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ABSTRACT

The principles for use of the insurance, mercantile, and Lester-Hill simulation techniques in a program of office education are provided in this document. Guidelines for the development and use of such techniques in the classroom are suggested. The chapters outline the basic philosophy of student and business needs, curricular implications, teacher preparation and considerations, program preparation, evaluation and grading of students, public relations, program revision, followup programs, classroom designs, equipment for office simulation, resources, and references. Test graphs, pre-tests, post-tests, pre-simulation rotation charts, scoring sheets, classroom models, simulation models, and flow charts are included. (KP)

Simulated Office Education Guidelines

SIMULATED OFFICE EDUCATION GUIDELINES FOR WASHINGTON

by

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SIMULATED OFFICE EDUCATION GUIDELINES FOR WASHINGTON

INTRODUCTION

Simulation as a method of teaching is certainly not a new concept, as indicated by Weinberger when he stated:

> "although several highly sophisticated forms of simulation have been developed within the last 25 years, the basic technique has undoubtedly been used for centuries. War games are its oldest recorded form and many early civilizations taught their youth to fight as a beginning of their training."[1]

Thus, simulation has developed from ancient beginnings to sophisticated flight simulation, computer simulations used in game theory, and use of simulation for the space program, as well as many other areas of learning.

Although simulation is not new as a method of teaching particular skills and abilities, certainly the technique is relatively new to the office education teacher. A few innovators have become involved in simulation in office education programs, but generally the use of simulation in this area, at least until the middle 1960's, has been very limited.

One of the primary factors leading to the use of simulated programs in office education has been the ineffectiveness of previous methods of teaching office practice skills. The objective of the office practice class, as stated by business educators, has been and is to bridge the gap between the classroom and the job. The students enrolled

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1. Morris J. Weinberger, "Methods of Using Simulated Materials in Teaching School Administration," Wichita State University, 1965, p. 63.

in the class should be provided with experiences leading to job-entry skills.

Beginning in 1963, however, increasing amounts of written material were published indicating that current office practice classes were not accomplishing stated goals and that simulation could be of practical use in preparing future office workers. In 1963 Berry concluded in her study that office practice as it was being taught at that time could not be justified. She went on to indicate that:

> "the frame of reference for this course (office practice) should be based upon a concept of what future business needs might be . . . a course as versatile and flexible as the employee it hopes to develop."[2]

Similar results came out of studies published in succeeding years. Also coming out of these same research studies was evidence of increasing interest in the use of simulation. Noodle concluded in a study completed after Berry's that simulation of office situations would be a valuable experience for office practice students.[3] Driska, in a study published in 1967, stated that 80 percent of the state business education supervisors returning questionnaires from his survey indicated that simulated office education materials were needed due to the increased emphasis in simulated office education programs.[4]

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2. Doris A. Berry, "The Role of Office Practice Instruction in the General Office Assignments." Indiana University, 1963, pp. 215-216.

3. Jack Noodle, "A Study to Determine the Adequacy of High School Office Practice Instruction for the Modern Office." University of Nebraska, 1967, pp. 117-118.

4. R. S. Driska, "A Critical Analysis of Office Education on the Secondary School Level." Arizona State University, 1967.

High school teachers here in the state of Washington have, since 1965, become increasingly interested and involved in simulated office education programs. Beginning with the model office concept developed by Beverley Funk at Mountlake Terrace High School in 1966 to the present time, a consistent growth in the number of simulation programs has occurred. Teachers, administrators, business people, and individuals from the Coordinating Council for Vocational Education are expressing growing interest in such programs.

These guidelines are an attempt to aid Washington business teachers in the development of office education simulation programs for their classrooms. It is the goal of the authors that office education teachers will be able to read the material contained in this booklet, and, with the aid of some of the outside sources mentioned, complete the task of providing a simulated office experience for students who may benefit from such activities.

PHILOSOPHY

Simulation can be defined as a method of instruction which systematically abstracts and partically duplicates an environment in the classroom for the purpose of effecting a transfer of training from the classroom situation to the real environment. In the case of office education, it takes the form, as nearly as possible, of the real business office environment in providing life-like experiences to aid the transfer of training process.

The business education teacher has the responsibility of constantly searching for better methods of providing appropriate learning experiences for his students. In the past, this has meant the teaching of office education classes, specifically vocationally-oriented classes, by means encompassing everything from one-hour classes dominated by lectures to effective cooperative programs.

In attempting to provide the best avenue of learning for students, and specifically business education students, two prime considerations are important. These two considerations include: (1) Student needs, and (2) Needs of business.

Student Needs

When considering the needs of the students, the most obvious need is for the student to obtain marketable skills during the business education experience. In recent years in business education, it appears to be increasingly difficult for teachers to motivate and encourage students to recognize the importance of skill goals in preparing for employment.

It has been often said that if we are going to do an effective job of preparing today's youth for the world of work we are going to have to make the learning of skills and business knowledge more relevant to the individual student. Students should be able to see why various subjects are necessary and also to see the relationship between what they are learning and its application to the business world. In many respects this relationship has to be obvious almost immediately. Office simulation is an excellent method of supplying this relationship by combining classroom instruction with a simulated business environment. Students in a simulated program are involved in a realistic approach to obtaining skills and developing attitudes necessary for the business world.

A second important student need business educators should attend to is that of assisting the student in developing the noncognitive areas. The noncognitive realm involves an understanding of the processes in developing concepts, understandings, and attitudes necessary for effective group interaction. A heavy emphasis is placed upon the noncognitive area when the teacher utilizes simulation in the office education program.

For a student to fully extend his learning capabilities, he needs an orderly but permissive climate. The majority of simulations operate with this type of classroom structure. Basically, the simulation classroom may be called a non-teacher-oriented classroom.

Students should have the freedom to develop their own personalities in relation to the office environment rather than being forced to accept artificial guidelines of behavior. This does not mean that an office

simulation should be constructed to give the student complete freedom within the classroom. Orderly procedures should be established, and the students should be allowed to function as individuals within this framework.

Needs of Business

The needs of the business community are a second major consideration for the prospective simulation teacher. Business is in constant need of high school graduates with proficient skills. Characteristics such as punctuality, ability to accept responsibility, ability to work as team members, honesty, and many others are important to the employer. These characteristics need to be integrated into a program in such a way that the students live them.

Simulation can be the method by which the teacher can enable the student to reach objectives desired by business by controlling the environment in which learning occurs. Controlling the environment allows the teacher to provide those experiences of greatest value to the student by both individualized and group instruction. It also allows for strengthening of specifically weak areas a student might have, thus enabling better job preparation of students. The use of simulation allows students to understand the value of working cooperatively. The students learn values in the process by a "learning by doing" philosophy.

It appears that the coming years in office education will show a marked increase in simulation programs. Teachers, therefore, will need to become familiar with the development and operation of simulation programs in order that they might meet office education needs of the future.

CURRICULAR IMPLICATIONS

Currently, office education simulation programs are being offered in varying segments of time including short unit simulation, one-hour programs, two-hour programs, and combinations of time periods. The specific length of time allotted each day will depend on school scheduling procedures and the goals of the office education teacher.

Short Simulation

There are many classes in which a teacher may establish a short simulation activity to instill a sense of realism to the learning process.

Duplicating

If duplicating is taught as a separate class or is taught as part of a typing class or office practice class, a teacher may provide a setting for students wherein they simulate working as print shop employees. Students in duplicating may design and produce work orders, invoices, statements, etc., used in the actual receiving and processing of work orders. Orders may come from other students or from other classes. We are not recommending that this "print shop" become a duplicating facility for the entire school faculty. Far too often this becomes a "mill" to type history tests on spirit masters, and this situation should be avoided.

In the preceding example involving the print shop, class members may each contribute a chapter on duplicating equipment that they have researched. These materials may be put on stencils, duplicated, spiral punched, and bound into books. In the process, students learn how to operate the duplicating equipment, and, at the same time, produce

something useful. The materials in their books may be used as the "meat" for a final exam.

Business Communications

Direct students to choose a type of business they would like to own and operate. With direction from the teacher, students may design a letterhead for such a business. The letterhead should include a name, address, city, state, zip, area code, phone number, picture or symbol depicting the type of business, and perhaps a slogan. These letterhead designs may be forwarded to the duplicating class with work orders attached for each job. The work order will specify who placed the order, date wanted, number of copies, type of duplicating process, type style, color, and quality of paper.

Throughout a course in business communications, all letters to be written by students will be produced on their designed letterhead. When students have been instructed as to the format of a well written letter of inquiry or request, they may be directed to write the following letters:

A local employment agency regarding the hiring of a clerk or steno. Have student use real addresses available in your local telephone directories.

The telephone company concerning installation of a business phone and an extension.

The Internal Revenue for necessary and appropriate tax forms.

A local office machine store for information about a typewriter, adding machine, cash register, or other equipment.

A local bank requesting information about opening an account, ordering checks and deposit slips.

The Chamber of Commerce for information about local trade associations.

An accounting firm regarding securing the services of an accountant for the new business.

The City Clerk regarding the purchase of a business license.

The State Tax Commission regarding information pertaining to the B and O tax.

Choose several of your capable students to function as the outside world. These students may prepare general answers to all of these letters. The outside world may prepare their answers on spirit masters addressed in general to the class rather than to each individual student. All incoming mail from the outside world should be attached to the carbon copies of the original letters prepared by the various businesses.

When sales letters are introduced, student businesses may be asked to write to other businesses in the class extolling the virtues of their own service or product. Students may also write complaint letters to one another to be answered as adjustment letters. Some adjustment letters may be favorable and some may be unfavorable.

The new businesses may go through an application for credit in order to purchase a piece of office equipment. At this point, the "outside world" may assume the identity of a typewriter sales firm, for example. The typewriter firm may agree to sell the typewriter on a cash basis only but requests credit information about the new business. The student businesses respond by furnishing the requested information. The typewriter business may then write back granting credit in one case and refusing to grant credit in another.

The student businesses may also assume a few bad debts after which a series of collection letters may be prepared that will provide students with the experience of writing tactful but effective collection letters.

The purpose of this use of simulation is to provide realism for the students and to make the learning of correct letter writing more interesting, relevant, and believable.

Typewriting

After the teacher has introduced purchase orders, invoices, billing statements, etc., in form typing in the second semester, these forms are often stored and forgotten. Students fail to see the relationship between the various business papers.

A teacher may develop a two-week simulation unit whereby typing students simulate the ordering of products from a price list or catalog the teacher distributes. An example of this process might include the preparation of a ski equipment catalog prepared by a duplicating class. Then typing students may be directed to issue purchase orders for certain items in the ski equipment catalog. Purchase orders would be typed in duplicate. Students then mail the original purchase order in an envelope addressed to the ski equipment firm, keeping the carbon copy in their files. The first students completing the purchase order typing may begin checking the accuracy of the extensions on all purchase orders. This checking may be accomplished if the teacher will bring several calculators to the typing classroom. Next the typing students may become invoice typists. Again, forms are prepared with carbon copies. The

original invoice is mailed to the purchaser, and the carbon copy is filed.

The teacher may then distribute checkbooks to the students. At this point the students may be directed to type checks paying for the various items they have ordered. A check may be prepared to match every invoice, or one check may pay for several invoices. If the teacher gives the students an opening balance in their checkbook stubs, subtractions may be performed on the stubs.

The short simulation does provide a setting whereby realism may be brought into the classroom.

One-Hour Programs

An extension of the short simulation includes both one and two hour simulations. In many school districts it is quite difficult to arrange two-hour programs for students. In order to provide an effective office education curriculum, some schools have gone to simulation methods through the use of a one-hour office education simulation class.

All of the concepts inherent in a simulation class can be contained in such a program. The use of approximately 180 class hours in this kind of program as compared to the 360 hours available in the two-hour program restricts somewhat the amount of material that can be included. This does not mean, however, that such a program cannot be extremely effective.

Communications Unlimited, a simulation at Lincoln High School in Tacoma, is an example of a one-hour program. The materials for the simulation were developed by representatives of Pacific Northwest Bell

Telephone Company and Fort Steilacoom Community College in 1971.

This program operates for one hour per day for one school year and includes such units as: (1) getting acquainted, (2) communications skills, (3) business telephoning, (4) correspondence, (5) billing, (6) long-distance telephoning, and (7) credit extensions.

Communications Unlimited is an office simulation which is patterned after the actual duties of the service representatives in the business office of the Pacific Northwest Bell Telephone Company. Heavy emphasis is placed upon the use of the telephone as an important tool in business communications and customer relations. Students gain practical experience in preparing bills, composing business letters, handling customer complaints, collecting overdue accounts, selling new equipment and improved services, and representing the company in a business-like manner. The importance of tasteful personal grooming, manners, and appropriate dress receives considerable emphasis. Skills acquired can be adapted to most types of business office operations.

Communications Unlimited concentrates on four job classifications in two office situations: (1) Telephone Clerks in the Business Office, and (2) Payroll Clerk, Assistant Supervisor, and Supervisor in the Model Office.

All students are assigned initially as Telephone Clerks. Thereafter, the students are rotated through the three Model Office positions in the order listed above, serving one week in each position. Duties and responsibilities of each position are defined in a manual, and each person being rotated to another position is expected to help train his successor.

Each Telephone Clerk is assigned 25 customers. He or she computes customers' monthly bills, which include the service charge in advance plus city tax, toll calls, and applicable Federal excise tax, using specially prepared tax tables. The bills are typed in final form and inserted in window envelopes for mailing. The telephone Clerk is then responsible for all activity concerning her customers' accounts--complaints, inquiries, additional service, and collection of overdue accounts. The input is generated mainly by telephone calls and letters from customers.

One-hour scheduling makes it possible for many junior and senior students to enroll in the Simulated Office who could not normally afford to spend two hours a day or two semesters. The only prerequisite for the class is one year of typewriting.

Communications Unlimited can be taught in an ordinary classroom, even without sophisticated equipment. Having one area sectioned off for the Supervisor and Assistant Supervisor creates a more realistic situation, however. L-shaped or other office style desks add to the efficiency and appearance of the "office." A 15-phone installation with monitoring board, two of the phones being installed in another area of the building, provides good service. Desk organizers hold the necessary manuals, forms, and directories. File boxes for customers' records and storage carts for the boxes can be made by the Industrial Arts Department. Thus the initial expense for the telephone system, plus any other related equipment, is the only major expense for this simulation, except for the nominal cost of replenishing paper and supplies.

The teacher, although inconspicuous in the "office," is nevertheless the key to the success of the course. The teacher, or manager,

must be certain that the persons in the supervisory positions are carrying out their duties satisfactorily, that the work of the Telephone Clerks is being properly recorded, and that everyone is constructively busy. It is necessary, on occasion, to develop additional, challenging work for very capable employees. There is room for much flexibility within the course and for innovation. The teacher, therefore, must be enthusiastic, creative, and industrious.

Two-hour Programs

Currently, most simulation programs are developed for a two-hour class situation. Those two-hour programs use one or a combination of several types of materials such as teacher-developed materials, or materials published in cooperation with industry.

Most teachers and writers in the area of simulation consider the two-hour approach the most beneficial in terms of vocational preparation. Several reasons for this emphasis on the two-hour approach exist.

