AN EXPERIMENT TO COMPARE AN ABILITY GROUPED CLASS AND AN INDIVIDUALIZED CLASS IN TYPING I ON THE SECONDARY LEVEL

by

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CHAPTER I

Introduction
Because meeting performance objectives set by their departments for each class has become the major concern of many teachers, the writer wishes to determine which of two teaching methods in a beginning typing class will prove more effective in meeting these performance objectives. In the coming years, teachers will be evaluated according to how their students meet performance objectives. With this in mind, the writer has become increasingly conscious of the importance of student performance. Teaching becomes more than a mechanical process of assigning A's through F's. It becomes a very real concept of thinking "student achievement is my achievement."

Statement of the Problem
Which of two—ability grouping or individualized instruction—methods will more effectively help students meet the performance objectives for beginning typing?

Need
An experiment of this nature will be beneficial to beginning typing teachers by helping them to determine methods to use in their classes. The writer feels that her teaching in future years will benefit from this experiment especially if a significant difference is found between the attainment of the two groups.
Scope and Limitations

This experiment will take place at Ponderosa High School in Shingle Springs, California, in the academic year 1972-73. The two classes involved will be beginning typing classes of approximately 40 students each. These students signed up for the typing classes on a voluntary basis during a registration session in the spring of 1972. All the students involved will have the same equipment, materials, and professional and clerical help available. Comparisons of class achievement will be made only during the second and third nine week sessions.

Definition of Terms

Ability grouping: Dividing the students in a class into groups that through instructor's observation and classroom testing have displayed similar levels of ability and achievement.

Individualized instruction: Each student in a class is allowed to work at his own speed and cover as much material as he feels is necessary to meet the objectives of the course.

Plan of Presentation

The first chapter will give an introduction, a statement of the problem, the need for the study, the scope and limitations, and definition of the terms. It also includes the methods and procedures that will be used in the study.
In the second chapter of this paper, the writer will discuss some of the data found when reviewing the literature on individualized programs and ability grouping in typing classes.

Then in the third chapter, the findings of the study will be reported. The grade earned on each unit's test will be carefully recorded. The percent of students meeting the minimum objectives on each unit will be compared. These numbers will be analyzed to find if any significant difference exists between the two classes in meeting the performance objectives. Tables developed from the findings will be included.

The summary, conclusions, and recommendations based on the data obtained from this study will be given in the last chapter. Samples of assignment sheets will be in the appendix.

Methods and Procedures

To simplify the identification of the two classes, the writer will label the ability-grouped class as Class A and the individualized class as Class B.

Class A will be divided into three ability groups at the end of the first nine week session. Grades earned on daily assignments during this period will be the basis for the grouping. The students will be able to move from one group to another if the instructor or student with instructor's approval feels it is necessary.
Assignment sheets will be given to each group on each unit. Although all students will be working on the same unit in the same period of time, the slow group will be given only enough projects to cover the unit's objectives. The fast group will be given extra work on each unit while the average group has just enough assignments to finish in class time.

All students will take timed writings which will be given on a regularly scheduled basis.

Papers that are collected will be graded. Students will be given the grading scale used so they can keep a record of their scores. If any student wishes to spend time outside of class to redo any of his work for a better grade, he will be allowed to do so. All work that is done over must be done in the classroom before or after school or during free time. Work done at home will not be accepted.

Written, typed, or oral tests will be given to all three groups at the same time when the unit is completed. All the students will take the same tests which will cover the performance objectives for the unit that was just completed. Final tests at the end of each nine week session will cover all the objectives for that period.

In contrast, Class B will be given a list of objectives for each unit and the objectives for the total nine week period.
The instructor will explain what projects in each unit should be studied in order to successfully meet the goals. Each student will be allowed to progress through the text at his own rate. Each will choose which projects he wishes to do. When a student believes he can meet one unit's objectives, he will inform the instructor and she will administer a written, typed, or oral test on the material just completed. If the student successfully meets the minimum requirements on the test, he may proceed to the next unit. If he does not reach the objectives, the student will then practice any of the material in the unit that he feels he needs to review; and when ready, he may try another similar test on that unit.

Timed writings will be given in Class B but only to those students who want to take them. The students will know the minimum speed requirement for each nine week session and can decide for himself if he needs more work on the timed writings. If the instructor finds that some students are avoiding all timed writings, she will have a conference with each of those students to find out why they are not participating and to encourage them to try taking timed writings to build their speed.

