. With regard to hardware and software, the selection is expected to be considerably simplified throughout the 1980's among the dominant manufacturers. Along with this trend will come well-trained educational sales representatives, possibly former teachers, who have the ability to discuss with classroom teachers the educational applications of both hardware and courseware.

Guidelines

The eight major guidelines discussed below should serve as both a stimulus and an organizational guide when developing a curriculum that uses microcomputer technology.

1. *Unite the department.* Curriculum development and implementation are far more successful when they evolve from a broad base. Use your leadership skills to encourage *every* teacher to participate in this important development. Some form of in-service from the beginning may be helpful. For example, teachers could take courses on college campuses to gain both experience and confidence. They could also take advantage of demonstrations and hands-on experiences from manufacturers' sales representatives. Selecting a good bibliography and dividing the responsibility for reporting to the faculty are other viable ideas. In other words, form a team effort to overcome apprehension and explore the possibility of a microcomputer curriculum.

2. *Establish both short- and long-term goals.* First, include input from both business and industry through an advisory committee. Others who know the non-employment-related values of microcomputer skills, such as parents, should also be represented on this committee. Have this committee determine answers to questions, such as: Where do we want to be one, two, or five years from now? Is usage potentially broader than the business education department boundary? What students will we serve—disadvantaged, talented, or handicapped students; vocational or non-vocational students; youth or adults? Where will we house the equipment? Will we add a new course(s)? Do we need in-service education for faculty?

3. *Determine what you want to teach, based upon defined goals, via microcomputer.* Will you teach the microcomputer or

will you use the microcomputer to teach — or both? At a recent National Educational Computing Conference, Arthur Luehrmann, founder of Computer Literacy Inc., stated that we may learn from, learn with, or learn about the microcomputer. (Stewart, 1981) To learn *from* suggests forms of computer managed instruction (CMI) and computer assisted instruction (CAI). To learn *with* involves processes of problem solving and simulations. Finally, to learn *about* suggests computer literacy and programming.

For those who are specifically interested in the development of a computer literacy course, the article "Computer Literacy: What is it?" provides a good starting point. (Johnson, 1980) Specific skills, knowledge, and attitudes in the format of basic content are identified and discussed.

During the planning phase, you should also consider the variety of available curricular applications. The microcomputer provides an excellent mode for the following learning activities: tutoring, drill and practice exercises, problem solving, simulation, remediation, enrichment, diagnostic and prescriptive services, and programming.

4. *Make initial equipment selection.* The proposed curricular activities will be only as successful as the match between the learning objectives and the capacity of the equipment. You may find using a planning instrument helpful. An *AEDS Journal* article entitled, "Selecting Microcomputers for the Classroom," (Thomas and McClain, 1979) illustrates the use of an instructional matrix. By carefully analyzing instructional areas and matching them with required specifications of computer capacity, the user identifies the essential features of the microcomputer that would best suit curricular needs.

Finally, you must consider the matter of available software. Software packages, when used, must be specifically compatible with preplanned learning outcomes. The extent to which compromises are made is a strong predictor of the relative success or failure of the curriculum in achieving program goals.

5. *Develop widespread support for implementation.* Solicit both internal and external support — parents, patrons, and business community, etc. The advisory committee should provide valuable support here. This activity may well be one of the most difficult steps in curriculum development. One school in Florida found that they had to tap internal, non-committed money to make the initial investment in microcomputers. Once the program was going,

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however, the community, formerly skeptical and of little help, could hardly wait to get involved in expanding the program.

6. *Commandeer a budget.* If you have widespread support, this activity is considerably easier. You must develop a rationale that supports both the educational value,and the minimal, per-student cost of this curriculum. An excellent guideline for estimating costs is available in the article, "Information Technology for U.S. Schools," by Arthur Melmed (1982). In a dollar-and-cents way, Melmed develops the rationale and cost of $30 per student annually for a computer-enriched curriculum averaging 30 minutes a day.