One of these reasons concerns the need for the students to receive the experience of working at a task or series of tasks for an extended period of time. In a shorter class period it has been found that too much of the period is required for gathering together and later storing the materials to be used in the simulation. Thus only a limited amount of time is available for actual simulation.

A second reason for the use of a two-hour period is that the normal office routine is established two-hour intervals. It is quite normal for the worker to begin work at eight o'clock. After two hours

a coffee break is part of the normal routine. Two hours later it is time for the lunch hour. The same routine normally occurs during the one o'clock to five o'clock sequence. Thus we find the normal office work day to be a series of two-hour time periods. It is quite realistic, therefore, to develop the office practice class based on an uninterrupted two hours.

A third reason for the two-hour period concerns the fact that in most simulation programs, the only prerequisite the student must have is one year of typewriting. Thus for the program to be successful and for the student to gain employable skills, a considerable amount of subject matter must be taught even prior to the simulation. This is normally accomplished through the use of presimulation or related units. Once these units have been presented, the knowledge gained must be integrated into the simulation allowing the students to experience the realistic office activites. This integration allows the learned skills and knowledge to be used in interaction with other people, providing for the interpersonal relationships considered so critical to vocational preparation. Such characteristics as the ability to get along with others, dependability, responsibility, and others are recognized and developed through the simulation experience.

Current examples of two-hour simulations include the Insurance simulation, the APEX simulation, the MOE simulation materials, as well as other teacher developed packages.

These programs typically have a yearly schedule providing for specific periods of time set aside for teaching related units or course

material necessary for the simulation. At a predetermined time, anywhere from 7 to 18 weeks into the school year, the simulation begins. The simulation may then continue for the remainder of the school year, or the class may experience an entrance to and exit from the simulation several times during the course of the year.

The bulk of the simulation programs operated in Washington provide for a model office, which is the parent company of the organization. The model office is normally located in another part of the business facility. Students provide the input into the parent office by functioning as either agencies or branch offices of the parent company. The input into the agencies or branches of the organization may be provided by the teacher or by students from other classes within the school.

A popular and effective simulation program operating in Washington and in other states is a two-hour class that meets daily for the entire school year. (180 days--2 hours per day--360 hours)

The auto insurance simulation at Mountlake Terrace High School, Mountlake Terrace, Washington, has been an ongoing program since 1967. With the assistance of SAFECO Insurance Company of Seattle and the Washington Insurance Council, materials such as forms, procedures, rate pages, and flow charts were published to assist in the simulation classes.

The auto insurance simulation operates with three distinct parts:

1. Student customers (Driver Education students)
2. Student Agents (members of the Simulation class)
3. Student company employees (members of the Simulation class)

Agents are trained to interview student customers for auto insurance. The resulting facts are translated to rates that lead to actual premiums. Source documents, therefore, are all created by students, not by the teacher. Documents are mailed, to the parent company for checking, verification, assembly, and posting as charges to agent accounts. Incorrect documents are mailed back to agents for correction. Completed documents form policies that are paid for, and agent commissions are earned.

Agents handle single-car rating and renewals during November and December following pre-testing, pre-simulation, and job applications. Multi-car rating is introduced in January. Claims fit in during February and March, and endorsements are introduced after spring vacation. Such a flow allows students to proceed throughout the year from a simple beginning, adding complexities as they progress. It is vital in a simulation to continue to "plug in" more and more complex activities in order to maintain high student interest. The repetition of a simple task or tasks will fail to motivate students to reach out for more and more challenges.

All students of the two-hour simulation rotate into the parent company at least once during the year for a period of 5 weeks where they assume positions of increasing responsibility.

The two-hour simulation also allows sufficient time to provide remedial training for students who pre-tested below the class average in production areas as well as in Business English areas.

This type of simulation encourages students to develop in the areas of human relations and in self-responsibility, for agents are

assigned to work in pairs and to maintain their own financial records. Check records, deposits, bank loans, monthly bills, bank reconciliation, commission statements, income and expense statements, and income tax filing are all built in to provide arithmetic tasks.

Students maintain their own filing system for each agency and keep carbon copies of each document created.

Typewriting is a continuous activity with machine transcribers being used as the means of communicating instructional units. Students type on actual insurance forms, type their own letters of transmittal, and compose their own correspondence.

Oral communication takes place over phone lines between agents and between agents and employees of the parent company.

Office machines are used by agents in rating and in the parent company in the verification and posting of the various documents.

Duplicating is incorporated in simulation by having the students learn the equipment as they design and prepare their own letterhead, checks, deposit slips, and many of the company forms used.

All mailings between agents and parent company require postage so students become familiar with postal procedures.

Simulation provides opportunities whereby a teacher may provide office-style dictation for shorthand students if such students are included in the simulation class. Some large schools split their simulation sections into clerical and stenographic. However, teachers may combine clerical and secretarial students into one simulation if the teacher aims for the development of office-style dictation rather than

the development of high speed dictation. Simulation as such is not geared to develop new skills--rather simulation intends to "pull it all together." Shorthand activities such as taking board meeting minutes, taking dictation over the phone, taking dictation from the office manager of the parent company, taking teacher instructions over the phone, etc., may be built into the simulation class.

Costs of doing business including the payment of wages, payroll taxes, and utility charges present students with an opportunity to have a feeling for the private enterprise system of profit and loss.

Other two-hour programs currently being used include a boat building company, a small loan company, a life insurance company, a fire and casualty company, a travel bureau--all of which are teacher created with the able assistance of industry within the business community where the teacher is located.

Intradepartmental Simulation

Currently, most simulations involve only one class in the business education department. However, there are many phases of the simulation program that can be strengthened if other business classes are included.

An example of this intradepartmental simulation approach may be explained by use of the bookkeeping class. Students who are enrolled in simulation classes may not have taken a bookkeeping class. Therefore, the simulation teacher is forced to dilute the bookkeeping material offered in the simulation. Intradepartmental resources can be utilized to create a stronger simulation in this situation.

The paper work generated by the students in the office simulation could be sent via a mail system or carrier to the bookkeeping and accounting class. The bookkeeping students on a rotating basis could operate an accounting firm or office.

The bookkeeping teacher might be able to obtain an office desk, new or old, and designate it as the simulation area. If this is not possible, have labeled signs prepared which identify the area and assign the student a title. Forms, journals, ledgers, and other support equipment should be added as the program grows. Besides the double entry bookkeeping process, the teacher might consider expanding into payroll accounting, year-to-date salary information, income tax procedures, etc. In developing this type of simulation, it would be preferable if both classes met at the same hour; however, this is not essential to the success of the program.

Business machines classes could also be involved in intra-departmental simulation. Work that requires calculating and tabulating could be sent to the machines class for processing. Purchase orders, invoices, payroll registers, and other data could be checked for errors in extensions and totals.

Students in the shorthand program can be brought into the office simulation as stenographers to take dictation from the office manager. This would be beneficial to the students in the model office and to those students in the shorthand classes. This would be particularly true if a teacher offered only a clerical office simulation and is unable to include a stenographic simulation in the curriculum.

If separate filing or duplicating courses are offered, these classes would fit into the intradepartmental simulation scheme. Data which needed to be filed permanently would be sent to the filing class which would act as a central filing unit. All materials needed for processing and reproduction in the program could be handled by the students in the duplicating class.

The examples just cited provide many opportunities to involve other department members in simulation activities.

Multi-disciplinary Simulation

A multi-disciplinary simulation program encompasses the utilization of students and teachers from disciplines within your school other than those in the Business areas. Examples of the use of multi-disciplinary simulation include the auto insurance simulation at Mountlake Terrace High School in which students from Driver Education classes and students from Auto Shop classes form an integral part of the office simulation program. Driver Education students form the nucleus of customers from whom flow the source documents that serve as a catalyst for the agencies and parent company to function. Agents interview student customers for auto insurance. Their input forms the raw data which is transferred in typewritten form to the parent company.

During the claims segment of the auto insurance simulation, estimates for damages that occur to insured cards are handled by the students in the Auto Shop.

School counselors participate in the multi-disciplinary simulation through the contribution of their talents in the interviewing and employment units of the simulation.

In addition, Home Economics instructors and School Nurses may be called upon to handle units on grooming and personal hygiene. However, it should be stated that in choosing these resource people from the faculty, it is important to select those with whom the business students can relate.

In the Small Loan simulation at Meadowdale High School in the Edmonds School District, student customers for small loans come from the Home Economics clsses. Here students arrange to make loans for the purchase of homes, cars, furniture, etc.

Full Simulation

An idealistic approach to office simulation would be the concept of a full simulation whereby the entire business education department would become a simulated business office. Students enrolled in the bulk of the business and office education classes would have an opportunity to become involved in an area of simulation related to the particular subject or skill being studied.

Since a full simulation is an idea rather than reality, further description will be focused on three areas which would have the greatest effect on making full simulation programs possible. These areas include (1) simulation work areas, (2) instructional methodology, and (3) student transit.

Simulated Work Areas

A full simulation might develop around the expansion of the insurance simulation. In addition to a model office facility, other simulation areas would be required throughout the business education department. Besides the model office, these areas might include an accounting and payroll department, central filing area, a duplication department and perhaps a data processing department. If a full simulation were to become a reality, all the simulation areas would have to function as a unit.

Instructional Methodology of Full Simulation

The instructional methods in a full simulation would have to depart from the traditional teacher-oriented learning experience. Obviously, the teacher will still be the main ingredient of each instructional area; however, the method of teaching and learning cannot resemble

teacher-oriented education. Many of the courses taught would have to be highly individualized.

This is necessitated by the fact that simulations have to be flexible and that students achieve and perform at different levels and speeds. A full simulation will require more specific knowledge by each student in relationship to equipment and skills learned. The students will have to advance through classroom learning at an individual rate that will allow them to better understand the material rather than being pulled along in the classroom.

Student Transit

By student transit, reference is made to the movement of students between the classroom instructional portion and the simulation areas. Questions like:

what system to use in making sure that all students are involved in work experience

at what point will the student be allowed to transfer from the instructional area to the simulation

what achievement levels will be expected of the students

how long will the student stay at each station in the various simulation areas

how will students have an opportunity to advance in the simulation to different jobs once they obtain more qualified skills

will the students be able to take all the instructional classes at any time during the day

are just a few that would have to be answered in applying this approach to full simulation in the business and office education department.

TEACHER PREPARATION AND CONSIDERATIONS

In deciding whether or not to use simulation as a method of teaching office education students, certain basic considerations should be undertaken by the teacher. Some of these are as follows:

Teacher Prerequisites

The prospective simulation teacher should ask:

Do I want to innovate?

Can I handle the unstructured setting and adjust to the flexibility necessary for simulation?

Do I have a business background? Have I worked in an office?

Can I change from the rotation-type system of teaching office practice?

Can I tolerate being pulled in all directions by students needing my attention?

Can I give up group demonstrations wherein I am the center of the group?

Am I willing to allow students a certain degree of freedom of action?

Am I willing to allow students to assume responsibility for their own actions?

Am I now satisfied with the results of a traditional office practice class in terms of personal development and human relations?*

Workshops

To provide the best possible experience for the students in the simulation, it is impcrtant that the teacher understand the methodology of such a program. This understanding may be gained in two basic ways.

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* "The You in Simulation," Beverley M. Funk, Washington Insurance Council, 1972.

The first and most important step for the teacher in understanding the simulation program is to enroll in a simulation workshop. The purposes for attending the workshop should be to achieve the following objectives:

1. To gain an overview of the area of simulation methodology.

2. To become familiar with available simulation materials and programs.

3. To gain practical knowledge and experience in designing and producing materials for a simulation program.

4. To gain some actual experience in developing a simulation program including identification of a type of simulation program to use, positions to include, work flow charts, procedures manuals, equipment and supplies necessary, public relations materials, and evaluation procedures to use in the program.

5. To gain actual experience of working through a simulation program and rotating through the positions of the simulation. This participation in the simulation procedures can be extremely helpful to the teacher in identifying problem areas, as well as providing confidence to operate the simulation.

Secondly, the teacher should talk to someone currently operating a simulation program. A close observation of the simulated classroom should be made to assist in understanding methodology and procedures of conducting the simulation class.

Selection of a Simulation Program

A simulation vehicle can be identified as the particular type of simulation to be used by the office education teacher to provide the most relevant experiences possible for the student. During the early years of simulation office education, this meant development of a "local" simulation.

In the past year or so, packaged simulations have been provided by companies such as Gregg Publishing Company and the 3M Corporation.

There are, however, many variables to be considered in the teacher's selection of a particular vehicle. These variables include such things as:

1. Grade level.
2. Number of students in the simulation.
3. Where graduates are employed.
4. Possibilities for consultive help.
5. Space.
6. Familiarity with an organization and its procedures.
7. Equipment.
8. Funding.

1. Grade Level

The grade level of the students to be served is important. Simulation as presented in the context of this material is primarily concerned with vocational preparation. That is to say that the primary objective of the office education simulation is to provide the student with the ability to get and hold a job in the business world. That being the case, the most beneficial simulation program will be the one which begins as close to job entry as feasible. This provision in itself has some variables to be considered. Will the simulation be a capstone course for the rest of the business program or will it be a program integrated with the other business courses, with the capstone course being an effective coop program?

If the simulation is meant to be a capstone course for the other business courses, it should be presented at the senior level of high school, providing realistic business experience as close to entry into the world of work as possible. If the program is preparatory to a cooperative experience, it may very well be presented during the junior year of high school. Under these circumstances, the senior year could include a one year cooperative program with the student being involved with work on the job as well as receiving relevant related course work.

2. Number of Students in the Simulation

The type of simulation program you operate will determine the number of students you can accept for enrollment.

If you are operating a four to five position office with at least one week of exposure at each position, the ideal number for a rotation system would probably be between 16-24. Assuming that all students will occupy all positions, too large a class (over 25), will have a detrimental effect on the time schedule for the entire year.

The input vehicle, remedial work, enrichment stations and individualized instructional programs cannot be effectively used if the number of students in the class is too small; under 16. The students would be using all or a majority of their time in the model office on the rotation system, and the rest of the class year feeding data into the simulation. There would be little time for the students to work on other functions. If this situation arises, you may be faced with bored students during the months of February or March.

There are programs in simulation which are not so dependent upon the number of students enrolled. Under the Lester Hill Program, it is possible to have up to thirty students in a self-contained classroom. Thus, if the teacher is planning to use the above simulation, the number of students that are needed or not needed has little or no effect on the program.

3. Where Graduates are Employed

Local employment opportunities may well determine the type of simulation the teacher operates. If there happens to be a particular employer in the community who hires a large percentage of the high school graduates, it might be wise to implement a simulation modeling the positions available at that particular business. Examples of an employment opportunity being a determinant of a specific simulation include the Insurance program, the Communications Unlimited program, as well as several programs involving government office jobs.

If no employer in the community hires a significant number of the high school business graduates, the teacher could use a simulation that provides for general office skills and knowledges. Units of instruction could be included in the program which provide knowledge in the areas that research indicates are important for future office workers.

4. Possibilities for Consultive Help

One of the very important concepts of simulated office education is the realistic environment provided for the students. The availability of consultive help from industry can help insure this realistic environment.

Many of the current simulation programs have developed with the help of enthusiastic consultants. In the case of the insurance simulation, close cooperation between the teacher and the industry occurred. The same has been true with the development of the Communications Unlimited, as well as the MOE Simulation used in Utah.