The class will be given weekly time schedules to show them how much they should be trying to cover each week. They
will then be able to tell if they need to push a little harder or come in some extra time to work on their units.

The instructor will need to see that everyone is working on the typing projects they should and that all are progressing satisfactorily. Students will receive any help they need but will be encouraged to think for themselves. An important function of the instructor will be to see that the students are using the correct techniques and that they are all making efficient use of class time. She will work individually with each student who is having any kind of problem in typing.

At the end of each nine week period, both classes will be given the same typed, written, or oral tests that cover all the performance objectives for that period. The scores on the tests will be compared to see if one class was significantly more successful than the other class.

**Limitations**

Sources in the review of literature are limited to those found in the libraries at Montana State University and Sacramento State College.
ABILITY GROUPING

Research in ability grouping began in the 1920's, peaked in the 1930's, declined in the 1940's and rose again in the 1950's when the practice of grouping increased (9:49). Studies indicate that ability grouping has been widely accepted at both elementary and secondary levels by parents, teachers, and school administrators as an efficient scheme for handling the organization of classroom groups (4:556).

Research has been contradictory and inconclusive. Some researchers find that ability grouping puts poor students at an even greater disadvantage. Others find that it benefits below average groups more than it does average and above average groups.

Various things are used as the basis for grouping. In Kasper's (6:25) study, the DAT and IQ scores were used as well as grades for the first 12 weeks. This procedure was based on general ability to follow directions, comprehension, and individual initiative. Grades over a 12-week period were considered a good indication of aptitude and the trend of typing development in each student.

It must be made clear to the students that the original grouping is not final. If a student is adversely affected by
his grouping, steps should be taken to correct that situation as it makes him feel inferior to his peers. Fixed groups can trap both young people and adults physically and psychologically (1:309).

In Kasper's (6:26) study the warmup was done with all the groups each day. Drills and timed writings were also done with all groups two days a week. All the students did the same units of work on production but the fast group had more to do and were given extra work. They were expected to need a minimum of assistance. The textbook explanations were considered sufficient for the fast students.

The slow group was given very detailed explanations of each assignment to be done. Some explanations were given to the average group in addition to those in the textbook.

In this grouping plan, the quicker students were kept busy and slower students had the satisfaction of seeing a few lessons completed. Lessons were of the same difficulty regardless of the group.

Slow students cannot be allowed to get behind because a loss of interest on their part can and often does lead to discipline problems (5:33).

Advantages. There are some definite advantages in ability grouping. Rinehart (9:50) listed these:
1. Ability grouping allows the student to advance at his own rate with students equal or at least nearly equal in ability.

2. In heterogeneous classes, educational standards are low because teachers tend to teach to the average student or below. Bright students are not challenged.

3. Pupils of below-average ability find greater success when grouped together and are challenged to do their best in order to excel within the group or to be promoted to a higher group.

4. Teacher has more time to give attention to the individual because he is free from the time consuming task of meeting a wide range of differences in ability.

Some students have a favorable reaction to working in ability groups. One slow student’s reaction was:

If we were not grouped, the people in the fast section would get tired of waiting and people in the slow section would get tired of trying to keep up with the fast group. It has helped very much. (6:37).

Disadvantages. On the other hand, there are reasons against grouping students according to their ability. Rinehart (9:51) pointed out some of these.

1. Undesirable social implications are made. Above average students get an exaggerated sense of importance while low-ability students feel inferior.

2. Students of the low ability profit from exposure to material aimed at average and above average students and from association with students more able than themselves. They miss this exposure when grouped.

3. If the educational process is to succeed, it must prepare students to face adult life and this entails being able to work and get along with people
who have a wide range of abilities. Grouping does not help students to cope with others of different abilities.

4. Teachers of homogeneous ability groups assume that all the children are more alike than they really are and neglect individual differences.

Supporters of ability grouping and supporters of individual instruction both favor greater degrees of individual attention for each pupil.

Another view on ability grouping was pointed out in Aspy's (1:308) article. It says that "research has shown no significant increase in achievement when grouping is used." In addition, some researchers have found that grouping does not significantly reduce the range of abilities in each section.

One thought that is important to remember is that stated in Rinehart's (9:49) article.

The sense of competitiveness or aggressiveness is part of the American way of life. To shelter a child from it on the pretense of building up his self image or ego--only to dash it to pieces when he graduates and goes out into the world where he must compete with persons of all abilities--is in itself unjust.

