An analysis of the literature on motivation in typewriting.

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AN ANALYSIS OF THE LITERATURE ON MOTIVATION IN TYPEWRITING

Submitted by

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CHAPTER I

INTRODUCTION

Statement of the Problem

The purposes of this study were to analyze the literature on motivation devices in the field of typewriting, to screen out the motivation devices which appear to be most significant for the teacher in the classroom, and to write brief descriptions of the motivation devices or plans of motivation.

Justification of the Problem

Motivation in our schools today is a predominant factor in every class in high school. Related to the field of typewriting, the motivated work causes the pupil to become enthusiastic over his task because he is doing something which seems valuable to him. According to Wilson,¹ adequate motives insure enthusiasm in the student's work, and the more enthusiastic he becomes about it, the more vigorous are his efforts. Such motives establish the right emotional atmosphere for maximum learning.

Discouragement, lack of cooperation, and inattentiveness may result from the lack of motivation. The student needs incentives to build up his work. The student who reaches a

plateau needs encouragement and faith that he will soon overcome this plateau in typewriting. One cannot say, perhaps, that all plateaus can be avoided, for they are produced by a variety of causes, some of which are inaccessible.¹ But the teacher can produce stimulation that will help the student gain confidence himself.

This analysis of the motivation devices in the current literature should prove to be very valuable to typewriting teachers in the classroom. The great variety of motivation devices contained in this report will enable teachers to select those which are most effective for teaching specific procedures of typewriting; such as, developing speed, developing control, developing efficiency in typing numbers, typing tabulations, writing letters, and developing production ability.

Authors of typewriting textbooks will find this thesis valuable. It suggests many motivation devices and plans which could be well incorporated in textbooks in typewriting.

Delimitation of the Problem

The following delimitations were established in this study:

1. The articles analyzed in this study were limited to those written during 1935-1951.

2. No comparison was made of motivation devices for first-year typewriting with those for second-year typewriting.

3. The literature was limited to the teachers' business education magazines and to the American Business Education Yearbook.

4. The articles which overlapped were disregarded in the analysis, since the primary purpose of this report was to assemble a comprehensive list of different motivation devices.

5. The selection of the articles for analysis was made on the following bases: (a) articles that seemed to make the most significant contribution in helping to promote better typists through speed and accuracy, (b) articles which gave illustration or description of specific motivating devices either for high school or college students.

6. The articles which were rejected generally possessed one or more of the following characteristics: (a) author explained the reason for using motivation in typewriting without including a device, (b) author's description of motivation techniques was too technical for classroom use, such as typing codes, (c) author did not include a substantial device that could be used in the classroom.

Organization of Chapters

Chapter I deals with the statement and nature of the problem. A review of related literature concerning motivation in typewriting is presented in Chapter II. Chapter III outlines the procedures used in conducting the study. In Chapter IV, the summaries of the analyses of the literature are presented. In Chapter V, the summary and recommendations
are presented.
CHAPTER II

REVIEW OF RELATED RESEARCH

This chapter includes a review of three theses concerned with the effect of motivation. Pertinent excerpts from the writings of expert authorities were also included.

According to the Dictionary of Education,¹ "Motivation is the application of incentives, whether external or internal, for the purpose of causing a student to perform in a desirable way." Motivation is the force that makes students want to learn and willing to exert the effort required for learning. Charts, games, contests, and achievement records are familiar devices used by the typewriting teacher.

Offering awards for attaining various rates of speed is a method of motivation that can be integrated with the school work throughout the whole course.

The purposes of the thesis, An Experimental Study to Ascertain the Value of Awards in Typewriting, written by Clarissa Hills² included the following factors:

1. To find out whether final results in typing are better when awards are used than when awards are not used.


2. To find out whether or not pupils will voluntarily devote more time to practice for the sake of earning an award.

3. To find out whether there will be greater competition among pupils when awards may be earned.

4. To find out whether awards in typewriting tend to discourage the slower pupils.

5. To find out whether or not good teaching of typewriting receives additional help from an award system.

6. To show the routine progress of a class offered awards in comparison with the routine progress of a class not working for awards.

In her study, the goal set for each class was to write 40 words per minute for 15 consecutive minutes with five or less errors. Any pupils in the Experimental Group reaching this goal received a pin as an award. A total of two pupils in the Experimental Group received the pin. Pupils in the Experimental Group devoted extra time to practice in the typewriting room. No reactions showing that the slower pupils were discouraged by the offering of the awards in the Experimental Group were noted.

The conclusion of Clarissa Hills' thesis was that offering awards does not make a radical difference in the progress of a group of students in their second semester of typewriting. However, on the 15-minute tests, the Experimental Group spurted at the end showing definitely that their urge toward the goal was a little higher.
An experiment to determine the effect of motivation on speed and accuracy on first-year typewriting conducted by Ruth Janes\(^1\) indicated that the Experimental Group made a significant gain over the Control Group in both the final mean scores and the follow-up mean scores. The increase in gross stroking speed and in the net words per minute was significantly greater than the increase for the Control Group for the three-week period. Another significant difference was that the students in the Experimental Group showed a greater reduction in the per cent of errors in the five-minute timed writings than did the Control Group.

The major type of motivation provided was a game of "Target and Arrow." A large dart board, marked with certain speed ranges, was hung on the bulletin board. Arrows with students' names on them were placed on the target each day according to the daily increase over the pretest. The project placed emphasis upon improvement in net speed. This target was used throughout the three-week period, and certificates were given at the end of the time for the person showing the greatest improvement, and to the person with the highest net words per minute.

Although a "Ladder Device" was used in the second week of experimentation for a three-day period, the "Target and

\(^1\)Janes, Ruth, "An Experiment to Determine the Effect of Motivation on Speed and Accuracy in First-Year Vocational Typewriting," Master's thesis, Boston University, 1950, p. 25.
Arrows" motivation device was the main incentive for the three-week period on speed tests. Both of these devices are shown on the following pages.

Odell and Stuart,\textsuperscript{1} co-authors of \textit{Principles and Techniques for Directing the Learning of Typewriting}, designated that teachers must consider external factors in the learning situation before they can set up the procedures to be used in teaching typewriting. These include the teacher, the classroom organization, and the equipment and physical needs of the typewriting room. The following statements were made by the authors:\textsuperscript{2}

The teacher plays an important part in integrating motivation in her classroom. No matter how perfect the technique used in teaching typewriting, or how excellent the equipment, the results in the classroom depend upon the quality of the teacher. In common with all teachers, the typewriting teacher should possess a pleasing personality, should have poise, and should rank high in such other general qualities as commonly are conceded to be important for dealing effectively with adolescent boys and girls. In addition to these, she must possess to a high degree the skill she proposes to teach.

According to them,\textsuperscript{3} ability to motivate the work effectively constitutes the second special need of the teacher of typewriting. In acquiring proficiency in any complicated skill, a large amount of repetition cannot be avoided. The


\textsuperscript{2}Loc. cit.

\textsuperscript{3}Loc. cit.
A student's name was written on each arrow. The figures on the target indicate the net increase in speed over the pretest.

Two ladders were used and each pupil was numbered and paired with another pupil of equal ability. Cards containing pupils' names were placed on the ladder according to the net speed attained. Each card also contained the corresponding number of the opponent who was charted on the other ladder.

\(^1\)Janes, Ruth, "An Experiment to Determine the Effect of Motivation on Speed and Accuracy in First-Year Vocational Typewriting," Master's thesis, Boston University, 1950, p. 59.
co-authors' further advocate, however, that the ingenious teacher can do much to relieve the monotony of this practice. Odell and Stuart feel that one of the most effective ways to relieve the monotony of necessary repetition is for the teacher to make the learner aware of the reason for his practice. They state further that this presupposes knowledge of what is to be accomplished and the learner must constantly be aware of the reason for his practice, which will enable him to understand what he is to do next and why he should do it. Their belief is that "all work to be most effective must be based upon self-analysis and meaningful repetition."

Odell and Stuart recognize another very effective motivating device which consists of "arranging the classroom situation so that a business-like atmosphere prevails." As a result of this, they indicate that the student constantly feels he is accomplishing something worth while.

Deviating from a set schedule in order to take advantage of an unusual situation represents still another motivating device. An example of this is illustrated below.

1Loc. cit.
2Ibid., p. 4.
3Loc. cit.
4Loc. cit.
The regular assignment in the text for the third-semester class was a timed letter test. The time was one-thirty in the afternoon. The setting was the typewriting room in a large high school whose football team was that day to play the last game of the season with its strongest rival team. The game was to be played at three o'clock on the local field. Every student was wearing the school colors in some form. The atmosphere bristled with "school spirit."

The alert teacher sensed...the tenseness of the students as they settled in their places. She immediately planned a tabulating contest instead of the regular letter test in the book. The winning team was to be the one which produced the greatest number of perfect copies with the lowest median time score. The copy used was in the Weekly News, the school paper. (The football write-up had contained a request for each student to keep his News because it contained the line-up of the teams.) The students sitting at the even-numbered machines were assigned to represent the "home" team. The students who were seated at the odd-numbered machines became the "rival" team. This was excellent copy which called for a "heading" or "title" and four column headings. It was one of the outstandingly accurate and fast tests of the entire semester.

In Problems of Teaching Typewriting, the authors gave an example of inducting motivation in the introduction of the operation of the shift key. If the class has already learned to control the stroking of all the letters on the keyboard, the use of the shift key may be motivated by suggesting that it will be desirable in the future to have the name of the pupil typed on each exercise, instead of written in longhand.

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as has been necessary up to the present time. The setting up of this definite purpose in the mind of the pupil is extremely important because of the added vigor which the pupil so motivated will put into drill. He must also be encouraged to feel perfectly confident of his ultimate success in attaining the objective which is set up.

Margaret G. Connelly\(^1\) states in her thesis, *Motivation of Shorthand and Typewriting*, that shorthand and typewriting are subjects, which if properly motivated so that each lesson will touch some interest in the pupil's lives, will prove most interesting to the learner. She also states that motivation is not an easy task at best because in motivating, the teacher must consider the members of her class as individuals and not as a whole. Connelly\(^2\) advocates that direct dictation to the machine, which is another valuable type of motivation, should be employed from the beginning. The teacher may read the material once slowly and have the pupil write what he has remembered. Connelly\(^3\) feels that this type of dictation "forces the pupil to keep up with the teacher, cultivates his hearing, assists him in acquiring

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\(^2\)Ibid., p. 29.

\(^3\)Ibid., p. 30.
rhythm, and in addition, prevents him from watching his machine."