This consultive help can be a prime factor in a decision to use a particular simulation. If a business in the community can provide supportive help to the teacher, it might be very beneficial to use that particular office or business around which to build the simulation.

5. Space

The amount of space available may dictate the type of simulation that may be chosen. It should be stated, however, that an extensive simulation experience can be provided in the normal size classroom. Many of the successful simulation programs currently in existence are operating in the normal typing facility available in our traditional high school buildings.

Many teachers find themselves in a position of using a classroom for their simulation which is also used for as many as four other classes including beginning typewriting, shorthand, transcription, etc. If such is the case, the teacher should not be reluctant to simulate as adjustments may be made to minimize problems arising from such a situation.

If the model office technique is used, it is quite simple to prepare partitions to allow for a minimum number of work stations to be somewhat separated from the remainder of the classroom. If this arrangement is not feasible, portable stands can be prepared with attractively

colored burlap or other similar material which can be moved into position quite easily. This can provide the desired room division while at the same time providing colorful room decor.

The most desirable facilities provide for a separate classroom for the simulation, as well as a separate room for a model office, or head office, whichever the case may be. This is assuming a particular type of simulation; that being one in which a model office or head office is used.

The important concept is that any available classroom currently in use as a typing or office practice class can be converted to a simulation classroom with a minimum amount of effort.

6. Familiarity with an Organization and its Procedures

If the teacher has worked in a business, it may be desirable to simulate that business. This provides first-hand information and allows the teacher to give students first-hand knowledge of realistic office procedures. It should be noted, however, that if the office experience has not been recent, some updating is in order. Procedures in the office change and it is imperative that students be prepared for today's office tasks.

7. Equipment

The amount and type of equipment used in the simulation will vary according to the resources available at a particular school as well as to the type of simulation in operation. Current programs exist using the most modest of facilities including tables, chairs, and typewriters. Some existing programs include the use of the latest in office furniture and equipment including telephone equipment, office-type desks, etc.

Because the teacher's objective is to provide the students with relevant vocational experience, an attempt should be made to provide the kind of equipment normally found in an office. A priorities schedule for the acquisition of equipment should be developed. The following items of equipment are extremely important to the simulation program.

Typewriters--The most obvious need and one which may be met by all prospective office education simulation teachers.

Desks--An important concept to be developed in the simulation is that of organization of the work station. In order that a realistic situation may be provided, it is recommended that some form of L-shaped desk be provided.

Telephones--One of the most important skills to be developed in the office education classroom is that of interpersonal relationships. This skill requires an extensive use of oral communication which necessitates a telephone system in some form.

In and Out Baskets--These provide for the efficient flow of materials in and out of the office.

Other equipment necessary for the simulation program should be decided upon using several procedures including:

A business-community survey indicating the kinds of equipment used in the various businesses that hire graduating students. This information may very well have been conducted during the time that the teacher was deciding on the type of simulation to be operated.

Identification of equipment needs during the development of the tasks to be completed in the simulation. For example, the job of the bookkeeper in a given simulation may include posting to accounts receivable or accounts payable. The teacher then must decide whether hand posting or machine posting would be of the most benefit to the student. If machine posting is decided upon, then an attempt may be

made to acquire such equipment from a local business. Consult your advisory committee to aid in a search for equipment in the community.

8. Funding

The amount of money available for equipment, supplies, instructional materials and salary support will have an effect on the type of simulation you can initially operate. Prepared simulation programs such as Lester-Hill require little additional revenue other than the basic purchase price of the instructional materials.

Look around the business department. Start with the resources you have. Then as the simulation grows, develop a plan for program funding. It is important that once the simulation is established, you continue to make efforts to acquire equipment, supplies, etc., which will enable you to offer a simulation program which closely resembles the business world.

Within most school districts, there are usually two immediate sources available for funds. The principals budget, which may include finances allocated to departments through programmed budgeting, or simply funds accessible through administrative allocation and desires, is the first source. With the pressure of many factions within the school structure vying for these funds, both academic and vocational, the business educator will have to consider a great deal of public relations work with the various administrative levels in an effort to secure funding. This is not an impossible task even though, at times, frustrating. Revenue derived from basic vocational education grants provides a second source.

Some special areas warrant funds through federal title projects. Title I, Education for the Disadvantaged, is the largest single federal aid to education. Approximately 16,400 of the nation's 18,904 public school districts participated in the program in 1970. Many of the business education programs, especially on the secondary education level, have a disadvantaged population within the classroom or the department. Consideration might be given to programs and projects which will aid in the acquisition of equipment and materials to assist the disadvantaged students and at the same time be used in simulation programs.

Title III, Supplementary Education Centers and Services, is related to innovative and exemplary programs. Projects can be written which include different approaches to simulation in other business education areas as well as office simulation. Perhaps you have a special program in bookkeeping and accounting which requires certain equipment similar to that used in an office simulation program. If funded, this equipment might be involved in both areas--the bookkeeping and accounting and the office simulation.

Quite often the business education teacher does not have the background to develop and write a proposal requesting special funds. If this is the situation, consult with the principal, vocational director, or secondary curriculum specialist in charge of federal title projects. They can provide the information to get you started in the area of funding.

Intradepartmental Planning

Once a decision has been reached concerning a simulation vehicle to be used, consideration of other school factors as well as outside

elements should be considered.

First, there should be some agreement between peers in the business education department that the simulation technique is a worthwhile method to use and that there will be some cooperative effort made, as a department, to assist the beginning teacher.

It is advantageous for this type of planning to occur even before administrative approval is sought so that the simulation teacher and department may present a united effort to the school principal. There will be teachers who may never be convinced to try new methods. However, there will also be those teachers who will listen to innovative ideas with interest and be willing to offer their assistance. One truth is evident, however. The simulation will be your "baby" and you should be prepared to carry the load yourself.

Co-workers may assist you a great deal by making your program known to students, arranging for visits to your facility, and helping to select those students who will benefit from the simulated experience. You may also look for the other business teachers to permit some of their students to participate as customers of the simulation. Perhaps the bookkeeping teacher will supply a banker or an auditor. Possibly the consumer economics teacher, during a presentation on a specific area such as insurance, would allow his students to become the "outside world."

Administrative Approval

If you are going to promote CHANGE, such as transition to simulation as opposed to traditional methods of teaching office education,

you will need the assistance of people in positions to make decisions. Administrative approval will be needed for the basic acceptance of operating a simulation program. This approval will probably involve the following areas:

(1) Program Funding. This may take the form of funds necessary for either capital or supplies expenditures for initial operations and for teacher salary support.

(2) Scheduling. If the program requires a time element which is different from the traditional school program such as a two-hour period, some administrative decisions must be made as to whether this would be feasible under the particular school's educational policies and procedures.

Also, administrators are concerned with the teacher-pupil ratio. This ratio, which is usually between 20-30 students per class, is desired by the school districts for cost efficiency. If a two-hour period with 15 to 24 students is desired, justification must be provided for not conforming to the 20-30 student per class ratio.

In addition, questions like "what course offerings will this simulation program replace?" and "if this office simulation in included in next year's scheduling, what class or classes do you plan to drop?" are some that the business teacher may have to answer. An increased course offering by the business education department may cause a decreasing enrollment in other areas of the school. Whether or not to allow this expansion without additional department cutbacks are administrative decisions that must be faced.

Before approaching the administration on the topic of office simulation, develop an orderly plan as to how you will inform the administrative levels of the reasons, needs, and desires of the business education department members in providing this type of learning experience for the students. Administrative time is usually very limited, and if you are going to be effective in winning support of the program, your method and approach will have a significant effect on the success in implementing the simulation.

To aid in presenting office simulation to administrative personnel, some outside resources are available to assit you in preparing and justifying simulation. Several high schools and community colleges in the state have adopted simulation programs which are available for interested persons to visit. The section in this book entitled "Resources and References" contains a listing of people and schools involved in simulation office education programs. If you decide to visit a simulation program, be sure to take the time to get the right people to go with you. Again, don't be in a hurry to involve just any administrator. Work with the people who have the power to make decisions and cause CHANGE.

Multi-Disciplinary Approval

In the development of a simulation program it is highly desirable to include disciplines other than just business education. This provides for interacting between areas of learning as well as providing learning experiences for students they might not otherwise have. Also, multi-disciplinary approaches provide input for your simulation.

Two examples of the multi-disciplinary approach include the auto insurance simulation and the small loan simulation. The auto loan simulation includes input from driver education classes and the small loan simulation includes input from home economics classes. In both situations learning experiences are provided for both the simulation classes as well as the other participating classes.

Other examples of multi-disciplinary cooperation include such activities as: 1) involving the high school counseling staff with the testing and interviewing for positions included in the simulation, 2) involving the Home Economics teacher and school nurse in presentations on personal grooming and personal hygiene, and 3) involving students from basic English classes and Social Science classes as customers of the simulation.

Approaching a Business

At least three months before opening a simulation, the teacher should contact the business to be simulated. Talk to someone in the business who carries the title of manager or above. Your contact should be made at the decision-making level.

Put on your salesman's hat. You are there to sell him an idea. Some of the items for discussion include:

What can he do for young people today.

What his involvement will mean to his business.

Borrow colored slides of existing programs so that you can visually describe an on-going simulation. Familiarize yourself with the script and the synchronization of the slides before your presentation.

An example of slides available for such a presentation include those of the auto and homeowners programs.

The business may be asked to help in several ways. Some of these include expertise, help as a resource person, a supply of forms and documents, office procedures, flow charts, and other related materials. It is not possible for you to simulate the entire business office operation. Examine and pinpoint the essential elements and keep reminding him to simplify, simplify, simplify. Also, remind him that your obligation is to teach office practice--not to train specifically for his business.

Fully discuss the objectives of simulation with him. Have him "walk through" with you the actual work flow. This walk through approach is extremely important in providing you with the information, technique, and problem areas of the office procedures you wish to simulate.

Inform the businessmen that the simulation must hold interest and appeal for the age level of your students. Too difficult a theme will cause your students to "turn off." It would be preferable for you to use a simulation that deals with a product or service with which the students are somewhat familiar.

Go home and sort through the business process. Sketch a flow chart of work movement and interchange between the various elements included in the office. This again will provide insight into some of the difficulties that may arise in the simulation as well as providing you with a greater understanding of the total program.

Return to the business contact and verify the flow of work. Establish some written procedures for work flow. Discuss with the resource person actual forms and documents he can supply. Secure his permission to reproduce necessary forms. The quantity of forms needed at this point will be difficult to ascertain; however, make a calculated guess as to necessary quantities with the assurance that you may reorder as necessary.

PROGRAM PREPARATION

Simulation Elements

Once a teacher is assured that the necessary steps for the development of the simulation program are completed, the important step of program preparation follows. This phase of the simulation should be based on the elements of the simulation as determined in the business survey, or by whatever method of simulation identification has been undertaken.

In the state of Washington there are basically three forms of office education simulation being used. Following is a brief description of each including the elements involved in the simulation.

Insurance Simulation

In the insurance simulations (both homeowners and auto) currently operating, three separate elements are involved: customers, agencies, and parent company.

CUSTOMERS

Recruitment of customers comes about in several ways:

1. Through multi-disciplinary planning between the business teacher and another teacher (i.e. Auto Shop/Driver Education).

2. Through intra-departmental planning between the business teacher and another business teacher whereby students in typing classes or bookkeeping classes will participate on a planned basis.

3. Through the teacher's planning to involve her own students from other classes that she teaches.

4. Through student inviting student to participate--either in class or out of class.

5. Through student inviting participation of adults and relatives--handled outside of class.

6. Through simulation students combining facts on two customers into one situation. For example, a simulation student may combine the facts from two separate single-car auto applications into one multi-car auto application. The merging of the facts presents a new problem for the simulation student to solve.

AGENCIES

Agencies are composed of student members of the simulation class who participate during the school year as agents representing a major insurance company (the parent company). Their function is to operate an agency, interview customers for insurance, rate their applications for insurance, process the applications, receive completed policies, and forward completed policies to customers. The agency borrows money to open and creates the various stationery and financial records necessary to operate (i.e. letterhead and checks). Agency employees order and pay for all pertinent insurance forms needed to operate and also incur bills for rent, heat, light, phone, postage, etc., for which payment must be made. Agents must earn sufficient commissions from the sale of insurance to meet these obligations.

PARENT COMPANY

Each student of the simulation class will, at a time designated by the teacher, leave the agency to function for several weeks as an employee of the parent company (the major insurance company that is represented by the agencies). In the auto insurance simulation, employees of the parent company serve five weeks in the model office area (a room apart from where the agents are located). Communication between agents and parent company, therefore, takes place only by phone and mail.

Company employees handle all incoming orders for supplies and process all insurance applications fully. Included are activities involving the routing of mail, inspection and review of submitted applications, verification of rates and premiums, posting of charges and payments, and the assembling of policies for return to agents.

Mercantile Simulation

In the mercantile simulation (branch store to head office), there are three separate elements which are involved in the workflow: Customers, branch store employees, and the head office. The concept of the branch store-head office approach in merchandising businesses can also be applied to retail-wholesale firms.

CUSTOMERS

The recruitment of customers to purchase merchandise from the branch stores is internally controlled from within the classroom. The control of a company's clientele can be handled either by the teacher or a simulator (student filling this input function). There are a number of ways in which the customers may be selected by the branch store outlets. The teacher can assign a predetermined number of customers to each firm, or a listing of possible customers may be made available to the individual companies for selection of their own clientele. If the teacher desires, purchase orders can be prepared in the various customers' names and mailed to the retail stores. The control of the number of customers each company has can either be set at a predetermined level or an unlimited clientele allowed each firm.

BRANCH OR RETAIL STORES

Employees are two students in the simulation program who work at different job positions representing either a branch store for a major merchandising firm or an independent retail sales store which purchases merchandise from a wholesale company.

The retail store employees supply the customers with merchandise via the invoice-purchase order method. Branch stores are involved with merchandising concepts such as backordering, cash and trade discounting, purchase orders, requisitions, invoices, accounts receivable, etc.

Requests for merchandise from customers are either filled by the packing slip-invoice process or a requisition created to obtain needed inventory. Thus a request for merchandise goes to a wholesale supplier, and the merchandising process begins.

Branch stores borrow from a bank to open their businesses and to establish necessary inventory. Employees of the branch outlets have to pay bills for rent, lighting, heat, phones, postage, salaries, bank loans, etc. A monthly salary is established by each individual firm and paid to both employees.

HEAD OFFICE OR WHOLESALE FIRM

Each student rotates out of the classroom into the model office area. Here they function for one week at each station in the head office area.

The various branch outlets are located throughout the United States, therefore, the only acceptable means of communicating is by

mail or telephone. Company employees handle all incoming mail and merchandise requests. Some of the business functions students are involved in include the processing of purchase orders, maintaining perpetual inventory control, and accurate accounts receivable and payable records. Other tasks include monthly billing of retail clients for merchandise purchased, allocating correct postal charges, bill paying, maintaining proper payroll records, handling all written correspondence on dictation-transcription equipment, and applications of credit allowances and backordering processes.

Lester-Hill Simulation

In the Lester-Hill simulation there are two separate elements involved: branch offices and Tallidata.