INDIVIDUALIZED APPROACH

An individualized approach in typewriting is a way of providing for student differences. There are many ways to individualize a program. Teaching machines are being used; but even without these expensive machines, an attempt can be
made to individualize courses. In typewriting this can be done by using units of instruction. This idea was pointed out by Grubbs (3:45).

First the typing learning program must be divided into many small parcels or units. You might think of them as 'minicourses'; and if you are using a standard typing text, the minicourses may be a single lesson or a group of lessons from the text. Performance goals must be clearly stated for each of the minicourses so that the student knows in advance how he will be able to perform when he has completed it.

A study done by Zahn (11:13) with an advanced typing class explained about setting up a master plan for the class showing the units to be covered and the approximate time each would take. The units are introduced by a handout which includes the forms to be used for the jobs, sources for practice material, and the behavioral objectives for the unit.

Another study using the unit concept was done by Lambrecht (7:243). She used a control group taught in the standard fashion and an experimental group which began working on units the seventh week of instruction after the basic techniques were learned. Each student had eight units to complete and as soon as he could meet that unit's goals, he could move to the next. Each student had to complete a minimum of three units to pass the course and to receive credit for the year.

In this individualized approach, the teacher must provide guidance for the students. Though students can advance at
their own rate, they must achieve the goals of each unit before moving to the next unit. The instructor must see that standards of performance are maintained. She must assess the achievement of students' performance on the units and provide help for those students who are having difficulty meeting the unit's goals. Along this line Grubbs (3:45) said:

Tests must be constructed for each minicourse so that the director of learning, and the student, will have a means of determining if the performance goals for the minicourse have been achieved. The learning system must also provide for remedial and alternate training material for those students who do not accomplish the goals.

After taking a unit test, students should be allowed to improve their score by taking another similar test after reviewing the material in the unit more thoroughly for at least one full class period.

Advantages. In agreement with Zahn (11:14), the writer feels that there are many advantages to an individualized approach.

1. When working on an individual basis, students react favorably and feel that the course was designed for him.

2. The students can maintain individual progress records which show what units have been completed. He knows where he stands as far as grades are concerned. He knows the objectives before he starts the unit and knows they won't change at the end.
Some other advantages are also given in a study by Lambrecht (7:244).

1. The instructor has more time to spend with individual students.

2. Some students progress farther with individual attention than they might under the usual methods of instruction.

3. The grading of papers in an individualized class is easier and less burdensome since all of the students' work in the units is not turned in all at one time.

4. It is easier for transfer students to enter the class after the beginning of the school year and to be placed in one of the units according to their accomplishments in the skill area.

5. Discipline problems are reduced in the unstructured class because with the individualized program there is no group security in misbehaving.

6. Slow students feel the necessity to keep going, while the advanced students are not held back.

**Disadvantages.** Some difficulties also arise in the individualized classroom. Some students do not seem to have the drive to work on their own. They need to be pushed all the time. Many seem to put off doing their work if they have no real deadlines to meet. Lambrecht (7:244) listed these difficulties she found in her study and the writer believes they tie in with problems she will have to deal with in her study.

1. Some students tend to waste time when there is no definite deadline for the completion of work.
2. More class preparation is required on the part of the teacher since he may be teaching different aspects of typing to each student within the same period of instruction.

3. More ingenuity is required on the part of the teacher to add variety to the classroom routine.

4. Failure to attain the required speed and accuracy goals may slow the progress of some students through the units.

5. Without strong teacher guidance, the students may become lazy, indifferent, or misinterpret directions and do the problems incorrectly.

One cannot say for sure if the individualized approach is more effective. In Lambrecht's study (7:244) she stated that at the end of the third quarter, typing achievement showed no significant difference between the control and experimental classes. For variety, the individualized approach can be used. Students would probably enjoy typewriting when they feel at ease and not under a great deal of pressure.

Individualized instruction is one solution to providing for the needs of students of various abilities (7:245). Individualized instruction boils down to taking differences in achievement into account in deciding what every student should be taught next, what he should do next, and what his next objectives should be (10:20).

Too often teachers are afraid to try new methods of instruction, possibly because they are not familiar with new
innovations. The traditional, structured classroom is where they feel secure; therefore, any deviation from this method is out of the question. A teacher's first concern should be that the student meet his own goals and that the instructor find a way of teaching that fits the student's needs, not the teacher's. An interesting idea on this is one from West (10:21) in which he stated:

... it would appear that very often the traditional rigidities of mass instruction have been a bar to individualization. The chief fault is the tendency to march all students along some predetermined route, at a predetermined pace, and in a predetermined fashion convenient for or familiar to the teacher. It is too often forgotten that the school exists for learners, not for teachers; that the teacher is the servant, not the master, of instruction.