Connelly\textsuperscript{1} thinks that because "the typewriting machine possesses an inherent fascination to the average student," the first lesson in typewriting should contain some drill which enables the pupil to manipulate the keys even though it may be in a very elementary way. She further reveals that the teacher should acquaint the pupil with just those parts of the machine he is going to use, and in acceptance of this, the teacher's best method of motivation for this elementary work is to demonstrate each feature of the machine with which she intends to acquaint her pupils. Her\textsuperscript{2} philosophy is that:

The ultimate aim in typewriting is the acquirement of speed and accuracy; therefore, the value of each mechanical feature in helping the student to realize this objective should be tied up with the instruction on these parts.

Connelly\textsuperscript{3} reminds us that, although the typewriter was never intended to be a medium of artistic expression, the artistic features of typewriting may be utilized as an interest-awakening feature. She\textsuperscript{4} feels that:

The interest-awakening feature can be motivated by allowing those pupils who are advancing rapidly to make typewriter designs and to place them on display in some conspicuous place in the classroom.

\textsuperscript{1}\textit{Ibid.}, p. 32.
\textsuperscript{2}\textit{Ibid.}, p. 33.
\textsuperscript{3}\textit{Loc. cit.}
\textsuperscript{4}\textit{Ibid.}, p. 39.
The teacher must use discretion in the assignment of this work and should see that it be of a practical nature—the designing of covers, indexes, tables of contents, and other things included within the realm of typewriting.

The motivating devices previously discussed in this chapter, as well as other devices, are invaluable to the typewriting teacher. According to Lomax, motivating devices may be used in the following ways:

1. Simplified regular routine.
2. Slight variations in routine to increase interest.
3. Competitive efforts to produce quantity and quality, freely using timed and untimed work.
4. Display of best work—both quantity and quality.
5. Use of simple measuring devices, records or graphs to make students fully conscious of present progress as the basis of future possibilities.
6. Occasional student demonstration of a particular operation.

The literature indicates that typewriting is largely a subject of repetition and that motivation is necessary in order to relieve the monotony that cannot be avoided in achieving skill. Even though the typewriter is a fascinating device, how effective it is depends upon the teacher in the classroom.
CHAPTER III

PROCEDURES

1. A review was made of the literature concerned with the effect of motivation in typewriting.

2. For the study under investigation, magazine articles on motivation in typewriting were located by reference to the Education Index, Business Education Index, and other indices of magazines.

3. The selection of the articles for analysis was made on the following bases: (a) articles that seemed to make the most significant contribution in helping to promote better typists through speed and accuracy, (b) articles which gave illustration or description of specific motivating devices either for high school or college students.

4. A description of each motivation device selected from the articles analyzed was included with an illustration of the device wherever practicable in the final report.

5. In many cases, two or more persons were given credit by footnoting one of the articles when there was a repetition of devices discussed.

6. For each article that was reviewed, a complete biographical reference was given, arranged in alphabetical order according to authors.

7. A summary and recommendations were formulated based upon the findings.

According to Adams, "tin soldiers" are an invaluable aid in teaching the use of the variable line spacer. She believes in giving directions without explaining the goal, and if the students follow these correctly, they will be amused at the result.

The directions are as follows:

Type a row of ampersands (&) across your page. Return your carriage without spacing down and type a row of diagonals (/). Return your carriage and with the use of the variable line spacer turn your paper down slightly so that there will be no space between lines. Now type a row of capital O's. Return your carriage without spacing down and type in a row of capital X's. Use the variable line spacer to space down leaving no space between lines and type a row of capital W's. Use the variable line spacer to space down to connect a row of quotation marks ("), with the W's above. Return your carriage without spacing down and insert a row of hyphens (-). The result should be a row of tin soldiers lined up in precisian.
Comments:

After the students have learned the keyboard and can type about 25 words per minute, the teacher may introduce the use of the different keys to make designs on the typewriter. A few minutes of class time will be all that is necessary to spend on this particular assignment.

Anderson has found the speed and accuracy target, described below, to be very popular with her students.

The target was made from large sheets of construction paper and equal in size to a regular archery target. The circles were black, red, blue, yellow, and green. Arrows were made for all students by gluing a small triangular piece of construction paper on each side of a straight pin, leaving approximately one-half inch of the pin extending beyond the tip of the paper. The name of each student was printed on both sides of the arrow. Five classes participated in the use of the target and each class chose the colors to be used in their arrows. Some of the combinations were: red and green, blue and yellow, brown and yellow, green and orange.

All students began by placing their arrows on the bulletin board surrounding the target. The arrows remained there until the students qualified for one of the circles on the target. The requirements for the beginning typing classes were: for the black circle, a speed of 15-19 wpm; for the red circle, 20-24 wpm; for the blue circle, 25-34 wpm; for the yellow circle, 35-49 wpm; and for the green circle or bull's eye, 50-70 wpm—with an accuracy requirement of not more than one error a minute to qualify in each of the speed circles. Either a speed below 15 wpm or a test with six errors in five minutes
regardless of the speed would be definitely off the target. Only advancements from the outside toward the center were made. Arrows were never moved backwards. Therefore, a student's best rate was always indicated by his arrow.

A small key explaining the requirements for the various circles was posted on the bulletin board beside the target.

Comments:

The percentage of error would be a better method for determining the student's rate of typing instead of using a one-word per minute method.

The author used this motivating device in the advanced typewriting class that typed 10-minute tests rather than five minute tests, and she stated that they could qualify in the various speed circles only if they were able to type for the 10 minutes with five errors or less.

In Banker's\textsuperscript{1} editorial, a description of a target chart was submitted by Boulware.

In Cobb's\textsuperscript{2} article, "Targets and Arrows," the circles in the target represented from 10-words per minute to 50-words per minute and above. The bull's eye represented the highest number of words typed. The circles in the target were illustrated as shown below:

\textsuperscript{1}Banker, Harriet P., Editor. "The Lamp of Experience." \textit{The Business Education World}, September, 1944. p. 35.

Black: Above 50 words a minute
# # #: 40 words a minute
" " "#: 30 words a minute
// //: 20 words a minute
...: 10 words a minute
White: Below 10 words a minute

Jackson¹ suggested the use of a bull's eye target in which each circle in the target represented different speeds.

¹Jackson, Mary Frances. "Incentives to Improvement in Learning to Typewrite." *Typewriting News*, Spring, 1951. p. 3.

Banker included in her editorial an article written by Sister Mary Alacoque in which she stated that the following game is very popular with her typewriting classes.

To begin the game, the author gives a one-minute test to a group of 32 first-year typing students. The two girls scoring the highest are given charge of the "checkerboard" for the week. The other 30 pupils in the class constitute the checkerboard.

Scorer Number One represents the "red men" and Scorer Number Two, the "black men." From a list of short alphabetic sentences, Scorer Number One selects three sentences which she writes on the blackboard, while Scorer Number Two calls out the names of 15 students to represent the "black men." When the sentences have been written on the board, Scorer Number One takes the remaining 15 pupils for the "red men" and the game is started.

The timer is set for 30 seconds and the "red men" begin the game. They are required to write the first sentence twice. If the 15 girls write the assignment without an error, they win two points for the player and proceed with the next sentence. If, however, there is one error among them, they give the "black men" a chance to play for the same length of time. If the "black men" write without an error, the "move" is theirs.
and they win. But if there are errors on both sides, the side with the least number of errors wins one point.

The game continues like this until the three sentences have been completed twice by each side. Then the entire group, including the scorers, write the three sentences in one minute. Papers are collected and corrected by the scorers. Whichever side writes the assignment without error, wins a "crown." A crown is the equivalent of two points.

The entire game lasts 10 minutes, including the time for correcting papers and scoring. The winning side posts the score on the blackboard under the checkerboard, as shown in the illustration. Then the class, alert and interested, begins the regular assignment for the day's work.

Comments:

The construction of this game is so well organized that it may be fully controlled by the students. In teaching, leadership should be encouraged.
"Who Is the Winner?"

<table>
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<tr>
<th></th>
<th>Red</th>
<th>Black</th>
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<tbody>
<tr>
<td>Mon.</td>
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<td>Tues.</td>
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<tr>
<td>Wed.</td>
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<td></td>
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<tr>
<td>Thurs.</td>
<td></td>
<td></td>
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<tr>
<td>Fri.</td>
<td></td>
<td></td>
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</tbody>
</table>

In her editorial on "The Idea Exchange," the author reported on the article, "A Bouquet for the Winners," submitted to her.

The device for the typewriting students consists of a flower basket, drawn on the blackboard. As each pupil reaches a net speed of 15 words a minute, a flower is placed in the basket. To identify the owner of the flower, a ribbon bearing the pupil's initials is attached to the stem. When a pupil reaches a net speed of 25 words a minute, he brings a snapshot of himself, which is mounted on the handle of the basket. The assorted flowers and the ribbons in contrasting and harmonious colors make a very attractive display.

**Comments:**

If the students wished to keep this device for display at the annual school science fair, they could make paper flowers to put in a real basket. The speed requirement could be increased with advanced students.
In her editorial, the author describes the golf-course device that was contributed by Sister Mary Alexius.

Bright orange chalk is used for the lettering and numbers. The very short strokes representing grass on the golf course are made with green chalk. The names of the participants in the contest are listed at the left.

Students who succeed in writing a five-minute timed test without an error have their names written in Hole No. 1; those having one error, have their names written near Hole No. 1; and those having two errors find their names written further away. If a student has made more than two errors, his name does not appear on the chart. He is told that his ball was lost in the underbrush near the course.

Each day, a five-minute timed writing is given. If a student whose name already appears in Hole No. 1 writes the test without error, his name is written in Hole No. 2, and he is ready to try for another perfect paper and the advance to Hole No. 3. The contestant reaching the ninth hole first wins the contest.

Comments:

Perhaps the five-minute timed writing would be of more value if the goal were not set for a perfect copy.
The "Golf Match," a similar game, has been suggested by Ehrenhardt.\(^1\) The members of the class are listed on the blackboard. At the end of each timed writing, the number of errors are listed beside the persons' names. The person having the least number of errors is the best golfer.


Banker, editor of "The Lamp of Experience," included the following plan that was submitted by Sister Mary St. Hilda. The plan was used to stress the importance of accuracy.

The pupils were separated into groups and their names were listed below diagrams on a large piece of white cardboard. One group had the use of a fireplace whereupon the pupil who had a perfect test was entitled to have one brick in the fireplace colored and his initials printed on it. The second group used a diagram of a bowl of poinsettias. The persons with perfect papers were entitled to color a flower petal, a leaf, or a flower pot. One-two-and five-minute accuracy tests were given each day, the length of the test being based upon the ability of each group.

Comments:

The teacher may wish to use gross words per minute instead of perfect papers as a basis for indicating the students' progress.
In Banker's editorial, Sister Mary John LaSalle submitted a description of a motivation device.