Branch Office

The simulation revolves around the operation of a branch office of the Lester-Hill Corporation, a national distributor of hotel and motel supplies and equipment. The teacher acts as the corporation's executive vice-president in charge of branch office operations. The students perform as branch office employees. The class can be organized as one large branch office, or it can be subdivided into several smaller branch offices which operate concurrently but independently.

Each branch office has four main departments--Sales, Warehouse, Traffic, and Accounting. Each department is under the direction of a general manager. Also each branch office has a functional relationship with a data processing organization known as Tallidata. Tallidata represents all the customers and suppliers of Lester-Hill and also serves as the bank that maintains Lester-Hill's account. Basically Tallidata is the outside world.

At the beginning of the simulation, students apply for jobs at one of the branch offices. Under the direction of the executive vice-president, students are hired for specific positions in the branch office--some as department managers, others as order clerks, stock control clerks, accounting clerks, and so on.

Once hired, employees establish office files and go through orientation sessions to familiarize them with specific job duties and the procedures of the whole department. Once orientation is completed, the actual day-to-day office work begins. Within classroom limitations the work flow parallels that of an actual business office. The work flow begins as soon as the office receives its first orders from customers.

Each day the teacher gives a set of input orders to the Tallidata representative so that he can forward them to the Lester-Hill Office for processing. The orders are divided into seven categories according to complexity. The teacher determines the number and complexity of orders to be fed into the simulation each day.

The Lester-Hill Office Simulation covers three office systems central to any office operation. These include sales, purchasing, and cash control.

Sales System--When orders come into the office from customers, the employees edit the orders, prepare shipping orders, freight memorandums, and invoices. They then post the amounts owed to the customers accounts. When customers' checks are received, the employees post the receipts to the cash receipts journal and the customers' accounts. They

then deposit the daily cash receipts in the bank (also represented by Tallidata).

Purchasing System--As stock runs low, the employees order goods from suppliers, represented by Tallidata. The company receives suppliers' invoices, the employees check the invoices for accuracy and they post the amounts owed to the suppliers' accounts. When a payment is due, Lester-Hill employees prepare checks for suppliers and post the payments to the cash payments journal and the suppliers' accounts.

Cash Control System--The bank, again represented by Tallidata, maintains a record of Lester-Hill's bank deposits and withdrawals. Periodically, a bank statement is sent to the Lester-Hill Company which is reconciled to make sure that the cash records agree with the bank's records.[5]

Flowcharting

Once the prospective teacher of the simulation office education class has identified the elements to be used in the simulation, the important step of identification of job positions is necessary.

Identification of Positions

Perhaps the best way to establish positions needed in the simulation, as well as assigning duties and responsibilities to the various positions, is to flowchart the activities of the office being simulated. This is most effectively accomplished through flowcharting the source

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5. Myron J. Krawitz, Lester-Hill Office Simulation, McGraw-Hill Book Company, San Francisco, California, 1971.

documents being used in the simulation. Flowcharting simplifies the steps to be followed during the course of the simulation.

In flowcharting, each operation or activity is represented by a symbol depicting documents created and processed. Also, work stations through which these documents pass and the type of equipment and skills used in processing documents are depicted. With an operational flowchart you are trying to include all steps and procedures by symbol representation; few details should be omitted.

Diagram templates have been developed and used universally for standardized symbols. These templates can be purchased through IBM outlets, data processing schools and in many office supply stores. There is no set rule stating how a flow chart should be constructed. However, the majority of charts read from top to bottom, left to right. If a special case arises which makes it impossible to conform to this theory, it is perfectly permissible to draw the flowchart in any manner that accomplishes the job and presents the procedures in a neat, uniform manner.

Flowcharting is absolutely necessary if you are creating your own simulation. It is also extremely valuable if you are planning to add to a prepared simulation, or if you are going to make minor program changes in an existing simulation. The Lester-Hill simulation is an example of a published package that a teacher might wish to alter by changing either operational procedures or by creating additional materials and program steps. Perhaps you might wish to emphasize the communication area more than is presently done in a purchased simulation

package. If you decide to expand the simulation, flowcharting will greatly aid in developing organized procedural flow.

Once the flow of documents has been completed, the teacher should identify the office positions necessary to accomplish the office work required. In the model office approach, this identification usually includes four or five positions. The remainder of the class then becomes outside sources of input for the model office be they agents, or retail outlets. Simply by the functions of work required you can begin to get some idea as to the type of positions that will be needed in the simulation. Illustration 1, page 50, is provided as an example of document flowcharting.

Duties and Responsibilities

After you have flowcharted the flow of documents in the simulation and identified positions, you should begin to give thought to more specific duties and responsibilities you expect the students to perform. This may be somewhat of a trial and error process in that the plans you create and duties that are assigned people may have to be altered continually. In fact, you should plan on this happening. When it occurs, simply make the necessary adjustments and continue on with your program of office simulation.

The availability of equipment and supplies will also have a significant effect on duties and operations assigned to people. For example: If you are going to have data posted from invoices to an accounts receivable ledger, whether you use a posting machine or complete this operation by hand has an effect on the job description.

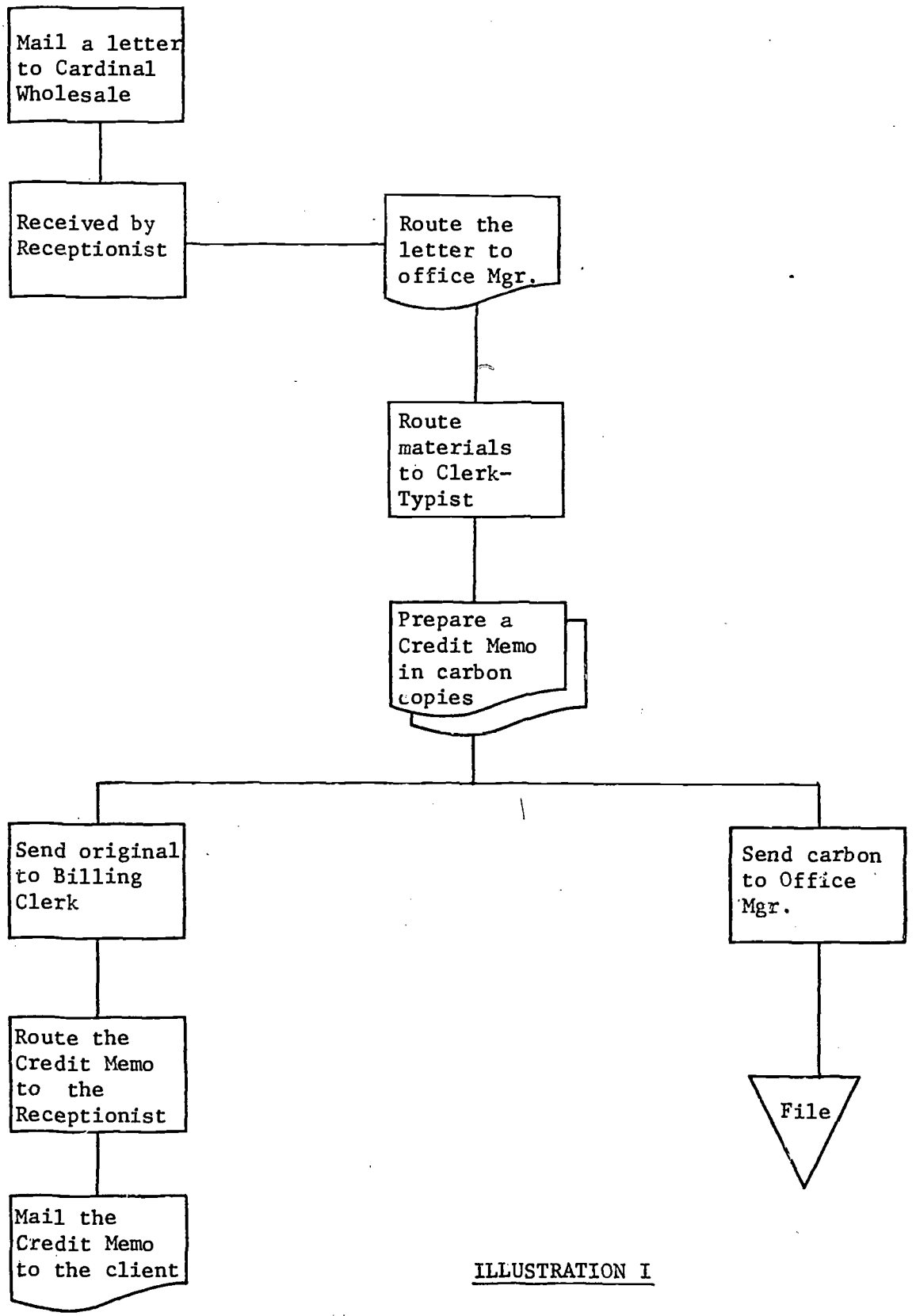


ILLUSTRATION I

Also, if you are unable to afford carbon paper, processes which might call for the creation of a carbon pack would have to be altered. Below is a listing of the possible duties and responsibilities assigned to three positions created in the mercantile business and identified through a flow-charting process: Receptionist, billing clerk, and clerk-typist. Also the outside source (simulator) duties are presented.

1. Outside simulator (classroom)

   Received merchandise request from the teacher or the simulator.

   Check inventory listings to determine whether you need to reorder merchandise.

   If you need to order goods, make out a REQUISITION in duplicate. Send one copy to the purchasing agent and the carbon is to be put in the files under PURCHASING REQUISITIONS.

   Purchasing agent is to determine the cost of the merchandise ordered by referring to the price listings, catalog, and inventory cards.

   Prepare two copies of your company's PURCHASE ORDERS. Mail one to the wholesale company and file the carbon under PURCHASE ORDERS.

   Record the postage involved in the POSTAGE ALLOCATION REGISTER.

   Record in the OUTGOING MAIL REGISTER.

   Place the purchase order in an envelope, correctly address it, and mail it.

2. Receptionist

   Log all incoming mail in the INCOMING LOG SHEETS.

   Use the time and date stamp on all incoming mail.

   Send all purchase orders to the billing clerk. Use the BILLING routing stamp.

Place the purchase orders in the OUT tray for company circulation.

3. Billing Clerk

Receive the customer purchase orders from the receptionist. They will be placed in your IN tray.

Check with the company catalog to determine if the correct prices and items are listed. Check the multiplication and addition of the extensions and totals. IF THEY ARE INCORRECT, you will have to notify, either by mail or telephone, the client company and make the necessary corrections.

After you have verified the purchase order, send it to the clerk-typist. Use the routing stamp CLERK TYPIST and place the purchase order in your OUT tray. In addition, you will at this time make the necessary adjustments to the inventory to determine if you have the requested merchandise in stock. If you don't then you can't send the merchandise to the customer. The merchandise then has to be back-ordered. You will then have to prepare a REQUISITION to be sent to the office manager for his approval.

4. Clerk-typist

You will receive the purchase order from the billing clerk. Check the routing stamp to see if the billing clerk has received the purchase order before you. This is necessary in order that the proper extensions have been checked and the merchandise has been recorded on the inventory control system.

From the information on the purchase order, you will prepare packing slips and invoices. These will be done in carbon packs of two invoices and two packing slips.

After completing the typing of this material, send the original purchase order along with the completed carbon pack to the receptionist. Use the RECEPTIONIST routing stamp.

Procedural Manual

After more extensive planning and job duties have been determined, you should begin to consider a manual which will assist the students in their positions. Whether you create your own simulation program or add

to an existing program, you should obtain copies of procedural manuals which are used in several of the currently operating simulations. The insurance simulation which is used at Mountlake Terrace High School has a procedures manual which has been published and is available through the Washington State Insurance Council. Although this particular simulation vehicle is insurance, many of the documents, duties and procedures described in the manual would pertain to any office simulation program. Also, the Lester-Hill simulation has a flowchart and descriptive manual you may wish to obtain.

When deciding on the materials to be included in a procedural manual, the following items should be considered: Documents used in the simulation should be displayed, total duties and responsibilities of each station explained, and basic procedures presented and perhaps even flowcharted. Try to include a copy of each document to be used in the simulation in the procedures manual. If you haven't determined completely all the procedures and documents you will need at the beginning of the school year, start with what you have planned; then update the manual as new functions and source documents are created. As far as the duties and responsibilities of each station are concerned, the students will need a detailed, step-by-step explanation of what they are expected to do. Throughout the first few years of your simulation, there will be continual revisions to this manual. These revisions are caused by the creation of new duties and by attempts by the teacher to have a balanced workload among the students working in the simulation. To achieve a balanced workload, the teacher will have to redistribute duties and responsibilities.

The following pages contain a small sample of a procedures manual. The duties of a clerk-typist are described and the basic procedure of handling credit returns and allowances is shown in descriptive form.

Duties and Responsibilities--Clerk Typist

1. You are primarily concerned with typing letters, memos and other documents which will be given to you by the office manager.

2. You will work on packing slips and invoice forms. Carbon packs of the invoice/packing slip forms are to be used. After you have completed the carbon pack, send the pack and the original purchase order back to the receptionist.

3. Make sure all transactions are in carbon copy form. The original document goes to the client and the carbon copy is filed. Remember all materials which require the office manager's signature must be returned to him for proofreading.

4. Memos should be prepared in Master form with copies forwarded to all employees of the model office. File one copy of the memo under MEMORANDUMS. Make sure that each memo contains the current date.

5. New Price Lists, will be referred to you from the office manager. Prepare these in master form sending a copy to each employee in the Model Office as well as to each client customer. Get retail company addresses from the mailing list.

6. Always punch in and out each day on the time clock.

7. When you get your pay check on Friday, endorse it "for deposit only" and sign your name. Hand it back immediately to the office manager.

8. In spare time, prepare carbon packs of PACKING/INVOICE SLIPS.

9. All materials to be mailed must go to the Receptionist for logging of Outgoing mail.

10. You will be required to transcribe the office manager's correspondence material. After you finish your work make sure that the IBM folder (dictation belt, tape and typed material) are returned to the office manager.

Developing Related Units

Identification of Related Units (also called pre-simulation activities)

Pre-simulation activities deal with introducing unfamiliar concepts, documents, procedures, equipment, and vocabulary to students. To identify the areas unfamiliar to your students, you must carefully examine and take apart activities students will encounter in the simulation period of the school year.

Look at equipment first. If you have a posting machine at the Accounting desk in your model office, you should present an instructional unit to each student prior to the time the student must function as the Accountant--otherwise, valuable time will be lost as the student trains on the job while assigned to the parent company. The same is true with an executive model typewriter, a key punch machine, a dictating unit, mimeograph, a copier, a spirit duplicator, or other office machines with which your student do not already have familiarity.

Next, consider how much about each piece of equipment the students need to know. If you have a sophisticated posting machine (i.e. a gift of an old posting machine from your local bank), strip away all the elements of its operation except those your students need to know to post debits and credits.

Consider the executive typewriter. If your executive model is placed at a desk in the model office, consider how it will be used in the simulation process. If the student occupying that desk as a clerk will be typing 3 x 5 cards, memos, letters, and forms, then build into your instructional unit directions on the two- and three-space thumb

bar, backspacing for correction, centering, etc.,--but do not include how to justify right margins. To teach all elements of each machine would require considerable time--more than you will have available. You might conclude here that students learn best what they need to know.