7. *Purchase selected equipment.* Within the available budget, you are now ready to purchase the hardware and software most compatible with your new curricular goals. Be particularly careful, however, to understand the number of hours of faculty training time provided by the seller as well as the specifics of any maintenance agreement included in the purchase or lease contract.

8. *Implement the curriculum.* Whether it be a single course or a full curriculum that uses the microcomputer for many courses or parts of courses, you will have fulfilled the challenge of Ronald Palamara. (Long, 1982) A former educator, Palamara, has founded a successful computer service firm. He states, "The role of education is to try to improve the learning process. Educators have an obligation to experiment with whatever new technologies are available. Certainly, the use of computers is an area of unrealized opportunity."

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The Ohio Business Teachers Association
1982–1983

55 Years of Service 1928–1983

1983 Business Teacher of the Year

Barbara Trent-Langdon

A FOURTEEN-YEAR MEMBER of the Ohio Business Teachers Association, Barbara is the Chairperson of the Business Education Department at Franklin Heights School. She earned her bachelor's degree in 1966 and her master's degree in 1974 from The Ohio State University. Currently, she is enrolled in a doctoral program at The Ohio State University. She has worked as an intensive office education instructor at Pleasant View High School and at Grove City High School and as an instructor at Columbus Technical Institute before accepting a position at Franklin Heights High School.

Professionally, she is an active member of the National Business Education Association; North Central Business Education Association; American Vocational Association; Ohio Vocational Association, BOE Division; Ohio Education Association; Delta Pi Epsilon, Rho Chapter; Southwestern Education Association; and the Columbus Area Business Education Association. She also holds membership in Phi Delta Kappa, Grove City Church of the Nazarene, Hawthorne Woods Residents' Association, and the National and State Office Education Association.

In addition to exemplifying excellence every day in the classroom, she, as department chairperson, provides leadership in developing an articulated business education curriculum and in establishing criteria for program evaluation. She has developed and implemented business programs for the mentally retarded; has assisted in writing computer programs for the use of microcomputers; has initiated an improved recruitment program for the business department; has participated in continuing education programs within the school district and at The Ohio State University; has assisted in the development of the first BOE-PERT Chart for a two-year accounting/management program in the State of Ohio; and has conducted special sessions in designing effective instruction, TABA teaching strategies, BASICS, and classroom management.

Along with Barbara's many presentations and workshops in the areas of classroom management techniques, business career development, and teaching techniques, she has co-authored the **National Business Competency Test—Office Procedures** published by the National Business Education Association. Currently, she is working on an accounting simulation for Houghton Mifflin Company.

Barbara creates an optimum learning climate for secondary, adult, and technical-level students. She is truly an innovative, motivational, and responsive Ohio Business Teacher.

1983 Business Educator of the Year

Kenneth R. Searfoss

As A CLASSROOM TEACHER, college instructor, and director of vocational and business and office education, Dr. Kenneth Searfoss has served the Ohio schools for the past 25 years. He has participated in the preparation of business teachers by teaching administrative and curriculum courses at Bowling Green State University and the University of Toledo. Under his leadership, the Toledo schools business area has grown from less than 30 business teachers to 40 units of vocational business with more than 65 business teachers serving more than 2,000 students in vocational and nonvocational business courses.

At present, Ken is the Executive Director of Vocational Education and Business and Office Education for the Toledo Public Schools. He earned a bachelor's degree in administration in 1957 and a bachelor's degree in education in 1958 from Bowling Green State University and a master's degree in 1963 and a doctorate degree in 1975 from Bowling Green State University.

Besides being a 22-year member of the Ohio Business Teachers Association, Ken also takes an active part in the National Business Education Association; American Vocational Association; North Central Business Education Association; Northwestern Ohio Business Teachers Association; and the Ohio Education Association. He has served as president and vice-president of Delta Pi Epsilon, Toledo Area Business Teachers Association, and the BOE Division of the Ohio Vocational Association.