Ribbon badges for each pupil in the typewriting class were made by the author. Each badge consisted of six strips of ribbon, each in a different color, measuring $2\frac{1}{2}$ inches in length and about 1 1/8 inches in width. These strips were posted on a foundation strip 3 3/4 inches in length and 1 1/8 inches in width. The foundation material may be made of any strong material such as buckram.

In pasting the colored strips on the foundation strip, each one was made to overlap the next, so that all of the top strip was visible but only about 3/4 of an inch of the others showed. The lower edge of each strip was cut on the bias to prevent it from fraying. Each of the six different colors that made up a badge represented one week of a six-weeks' period.

The completed badges were then arranged on a large chart. Each pupil's name was typed on a narrow slip of white paper and pasted above his badge. Finally, the numerals for the school year were printed across the top center of the chart.

This chart was used to show each pupil's progress during the six-weeks' period. Two-minute tests were taken daily and a 15-minute test on Fridays. Each pupil having a perfect paper on any day received a gold star. The pupil scoring the highest
speed was awarded a colored circle. The stars and the circles, as they were earned, were affixed to the section of the badge representing the week in which the award was received.

Papers were first checked by the pupils and then re-checked by the teacher.

Comments:

The chart may be put into a glass-covered frame and hung on the wall in the typewriting room. Displays of students' work from one year to the next may prove favorable.

Two motivating devices for typewriting classes were submitted to the author for her editorial. The following devices were introduced at the beginning of the school year.

I. The teacher drew the trunk of a tree along the edge of the blackboard, extending it to the top of the board. Then she filled in a little foliage with colored chalk. Each pupil, when he attained a net speed of 38 words a minute on a 10-minute copy test, brought to class a green leaf which he posted on the board. The persons securing a net speed of 43 words a minute brought in red leaves. Each leaf was marked with the name of the pupil to whom it belonged. The speeds of 38 and 43 were chosen as suitable at the time the device was used.

II. The second device, a chart, was made by pasting maple leaves, cut from brightly colored paper, across the upper edge of the blackboard. The class was divided into two teams and the lists were posted, with a printed notice that read, "The Chipmunks and Squirrels at Play Among the Leaves." Whenever a pupil completed a perfect exercise, he placed a leaf on the board. For each succeeding exercise completed, another leaf was added.

Comments:

Both of these devices were used in the fall. The same
idea could be used in the spring, and either apple or cherry blossoms could be used for the higher speed. For the second device, spring flowers, instead of leaves, could be used in the chart.

A similar device was described in Sister Mary Beata's article. The author cut out a trellis which she mounted on the bulletin board. Above the trellis, she printed, "Typing Rose Bower," in yellow and rose letters. Each time a perfect paper was typed, a crepe-paper rose bearing the student's name was posted on the trellis. The pupil who had the most roses on the trellis at the end of the month received a prize.

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In Banker's editorial, "The Lamp of Experience," in which Walter contributed a motivating device, a chart entitled, "From Oxcart to Airplane," was described.

On the chart, the speed of individual members of the class is illustrated by means of pictures made of varicolored construction paper that depict different means of transportation, beginning with the oxcart and advancing to the airplane. See illustration.

At the end of each week, slips bearing the names of the students are placed under the transportation agency that denotes the speed attained by the pupils. For example, the names of the slowest members of the class are placed under the oxcart and those of the fastest, under the airplane. The names are changed weekly on the basis of speed-test records.

Comments:

A chart illustrating the speed each student has attained may be accompanied with this device.
FROM OXCART TO AIRPLANE

Pictires of varied conveyances are arranged as shown here, and students' names are put under the pictures to indicate the speed each has attained.
The following game greatly increases accuracy, for the rules require perfect work, states the author. The procedure for playing basketball follows:

Divide the classes into two teams, the "Workers," and the "Concentrators."

For every perfect paper of straight copy matter, 29 lines, handed in by a player, his team is given credit for a field goal, which is two points. This is indicated on the score sheet by an X. For every five perfect half sheets handed in by a player, his team is given credit for a free throw, or one point. This is indicated on the score sheet by a circle with an X in it.

For each paper handed in with an error on it, a foul is counted against the player. Four fouls put the player out of the game and a substitute takes his place.

Papers are checked by one or more pupils from each team. The checkers from one team always check the papers of the opposing team. These checkers are the guards, since they are on the lookout for errors that will prevent the opposing team from scoring and possibly putting their players out of the game.

The game may be played for any length of time from one to six weeks. The accompanying illustration shows the score
sheets and the score boards of the two opposing teams.

Comments:

Requiring the students to check their own papers promotes the practice of proofreading.

Another device in which the student is required to write a perfect copy before his name will be recognized is included in the article written by Paulsen.1 When a student writes a perfect copy, his name is added to the "No-Error Club" and the rate of speed is written on the blackboard.

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### THE WORKERS

<table>
<thead>
<tr>
<th>No.</th>
<th>Players</th>
<th>Scores</th>
<th>Fouls</th>
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<tbody>
<tr>
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<td>XXX</td>
<td>X</td>
</tr>
<tr>
<td>2.</td>
<td>Helen Dyer</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Marvin Mourning</td>
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<td>Eugene Myers</td>
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<tr>
<td>5.</td>
<td>Dona Roll</td>
<td>XXX</td>
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</tr>
<tr>
<td>6.</td>
<td>Effie Snyder</td>
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</tr>
<tr>
<td>7.</td>
<td>Nabel Hurst</td>
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</tr>
<tr>
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<tr>
<td>9.</td>
<td>Gertrude Lee</td>
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### SCORE BOARD

#### WORKERS

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#### CONCENTRATORS

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</table>

### THE CONCENTRATORS

<table>
<thead>
<tr>
<th>No.</th>
<th>Players</th>
<th>Scores</th>
<th>Fouls</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Maurine Kimel, Captain</td>
<td>XXX</td>
<td>X</td>
</tr>
<tr>
<td>2.</td>
<td>Marcelle Critzer</td>
<td>XX</td>
<td></td>
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<tr>
<td>3.</td>
<td>Grant Champe</td>
<td>XX</td>
<td>XXXXX</td>
</tr>
<tr>
<td>4.</td>
<td>Wynford Gilbert</td>
<td>XX</td>
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</tr>
<tr>
<td>5.</td>
<td>Maybelle Gubitz</td>
<td>X</td>
<td>X</td>
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<td>6.</td>
<td>Maxine Hockett</td>
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<tr>
<td>7.</td>
<td>Gladys Kirkland</td>
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<td>8.</td>
<td>Waunita Burchell</td>
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<tr>
<td>9.</td>
<td>Winifred Yergler</td>
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</tbody>
</table>
Belanger, Rita, "Who Shall Name the Chief?" The Business Education World, January, 1940, p. 424.

Each pupil in the typewriting class receives a picture of an Indian, drawn on 8½ by 11 paper. The band around the Indian's head is perforated so that paper feathers can be inserted.

Each feather in an Indian's headdress stands for a deed of valor or for a new achievement. In typing 15-minute speed tests, each pupil having a speed of 45 words a minute or more, with no more than five errors, receives a feather to put into the Indian's headdress.

The feathers are distributed on the following basis:

Forty-five words or more a minute, with two to five errors—one feather.

Forty-five words or more a minute, with one error—two feathers.

Forty-five words or more a minute with no errors—three feathers.

The pupil who completes the Indian's headdress first is the winner and has the privilege of naming his Indian, who becomes the chief.

Comments:

Rather than drawing a picture of an Indian on paper, let the student draw his own Indian head, perforating the band so that the feathers may be inserted in it, and attach it to an
easel so that he may display his Indian head on his typewriting table.
Benson, Paul, "Take It or Leave It," The Business Education World, September, 1941, p. 67-68.

The following description of the chart, entitled "Take It or Leave It," was given by the author.

At the top of the chart, below the title, are printed time intervals, beginning with one minute and continuing in half-minute intervals to 10 minutes. See illustration.

Any test copy may be used. The students are told that the timer will be set for one minute, and that they are to write without making any errors. When the clock rings, each student checks his own copy.

A colored thumbtack is placed in the one-minute column opposite the name of each student who made no errors. Tacks of different colors are used for different classes.

Each student who made no errors may go on to the 1½-minute interval, if he chooses. If he tries for a minute and a half, however, and fails, he loses the tack he has and goes back to the beginning. Another tack is placed in the 1½-minute column opposite the name of the student who makes no errors in the second time interval.

The time is increased in this manner as long as the students wish to try.

The tacks that are left on the chart at the end of the week become permanent. A little red mark in the square by the last tack of the week will indicate at what point the tacks
are permanent.

The instructor can tell by the holes in the chart left by the tacks how far the student has gone without an error.

Comments:

The author states that she sets the time clock for the longest time test and starts everyone at once, calling out the time intervals as they come. If a student who is on a one-minute interval can type for three minutes without error, credit is given by putting in tacks up to three minutes on the chart.

This motivation device was for accuracy development.
The typing student takes a chance of winning more thumbtacks by typing perfectly; if he makes a mistake, he loses all his gains.

John Binnion included in his article, "Typewriting Games for Work and Play," an interesting game suggested by one of the writer's former pupils, Elizabeth L. Brown. In the following paragraph the directions for the game, "Typewriting Canasta," are given.

**TYPEWRITING CANASTA:** Teams of two can compete tournament style with other couples in the class. A gross score (or net, depending on the abilities of the class) of 50 (or 30, 40, 60, et cetera) can be made requisite before a meld is made. One hundred points bonus can be given for a perfect copy; each single perfect line can count ten; other points may be awarded according to rules established by the class. "Typewriting Canasta" may be played tournament style or winners can be decided by keeping cumulative totals for a certain period of time. Prizes are optional.

**Comments:**

The Canasta game stresses accuracy over speed. This game and the Army game by Morgan¹ may be interrelated and credit can be given in Canasta game and at the same time given credit to the Army game which is developed for individual attention.

---


The author has used the following chart at the beginning of the second year of typing. Before the chart is made, the class is given three 10-minute tests during one week. The students are not told the purpose of these tests. Individual averages are figured for the three tests and this speed is used as the starting point for the semester.

The students' names are listed at the left on a large white cardboard chart. The chart is ruled in columns to represent each week of the semester. The student's average speed at the beginning is placed in the first column. Then his goal for each week of the semester is placed on a line with his name in the proper column. The goal for the second week is one point higher than the beginning average and is increased one point each week thereafter.

On completion of the weekly speed test, the student compares his speed with his established goal. If he exactly makes the goal, a red star is pasted over the speed figure; if he exceeds the goal for that week, he receives a gold star. His speed grade for the week is based on whether or not he passes, reaches, or fails to make his goal. If he exceeds the goal, his speed grade is 100; if he just reaches the goal, his grade is 98; if he fails to reach the goal, one point is subtracted from 98 for each word a minute he lacks.
Comments:

This plan gives the students something definite to work for, and the grading standard is specific. The chart would make an attractive display for the annual school exhibit.
According to the author, the game of Chinese Checkers can be used as an incentive for both speed and accuracy in typewriting. The adaptation of the game to typewriting described in the following paragraphs was made by the author's student teacher.