A second method of related unit development should include an examination of jobs or tasks to be completed in the simulation process. Jobs students may be involved in include payroll, mail handling, debit and credit posting entries, loan application, telephone techniques, and filing.

Consider the payroll procedures. What skills will a student need to perform in order to prepare the weekly payroll of the parent company. Assemble all the necessary time cards, tax charts, and payroll journal forms so you can prepare the instructional unit according to the rates of pay and actual deductions that will be used in the simulation.

Methods of Presenting Related Units

There are several alternate ways to present the material.

1. Prepare a video tape (less than 20 minutes in length) showing you instructing on the machine that your students will be using in the simulation process. Have a student stand by you, to be seen by the cameraman, so that your presentation will be on a "you" basis. Go slowly enough to allow students to perform steps after you have demonstrated them. Allow "break" time so that students may stop the tape from time to time to review or to back up to see a particular operation over again.

2. Use a recorded tape, belt, or cassette on which you have recorded, in your voice, directions for use of a particular machine.

The student then takes the playback machine to the posting machine, for example, listens to the steps, and performs the steps. The student may start and stop the playback machine to listen to steps over again as needed. Talk conversationally to your students through this media being sure to clearly identify the parts of the machine as you speak about them. It might be well to label various parts of the machine you are giving instruction for operating in advance so that students can quickly identify the parts of the machine by the labels.

3. Write your own printed directions for the operation of the machine.

4. Use printed machine directions supplied by the manufacturer. However, in 3 and 4 above, remember that all students cannot read equally well and some adjustments may be necessary.

It should be noted that assigning two students to work together on such an instructional unit will enhance the learning process as they will help one another.

Consider in tape preparations how many playback units and monitors you will have available. If you have only one, confine your use of video tape to equipment demonstrations or else you'll find students lining up to use the playback machine.

Establish Time

Your first time using these prepared units will give you an estimated time needed by students to accomplish the tasks. You can only provide average times, however, as some students will complete a unit more quickly than others. It would be advisable, if time permits, to try out the units on a student in advance of using them in the classroom.

Summary on Related Units

Keep in mind that all preparation of instructional units should be personalized as much as possible. You are using various methods of presentation as a substitute for yourself. You will thereby eliminate the need of repetitious demonstration; but you will somewhat remove your individual relationship with the student. Organize and plan your material in such a way that a feeling of closeness will remain between you and the student listener or student reader.

Another advantage of the pre-prepared units of instruction is to free you to spend needed time with the slower students who need your help the most. The competent students will get along whether you are there or not.

Developing Pre-Tests

The purpose of pre-testing is to discover the strengths and weaknesses of your students in areas of existing skills and knowledges. Pre-testing is diagnostic only. For example, if students will be handling a great deal of arithmetic computation in your simulation, devise a pre-test to determine strengths or weaknesses in the business arithmetic area. If your students will be composing their own letters and memos, you will want to know about their Business English skills. If your students will be filing, what do they already know about alphabetic filing? How fast can they alphabetize?

What do your students know about searching out addresses, phone numbers, word division, zip codes, etc., or will this knowledge be required of your students to function in your simulation?

Development

There are several avenues you may choose to explore in regard to pretesting:

1. Use existing pre-tests of another teacher who simulates. (Write to the Washington Insurance Council, 1218 Third Avenue, Seattle, WA 98101, requesting the methods book, "The You in Simulation," copyright June, 1972, by Beverley Funk. Contained in this book are both production and Business English tests which have been used over the past 6 years. The book and the tests are free of charge to teachers.)

2. Devise your own tests from reference manuals on your own book shelves.

3. Write specialized pre-tests based on specifics of your own simulation (i.e. the vocabulary of the business you simulate).

Keep your tests fairly short and yet long enough for you to ascertain competencies. Especially with Business English tests, separate test results on spelling, grammar, punctuation, etc., tell you more than does one test which is all encompassing. Twenty to twenty-five problems covering each facet seems adequate in Business English

Also, if you graph results, your graph is more revealing if tests all have the same value.

Prepare tests, whenever possible, with answer columns for ease in scoring. When you have 20 or more students taking 15 or more tests, you will find youself overwhelmed if you fail to simplify the scoring. Answer keys should be lined up to match exactly the answer columns on

the tests. Include a line for the student's name, a line for the number correct, and explicit directions. It would be well to include one example problem with the correct answer to show your students the correct procedure for answering the questions on the test.

It is best to include in your tests (especially Business English) the common uses of the comma, for example. In spelling, use frequently mispelled words. In other words, do not include the far-out uses of commas or the spelling words not frequently encountered by the age-level of students whom you teach.

Results (Ways to Use Pre-Test Results)

Pre-test results may be used in several ways.

1. If you see benefit in assigning two students to operate one agency or branch office, you can use pre-test results for matching high ability with low ability.

2. You may use rank order on pre-test scores to determine the more competent students who will become your class leaders.

3. You may immediately identify which students in which areas require remedial training from pre-test results.

4. You may couple pre-test results with actual performance during related unit or pre-simulation unit instruction time for purposes of establishing a rotation through the positions of the model office (parent company-main branch).

5. Overall results, in terms of desired competencies, may determine the content of remedial or training units throughout the school year.

Graphs

Graphs may be designed to pinpoint individual student scores as those scores relate to the class averages. You may total all student scores on a given test, determine the class average for that test, and chart the results on graphs. The class average may be shown in one color of ink while each individual student may chart his own results in a different colored ink. Through the use of a graph, visual recognition may be immediately given to areas of weakness for future remedial training.

Develop Remedial Units

If you pre-test, for instance, in the use of information services, you may discover a low class average. If so, and if your objective is to raise the class average to 90 percent accuracy, for example, you can design units of remedial instruction so that students may attain the desired proficiency.

Preparing remedial units for the Business English areas is easily accomplished, using your various resource materials. However, it is suggested that you stay with one author--preferably one representing one of the two major publishers (Gregg or South-Western). As your students move from your class to typewriting or shorthand classes, life will be more simple for them if they're using the same punctuation rules in all of their business classes. The advantages of this procedure will be even more apparent at the post-secondary level as secretarial students continue to handle transcription.

Establish Time Required

Again, your first time using remedial units will help establish average time required to complete each unit. Be sure to allow for flexible periods of time to accomodate slow learners as well as fast learners.

Evaluation

Students may be asked to score their own tests and then consult with you regarding achievement relative to performance standards. Going over the test on an individual basis with the student provides you with instruction time on a one-to-one basis with that student. Have additional reinforcement structured or work out the additional training needed with the student at this time.

Teacher Tools

Teachers will find themselves better organized if they will prepare some charts in advance of the simulation program. Several examples of possible charts and graphs that may be used are included here.

Pre-Test Graphs

Scores on pre-tests may be graphed to visually present student individual scores as they relate to class averages. This may take the following form:

1. Take any given test such as punctuation. Total the scores for all of your students; divide the total by the number of students

*Tables, charts and graphs in the section are from the book "The You in Simulation," Beverley M. Funk, Washington Insurance Council, 1972.

taking the test; arrive at an average for that test.

2. On a pre-test graph, make a dot in the correct place indicating the class average on a particular test.

3. Do the same for class average on all other pre-tests.

4. Join the dots in red ink thus showing the class average on all tests.

5. Return the scored pre-test to the students.

6. Have each student plot his or her individual test scores on the graph.

7. Have each student join the dots in black or blue ink, thus showing the individual student scores as they relate to the class average.

8. You may, at this time, ask each student to address a memo to you stating . . . "I fell below the class average in the following tested areas . . ." The student may keep a copy of the memo and you will have the original memo to be used later in the year to design remedial units of instruction in the areas needed by the individual students.

Post-Test Graphs

Scores on post-tests may be graphed in exactly the same way as they were for the pre-tests. However, it is recommended that new graphs be used for post-test scores. If you were to plot the individual scores and post-test average scores on the same pre-test graph, you will find 4 lines to be very confusing. It is better, therefore, to prepare a separate graph for post-test scores.

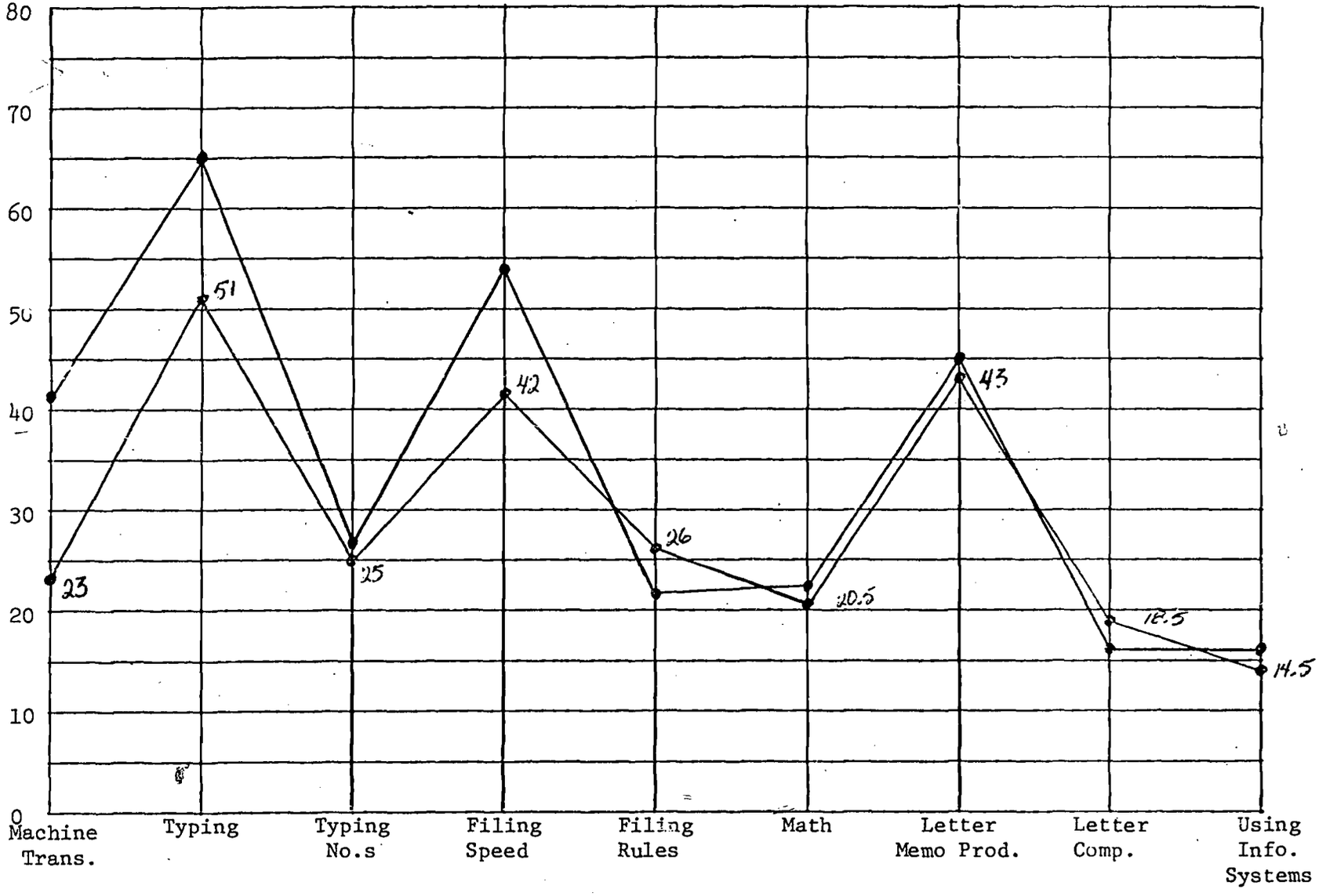
PRE-TEST DATE

POST-TEST DATE

_____CLASS AVERAGE (use dotted line)
-in red-

_____YOUR SCORE

NAME



Pre-Test Results for Purposes of Pairing

If you wish to use your pre-tests for purposes of pairing in your simulation, as many teachers do, you will want to arrive at a ranking based on pre-test results. Page 66 shows an example of "Results of Pre-Tests for Pairing."

It is suggested that you prepare a chart to record all pre-test scores. The inside of a file folder will do nicely. List your student names down the left side of the chart and the names of your pre-tests across the top. Record individual scores in the proper column to the right of each student's name. Total all points earned. The student who scores the highest number of total points on all pretests is given the rank of "1." The second best (or the next-to-the-highest number of points) gets the rank of "2," etc. Your last column, "Pair," may be used to establish the pairs you assign based on the "rank" column.

The chart on page 67 assumes a class of 20 students. You, therefore, will have established a rank of 1 through 20. If you choose to pair students based on high/low ability, you would pair 1 with 20, 2 with 19, 3 with 18, etc. Some teachers prefer to pair 1 with 11, 2 with 12, 3 with 13, etc. If your goal in pairing is to provide strength to the weaker students, it is recommended that you pair 1 with 20, etc. Once you make the decision as to pairing, it is suggested that these assignments be permanent throughout the year.

Results of Pre-Tests for Pairing

Inside a file folder, list the student names alphabetically down the left side.

Across the top, list the name of each test.

EXAMPLE

Students	5-M Type	Type	Trans	File	File	etc.	etc.	etc.	Total	Rank	Pair
1.	50	22	15	60	37	x	x	x	200	1	
2.	47	20	13	63	29	x	x	x	180	2	
3.	x	x	x	x	x	x	x	x	123	3	
4.	23	5	9	27	15	x	x	x	68	4	
5. etc.											
TOTAL	120	47	37	150	81	x	x	x	573		
CLASS AVERAGE (based on above 3)	40	16	12	50	27	x	x	x	191		

Using the examples above, you would pair students 1 with 4 and 2 with 3 if you see a value in combining high ability with low ability.

1 outstanding student
1 or 2 very low students
3 to 5 B students
3 to 5 D students
8 to 10 average students

If you pair high-low in a class of 20, it will look like this:

1-20
2-19
3-18
4-17
5-16
6-15
7-14
8-13
9-12
10-11

Pre-Simulation Rotation Chart

If you decide to pair students, you may proceed into pre-simulation, which is that period of time given to familiarizing student pairs with tasks, procedures, documents, equipment, and vocabulary to be encountered throughout the school year in the simulation class.

Across the top of your chart, list the various pre-simulation units to be covered. Down the left side of your chart list the dates and days of the week. Use pair number rather than students' names as the variable entries on your chart. On your first day of pre-simulation, therefore, your chart will indicate that pair 01 works on the unit called "designing letterhead." Pair 02 will work on the unit called "design checks." You also need an estimate as to the length of time it will take a pair to complete a pre-simulation unit, i.e. 1 day, 2 days, 5 days.

On this chart show group activities that will take place that will involve all pairs doing the same thing on the same day such as listening to a speaker on grooming, personal hygiene, hair styles, etc. It is strongly recommended that you enter your pairs in pencil only as you will quickly see that some pairs will complete an assigned unit more quickly than will other pairs and you must remain flexible in that you can keep the more capable students moving.

At the bottom of your chart, identify pair numbers with student names.