SUMMARY

Many kinds of experiments and studies have been done with ability grouping and individualized programs. Information from a variety of articles was obtained through researching the pros and cons of ability grouping and individualized instruction. Each offers some advantages and disadvantages to both students and instructors. The teacher's responsibility is to determine a method that is most effective in his class. The method used may vary from year to year or even from class to class in the same year, depending on the type of students in the class as well as the size of the class.
Chapter III

A. Findings

ABILITY GROUPED CLASS

As pointed out in the review of literature, the writer found many pros and cons to the ability grouped situation. During the first quarter that the students were grouped by ability, the class did not accomplish as much as the instructor expected them to. Fast students were in Group A, average students were in Group B, and slow students were in Group C. Many of the students in the A and B groups thought they could waste time and still pass if they did Group C work. Some asked to be changed to a lower group but due to past performance and the instructor's opinion, the change was not usually permitted.

Much of the failure to meet objectives was due to excessive absences. Those who missed school seldom made any effort to make up the work. Therefore, when it came time for a unit test, some had not covered the material; consequently, they failed to meet the objectives of that unit.

One of the main reasons only 38 percent of the students passed Unit 16 (See Table 1) was that it was on timed writings, a weak point with most students in the class. An error cut off was established and words typed beyond this point could not be counted. Also, any papers with proofreading errors on
them were rejected. Many students were careless in the area of proofreading, thus losing credit for their timed tests. Even though plenty of time in class was allowed to work on Unit 17, it was more time consuming than many students anticipated; therefore, many pupils wasted time and did not finish by the end of the quarter deadline. Those students who were absent during the last week did not have an opportunity to make up the time so some of these students did not finish Unit 17. It is the writer's opinion that poor budgeting of time and lack of effort to make up time missed is the reason only 50 percent of the students met the objectives for this last unit of work. (See Table 1)

Many good points were found with the ability grouping set up. Most of the students in Group C were encouraged by being able to complete a unit and even having time to redo any jobs that were not satisfactory. The instructor did not feel that any of the students in Group C felt they were inferior and stupid by being in a slower group. Instead, they realized that the class was being geared for their ability and were happy to be able to work without the fear of inevitable failure.

Some of the Group A students finished their work ahead of time and had to be given extra assignments. Most of the
students in Group B were kept busy with the assigned work. If they did finish a unit early, they were able to go back and redo any jobs that were not to their satisfaction. This opportunity to redo work enabled many of the students to improve their mastery of the unit.

A few of the Group B students who finished a unit early and did very well on it were moved to Group A. It was found that very few changes in grouping had to be made. The changes that were made were usually to a faster group rather than a slower one.

At the end of the first quarter, a written test was given and the results were disappointing. Only 56 percent of the class passed with a score of 60 percent or higher. A study sheet reviewing all units covered had been given out to all students; but from the test results, it would appear that a great number of the students did not review or study for the test. The retention of past work appeared to be very low.

During the second quarter of ability grouping, achievement picked up considerably. One adjustment the instructor made was to make sure the number and difficulty of assignments were suited to the class time allotted. During the first quarter, sufficient time was not available on some units to allow for redoing work. Most of the redoing had to be done
outside the regular class period. At first, students did not make an effort to come in extra; but during the second quarter many students used any extra time they had to come in and work on jobs if they were behind or if they wanted to get a better score. They realized the importance of making up any work they had missed as some students did not do as well as they had expected on their previous quarter grade reports.

Units 19, 22, and 25, which were timed writing units, still showed a low percentage passing. (See Table 2) More time should have been spent working on timed writes.

A performance test and written test were given at the end of the year on material covered during the two quarters of this experiment. The results of these tests were low. Only 60 percent of the students met the minimum objectives on the written test and 78 percent met them on the performance tests. (See Table 2) The writer believes these low scores were due to lack of study, lack of concentration and some carelessness.

The quarter grades were based on an average of the unit grades with the final test grades counting as one unit. The results of the first quarter were that 80 percent of the students received credit for the quarter. The writer feels that the 20 percent failure rate was due to the fact that students did not realize the importance of making up time lost by being
absent. The second quarter results were much better. One hundred percent of the students met the minimum objectives for the quarter.