Divide the class into teams, three or six preferably, on as even a basis as possible, based upon their previous records; and name the teams for different colors such as red, yellow, and blue. A Chinese Checker board, drawn on white bristol board, is placed on the bulletin board. The accompanying illustration shows a game that has been in progress for a short time. Instead of marbles, which are used in the regular game of Chinese Checkers, thumbtacks in colors corresponding to the team names are used. See illustration.

Each team is assigned a triangle of a certain color, and the tacks representing players on a team are placed at definite points on their respective triangles. Each player's name is printed on a small, round piece of paper; and a thumbtack is stuck through the paper, which is then placed on the triangle. The team that places the greatest number of men in the points of the opposite triangle of the same color by the end of the time assigned for the game wins the contest.

Accuracy and speed determine the rate of advancement. In
order to move, a minimum gross rate of 20 words a minute with errors not to exceed two per cent of the gross words must be made, regardless of the length of time of writing.

The following table, based on gross speed within the required two per cent accuracy allowance, shows the possible rates of advancement:

<table>
<thead>
<tr>
<th>Gross Rate</th>
<th>Jumps</th>
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<tbody>
<tr>
<td>20-29 inclusive</td>
<td>1</td>
</tr>
<tr>
<td>30-39</td>
<td>2</td>
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<tr>
<td>40-44</td>
<td>3</td>
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<tr>
<td>45-49</td>
<td>4</td>
</tr>
<tr>
<td>50-54</td>
<td>5</td>
</tr>
<tr>
<td>55 or over</td>
<td>6</td>
</tr>
</tbody>
</table>

Any player who writes a paper without errors at a rate of 20 gross words a minute or over, or at a rate of 55 gross words a minute or over with errors, may make the jumps entitled at that speed plus any other jumps available, as in the regular game. As an additional incentive, players who complete their jumps across the board may help the slower members of the team by giving them one jump for each timed writing that comes within the requirements.

The game should cover a period of three to six weeks, depending upon the number of timed writings and the caliber of the class.

Comments:

The standards set up for governing the rate of advancement may be varied to meet the class situation. In the construction of the game, the number of points in each triangle will have to
be adapted to fit the size of the class.

The timed writings may be of any length, but the shorter timed writings give the slower and less accurate student a better opportunity to move.
Balloons, airplanes, or kites may be used in the following game. Before the race starts, mark the blackboard with brown chalk for the ground; with blue chalk for the sky; with white chalk for the clouds to represent three goals or heights to be achieved.

The class is divided into three teams, red, white, and blue. The balloons (or airplanes or kites) are suspended on strings by means of thumbtacks pushed into the upper molding of the blackboard. They are kept on the blackboard until the race begins.

Each day a three-minute accuracy test is given. The students move their balloons up if they score a perfect paper or down if they make an error. If the errors bring the balloons back to the beginning point, the pupils start again.

To win, all members of the same team must be at the top height (the clouds) at the same time.

Comments:

The feature that adds interest to the game is that the team may lack only one member to win one day and on the next day may lack several members.

Conte suggests the use of the following incentives which he has used over a period of years.

1. A graph showing the class median can be worked in conjunction with the chart. The graph will put the classes on a competitive basis and will help them in doing better work.
2. Have students keep continuous records of the letters or characters missed to determine the persistent errors as a basis for remedial exercises.

ERROR ANALYSIS CHART IN TYPEWRITING

Name_________________ Date__________ Number______

Directions: Please write for ____ minutes on the assigned copy using this sheet. Place a circle around each error. Calculate the score and fill in the record below.

Gross Strokes___ Gross Words___ Errors___ Net Words___
Per Min.____

Please place an analysis of your errors on the form below, writing the letter struck under the letter that should have been struck.

| a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | - | , | . | " | # | $ | % | & | ' | ( | ) | ` | ; | : | / | ? | @ |

3. Give your students practice on the 1,000 most common words. Familiarity with these words will help them in acquiring speed and accuracy.

Comments:

The value of keeping records of letters missed is excellent when doing remedial exercises at the beginning of class. Let the students use the error analysis chart to pick out the words which most commonly have the letter errors in their typing.
In this game of basketball, the students are encouraged to type accurately. The class is divided into two teams and the game is played in quarters of one minute each. During the first half, the teams type the following sentence:

If you do your work as well as a wise old owl you are sure to please.

During the second half, they type the following sentence:
We should do the things which give us the best chance for success.

A perfect paper scores a field goal (two points). A paper with one error scores a free toss (one point). A paper containing more than one error does not score. The team having the highest score at the end of the game wins. The individual having the highest score is high-point man. A diagram on the blackboard is used for keeping scores, according to the author.

Comments:

Hoagland\textsuperscript{1} and Thompson\textsuperscript{2} gave a description of a basketball game which is feasible in promoting better speed and accuracy.

\textsuperscript{1}Hoagland, Mary, "Basketball Tournament," The Business Education World, December, 1938, p. 331-332.

\textsuperscript{2}Thompson, Lawrence, "Motivation in Typewriting," Typewriting News, Spring, 1948, p. 4.
Paterson\(^1\) describes the same kind of basketball game with a few differences. In the rules for scoring, each student who makes one error or more gives the opposing team one point for a "foul." The score of each member of both teams must be recorded. Then the total score for each team for one day is entered on the score sheet. The results of four days make a game—one day for each quarter.

Shaw\(^2\) also contributes an article entitled, "Basketball for Typists." The author believes this game has a wholesome effect upon the slower students. Urged on by their teammates, the author's students have been able to raise their individual averages noticeably.

Stillwell\(^3\) described the use of the round-robin tournament game which was divided into four teams. Each team played the other teams once.

---


The author included the following games in this article: "A Football Game," "Badminton," and "Horseshoe Tournament."

I. A Football Game.

Before the Game Begins

1. Divide the class into two rival school teams.
2. Select from the textbook practice material that the students especially need—drills on special characters and figures, flash drills, alphabetic sentences, or straight-copy material.
3. Announce that each "quarter" will be three minutes long.
4. Instruct the members of the opposing teams to exchange papers at the end of each quarter.
5. Appoint an "official" to write the name of the team and individual scores on the blackboard.

Rules of the Game

1. Thirty net words or more (adjust speed to class median) scores six points, a "touchdown."
2. A three-minute test typed without error scores six points, a "touchdown."
3. One error scores three points, a "field goal."
4. Two errors score two points, "safety."
5. Three errors score one point, or a point after touchdown.
6. Four errors count as a touchback. No points.

**Penalties**

1. Taking eyes off copy penalize the team 10 yards—two points deducted from team's score.
2. Throwing the carriage incorrectly penalizes the team 10 yards—two points deducted from team's score.
3. Incorrect posture (offside)—two-point penalty.
4. Incorrect finger for backspacer—two-point penalty.

The game requires little supervision. Let one of the students place the result on the blackboard. The instructor acts as referee and calls the penalties at the end of each quarter or during the quarter.

II. The following directions are used for Badminton.

Divide the class equally into two groups.

Give a series of four one-minute tests, with each perfect copy counting one point. An error in the copy corresponds to a fault in badminton. If a pupil types two or more consecutive tests with one or more errors each, two points are deducted from the score of his team.

If, however, he types two or more consecutive tests without error, two extra points are added to the score of his team. The team having the most points at the end of the game is the winner.
There must be a margin of two points between the final scores of the teams for the winning of the game. If, at the end of the game, there is only a one-point margin, another one-minute test determines the winner.

III. The Horseshoe Tournament.
Divide the class into two teams. Give a two-minute timed test on each of the following alphabetic sentences:

Bizarre Frenchmen were extremely prejudiced against quick revolutions.

Jacques, the valedictorian, amazed big Frank with explanatory zeal.

Quizzically juggling extraordinary matters helped Black win favor.

Scoring
An accurately typed paper scores a "ringer," two points.
A paper with one error scores a "leaner," one point.
More than one error scores nothing.
The team having the highest score at the end of the three two-minute tests wins.

Comments:
The author's use of the textbook material is a fine idea, because it gives the students actual practice on their own classroom assignments.

In Banker's editorial, Murphy submitted a football game as a motivating device which she found helpful as an incentive for developing accuracy.

The following ideas for motivating typewriting classes were devised by college students and used under the author's supervision.

I. Baseball

Teams

<table>
<thead>
<tr>
<th>Chicago Cubs</th>
<th>Pittsburgh Pirates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hack</td>
<td>Handley</td>
</tr>
<tr>
<td>Herman</td>
<td>L. Waner</td>
</tr>
<tr>
<td>Galen</td>
<td>P. Waner</td>
</tr>
<tr>
<td>Damaree</td>
<td>Vaughan</td>
</tr>
<tr>
<td>Reynolds</td>
<td>Suhr</td>
</tr>
<tr>
<td>Collins</td>
<td>Pizzo</td>
</tr>
<tr>
<td>Jurges</td>
<td>Todd</td>
</tr>
<tr>
<td>Bryant</td>
<td>Young</td>
</tr>
</tbody>
</table>
| Hortnett (Manager) | Bauers (Manager) |}

1. Each student draws a slip of paper on which is written the name of the team and a player.

2. The two managers decide which team is to be at bat first.

3. At the signal, both teams begin to type for two minutes from straight-copy material, the team at bat typing for accuracy, and the team in the field for speed.

4. The scores of the two teams are calculated in the following manner:

   **Batting team:**
   - A perfect copy scores four points.
   - A copy with one error scores a three-base hit, three points.
A copy with two errors scores a two-base hit, two points.
A copy with three errors scores a single, one point.

**Team in field:**
A student who types 60 net words or more scores four points.
A student whose speed is in the 50's scores three points.
A student whose speed is in the 40's scores two points.
A student whose speed is in the 30's scores one point.

5. The teams change positions and type for two more minutes.

6. Each player computes his individual score.
7. Add the scores of the first and second tests. Compare the scores of the competing teams.

**II. Baseball**

In this baseball game the class is divided into two teams. Each student competes with himself as well as with a member of the opposing team; that is, he tries to type more on the second test than on the first. There are two innings. Each inning is a two-minute test on the following sentence:

In 12 years, 10 months, and 26 days, he spent $1,726,483 for 1,050 uses.
There are 72 strokes in the sentence. The typist who completes it four times without error, which requires a typing rate of 29 nwpm, reaches first base; five times, or 37 nwpm, he reaches second base; six times, or 43 nwpm, third base; and seven times, or 50 nwpm, he makes a home run.