PRE-SIMULATION ROTATION CHART

TASKS		DATES
Design letter-head	1 day	
Design checks	1 day	
Design deposit slips	1 day	
Exec. typewriter	1 day	
Posting machine	2 day	
Key-punch	2 day	
Calculator	1 day	
Inc. vocabu-lary	1 day	
File	2 day	
Run	1 day	
Run checks	1 day	
Run deposit slips	1 day	
Payroll	1 day	
Postage unit	1 day	
Ins. forms	1 day	
Employ-ment	5 day	
Phone Technique	1 day	

Scoring Sheet for Employment Tests

If you include employment testing as an integral part of your simulation class, perhaps you will want to recap these employment test scores in such a way as to determine which student scores the highest, which student scores the lowest, etc.

The chart on page 71 shows a simple way to organize these results. List the various employment tests given across the top of your chart. Down the left side of the chart, list the students by name. Fill in their appropriate scores as necessary. In your "total points" column, fill in the total points earned by each student on all employment tests. Again, the student with the highest total in the "total points" column is ranked No. 1 in the "rank column."

The content of the employment tests will vary according to your personal feelings. Some teachers prefer to give the type of skill tests a clerk-typist may run into in the business community. Other teachers may prefer to give tests typical of the business they are simulating. It is suggested, however, that some test of clerical aptitude be included in the employment series.

Scoring Sheet for Employment Tests

NAME	*CLERICAL APTITUDE 12 min.	TIMED DRILLS 5 min.	M. TRANSCRIPTION 5 min.	TOTAL POINTS	RANK

etc.

*Score may be weighted 2 or 3 times, but results will remain relative.

Recap on Rankings

If you wish to determine an overall rank order of the students in your class based on pre-tests, employment tests, and interview results (if you include interviewing in your pre-simulation), the chart on page 74 will present an easy way to do this.

Across the top of your chart list "Pre-Test Rank," "Interview Rank," "Employment Test Rank," "Total," and "Final Rank." Down the left side of your chart list the student names. Record the appropriate entries. To arrive at an interview rank, ask your employment interviewer to rank the interviewees from the best (No. 1) to the poorest (No. 20).

In the total column, record the total of all rankings. In your final rank column, you will find that your best student has the lowest score because that student may have ranked No. 1 in pre-tests, No. 2 in employment testing, and No. 1 in interviews. This final rank may be used as a guide in establishing the order you release your students from the training lab to work in the model office.

One Caution

Experience has proven that a teacher will have a smoother running model office if high and low ability students are placed in the office in alternate order. If you use the final rank order just described, you will find that you have put all of your finer students into the model office early in the year and left students of lesser ability to finish out the year. It is recommended that your first student into the model office be your No. 1 student in final rank;

your No. 2 student into the model office should also be one of your very top students. After that, you may drop down in your final rankings column to assign a student into the model office who is of considerably lesser ability. It may thereafter alternate high-low. It is also suggested that you save a very capable student to be the last one through the model office in view of the complexity of closing activities to be encountered at the end of the year.

The final rankings arrived at on this chart should be used only as a guide for as the year progresses observations made by you as to performance, attendance, and attitudes may reverse some of these rankings. Furthermore, it is not necessary that students be informed of these final rankings; in fact, the authors feel it is better not to inform students of these rankings. Oftentimes, the teacher will be surprised at how the low-ranked student will perk up in a simulation class and outstrip some of her or his more capable peers.

RECAP OF RANKING

NAME	PRE-TEST RANK	INTERVIEW RANK (from file order)	EMPLOYMENT TEST RANK	TOTAL	FINAL RANK
Mary	2	3	5	10	2
Bob	6	5	4	15	4
Becky	8	2	7	17	5 tie
Sally	7	4	6	17	5 tie
John	5	7	1	13	3
Lori	3	9	8	20	7
*Linda	1	1	2	4	1
Jim	4	8	9	21	8
Josie	9	6	3	18	6

*The student with the lowest score, will be the first student to enter the parent company.

Time Schedule-Student Rotation into Model Office

The chart on page 77 depicts the movement in and out of the model office for a simulation group of 24 students operating in a 36 week school year in a simulation of 5 positions in the model office.

Three weeks in September and three weeks in October are allowed on this chart for pre-testing and pre-simulation activities with a target date of October 20 to open the model office. Simulation classes of less than 24 students may delay the opening of the model office to provide more time for pre-simulation activities. In planning the student rotation in and out of the model office, the authors recommend that a minimum of 5 days or 10 hours be allowed for each position of the model office, beginning on Monday and ending on Friday.

Weeks that contain holidays will present a problem. Thanksgiving week, for example, provides only 3 days of school. You may well have to use this week as a full week if your simulation class is large. If time is not a problem, you may choose to have the 5 students in the model office hold their positions for the 3 days and thus spend 8 days at the same positions. Christmas vacation will also present a problem with the large classes. Spring Vacation may run from two to five days in your high school, so that week may be entirely blocked out or adjustments similar to the Thanksgiving vacation may be made.

Caution

Be sure to allow ample time (1 1/2 to 2 weeks) at the end of the year for closing activities keeping in mind that your seniors frequently are released prior to the last day of the school year.

Also your post-tests should not have to be rushed if you wish to achieve some valid results.

TIME SCHEDULE - STUDENT ROTATION
INTO MODEL OFFICE

WEEK		Station 1	Station 2	Station 3	Station 4	Station 5
Oct.	20 Agencies or branches open Student	#1 enters				
	27	2	1			
Nov.	3	3	2	1		
	10	4	3	2	1	
	17	5	4	3	2	1
	24 (#1 to agency or branch).	6	5	4	3	2
Dec.	1	7	6	5	4	3
	8	8	7	6	5	4
	15	9	8	7	6	5
	22	10	9	8	7	6
Jan.	5	11	10	9	8	7
	12	12	11	10	9	8
	19	13	12	11	10	9
	26	14	13	12	11	10
Feb.	2	15	14	13	12	11
	9	16	15	14	13	12
	16	17	16	15	14	13
	23	18	17	16	15	14
Mar.	2	19	18	17	16	15
	9	20	19	18	17	16
	16	21	20	19	18	17
	23 ....(Spring Vacation)....					
	30	22	21	20	19	18
Apr.	6	23	22	21	20	19
	13	24	23	22	21	20
	20	1	24	23	22	21
	27	2	1	24	23	22
May	4	3	2	1	24	23
	11	4	3	2	1	24
	18					
	25 ..(Testing and closing)..					

EVALUATION AND GRADING OF STUDENT

Evaluation and grading of students in simulation is of concern to teachers who are considering the simulation method of teaching office practice. Listed below are various ways to accomplish evaluation and grading:

- Pre-Tests
- Post-Tests
- Pre-Simulation Evaluation
- Employment Tests
- Remedial Unit Tests
- Situation Tests
- Duties Tests
- Volume of Work
- Accuracy of Work
- Bank Reconciliation
- Performance
- Attendance
- Skill Development (if a skill development area is built in to your simulation)
- Office Manager Evaluation
- Office-Style Evaluation

Pre-Tests/Post-Tests

Despite the fact that pre-tests are diagnostic, a comparison of results between pre-test results and post-test results may be used as a basis of grading. In a full-year simulation, however, the time differential will be approximately of 9 months' duration, so post-test improvement could be used only at the 2nd semester grading time in arriving at final grades. Improvement on individual scores is significant for grading purposes.

Employment Tests

Carefully selected employment tests may provide the simulation teacher with effective evaluative instruments. In essence the simulation

program should be designed to provide students with employable skills. Therefore, it would seem natural to provide students with the experience of taking employment tests administered by businesses at which the students may soon be applying for employment. A survey of instruments used in local industries, as well as reference to such books as the Buros' Mental Measurement Yearbook can provide the teacher with information concerning valid instruments to be used for student evaluation.

Pre-Simulation Tests

Some teachers may choose to evaluate the units of pre-simulation. There are several ways to do this. Evaluation of each unit of pre-simulation may be made by: (1) pre-arranged criteria (i.e. answer sheet for payroll unit); (2) teacher judgment of results (i.e. letterhead design); (3) answer book (i.e. unit on calculation with answer key). CAUTION: If you have operated pre-simulation on a paired basis, the evaluation of these units will be based on the efforts of two students . . . not one. You are unlikely to be able to grade based on individual achievement.

Remedial Unit Testing

Your individual students may be assigned to remedial training units based on their weaknesses as pointed up in their pre-test results. Hopefully, remedial units will be tailored to the needs of the individual student. Therefore, tests may be designed at the completion of the remedial training that will indicate success or degree of failure. The teacher may choose to assign a requirement of completion of unit tests with 85 percent mastery, for example. If this percentage is not

achieved, the teacher may use the percentage acquired by the student as a means of grading or the teacher may ask that the student repeat some of the remedial instruction or assign more remedial instruction until a certain degree of mastery is achieved.

Situation Testing

Many simulation teachers prefer situation testing rather than conventional testing at grading periods. A situation test may be defined as an exercise given in a timed situation whereby students perform the same clusters of tasks as they have been performing daily in the simulation. If your source document in a simulation is an insurance application, your situation test would be built upon an application. Because this is a test, all raw data needed by the student for the situation test must be the same. The teacher may hand out typewritten directions containing all the needed information in order to perform in this situation. With insurance, the teacher would have to provide all the same information that a student agent would have gleaned from a student customer during an interview for auto insurance. The situation test directions may require the sorting of this raw information into the proper form, the rating of the coverages, the typing of the application, its mailing, its receipt, its commission earned, etc. Such a situation test may provide many bases for grading:

1. Did the student follow the written directions?
2. Did the student finish the situation test in the assigned time?
3. Is all of the typing correctly done?
4. Was all of the typing carefully proofread?
5. Did the student look up the rates correctly from the appropriate tables?
6. Did the student perform the mathematical computations correctly?
7. Did the student complete all the required forms as outlined on the test?
8. Did the student arrive at the correct answer? (This point should be minimized if all other steps were correctly performed.)

Duties Tests

As students complete their rotation in the model office, they may be given a Duties Test which covers various procedures at the positions just occupied. This test may be administered the week after the individual returns to the regular classroom or it may be given to your entire class after all students have completed their tour through the model office. There is one problem with administering this test to the group: those students who toured through the model office during the early part of the year will have difficulty remembering the minute details necessary to pass this test if it is administered some four to five months after they have performed the tasks tested.

The authors feel that giving the duries test as the office manager leaves the office situation is the fairest way of offering this test.

Volume of Work

A teacher has many ways of evaluating the volume of work produced in the simulation. In the auto insurance simulation, for example, receipts in duplicate are kept on each completed policy. In addition, 3 x 5 record cards in the model office may be tallied to indicate the volume of work produced by each agent. Competitive sales charts may be displayed and kept current indicating the volume of work completed by each agent.

Performance

Performance in the group, either in the large training situation or in the smaller model office situation, may be subjectively evaluated.

Does the student come into the classroom and get right to work? How does the student handle the responsibility of the telephone? How does the student handle his or her own filing system? How does the student handle the ordering of supplies? Does the student plan ahead as to supply needs or does the student allow himself to run out of supplies and then panic?

Attendance

Assuming the teacher has spelled out the attendance policy clearly at the beginning of the year, what is the student's attitude in regard to being present every day? Of being on time? Of notifying you of the reason for an absence? How many two-hour absences has the student had?

Office Manager Evaluation

Many simulations require that the student office manager confidentially evaluate all the parent company employees working under his or her direction on a weekly basis. The teacher may examine these evaluations on a certain employee to get student peer reaction to a student's usefulness, diligence, and performance in the model office situation. Each student will have been evaluated several times (once for each position) by his or her peers as the student moves through the model office. Obviously, peer evaluations must be examined with caution.

Office Style Evaluation

Ask yourself what measurements an office manager uses in the business world to evaluate his employees. Consider ability to work

with others, volume of work, attitude, improvement, vocabulary, ability to think critically and make judgments.

In conclusion, it is apparent that certain of these evaluation techniques will be used at different times. If the teacher is responsible for four letter grades during the one year of simulation, the timing of the activity to be tested will be reflected at the appropriate grading period.

PUBLIC RELATIONS

The methods of providin outside sources with information pertaining to the operation of the simulation program are as varied as the programs themselves. Public relations do, however, play a vital role in the growth and improvement of the simulation program. Therefore, the teacher would be wise to expend as much energy as possible on this integral part of the total program.

There are many groups of people that need to be informed about the simulation program. First of all, of course, students need to know what the program consists of as well as knowing the objectives set forth by the teacher. Also, fellow teachers, administrators, counselors, business and community groups, as well as parents, need to be informed as to what is happening in the office simulation classroom.

The development of student interest in the simulation program is, of course, crucial to its growth. As the teacher develops the simulation, the first important project is to get students enrolled. This may occur automatically the first year the program is in existence. That is to say, the teacher may take a currently existing office practice, clerical practice, shorthand II class, etc., and introduce the simulation into the classroom. Thus, these may be ready-made classes. In such a situation, there need not be any great concern about initially publicizing the class for the coming year, at least to students.

If, however, the simulation will be a completely new offering, publicizing the class becomes extremely important. If, as is the case

in many schools, scheduling of classes occurs in the spring, it is important that the publicity program begins early enough in the year preceding implementation of the class so that students know what the class consists of and what they can expect from the simulation program.

This information can be provided in several ways. One of the most effective methods of providing information is to inform students currently enrolled in office education classes. By working in cooperation with the other business education teachers in the school, an informative presentation can be developed and presented to all business classes in the school and this presentation will reach most of the students qualified to enroll in the class.

The teacher making the presentations should have a knowledge of the philosophy and purposes of a simulation class. A good grasp of the concepts inherent in the simulation process will aid in a logical and informative presentation. Also, it would be extremely helpful if the teacher would obtain a set of slides showing a simulation program as it currently exists. These slides are available from the Coordinating Council for Occupational Education and provide an informative look at successful programs.

By providing the information concerning the simulation to the business classes in the high school, the largest percentage of students qualifying for the class will be reached. Many others who may be qualified will be reached through word-of-mouth as students talk to their friends concerning the presentation.

Informative material concerning the upcoming class should be prepared. This material can be printed in flyer form or in brochure form. It should be distributed through as many channels as possible, and particularly to school counselors.

The school counselor should be playing an effective role in directing students to worthwhile educational experiences. By providing the counseling service with informative material concerning the simulation program the business teacher can aid the counselor, the student, and the program, all at the same time. Strong lines of communication should exist between the counselors and the business teachers.

This distribution of brochures should not be limited to counselors, teachers, and administrators, but also the materials should be distributed to such areas as the PTA and to people involved in registration for classes. Bulletin boards should be used to let people know what is being done in terms of new and innovative programs within the school.

In promoting simulated model office programs, don't overlook involving the incoming junior high school students. These people will be entering high school in the fall and most of them will be uncertain about their future. Provide them with a direction, a business office career.

A visitation to the office simulation classroom would probably be the most effective method of exposing these students to the different type of educational environment offered by simulation. It is not advisable for the teacher to simply present the program verbally in the

in the junior high school classroom. By coming to the high school classroom and office lab, students will be able to actually see the office functioning.

Also, in many high schools a two-hour class is often difficult for seniors to fit into their schedules due to either state or local graduation requirements. By an early introduction to the office simulation program, the students who are definitely interested in office careers can begin to plan their schedules to include the simulation as well as other related business education courses.

The visitation by ninth grade students may present problems. If the intermediate schools in your district are fairly large, arrangements for transportation of students, teacher and counselor permission, and administrative consent may make a total class field trip very unlikely.