Instructor's Opinion. The ability grouped class works well for slow students. They are able to do a few jobs correctly rather than trying to hurry through many jobs and not getting them right. Average students also do well when assigned enough work to keep them busy but not bored with doing too much repetitious work. This is where the faster student may have problems in an ability grouped situation. In order for them to keep busy on the same unit as the slow students, the faster ones must be given many jobs of a similar nature. This can get boring. It would be more beneficial to the fast student if he could just proceed to another unit of work and not have to wait for others who are not so fast. These students could cover new material of a more difficult nature.

The instructor believes that it is essential to allow enough class time for the jobs assigned. Most students are not responsible enough to realize they need to work extra time on certain difficult units. A few days should be allowed for make up work as it is sometimes difficult for students to stay after school or come early in the morning.
Once the students get used to a system such as this, they will perform satisfactorily. Ability grouping does allow for differences in students' ability which is important. The problems encountered are not too great to overcome. All in all, the writer believes that ability grouping does work well.

**Student Opinions.** Students were asked to write a short summary of how they felt about the class. Class reaction to being grouped according to ability was favorable. Here are some of the comments that were received:

Personally, I thought the grouping system went pretty well. I can't say whether I liked it or not because I haven't seen any other group besides this one. I was in Group A and I didn't have any problem of keeping up. If what you really want to find out is can you use this system again successfully, I would say, "Yes."

I feel that it was a really good set up because if you couldn't work as fast as the other people you could go at your own speed. Being in groups really helped.

I thought the grouping was fine. My only gripe was that there was not enough time given to do the assignments. The reason for this though is because I am a slow typist.

I liked being put in groups. I think it made the class easier and helped me to get a better grade. I learned more, too, because I wasn't so rushed. Also, there wasn't a pile of work shoved on me that I couldn't do. I think you should be grouped to you anyway, not grouped by a whole class. This way gives everyone a fair chance. It's better to work up to your own ability rather than trying to work up to a classes' ability. Some people are just smarter than others.
I felt that the way you had us do our assignments this last quarter was excellent. I felt that working at our own level was very good. This way the only pressure we had was to be sure we had all the assignments done by the due date which was fairly easy because you only asked for a specified number of assignments to be handed in. The number was not out of reach to me and I easily reached it. It is good not to require too many because when we finish it we have a little time left in the quarter to go back and try to improve some of our grades.

INDIVIDUALIZED CLASS

Some problems found in the individualized class were that during the first quarter of the experiment, quite a number of students wasted a lot of time. When they realized they were running short on time, they began to hurry and did not do as well on unit tests as they could have. They did not complete as many units as they needed to receive the A, B, or C grade they were hoping to get. It was necessary for the instructor to constantly remind some to keep busy and use every minute of class time effectively. She also encouraged students to come in extra time and work, which many did rather regularly.

The reception from the students to the idea of an individualized class was extremely favorable. They seemed to relax when the pressure of deadlines was removed.

Unit 13 was a timed writing unit; therefore, the instructor did not make all students meet the speed objective before
moving on as many would not have progressed beyond that unit. After the students had tried several times to meet the speed and accuracy objective, they were allowed to go to the next unit. This accounts for only 56 percent passing Unit 13 and a higher percentage passing following units. (See Table 1)

It was found that receiving new students into class was easy as the instructor could test to determine what the student already knew then place him in a unit that was new or needed review.

A sense of competition was shown in many cases where one student did not want his friend to get ahead of him. Many would push hard just to keep ahead of someone else. This led to some problems as far as discipline was concerned. The students, being more relaxed and in an informal atmosphere, were inclined to discuss things aloud with their friends. The discussions were usually pertinent to the class but sometimes were too loud and had to be stopped. Enthusiasm can lead to noise in many instances, but misbehavior of any serious nature was almost nonexistent.

Working at an individual pace worked very well for the fast students. Some were able to start units from an advanced typing text after having completed all the units in the beginning text.
It was found that students who received a grade of C or even many who received a grade of B on a unit, would review and take another test on the unit to try for a perfect score. The students were very enthusiastic as a whole about being able to redo units when they found they had not learned as well as they wanted.

On the written test at the end of the quarter, it was found that only 66 percent of the students passed with a score of 60 percent or better. (See Table 1) This would indicate that the retention of much information studied during the quarter was poor.

During the second quarter in the individualized class, the students were more accustomed to working on their own; consequently, the number of students meeting the objectives of the units increased. The last unit was low, only 66 percent passing, because many still had some trouble budgeting their time. (See Table 2) However, it was not intended by the instructor that all students finish all units. Enough units were available to keep the fastest students busy so the average and slow students were not expected to finish the last unit. In fact, most of the students did get through more units than the instructor anticipated. Many had worked very hard outside of class to do better than they had the last time.
Problems still occurred on the timed writing units; but as in the previous quarter, students were permitted to proceed after having tried several times to meet the objective.