Students should try to increase their speed in the second inning. The team having the most home runs wins the game. Caution the typists to keep their eyes on the copy on the board continuously.

III. Kentucky Derby

Each student is a jockey in the Kentucky derby; his typewriter is his "horse." The students may name their "horses" if they wish.

First, a three-minute timed writing is given to eliminate half the class. The half of the class obtaining the highest speed remains in the race; the other half is the audience, which criticizes at the end of the race. Three two-minute tests are required to complete the race.

The student advances according to the number of net words he writes. If a "jockey" makes more than one error on a test, he gets in a "pocket" and loses five words. If an accumulation of six errors or more is made during the three two-minute races, the horse is disqualified and must drop out of the race.

A diagram of the race track may be drawn on the board, and the instructor may indicate the students' names on the
chart after each two-minute test.

Comments:

In the second baseball game illustrated by Ehrenhardt, the value of the typewritten sentence is to increase the student's speed on numerals.

Babb\(^1\) was also a contributor of a baseball game.


The following stunt, called "A Race Between Bus Lines," is for producing both speed and accuracy.

Divide the class into two teams, the Greyhound Bus Line and the Great Eastern Bus Line. Both are transcontinental bus lines. The starting place is Salt Lake City, Utah, and the goal is Indianapolis, Indiana, which is 1,560 miles from Salt Lake City.

Each team tries to type 1,560 strokes before the other team. If one error is made, 75 strokes will be taken from the total number of strokes, and if two errors are made, 150 strokes will be subtracted. No more than two errors are allowed.

Divide the time into a series of one-minute tests.

"The Tortoise and the Hare" is a game whereby the class is divided into two teams, the Tortoises and the Hares. The teams are to run a 45-yard race.

The hares are to write for speed only. Students who write 55 to 60 gross words a minute gain five yards, those who write 50 to 55 gain three yards, and those who write 45 to 50 gain one yard.

A three-minute speed test is then taken and the speed and errors are figured as usual. This stunt should then be reversed so that the players on both sides will have an opportunity to type for both speed and accuracy.
Comments:

Both games may be best used in the advanced typewriting classes. If the same devices were used in a first-semester class, the number of strokes set for the goals would need to be decreased.

Ehrenhardt\(^1\) has also written another article on an imaginary trip by bus. The author believes these games create competition and stimulates students to increase their typing speed and accuracy on straight-copy material. The teacher should select the points for the imaginary trip that are familiar to the student.

Ames\(^2\) pupils took an imaginary automobile trip from New Jersey to Florida. The pupils had a race to see whose automobile would arrive in Florida first. Exercises on simple tabulation were used for the race.


I. The author describes the following stunt for practicing rhythm. Have two students sit before one typewriter, one student on the right side with his right hand on the home keys of the right side of the machine, and the other student on the left side with his left hand on the home keys of the left side of the machine. Each student will thus write on the typewriter with only one hand. In order for two people to type successfully on one machine, they will have to type with perfect rhythm.

II. The following "Accuracy Typing Tournament" may apply both to speed and accuracy. The best plan, according to the author, is to write the names of the students on slips of paper and put these slips into a box. Let the members of the class draw numbers to see against whom they are to compete. Give a series of two-minute tests, using the following material:

We have the following suggestions to make in answer to your inquiry: A rug that is 9' x 12' will look well on your sun porch. We would use two small rugs, 3½' x 5', or one 6' x 8', in the hall. There is a rug (Oriental) in Redlick's window that would be suitable for your bedroom. I think it is 8½' x 10'. The person making the least number of errors is the winner.
III. The following is a game in tabulation. Instruct the students to use a tabular key; center on page; insert necessary capitals, abbreviations, and states. Write across the page.

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Alabama</td>
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<tr>
<td>Arizona</td>
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<tr>
<td>Arkansas</td>
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<td>California</td>
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<td>Connecticut</td>
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<td>Colorado</td>
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<td>Florida</td>
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<td>Rhode Island</td>
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<td>Ohio</td>
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<tr>
<td>Idaho</td>
<td></td>
<td></td>
<td>Oklahoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td></td>
<td></td>
<td>Minnesota</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indiana</td>
<td></td>
<td></td>
<td>Mississippi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iowa</td>
<td></td>
<td></td>
<td>New Jersey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td></td>
<td></td>
<td>New Mexico</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td></td>
<td></td>
<td>New York</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td></td>
<td></td>
<td>Missouri</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:

The students may be checked in the last game by correct arrangement of tabulation, correct spelling of capitals and abbreviations. Set an allotted time for which the students must be finished with the tabulating problem.

The author describes and illustrates the game, "Speedy Boatman," for use as a motivating device in typewriting.

The chart for this game is a clever arrangement with perforations for the insertion of the individual boats as they speed along in the race toward the goal, "Perfection Isle." Each student pilots her own boat, readily recognized by the color of the sail, as rapidly and as accurately as she can to Perfection Isle, a distance of 3,200 strokes. The distance covered is measured by the gross strokes attained on four three-minute tests.

The maximum number of errors on each test is three and each error is penalized 50 points; if more than three errors are made, two additional points are deducted from the gross strokes to show that the student lost control of her boat. One point is also deducted for failure to observe any of the following rules: sit erectly at the machine with both feet on the floor; throw the carriage with a quick blow; use good technique; exhibit self-control; keep eyes on the copy.

The materials used are a chart of poster cardboard to represent the sea and small boats with sails of different colors. The chart is divided into four sections, each section representing a refueling station. As the speed increases, the boats are moved up by means of the perforated slots. All the
boats are placed at the starting point, "Take-off Pier." The first stop is made at "Concentration Village," a distance of 800 strokes. The next stop is at 1,600 strokes, or at "Speed Harbor;" the third is "Accuracy Bay," a distance of 2,400 strokes; and the final stop is "Perfection Isle," a total of 3,200 strokes.

The scores are recorded on the chart at the end of each test. The winner of the race is awarded the title of "Speed Urchin" and receives a Certificate of Honor from the City of Commerce, County of Typewriting. The illustrations show the chart, the Honor Certificate, and a boat used in connection with the chart.

Comments:

Calling the students' attention to simple rules of sitting position, throwing the carriage, keeping eyes on the copy is useful in a competitive race because they may respond quickly.
<table>
<thead>
<tr>
<th>Speed (kph)</th>
<th>PERFECTION</th>
<th>ISLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2400</td>
<td>Accuracy</td>
<td></td>
</tr>
<tr>
<td>2200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1800</td>
<td>Speed</td>
<td></td>
</tr>
<tr>
<td>1600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td>Concentration</td>
<td></td>
</tr>
<tr>
<td>600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TAKE-OFF PIER**

<table>
<thead>
<tr>
<th></th>
<th>Smith</th>
<th>Jones</th>
<th>Taylor</th>
<th>Lewis</th>
</tr>
</thead>
</table>

---

**Partially visible notation:**

- Smith
- Jones
- Taylor
- Lewis
CITY OF COMMERCE
COUNTY OF TYPEWRITING

THIS CERTIFIES that on this ___ day of __________, 19__, was awarded the title of "Speed Urchin." This "Certificate of Honor" signifies that the person has observed the following rules:

1. Sits erectly at the machine with both feet on the floor.
2. Throws the carriage with a quick, sharp blow.
3. Uses the correct technique; that is, uses the correct fingers in the manipulation of the characters on the typewriter.
4. Exhibits good self-control during time test.
5. Keeps the eyes on the copy.

IN WITNESS whereof our signatures are hereunto fixed at ______________, this _______ day of ____________, 19__.

Typewriting Instructor

This game is a contest in speed and accuracy. Those competing take off from the coast of France and swim toward the English shore. The Channel is swum in a series of three tests: the first, three minutes long; the second and third, each two minutes long. If the distance is not covered in three tests, another short test may be given. Straight-copy material is the best type of material and it is advisable to use different copy each time. Every 25 words represent a meter.

If one or two errors are made, 50 strokes are deducted for each error. When there are more than two errors, the paper counts one-half and the condition is described as being forced back by the waves, being out of breath, or floating. Additional points may be taken off for faulty technique at the machine.

A chart, either made of cardboard or drawn in colored chalk on the blackboard, is used for scoring. The competitors' names are listed one under the other. The total distance covered in the race is marked off in spaces, each representing 25 words up to and including 200 words. Horizontal lines are drawn and extended to show each contestant's progress.

Comments:

Arrange the game so that the students will be required to judge whether or not the students are using faulty technique at the machine. Criticism from the students is sometimes more resultant than suggestions by the teacher.
<table>
<thead>
<tr>
<th>Names</th>
<th>25</th>
<th>50</th>
<th>75</th>
<th>100</th>
<th>125</th>
<th>150</th>
<th>175</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mann</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nason</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roberts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smith</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sullivan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I. The first motivating device is called, "An English Steeplechase." The race consists of five half-minute hurdles. Before the contest begins, the student types his name in the upper right-hand corner of his paper.

At the signal, the student types the following for one-half minute:

H'oh, it eye'n't the 'eavy 'aulin' wot 'urts the 'orses 'oofs--h'it's the 'ammer, 'ammer, 'ammer h'on the 'ard 'ighways.

The student then removes the paper from the machine, using the paper release, goes to the next typewriter, inserts his paper, and awaits the signal for the next hurdle. The rotation plan is used so that the student uses a different typewriter for each race.

Students mark their own errors.

If the point system is used, the instructor may give a grand prize of 10 points to the typist who wrote the five one-half minute tests with the fewest errors.

II. "Syllabication," the second motivating device, is a contest game to develop alertness to the syllabication of words.

The following list of 20 frequently used words is written on the blackboard:
<table>
<thead>
<tr>
<th>solemn</th>
<th>repartee</th>
</tr>
</thead>
<tbody>
<tr>
<td>solemnity</td>
<td>secret</td>
</tr>
<tr>
<td>reorganization</td>
<td>secretarial</td>
</tr>
<tr>
<td>solid</td>
<td>accumulate</td>
</tr>
<tr>
<td>solidification</td>
<td>syllable</td>
</tr>
<tr>
<td>occurred</td>
<td>syllabication</td>
</tr>
<tr>
<td>recommendation</td>
<td>correspondence</td>
</tr>
<tr>
<td>occasion</td>
<td>business</td>
</tr>
<tr>
<td>separate</td>
<td>corroborate</td>
</tr>
<tr>
<td>arithmetical</td>
<td>indenture</td>
</tr>
</tbody>
</table>

The students have six minutes in which to type the words, hyphenated according to the correct syllable divisions such as cor-rob-o-rate.

At the end of the six-minute timed test, the teacher writes the same words on the line, correctly divided.

The student who has the highest percentage of words correctly divided receives a bonus of 10 points, if the point system of grading is used.