Under his leadership, the first, full-time teacher-coordinator in adult business education in Ohio was hired to develop programs with industry; and a seminar involving the Mayor of Toledo, the State Superintendent of Education, the State Director of Vocational Education, and top leaders in industry and labor was held for the purpose of determining the future needs of business, job training, and education in Ohio. He served as a member of the National Association of Supervisors of Business Education and the Large City Directors of Business Education Organization, which has helped Ohio benefit from new trends and ideas throughout the United States.

His participation on the national level in policy decisions and recommendations through the National Business Education Association and the Department of Education have not only brought recognition to Ken but have helped keep business education and vocational education in a leadership position in Ohio. Ken is truly the Business Educator of the Year.

Marion L. "Kitty" Driehorst
1982–1983 President

Greetings from your President

As I leave the presidency and "retire" to a less active role in OBTA, I do so with many fond memories. These memories include the wonderful people I have been associated with during the time I have been serving OBTA as an officer. As enriching as the total experience has been, getting to meet and to know so many beautiful people has been well worth any time and effort I have expended as an officer. The plaudits and accolades bestowed upon me last year at the Columbus convention belong not to me but to all of you who so willingly gave of your time and/ or money to help in any way you were asked. In no way could any one person plan and execute an OBTA convention without the assistance of hundreds of people such as you. For the opportunity to make new friends, for getting to know old friends better, and for the support of all of you throughout my tenure as an officer of OBTA, I thank you and urge you to continue supporting OBTA and its leadership. You are the ones who make OBTA the well-respected, prestigious organization it is.

President-Elect's Message

Donna Smith Courtney
1982-1983 President-Elect

One of my goals as your 1983-1984 President will be to strengthen classroom business teachers' involvement in OBTA. I will propose a plan that will give every classroom business teacher in Ohio an opportunity to participate through the nine OBTA sectional groups of Central, East Central, Eastern, North Central, Northeastern, Northwestern, Southeastern, Southwestern, and Western. Active classroom business teachers strengthen OBTA, for the classroom teacher is the keystone of excellence in business education.
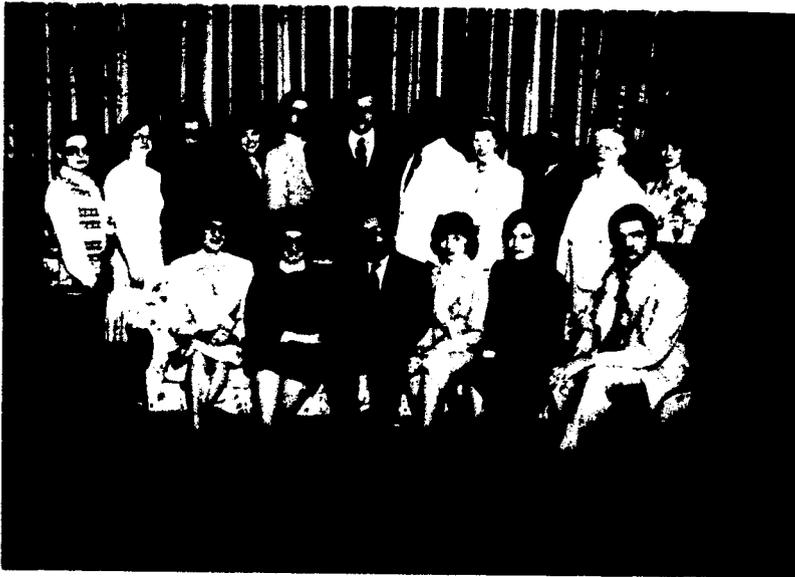
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The Ohio Business Teachers Association 1982–1983

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1953-1954	Harold Leith	1980-1981	Helen S. Morris
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		1982-1983	Marion L. Driehorst

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1971	Mary Del Tedesco	1978	Rose Marie Jisa
1972	Robert Balthaser	1979	David Gynn
1973	Mearl Guthrie	1979	Lillian King
1974	J. Marshall Hanna	1980	Nadine Bielich
1975	Galen Stutsman	1980	Nelson Madden
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