Another written test was given at the end of the year over basic material covered during the two quarters in which the experiment was being done. Only 67 percent passed with a score of 60 percent or better. (See Table 2) The students had been given thorough review sheets over all material in the units; but apparently they failed to study for the test and did not remember very well from past work. A performance test was also given at the end of the year. The results on this were better. Eighty percent of the students were able to meet the minimum objectives.

Instructor's Opinion. The instructor found that she did not have more time to spend with each student than she did in the ability grouped class. Because students were at so many levels, there were always some needing unit tests, timed writings, new unit work sheets, or retakes on unit tests. On occasion, this caused some confusion for the instructor in trying to remember which student was working on what unit. It is necessary to have capable aids to handle this in-class paper work so that the instructor is free to explain things and help those who need it.
Also small classes are essential so as to prevent students from having to wait for what he needs. Often six or more students would all need something at the same time. Some days, however, were very calm as everyone would be working on his own projects and needed very little assistance.

One thing that is important for the instructor to do is to be sure to have all unit work sheets, tests, and makeup tests ready before the quarter ever starts. On some occasions a fast student would be ready for a new unit before the work sheet for that unit was ready. Once these papers are ready, there is very little other paper work to prepare outside of class. There are the unit tests to be corrected but most of this should be done in class with the student so that he can see his errors and have them explained at that time. Competent aids are also essential in this capacity as many students are ready to have their tests corrected at the same time, thus having to wait in line if the instructor is the only one available to do the correcting.

Having the students work on their own is generally an effective way of meeting the needs of different abilities. For some slow students or for some lazy students, it may be better to have exact assignments and deadlines or they will not discipline themselves to do the work.
Student Opinions. Some of the student reactions to the individualized class setup were as follows:

I did like this method; it gave me a chance to know the work if I didn't know it the first time. Otherwise, I don't think I would ever learn how to do it right.

I did like the system better this semester because we were not pressured to do the work at a certain rate but rather at our own rate which was very nice for me.

I thought the system that was used this quarter was real good. I think I get more done working on my own. Another thing I liked was no pressure to hurry through the assignment.

I thought that the system you used was a very good way for the student to work on his own. It was good because the student did not have a teacher breathing down his neck. The student was able to use his time in his own way. I felt that I could take a test when I was ready. I liked it because there was no deadline on my papers, and I did not have to rush through the test to meet the end of the period. So in other words, the system was great!!

I really liked the way this course has been presented this quarter. I feel that the student has the time to complete his assignments at his own desired pace. It also gives the student a sense of responsibility by making him decide if he wants to work to achieve a satisfactory grade or not. It's his choice.

The system that was used this quarter was a good one I think. It let the people work at their own speed, like if I had more problems with business letters or business forms, I could take more time on them and learn them right which is better than doing them half-way and not even really learning them.
I really like the system that we have been using in this class for the last couple of quarters. Since I could work at my own speed, I felt more relaxed and I feel that being relaxed helped me do a better job than I would have done if I was under pressure all the time. I also think that I learned more because I could spend almost as much time as I wanted on certain things that were giving me trouble. There were probably a few people in this class that could not handle being on their own, and probably wasted the time and didn't get all the units done. But for me, it was really a break and I really appreciated the freedom.

COMPARISON

The writer has set up two tables showing the percentage of students in the ability grouped class and the percentage of students in the individualized class who met the minimum objectives for each unit. A comparison of these shows that during the first quarter, the students in the individualized class performed better than those in the ability grouped class. The percentage of students meeting the minimum objectives is higher on all units except Unit 13 which was a timed writing unit. (See Table 1) This could be due to the fact that the ability grouped class had more practice on timings as a class, while the students in the individualized class were allowed to decide for themselves how much practice on timings they needed. Most of them needed more than they got as only 56 percent of them met Unit 13's objectives for speed.
On the written test at the end of this first quarter, 65 percent of the students from the individualized class passed. The writer believes that even though both percentages are low, the students in the individualized class had a better understanding of the material because of having to repeat units until they could pass each unit's test.