III. The author's third interesting motivating device is called "Election."

The students assume that they are at the polls on election day. The class is divided into two teams, Democrats and Republicans. At a given signal, the first man on each side begins to type the following sentence:

Juxtaposition of ruby and emerald quickly crazed the extravagant wife.

As soon as the contestant has typed the sentence perfectly, he signals by saying, "Go," whereupon the next man on his team begins.
No contestant can say "Go" until he has a perfect sentence. The typist cannot begin a new sentence when he makes an error; he must finish the sentence first.

The side that finishes first, of course, wins the election. If the point system in typing is used, a bonus of 10 points may be given to each person on the winning side. A candidate scoring a perfect sentence at the first writing is entitled to five additional points. The leader on each side should check the papers carefully before he hands them to the instructor.

Comments:

After a discussion on syllabication rules, a review may be made by giving a short test on the same list.

In all three illustrations, the student has a review of English. A good plan is to correlate typewriting with many other courses.

Hayes furnishes us with a motivating device to increase speed and accuracy in typewriting.

The first step in this game is to cut as many slips of paper as there are pupils in the class. The word "Cop" is written on half the number of slips and the word "Speeder" on the other half. Slips for the cops are numbered consecutively and those for the speeders are numbered to correspond.

The slips are placed in a jar and shaken. Each student then draws a slip. Cop Number One is the opponent of Speeder Number One, and so on until all the numbers have been used.

The chase consists of three speed tests, which are checked according to the international contest rules. The object of the game is for each cop to catch the speeder whose number is the same as his. To do this, the cop must type as many words as, or more than, his opponent. Each word a speeder types in excess of the cop pursuing him is considered a mile.

Comments:

Often a student will ask how he can improve his speed so that he can type faster than his friends. Encourage the student to do extra practice. In this race, the student actually can see the progress that he is making. Not only may this device be profitable in timed writings but improvement will appear in other typewritten work.

In this article written by Doris Howell, the author states that the teacher's responsibility in teaching typewriting lies in the effective use of techniques, aids, and devices designed to help students attain a top-notch skill.

The author's belief is that interest can be stimulated by the use of seasonal sports. In the spring, young people's thoughts seem to turn to track and track meets. She suggests that if you have a bulletin board five or six feet in length, a track could be constructed along the top eight inches of the board. The bottom of the track could be represented by a one-inch strip of brown construction paper. Evenly spaced on the track could be hurdles, representing 10, 15, 20, 25, 30, 35, 40, et cetera, correct or net words a minute. Either five or ten minute writings could be used and two typewriting classes could compete with each other. Two track runners about four inches high, cut from different colored construction paper, would represent the average speed of each class. These can be thumbtacked to the bulletin board to be moved as the average of each class changes. Having the hurdles indicate various speeds gives the students a feeling of having accomplished
something big when a hurdle has been jumped. Usually student committees will be eager to help figure averages and keep the race up to date. In nearly every class, you will find students with some artistic flare who will enjoy creating this type of device.

A Track Meet - Speed Development

Another device included in this article by the author for improving accuracy and speed is the use of the altimeter. On a sheet of bristol board approximately 24" by 30", a column is drawn to represent an altimeter. (For the benefit of the air-minded, the circular altimeter has been slightly modified to a columnar type for adaptation in typewriting classes.) Correct words a minute are indicated at evenly spaced intervals ranging from 0 to 70. Each student has a plane, a simple one-half inch triangular shaped piece cut from colored construction paper. His name is printed on the plane. This altimeter could be used for one-three- or five-minute timings. In this instance, it was used for five-
minute writings. To get his plane "off the ground," the student must type a five-minute writing with three or less errors. His plane was then pinned to the bristol board at the height he had attained in correct words per minute. Once "in the air," the object was to keep trying to gain altitude. Each five-minute writing with three or less errors and a higher speed would raise his plane to a higher level.

The author concludes in this article that the teacher is one of the most important motivating devices. The teacher and the classroom atmosphere created by the teacher are the most important elements in any teaching situation. A pleasant atmosphere with complete lack of tension will be the classroom in which the most learning will take place.

Comments:

Any game that can induce interest is a vital factor in any class. The author gives two interesting and motivating games that are incorporated with school events which tend to make classes more fascinating. This track meet game suggested by Howell may be used for individual competition as well as class competition.

A "Cross-Country Run," a similar game, has been contributed by Ehrenhardt.1 Two teams are given a series of two-minute tests. The team having the greatest number of words at the end of the last test wins the cross-country run.

Another illustration of the use of a chart in stimulating interest in typing accurately has been submitted by Dempsey in Banker's editorial, "The Lamp of Experience."

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Alice Kariker states that a typewriting bridge tournament affords a pleasant deviation from class routine. The tournament is conducted as follows:

Two students (bridge couples) progress from one "table" (four machines) to another if their errors are at a minimum. The least number of errors constitutes the highest score. Four "hands" (four one-minute tests) make a "game;" four games are played (sixteen one-minute speed and accuracy tests). Scores are kept on appropriate tally cards, and the cards are collected at the end of each period. Sixteen machines comprise four "tables" of bridge, but this number may vary as the number of players varies in the actual game.

She also stated that a prize may be awarded to the student who keeps his error record lowest during the tournament, which usually lasts four days or four successive typewriting periods.

Comments:

The tournament game may be used to raise the accuracy record of the students, especially those who are making too many errors.

A special prize may be awarded to the student who keeps his record lowest during the tournament.

Dubats1 also describes the bridge game in her article.

---

Elizabeth Keiffer, author of this article, states that competition devices are a kind of motivation. These devices may be divided into three types: individual competition, competition in cooperation, and competition with self. She further states that individual competition often tends to develop selfish tendencies; competition in cooperation tends to encourage each pupil to do the best he can for the group; and competition with one's self is an attempt to better one's own previous record.

The following contest which Elizabeth Keiffer explained in this article is, according to her, an example of competition in cooperation.

"Lighting the Christmas Tree" contest is begun three weeks before Christmas vacation. Each class is divided into two groups on the basis of the last six weeks' grades. The two captains are the best pupils in the class. There should be an equal number of A's on each side, an equal number of B's, and so on down the line. One team is called "Yellows" and the other "Reds."

Half-minute writings on a sentence are given - two tries each day. The pupil selects the better of the two, crossing out the other. He multiplies his half-minute rate by two to determine the speed per minute. The sentence may be the same
on each day, or a different one may be used each week. All papers are given to the respective captain regardless of their quality. Only those pupils who write without error and type 30 words per minute qualify.

The team with the higher per cent of errorless speeds gets the candle for the day. To determine the per cent for each team, the number of errorless writings netting 30 words is divided by the number of pupils present on that team that day. Example: the "Yellows" have a membership of 18 pupils; the "Reds" have a membership of 17 pupils. On a particular day, 16 "Yellows" are present and 12 write without error once and make the required speed; this is 75 per cent. On that day, 15 "Reds" are present and 11 qualify; this is 73.3 per cent. The "Yellows" win that day and get the candle (cut out of construction paper and pasted on a Christmas tree cut of green paper). The team with the most candles at the end of the contest wins and receives a treat from the losing team.

The author further states that the teacher proofreads the papers after the captains hand them in and also goes over the figuring. The names of all pupils who qualify are listed on typewriting paper, and the speeds of those pupils who make 50 or more words per minute are indicated; this is added recognition. The names are listed under the proper date and under "Reds" or "Yellows." Rather than list the names each day, two squared charts, one for "Reds" and one for "Yellows," may be
made, listing the names of all team members and placing a check mark in the proper square headed by the date. For those who make 50 or more, the speed may be written in the square, rather than the check mark.

Comments:

The teacher would be able to vary the timed writings according to the ability of the class. For example, if the class were able to type one minute writings, the teacher could require 35 words throughout the contest.

The author proofread the students' work, but in some instances, the captains could be selected to proofread the material before the teacher receives it.

According to Louis Liebling, our problem in teaching tabulation is twofold:

1. To convince pupils of the need for learning how to tabulate and of the advantages of setting up data of many kinds in column form.

2. To teach pupils how to tabulate and to have them carry away the idea that the work is interesting and easy to learn.

The following motivating plan is one that has been used by Liebling in teaching tabulating to a class that has had no previous experience.

Each student receives a printed sheet, size 8 1/2 by 14 inches, containing the following copy:

A. The figures given here show the record of sales of a retail grocery story for the past week:
   Monday, $342.16; Tuesday, $313.75; Wednesday, $368.24;
   Thursday, $371.57; Friday, $342.12; Saturday, $511.78.

B. The material given at the top of this sheet is shown in column or tabulated form on the bottom of this page. Note how easily and quickly you can secure the information.
SALES RECORD

<table>
<thead>
<tr>
<th>Day</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>342.16</td>
</tr>
<tr>
<td>Tuesday</td>
<td>313.75</td>
</tr>
<tr>
<td>Wednesday</td>
<td>368.24</td>
</tr>
<tr>
<td>Thursday</td>
<td>371.57</td>
</tr>
<tr>
<td>Friday</td>
<td>342.12</td>
</tr>
<tr>
<td>Saturday</td>
<td>511.78</td>
</tr>
</tbody>
</table>

The teacher should fold the sheet in two when distributing it, so that the students see only the top half, which states the problem. The long sheet of paper is used so that there is sufficient space at the bottom for diagraming the plan directly underneath the completed tabulation. This provides a graphic and direct tie-up between the material in column form and the diagram. Calculations and notes may also be made in this extra space.

Liebling states that:

The students work step by step with the teacher while she uses the following procedure:

Horizontal Placement

A. Draw horizontal straight lines to represent the written columns, and a curved line to represent the spacing between the written columns.

Example: 9 (11) 7

Figure 1.

B. Find the number of spaces in the longest line in each column. In Figure 1, these numbers are 9 and 7.
C. Assign an odd number of spaces between each two written columns.

For the benefit of the teacher, the author gives a reason for assigning odd number of spaces. In certain tabulations, it is desirable to separate columns by drawing or typing vertical lines through the exact center of the spacing between printed columns. On a typewriter, an even number of spaces would not permit an exact central point.

D. Add the total number of horizontal spaces required by the tabulation. Subtract from 85 and divide by 2. The result will be the point at which to set the left marginal stop. Subtract that number from 85. The result is the point at which to set the right marginal stop. See Figure 2.

\[
\begin{align*}
9 \div 11 \div 7 &= 27 \\
85 - 27 &= 58 \div 2 = 29 \text{ (LMS)} \\
85 - 29 &= 56 \text{ (RMS)} \\
\text{Check: } 29 \div 9 \div 11 \div 7 &= 56 \\
\text{LMS } 29 & \quad \quad \text{56 RMS}
\end{align*}
\]

\[
\underline{49} \\
\text{T S}
\]

Figure 2.