Rather than trying to involve the total population of the ninth grade, invite those students who would be interested in viewing the office education program. This can be done with the help and assistance of either the junior high typing teachers or school counselors. Often few school districts have any coordination of curriculum between junior and senior high schools. Make a definite effort to know these people; sell them on simulation. Besides knowing the interest and aptitudes of many of these students, these professional people would usually be involved in arranging released time from the normal school operation for a visitation.

Open House

One of the most successful public relations activities in the development of simulation is the open house. The open house fits well into the design of a simulation program and provides parents and businessmen an opportunity to observe what is being done in the office education area.

PROGRAM REVISION

Revision and up-dating of curriculum and materials in the model office simulation program should be an on-going process. Areas such as pre-testing, post-testing, business resources, remedial instructional materials, pre-simulation activities and the simulation vehicle as well as countless other items have to be reviewed and evaluated yearly. This constant evaluation and up-dating should be based upon student achievement of objectives established for the class.

Pre- and post-testing procedures and materials should be thoroughly evaluated. If the testing is used in identifying student weaknesses and levels of competency, then the validity and reliability of these testing instruments should be considered. Perhaps professional advice can be obtained in your district on the subject of tests and measurements to assist the teacher in properly preparing these materials. In addition, if the tests are guidelines to determining the type and scope of remedial work for each student, then emphasis should be given to the effectiveness of these materials.

Outside resources such as speakers, field trips, films, work day activities and other business resources should be constantly evaluated relative to their value to the total program. If a workday is employed in your simulation, thought should be given to the effectiveness of the various stations.

There are some materials that will need to be revised almost yearly. Examples of these are tax charts, Internal Revenue forms, postage charts and Social Security schedules. Many other materials and

documents may be used in various simulations and may become obsolete from one year to another.

The simulation vehicle may need to be evaluated and revised. Attention may be given to the addition or deletion of work stations, source documents, continuous learning activites, or the reassignment of job responsibilities. Enrichment areas such as Western Union offices, banking facilities and duplication and graphic arts departments should be evaluated for possible revision.

Pre-simulation materials should be evaluated extensively to determine whether the activities and skills learned are (1) allowing the students to move from the classroom into the simulation with ease, and (2) whether the particular skills, tasks, and equipment taught are adequate so that a transfer of learning is achieved.

The teacher should conduct a continuous evaluation throughout the entire year by noting the problems the students are having in the model office. If a majority of the students are having trouble with payroll procedures, or posting, or telephone communication, or perhaps the operations of certain equipment, then the pre-simulation exercises which include these knowledges and skills might be ineffective.

Don't wait until the end of the year to try to remember all the problems that were encountered in the simulation. Write problems down as they occur, then review your materials and try to establish what needs to be corrected or altered.

Remember, whatever changes the teacher decides upon will require the rewriting of the instructions that are contained in the procedural manuals used by the students.

FOLLOW-UP

An attempt should be made to answer several questions from a follow-up program. Two of the most important are:

1. Are the graduates of the simulation program employed in an occupation for which they are trained?

2. What do graduates of the simulation program who are employed in the same or related occupation feel the strengths and weaknesses of the simulation are in terms of job preparation.

The importance of the first question is apparent in that the total purpose of the simulation program is job preparation. Since we are training students for jobs related to office occupations, it is hoped that motivating programs such as office simulation will encourage students to seek employment in the same field.

The importance of the second question is also apparent but somewhat more difficult to answer by survey techniques. However, some form of follow-up procedure is necessary to identify the strengths and weaknesses of your program. Ideas and opinions of these graduates will be invaluable in the positive growth of your simulation.

It takes a great deal of time for the teacher to develop a good follow-up system which will allow the collection and analysis of information about former students. The most productive method of follow-up for the teacher is to go to the job site and personally interview both the new employees and their employers. This method requires a great deal of time on the part of the teacher. To be realistic, if the teacher does not have released time from the daily classroom schedule

to do this, in all probability this method will prove too time-consuming to be practical.

Questionnaires are still another device used in follow-up systems. These lack some desirability because of the impersonalized touch they tend to indicate. Also, you tend to limit the responses to many questions with this method.

A written letter requesting a written reply may prove worthwhile as a method of follow-up, especially if you have informed the students before they graduate that you would be contacting them in the future and have previously explained the importance of their response to the total growth of the simulation program. We should not, however, be surprised at a limited response.

Some districts perform a follow-up by having the students fill in and return a post card. Although this method might get a better response than the questionnaire or letter, it is doubtful whether enough information can be obtained to provide a worthwhile evaluation of the simulation.

Occasionally former students will drop by to see you. This may be the most effective evaluative procedure you have with the exception of an on-the-job visit.

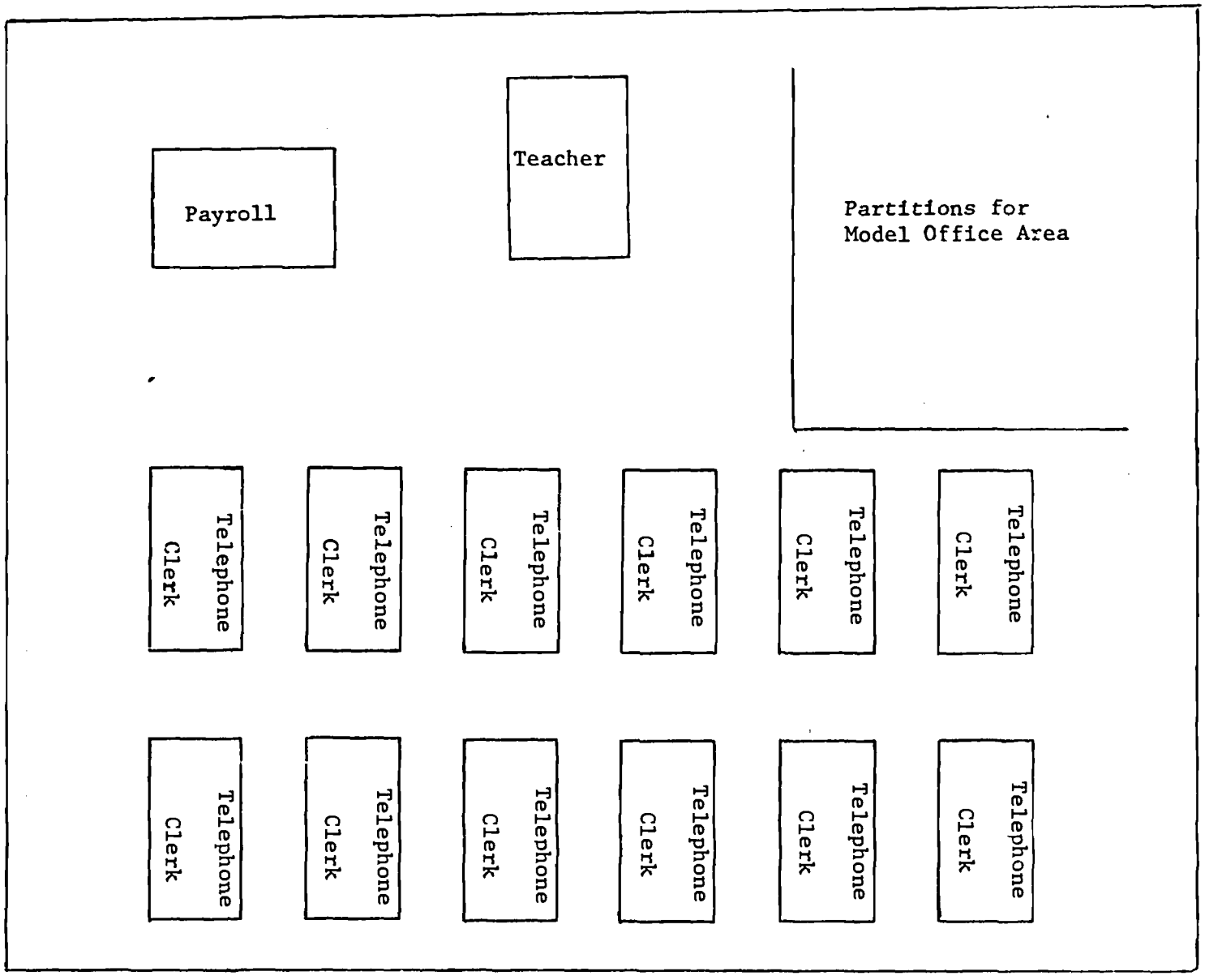
It should be understood that the follow-up efforts made in the total vocational education spectrum have been exceptionally weak. Therefore, if the simulation teacher wishes to gain a knowledge of the effect of the simulation program, there is only one way to do so: Go to the business community and ask.

CLASSROOM DESIGNS

Following are some sample designs of simulation facilities including situations in which from one to five rooms are available for the simulation.