The second quarter showed slightly different results. The percentage of students meeting objectives increased in both classes. The students in the ability grouped class performed just as well as those on an individualized basis and in some cases did better. For instance on the last unit of the quarter, 96 percent in the ability grouped class passed while only 66 percent in the individualized group passed. (See Table 2) This, the writer believes, was because the students who were working on their own did not proceed as rapidly as they could have had they needed to meet deadlines. Therefore, they did not get the last unit of work finished. The students in the ability grouped class did have deadlines to meet; consequently, they finished the units. Many had to come in extra time to do this; but when they knew they had to finish at a certain time, they did. The students in the individualized class knew they did not have to finish all units so did not make the extra effort outside of class.
On the end of the year test to check retention of the two quarters work, the difference was only 7 percent with the individualized class doing the better. The performance test showed only a 2 percent difference with the individualized class doing better on this one also.
Chapter IV

A. Summary

Some of the good points and bad points that were found in an ability grouped class and an individualized class have been discussed. A comparison of students' performance in the classes has been made with the result that there was not a great difference in the percentages of students meeting the objectives. The first quarter, the individualized class did score higher on most units, but the second quarter neither class was consistently higher.

Students' reactions to their own particular class were included as well as some opinions the instructor drew about each class.

B. Conclusion

The writer concludes that students will perform just as well in either an ability grouped situation or an individualized situation. Once the student gets used to a system and knows what is expected, he will produce what is expected.

Any student of any ability who can discipline himself and wants to learn to type well, can function in an individualized situation. Students who are inclined to be lazy and careless need a structured situation with some kind of definite assignments and time limits. The differences in students'
work habits and attitudes best determine what method to use in any class.

The writer believes that the performance of the student is based more on what he knows is expected of him rather than on the method of instruction used. She believes that a student will perform equally well under a variety of learning environments. There are, of course, exceptions; but generally, if an ability grouped class or individualized class is run properly with sufficient clerical help available for the number of students enrolled, the results will be equally satisfactory.

C. Recommendations

The writer recommends that a typing teacher may need to use a combination of methods in one class. Once she gets to know a student's habits, attitudes, and abilities, she can determine whether the student can be given units to work on at his own rate or whether the student needs definite assignments with deadlines to meet. In any classroom it is essential to provide some means of allowing for individual differences. One cannot say that one method is superior to another. The kind of students in the class should be the determining factor for methods of instruction.
BIBLIOGRAPHY


Table 1
PERCENTAGE OF STUDENTS MEETING MINIMUM CLASS OBJECTIVES
First Quarter Results

<table>
<thead>
<tr>
<th>Section Graded</th>
<th>Ability Grouped Class</th>
<th>Individualized Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 10</td>
<td>80%</td>
<td>97%</td>
</tr>
<tr>
<td>Unit 11</td>
<td>86%</td>
<td>94%</td>
</tr>
<tr>
<td>Unit 12</td>
<td>82%</td>
<td>91%</td>
</tr>
<tr>
<td>Unit 13</td>
<td>70%</td>
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<td>Unit 14</td>
<td>70%</td>
<td>76%</td>
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<tr>
<td>Unit 15</td>
<td>74%</td>
<td>75%</td>
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<td>Unit 16</td>
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<td>64%</td>
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<tr>
<td>Unit 17</td>
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<tr>
<td>Written Test</td>
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<td>66%</td>
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<td>Pass/Quarter</td>
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<td>87%</td>
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Table 2

PERCENTAGE OF STUDENTS MEETING MINIMUM CLASS OBJECTIVES

Second Quarter Results

<table>
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<tr>
<th>Section Graded</th>
<th>Ability Grouped Class</th>
<th>Individualized Class</th>
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</thead>
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<tr>
<td>Unit 19</td>
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<tr>
<td>Unit 20</td>
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<tr>
<td>Unit 21</td>
<td>96%</td>
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<td>94%</td>
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<td>Unit 25</td>
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<td>56%</td>
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<tr>
<td>Unit 26</td>
<td>100%</td>
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<tr>
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<td>80%</td>
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<tr>
<td>Pass/Quarter</td>
<td>100%</td>
<td>91%</td>
</tr>
</tbody>
</table>
TYPING I

Unit 13--Drills

Objectives: The student will demonstrate by touch the following symbols:

#, &, @, !, =, +.

On a 2-, 3-, or 5-minute timing, the student will place on this speed chart:

<table>
<thead>
<tr>
<th>Errors</th>
<th>WPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>1-2</td>
<td>19</td>
</tr>
<tr>
<td>3-4</td>
<td>21</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
</tr>
</tbody>
</table>

Assignment: Lesson 49, 50, 51, and 52. Staple and hand in all together.