The author gave the following application of instructions.

1. The pupils set up the plan as it is being worked out on the blackboard. Their questions are encouraged and answered as the solution progresses.

2. Move the right marginal stop to the extreme right end.

3. Clear all tabular stops.

4. Set the left marginal stop at 29.
5. Set a tabulator stop at 49.

6. Adjust the line-space gauge for double spacing.

7. Insert paper and space up to the twenty-seventh line—13 doubles and 1 single.

8. Center the main heading: SALES RECORD.

9. Typewrite the tabulation horizontally, line by line. Be careful to operate the tabulator key properly. Hold it down firmly until the carriage comes to a complete stop.

10. When the tabulation is completed, check the tabulation for errors.

The author suggests having a student summarize in his own words the procedure to be followed for the solution of a tabulation problem.

Comments:

As a review of the preceding day's work, the teacher may select an equally simple two-column tabulation which may be followed by a three-column exercise.

The value of working out a problem with the student is to enable the student to derive a feeling of achievement from the beginning. The student is made to feel that tabulation is both interesting and easy.

Students' interests in tabulation could be maintained by giving them the lineups of the basketball game to tabulate. A real project is more interesting than a hypothetical project.

From the author's viewpoint, standards and objectives should not be a deep, dark secret, but rather they should be the most familiar item in the class routine. Every student should know what will be expected of him at the end of the semester and should possess a map which will lead him toward the desired goals. This is where the weekly requirements chart, typewriting score chart, and the typewriting personal attainment chart enter on the scene. The weekly attainment chart contains information as to the length of writings used each week. It indicates the gross speed that should be attained weekly to meet minimum requirements to be average or to rank in the upper 10 per cent of the class. It also gives information as to the maximum number of errors permitted on a writing to be considered acceptable and marketable.
### WEEKLY REQUIREMENTS FOR SPEED AND ACCURACY FOR BEGINNING TYPEWRITING

<table>
<thead>
<tr>
<th>Week</th>
<th>Minutes of Writing</th>
<th>GROSS SPEED</th>
<th>Maximum Errors Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Min</td>
<td>Av.</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>22</td>
<td>28</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>21</td>
<td>28</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>22</td>
<td>29</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>23</td>
<td>31</td>
</tr>
<tr>
<td>11</td>
<td>5</td>
<td>24</td>
<td>32</td>
</tr>
<tr>
<td>12</td>
<td>5</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
<td>26</td>
<td>36</td>
</tr>
<tr>
<td>14</td>
<td>5,10</td>
<td>27</td>
<td>37</td>
</tr>
<tr>
<td>15</td>
<td>5,10</td>
<td>28</td>
<td>38</td>
</tr>
<tr>
<td>16</td>
<td>5,10</td>
<td>29</td>
<td>39</td>
</tr>
<tr>
<td>17</td>
<td>5,10</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>18</td>
<td>5,10</td>
<td>30</td>
<td>40</td>
</tr>
</tbody>
</table>

A speed of 30 wpm (gross) is the minimum for passing. The average and upper 10 per cent speeds are based upon experiences. More cases might slightly change the standards presented.
<table>
<thead>
<tr>
<th>Week</th>
<th>Minutes of Writing</th>
<th>GROSS SPEED</th>
<th>Maximum Errors Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>31</td>
<td>41</td>
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<td>3</td>
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<td>44</td>
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<td>37</td>
<td>45</td>
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<td>7</td>
<td>5,10</td>
<td>38</td>
<td>46</td>
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<tr>
<td>8</td>
<td>5,10</td>
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<td>5,10</td>
<td>40</td>
<td>48</td>
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<td>10</td>
<td>5</td>
<td>41</td>
<td>49</td>
</tr>
<tr>
<td>11</td>
<td>5,10</td>
<td>42</td>
<td>50</td>
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<tr>
<td>12</td>
<td>5</td>
<td>43</td>
<td>51</td>
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<td>13</td>
<td>5,10</td>
<td>44</td>
<td>52</td>
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<tr>
<td>14</td>
<td>5</td>
<td>45</td>
<td>53</td>
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<td>15</td>
<td>5,10</td>
<td>46</td>
<td>54</td>
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<tr>
<td>16</td>
<td>5</td>
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<td>55</td>
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<tr>
<td>17</td>
<td>5,10</td>
<td>48</td>
<td>56</td>
</tr>
<tr>
<td>18</td>
<td>5,10</td>
<td>48</td>
<td>57</td>
</tr>
</tbody>
</table>

A speed of 48 wpm (gross) is the minimum for passing.

Charts of this type place the task of evaluation directly on the student and notify him immediately as to the kind of progress he is making in relation to established standards. The use of these devices promotes even and continuous improvement. At no time is the pressure for improvement great but at all times it is constant. The student does not have an opportunity to let down his work.

Comments:

The teacher would not necessarily need to follow this chart but could use it as a basis for building her own depending on the class members. Again these charts are developed for in-
individual attention in promoting improvement in gross speed.

Andrew¹, in her article on the progress chart in typing, states that the chart is especially helpful in visualizing the progress of individual students.

Hickok² also contributes this kind of chart for individual differences.

Somersgill³ suggests the use of charts for showing progress in daily assignments.


The following paragraphs summarize the directions given to the students who participate in the motivation stunt called, "Saving Money."

The students have a job and are to be paid every two weeks. The amount they are paid will depend upon the amount they type. They will deposit their money on the 15th and the 30th of the month. Checks are written on the same dates. They pay all their bills on the day they receive their pay check. They wish to save at least $100 a month. They are to deposit their money in the bank, subtract any checks they may have drawn, and show their balance for the month. If they overdraw their account, it will be recorded as such and they will have to make it up with the next pay check.

Each net word a minute of typing counts for $1 on their pay check, which they deposit in the bank. Each error means a check for $10 drawn against their account.

They post their records on their bank statement, and when they have finished both tests, they subtract the amount of their checks drawn from their deposits to obtain the balance they have in the bank. If it is a minus amount, their account is overdrawn and, as a penalty, they receive an F grade. If they write accurately for the two tests, their balance has not been reduced by checks; so it draws interest at the rate of $5 a month.
With the money saved, these are the things that may be purchased:

- $1 to $25......D
- $25 to $75......C
- $75 to $100......B
- $100 and over......A

Example: Suppose a student types 50-3 on the first test and 57-0 on the next one. His bank statement would look something like the illustration. See illustration.

Comments:

A motivating device is defeating its purpose when the student knows that perhaps he will receive an F grade. Preferably, grades should be omitted.
Checks returned herewith

In Account With
(Name of School)
City and State

Statement of your account at the close of business

<table>
<thead>
<tr>
<th>Date</th>
<th>Checks in Detail</th>
<th>Date</th>
<th>Deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/15/52</td>
<td>$30.00</td>
<td>10/15/52</td>
<td>$50.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10/30/52</td>
<td>57.00</td>
</tr>
</tbody>
</table>

Balance  10/30/52  77.00

The author of this article is concerned with the fact that "speed tests, when used as a main course, are detrimental to the efficient teaching of typewriting, but when used as a dessert, there can be no finer instrument." Morgan believes that speed tests of the fifteen-to-thirty minute tests are not only time-consuming on the part of the teacher, but are detrimental to the progress of the average typist.

The following devices are advocated by the author. They vary from the usual speed workouts and can be used for an integration of innumerable worth-while problems of typewriting, especially during the period of automatising the keyboard.

**Honor Chart Pictures**

For the teacher who has photography as one of his hobbies, Morgan advocates using the following:

When a student has reached 40 words per minute, his or her picture is taken and placed in the "Honor Roll" chart in the front of the room. The chart is made of wood with slides that will easily hold 10 to 15 pictures in each speed rank. As the student progresses by units of five words per minute, the picture is moved up the ladder. Much interest comes from this, especially between two students whose speeds are close to each other, or between two close friends.
Take a Trip to Tokio

Select an article with seven to ten paragraphs. Have each paragraph represent a destination between your town and Tokio. As the student finishes a paragraph without error, he proceeds to the next island or destination.

You're in the Army Now

This exercise serves both as motivation as well as familiarizing the student with Army ranks, or Navy ranks if you prefer. Each student starts out as a "Buck Private" at the beginning of the timed writing. After he has completed the first paragraph without error, or with one error (as the case may be) he becomes a corporal. When he completes the second, he moves to a sergeant; then to lieutenant, then to captain, and then to major. At the end of the specified period, he simply turns in his name with his rank listed before it.

Binnion\(^1\) also contributed a game called "The Old Army Game"

Move Over

A ten-minute workout is given. At the end of the first two minutes the typist at machine No. 1 moves to No. 2, and each of the students moves to the next machine in numerical order. At the end of the next two minutes, the students again change. At the end of the test, each student has written on five machines, and also has received practice in inserting and

adjusting the paper. The test is figured as if done on one machine.

Relays

The class is divided into teams, two members to a team. Both members of the team use the same machine on a timed test. The length of the test can be five minutes with the first member writing $2\frac{1}{2}$ minutes. At the end of that time, the individual moves and the second member writes the remaining two and one-half minutes. This can be carried on with three or four members on a team with equal interest.

Miles Per Gallon (Strokes per error)

This device may be used for both speed and control in a timed writing. At the end of a ten-minute period, he checks his errors and divides the strokes by the number of errors. This will give him the number of strokes per error, or miles per gallon, he has made.

Perfect Lines

The students write for ten minutes. They check their papers and count only the number of perfect lines. A variation of this is to have the students return their carriages when an error is made, allowing them to complete only the perfect lines.

The author states that speed and accuracy are two things and should be taught separately, but to the finished typist capable of doing vocational office work, they are one and the same things, each dependent upon the other.
Comments:

The game, "Take a Trip to Tokio" could be utilized in whatever section of the textbook the student might be using. If writing letters were the predominant topic, let the student proceed from one letter to another, or as the case may be - from one island to another, until he reaches his destination.

"You're in the Army Now" would be most satisfactorily incorporated with the boys' lesson, although the same project could be used with girls, assuming they were in the Waves.

The value of "Move Over" assures the student of the opportunity to practice on all machines. However, this procedure cannot be practiced too frequently; otherwise, he will experience loss of speed on his own typewriter.

"Miles per Gallon" is used in our schools today although perhaps not called that. For psychological reasons, students are inclined to appreciate timed writings if there is a new name attached.

Sister Mary Anacleta¹ described in her article the use of small photographs of students when they accomplished a certain rate of speed and accuracy in timed writings. These photographs were pasted on stars that represented a certain speed a student had reached.

In Benson's chart, the stars were placed beside the person's name when a goal was achieved.

Manifold used the military plan in marking typing speeds whereby the students were graded from "buck private" to general." Ogden also exercised the rank of private to general in her army game.