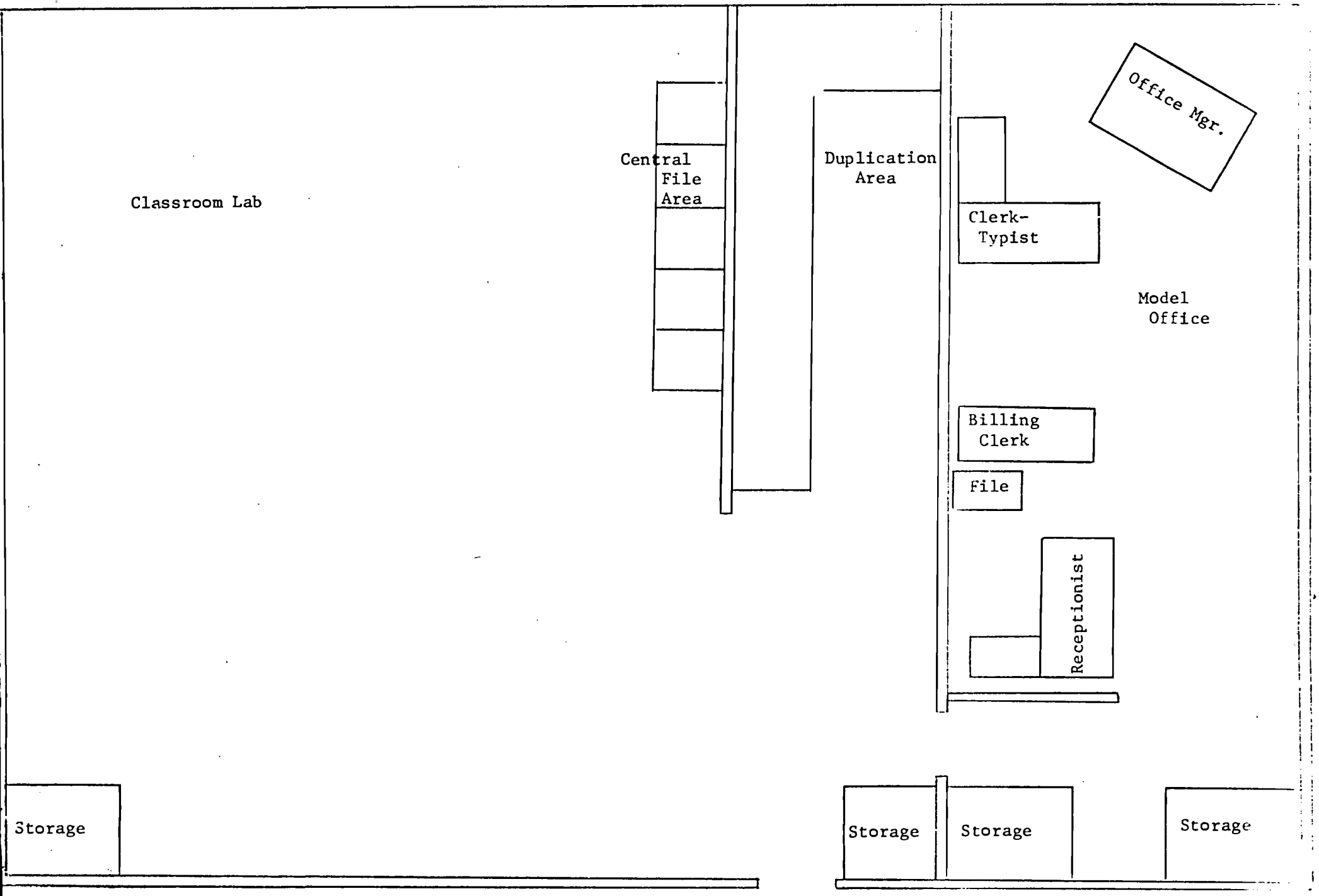
COMMUNICATIONS UNLIMITED

Lincoln High School, Tacoma, Washington



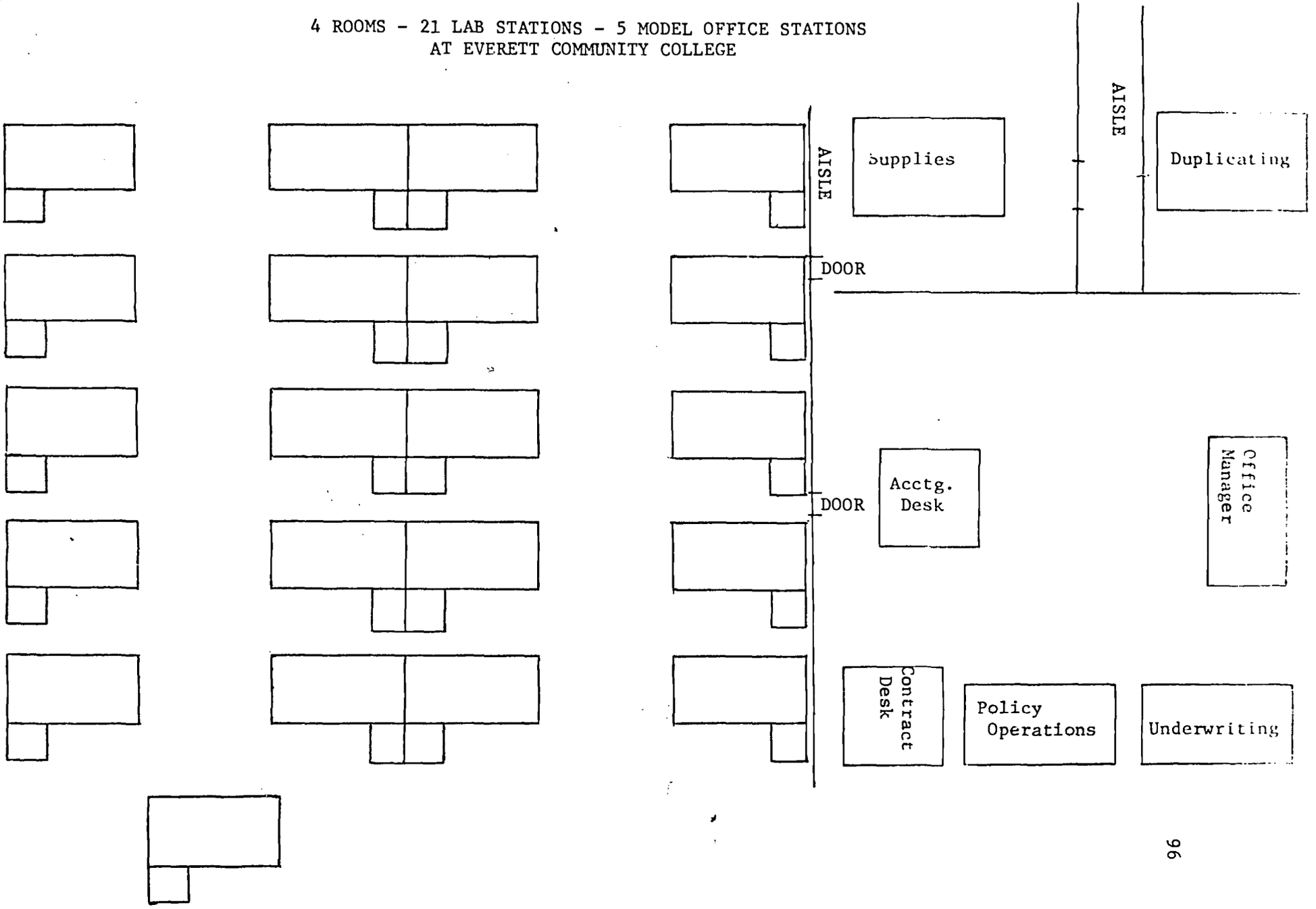
1 ROOM SIMULATION

FRANKLIN PIERCE HIGH SCHOOL - CARDINAL WHOLESALE COMPANY

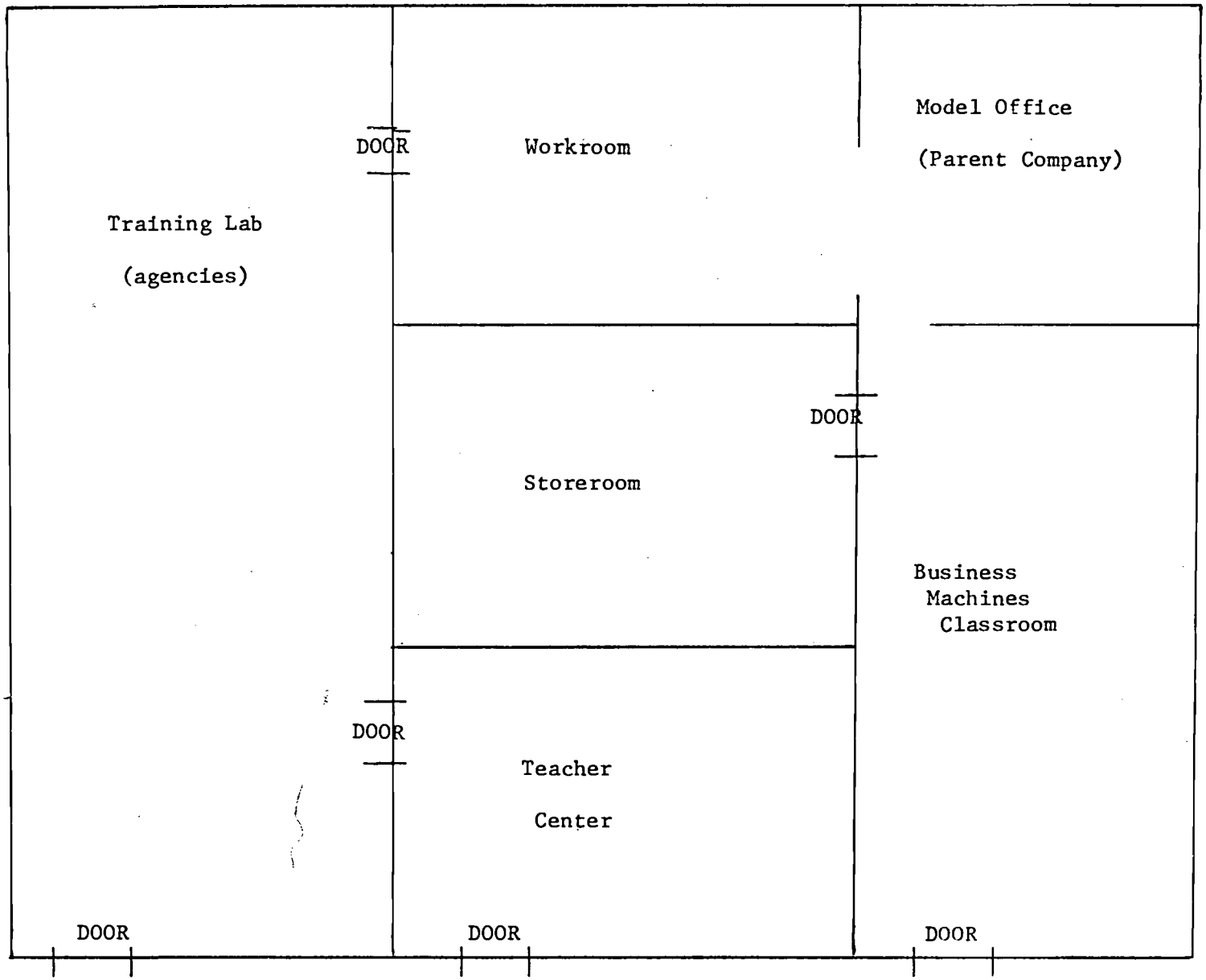


2 ROOM SIMULATION

4 ROOMS - 21 LAB STATIONS - 5 MODEL OFFICE STATIONS
AT EVERETT COMMUNITY COLLEGE



5 ROOM SIMULATION



LAYOUT OF THE SIMULATION FACILITY AT
MOUNTLAKE TERRACE HIGH SCHOOL
MOUNTLAKE TERRACE, WASHINGTON
28 LAB STATIONS
5 MODEL OFFICE STATIONS

EQUIPMENT

Following are examples of suggested equipment used in three different simulation programs.

INSURANCE

Equipment for Model Office

1 Executive Desk
1 Machine Desk
3 Secretarial Desks
5 Chairs matched to desks
1 Reception Room Settee
1 Lamp for Reception Room
4 Bogen Intercom Units
1 Postage Scale
1 Proportional-spacing typewriter
5 Small Wastebaskets
1 Bookkeeping-Posting Machine
5 Desk Calendars and Holders
5 Desk Blotters
5 In-and-out Baskets
Carpeting
Drapes
1 Small Lamp Table
3 Selectric Typewriters
1 Rotary Calculator
1 Rubber-stamp Rack
5 Position Name Plates

Equipment for Workroom

1 Mimeograph Machine
1 Copy Machine
1 Sink/Water
1 Paper Cutter
1 Collator
1 Fluid Duplicator
1 Stencil Storage Cabinet
Storage for Forms and Supplies
1 Large Wastebasket

Equipment for Laboratory

28 L-shaped Desks
28 Adjustable, Swivel Chairs
28 Secretary Trays for supplies
1 Mirror-full length
1 Multiple Listening System
1 Time Clock and Card Racks
12 Bogen Intercom Units
1 Four-drawer File Cabinet
Transcribing Machines

MOE

Materials (Software) Needed

One Student Manual for each student
One Teacher's Manual for each classroom.

Essential Equipment Needed

1 Typewriter for each student (electric preferred)
1 Adding Machine for each 6 students
1 Duplicating Machine
2 Rotary Files
1 Filing Cabinet
Partitions
1 IN and OUT Basket for each position

Very High Priority Equipment

Intercom Telephone System (3 phones for every 4 students)
1 Dictating Machine for every 6 students
1 Transcribing Machine for every 6 students
1 Proportional-spacing Typewriter for each 6 students
1 Printing Calculator for each 6 students
Office style desks, File Cabinetc, and Chairs
Accoustical Floor Covering
1 Video Tape Recorder
1 Tape Recorder Hookup to telephone

Equipment Important to Have

Electric Typewriter for each student
Proportional-spacing Machine for each Executive Secretary
Intercom Telephone System with a phone on each desk
1 Printing Calculator, 1 Rotary Calculator, and 1 Ten-key Adding Machine for each 6 students
1 Dictating Machine and 1 Transcribing Machine for each 6 students
Office-style Furniture throughout, including Carpets
Dry Photo-copy Equipment
Spirit Duplicator
Steno Lab
Addressing Machine
Desk Organizers
Cash Drawers
Roll-a-dex Files
Name Plates

APEX

This list specifies minimum requirements for equipment needed for the APEX program published by the 3M Company. Additional office equipment and supplies can be used effectively and will lend to the success of the program.

Equipment Requirements

11 Typewriters
8 Calculating Machines
1 Student Desk per student
1 Chair per student
1 Copying Machine (mimeograph, spirit duplicator, offset, photocopier)

Recommended Equipment for 20 students

Work station for each employee
15 Typewriters
9 Calculators and/or Adding Machines
1 Mimeograph Duplicator
1 Spirit Duplicator
8 Transcribers and Steno Belts (5 boxes)
3 3-drawer File Cabinets
1 Paper Cutter
1 Ingra-red Copier (thermo-fax)
IN and OUT Trays for each station
Mail Room Equipment (scale, zip code book, etc.)
Staplers for each station
Label Maker
Tape Dispensers for each station
Overhead Projector
Date Stamp, Scissors
Staple Remover, Rulers for each station

MOE Simulation, Utah State Board for Vocational Education, Salt Lake City, Utah, 1970.

The OFFICE: Reality Training Through Simulation. 3M Company, Visual Products Division, St. Paul, Minnesota. 1971.

Supplies and Materials

As you progress through the development of your simulation program, it will become apparent that certain supplies and materials will be necessary. Specific forms such as employment application forms, purchase order forms, registers, vouchers, routing slips, and others necessary for your simulation may be available through the business organization you are simulating. If not, the forms should be developed by the teacher and students in the simulation.

Included here is a list of suggested supplies and materials of a general nature, leaving specific needs to your own situation.

Student Supplies

- Expandable files
- Stenographic reference manuals
- Dictionaries
- Tape holders
- Staplers
- Staples
- Desk calendars
- Letter openers
- Paper clips
- Rubber banks
- Rulers
- Scissors
- Carbon paper
- Plain paper
- Onionskin
- Carbon correction tape
- Envelopes
- Erasers
- Rubber stamps
- Time and date stamps
- Routing stamps
- Time cards
- Stencils
- Mimeograph ink
- Mimeograph paper
- Spirit masters
- Spirit master fluid
- Spirit master ink
- Cleaning material for duplicating area

Free Materials*

- Phone directories - local telephone company
- Tax forms - if used - local Internal Revenue Service Office
- Mailing instructions - local post office
- National Zip Code Directory - local post office
- Official Airline Guide - if used - local travel agent

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* "The You in Simulation," Beverley M. Funk, Washington Insurance Council, 1972.

RESOURCES AND REFERENCES

People and Schools

As previously stated, one of the important steps in developing a simulation program is the observation of a currently successful program. Following is a selected list of names of teachers operating simulation office education classes.

In some cases only the name of the school at which a simulation program is being conducted is listed. Interested teachers may wish to contact one or more of these teachers and observe and discuss simulation with them. In instances where only the school is listed, contact the department chairman or principal for additional information.

TWO-HOUR SIMULATIONS

WASHINGTON

Miss Patty Yellum Meadowdale High School 6002 - 168th Southwest Lynnwood, WA 98036	Small Loan Company
Mrs. Edyth Hendenson Mountlake Terrace High School 21801 - 44th Avenue West Mountlake Terrace, WA 98043	Auto Insurance
Mrs. Delazine Moran Woodway High School 23200 - 100th West Edmonds, WA 98020	Life Insurance
Mrs. Myra Sorenson Edmonds High School 7600 - 212th Southwest Edmonds, WA 98020	Homeowners Insurance
Mrs. Marion Bellows Mountlake Terrace High School 21801 - 44th Avenue West Mountlake Terrace, WA 98043	Auto Products
Miss Wanda Smith Sunset High School Beaverton, Oregon	Auto Insurance
Mrs. Beverley M. Funk Everett Community College 801 Wetmore Avenue Everett, WA 98201	Auto and Homeowners (combined with Internship)
Mr. Jerry Russell Franklin-Pierce High School 11002 Portland Avenue Tacoma, WA 98445	Mercantile Simulation
Mrs. Lynn Austin Medical Lake High School Medical Lake, WA 99022	
Thomas Jefferson High School 4248 South 288th Street Federal Way, WA 98002	Insurance

Washington (continued)

Bethel Senior High School Route 2, Box 2438 Spanaway, WA 98387	Insurance
Centralia Senior High School 813 Eshom Road Centralia, WA 98531	Insurance
South Kitsap High School 425 Mitchell Avenue Port Orchard, WA 98366	Insurance
Hoquiam Senior High School 501 West Emerson Avenue Hoquiam, WA 98550	Insurance
Columbia River High School 800 Northwest 99th Vancouver, WA	Insurance

INSURANCE SIMULATIONS IN OREGON

Phoenix High School
Phoenix, Oregon 97535

North Bend High School
Airport Way
North Bend, Oregon

Tigard Senior High School
9000 Southwest Durham Road
Tigard, Oregon 97223

Lane Community College
4000 East 30th Avenue
Eugene, Oregon 97405

David Douglas Public Schools
2900 Southeast 122nd Avenue
Portland, Oregon 97236

Henry D. Sheldon High School
2455 Willakenzie Road
Eugene, Oregon

St. Paul High School
St. Paul, Oregon 97137

Hermiston Senior High School
600 South First Street
Hermiston, Oregon 97838

Union High School No. UH-1
60 Main Street
Lebanon, Oregon 97355

Beaverton Schools
4855 Southwest Erickson Avenue
Beaverton, Oregon 97005

Culver School District No. 4
Post Office Box 228
Culver, Oregon 97734

People and Agencies

Mr. Harold Anderson, Director of Office Occupations Coordinating Council for Occupational Education 216 Old Capitol Building Olympia, WA 98504	Slides on Simulation.
Mr. John Stanford SAFECO 4347 Brooklyn Avenue Northeast Seattle, WA 98105	Insurance forms. Auto insurance and Homeowners slides on Insurance Simulation.
Mrs. Pat Grover School Consultant Pacific Northwest Bell 1260 Mercer Street Seattle, WA 98109 Mrs. Virginia Smith Lincoln High School 701 South 37th Street Tacoma, WA 98408	Communications Unlimited Materials and Information.
Mr. Frank Nelson School of Business and Administration Eastern Washington State College Cheney, WA 99004	
Washington Insurance Council 1218 Third Avenue Seattle, WA 98101	Agency and Company Flow Charts Simulated Auto Insurance Manual Simulated Auto Insurance Forms "The You in Simulation" 1972, written by Beverley Funk

Periodicals

A review of business education books and periodicals should be conducted by the teacher interested in a simulation program. Numerous articles appear each year which are written by teachers currently operating a simulation program of some kind. Many ideas can be gained which will aid the interested teacher in the development of a successful program.

In particular, books and periodicals such as these should be reviewed:

NBEA Yearbook

Business Education Forum

Balance Sheet

Journal of Business Education

Business Education World

The Secretary

AVA Journal

Aside from researching current simulation programs, an examination of current office procedures, necessary skills, and the latest in office equipment should be conducted in magazine and periodicals such as:

The Office

Administrative Management

A third valuable area of study for the prospective simulation teacher includes research studies conducted in the Office Education area. Doris Berry's study of 1963 and Jack Noodle's study of 1967

have been mentioned previously. These studies are examples of good research that will aid the teacher in developing a sound office education program by providing insights to skills and levels of knowledge deemed necessary for the future office worker.