Group A Type each line **twice** and each paragraph **twice**.

Group B Type each line **twice** and each paragraph **once**.

Group C Type each line **twice** and every other paragraph **once**.

Grade: The Lessons will be graded Complete or Incomplete. Each student will take a test over the objectives of this Unit.
Objectives: The student will demonstrate by touch the following symbols:

#, &, @, !, =, +.

On a 2-, 3-, or 5-minute timing, the student will place on this speed chart:

<table>
<thead>
<tr>
<th>Errors</th>
<th>WPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>1-2</td>
<td>19</td>
</tr>
<tr>
<td>3-4</td>
<td>21</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
</tr>
</tbody>
</table>

Assignment: Lesson 49, 50, 51, and 52. Type the lessons until you feel you can pass a test on the Unit's objectives. If you pass, you may go to the next Unit. If you do not meet the objectives, you will need to review the lessons and take another test on the objectives.

Grade: Each student will take a test over this Unit's objectives when he feels he is ready.
Typing I
Unit 13—Test

Type each of the following sentences twice. Set a 60 space line. Circle all errors. A = 0 errors
B = 1 error
C = 3 errors
D = 5 errors

If \( a + b = 25 \) and \( b + c = 45 \), could \( a = 10, b = 15, c = 30? \)
She counted it down: Five! Four! Three! Two! One! Go!
It ought to be better to buy 20 @ 15¿ than to buy 15 @ 20¿.
Please write to Dodd & Co., Smith & Sons, and Howe & Blake.
John claims Order #31 is for 31#, but Order #32 is for 32#.

Take a 3-minute timed write on the following paragraph. Be sure to double space. Proofread carefully and circle all errors.

We sat by the fire and ate our meal with little of the spark and zest that had marked our lunch. We were still at it when the old fellow who had told us we could fish in the lake came up once more. He asked us whether we had had any luck. We said we had had quite a lot of it, all bad. Then he laughed and said he guessed that, by now, we knew why no one would mind if we fished there: There weren't any fish.

You might think that we must have exploded with anger, right then and there; but if you think that, you don't know fishing. We were so glad to find out that the results were not our fault that we just roared with laughter and relief.
Objectives: The student will type a tabulation problem in ruled form centering it both vertically and horizontally. A maximum of five (5) errors will be made all of which will be corrected or circled.

Assignment: Do the jobs assigned for your group. Hand in each job as it is finished. Proofread carefully and correct or circle all errors. Two (2) points off for proofreading errors. If you get behind, you may come in extra time. LABEL JOBS. List: Line started, left & right margins, and tab stops.

Group A  23 A  Group B  23 A  Group C  23 A  23 B  23 C  23 D  23 E

Grade: Each job is worth 10 points. 9-10=A  7- 8=B  5- 6=C  4=D

Jobs may be redone for a better grade.

The student will be tested on the objectives for this Unit.
UNIT 23—Ruled Tables

Objectives: The student will type a tabulation problem in ruled form centering it both vertically and horizontally. A maximum of five (5) errors will be made all of which will be corrected or circled.

Assignment: Do as many of the jobs as you feel you need to in order to meet the objectives of this Unit. You will need to be able to list the line you start on, the margins you set, and the tab stops you set for any tabulation problem. You should be able to finish this Unit in no more than 6 days. If you feel you need more time, try to come in extra and practice. Use class time efficiently.

Grade: The student will be given a test over the objectives of this Unit. If he meets the objectives, he may move to the next Unit. If he does not meet the objectives, he will need to review and take another test.
UNIT 23--Test A

Answer the following questions about the tabulation problem below; then type the problem in the proper form centering it both vertically and horizontally in ruled style. Double space the body. Center the column head over the column. Correct or circle all errors.

1. On what line should one start typing to center this problem vertically?
2. What are the left and right margins?
3. How many times should one come down before typing a ruled line? (single, double, or triple space)
4. What should the original tab stop be set on for column 2?
5. What should the original tab stop be set on for column 3?

<table>
<thead>
<tr>
<th>Hotel</th>
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<th>Minimum Per Plate</th>
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<tbody>
<tr>
<td>Atlantic House</td>
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<td>5.50</td>
</tr>
</tbody>
</table>

*BANQUET Accommodations
Available Second Friday in March*

*Reserve banquet rooms in advance.

Grade: Proofread carefully. Two (2) off for proofreading errors. 9-10=A 7-8=B 5-6=C 4=D