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3Ogden, Mary, "From Private to General," The Business Education World, January, 1943, p. 323.

The author's purpose of this motivation stunt is to enable the student to acquire both speed and accuracy on material that is different from the material the student types every day. Each test is checked on the basis of both speed and accuracy.

On an imaginary trip aboard the Bremen from New York to Southampton, the warming-up tests can be taken. The material for these tests is to be location drills and the sentence, "It is the duty of a man to do me a turn and if he can he is to do so."

The material to be used for the stay in England is as follows:

The invention of the vertical file drawer marked the real beginning of scientific filing. There are four distinct types of vertical filing cabinets in use at the present time. These are the upright units, the horizontal units, the counter-height units, and the solid units. Each type serves a different purpose.

The next stop is Barcelona, Spain, to witness a bullfight and catch glimpses of charming senoritas. The material used follows:

*Muy senor mio y amigo: Se van a vender en Almoneda los muebles y efectos del difunto D. Martin de Timoneeda el dia 3 del presente. Como yo se que posee una biblioteca compuesta de muy buenas cosas y de las mejores ediciones, quisiera adquirir la mayor parte de ella y aun hoy, si fuera posible. Enrique Reyes.*

Then comes France, and a stop in Gay Paree. The test material is as follows:
A quoi songez-vous donc en me considérant si fort? Je songe que vous embellissez tous les jours, malade. A propos, je sais que vous aimez les fleurs, et je pensais a vous aussi en cueillant ce petit bouquet: tenez, Monsieur, prenez-le.

The last stop on the journey is Heidelberg, Germany. The material used there is:

So wird er schliesslich zum Gott der Weisheit, aber Weisheit ist kein fester Besitz sondern ein fernes nie erreichbares Ziel. Leben ist ihm Ringer um geistige Herrschaft.

Comments:

Typing a foreign language should be good for accuracy.

The translations of the material used for the journeys are as follows:

Spanish Translation

My very Sir and Friend:

The furniture and goods of the deceased Don Martin de Timoneda are going to be sold in Almoneda the third day of the present. As I know that he possesses a library composed of very good things and the best editions, I would like to acquire the largest part of it and even today, if it were possible. Enrique Reyes.

French Translation

Therefore, why are you then thinking of me so much? I think that you grow handsomer every day. By the way, I understand that you like flowers and I think that you also like that little bouquet: I say, Sir, take it.

German Translation

So he finally becomes the God of Wisdom, but Wisdom is not a firm possession, but a distant never-attainable goal. Life is for him the struggle for spiritual mastery.
If there are students in the class who can speak either one of the foreign languages, encourage them to translate the material.

Vernon Musselman, author of this article, used the following exercises once a week as supplementary to the material assigned in the textbook. He stated that the exercises are designed to train students to think and to be always on their guard.

Exercises A and B are companion exercises, and according to Musselman, the first exercise is easier than the second. If students will study the words they miss in Exercise A, few of them will miss the "repeating" pairs when Exercise B is assigned a few days later.

The author also stated that the exercise can be used effectively with either beginning or advanced typing students. The teacher can grade on the quality of the typing only, or he may take into consideration the correctness in choice of words.

The author further states that Exercise C, in addition to giving students practice in typing, also aids in developing vocabulary. This exercise can be used just as effectively, early or late in the typewriting course, even with second-year students.

Exercise A. Homonyms

Directions: You are to type the following sentences, inserting the proper word in the appropriate blank so as to complete the meaning of each sentence correctly. Choose from the
pairs of words shown before the sentences, and type the correct word within each sentence. Underscore each word that you insert.

diseased 1. The doctor feared the patient's eye was seriously . . . . .
deceased 2. The company found that the . . . . . partner had left no will.
marshal 3. It would help us in this study to . . . . . all the facts.
martial 4. In case of an emergency . . . . . law is declared.
plaintive 5. The . . . . . will testify in court this morning.
plaintiff 6. The little girl spoke in a . . . . . voice.
stationary 7. The secretary said the stock of office . . . . . was exhausted.
stationery 8. To many, a . . . . . chair is preferable to the swivel-type chair.
Whose 9. . . . . . the man in charge of this group? Who's 10. . . . . . book is this on my desk?

Other pairs of homonyms used by Musselman in his classroom were as follows: capital, capitol; principal, principle; correspondent, correspondence; lose, loose; president; precedent; compliment, complement; prophecy, prophesy; imminent, eminent; parcel, partial; personnel, personal.

Exercise B. Choice of Words

Directions: You are to type the following sentences, choosing one of the two words within the parentheses to complete the meaning. Correct any typing of English errors you notice in this copy.
1. The Constitutional Convention not only (effected, affected) a change in the old government but created a new government.

2. The (correspondents, correspondence) is quickly sorted each morning.

8. (Marshal, martial) law was declared to meet the problems of the flooded city.

9. The case was decided in favor of the (plaintive, plaintiff).

10. The professor (cited, sighted) many passages from Shakespeare.

11. Prices have been (stationery, stationary).

15. She will (advise, advice) any student about their shopping problems.

34. Give these papers to Helen, Rosalie, and Geraldine (respectively, respectfully).

The key words from the omitted sentences are as follows: cartoons, cartons; deferential, differential; canvas, canvass; principal, principle; residents, residence; personnel, personal; counsel, council; cooperation, corporation; immigrants, emigrants; liable, libel; waves, waives; except, accept; legible, eligible; razed, raised; face, phase; capital, capitol; precedent, president; compliment, complement; soul, sole; adverse, averse; tenor, tenure; imminent, eminent; to, too; your, you're; luxurious, luxuriant; practical, practicable; intrastate, interstate; precede, proceed.
Exercise C. Negative Forms of Words

Directions: Here is a list of incomplete sentences. You are to type each sentence and fill in the blank with the negative form of the word given in parenthesis following the sentence. Underscore each word you insert.

1. The animal trainer who is . . . . will not succeed. (patient)

2. The rectangle that was drawn on the board was very . . . . (regular)

3. The soldier was . . . . except for one hand grenade. (armed)

4. The stock market is very . . . . in time of war. (stable)

5. . . . . evidence was given to convict the man. (sufficient)

6. The blow knocked the prize fighter . . . . (sensible)

7. We thought his remarks were rather . . . . (personal)

8. His action at the meeting last night was . . . . (warranted)

9. The business was declared to be . . . . (solvent)

10. The judge said the lawyer's reasoning was . . . . (logical)

11. "I . . . . to punish you," said the teacher, "but you will not obey the rules." (like)

Other words used by Musselman in his classroom were as follows: acceptable, perfect, true, separable, conventional, performance, real, existent, consistent, frequent, finished, significant, audible, definite, complete, legal, capable,
civilized, active, competent, technical, certain, believable, responsible, accurate, kind, conscious, polite.

Comments:

According to the author's viewpoint, these exercises are designed to promote thinking on the part of the student. The student also is made aware of the necessity of determining the use of the right word in the sentence. One wrong word in a sentence can change its meaning and these exercises are developed to stimulate and to promote less carelessness in typing.

Puckett uses the ciphering match game in her typewriting classes. Two captains are selected and they choose members for their teams. The names of the team members are written on the blackboard in the order chosen, followed by the name of the captain.

The teacher dictates a one-column problem in addition. All the students type the numbers as dictated, even though they are not taking part in the contest.

At a given signal, the two students whose names appear first on each team compete with each other in addition. The one who first gets the correct answer competes next with the student whose name is second on the opposing team. Finally, members of the winning team cipher against one another in order to determine the individual winner.

Students who look at the keyboard while typing the numbers lose their chance to score.

Comments:

This is a good mental game, and it helps to improve the students' ability to type numbers. Start at first with two or three figures and increase the number of columns and figures as the students are able to progress faster.
Schwandt\textsuperscript{1} also uses the numbers for practice in speed and accuracy. Her students type the numbers from a calendar which is hung in front of the classroom.

\footnotesize

\textsuperscript{1}Schwandt, Irene, "Numbers! Numbers!," The Business Education World, October, 1941, p. 179-180.
The author has suggested a relay race using the alphabet and numbers on the machine.

The directions for the game follow:

Divide the class into a number of small teams. Appoint a captain for each team.

When the race starts, there must be no paper in any machine. At a given signal, the captain of each team inserts a sheet of paper in his machine, types the alphabet once, throws the carriage, and types the numbers 1 to 25, spacing once after each number. As soon as he has finished, he removes the sheet of paper from his machine and passes it to the second member of the team. The student passes the paper to each member of the team. When the last one on a team has removed the paper from his machine, he calls, "Time." All typing ceases and the papers are returned to the captains who exchange them and score them on the basis of the following points:

Winning team.................100
Each alphabet correctly typed....25
Each correct series of numbers...25
Deduct five points for each error

The team that has the highest score is the winner.

Comments:

This would be an exciting game and it helps the student to learn the position of the number keys thoroughly in order to type them with accuracy and speed.

The following are the author's illustrations for the game called, "Brownie."

The pupils are given a sentence to type for one minute without error. When a pupil has typed five different sentences, he may draw the body on a sheet of paper provided him. To draw the head, a pupil must type four sentences for a minute without error. Thereafter, each minute of typing with no errors entitles the pupil to add another part to the figure. In order to finish the drawing, the pupil must have typed 20 minutes without error, but the 20 minutes are not necessarily consecutive. The body must be drawn first; then, the head; after that the parts may be added in whatever order the pupil wishes.

Each part represents sentences typed without error for the length of time indicated.

The body represents five perfect sentences; head, four; curl, one; each ear, one; each eye, one; nose, one; each eyebrow, one; and mouth, one.

The object of the game is to see who can complete his drawing first. Ordinarily, only one feature may be added at a time; but occasionally, to introduce an element of variety, a pupil may type for a two-or a three-minute period, which entitles him, provided he makes no errors, to add two or three features according to the length of time he has typed. An
error in the work done in the two-minute period of sustained
typing disqualifies the copy, but in the three-minute period
one error is permissible.

Comments:

Both the first-year and the second-year typewriting
student would enjoy this game. As an extra incentive, the
teacher may wish to credit the student who draws the best
picture with another point of accuracy.

The chart on which the progress of the contestants is recorded is made of smooth-finished, black, four-ply cardboard and measures 28 by 22 inches. White ink is used in ruling and marking for contrast. Horizontal lines an inch apart are ruled and numbered to represent altitudes in miles. The gondolas, approximately 1½ inches long and ½ inch wide, are made of one-ply, light-colored cardboard. The gondolas are numbered consecutively, each number representing a contesting typist.

Taking into consideration the width of the gondolas, eyelets are made ¼ inch from the top and the bottom of the chart. An eyelet machine is used for making the eyelets.

The gondolas are clamped to a string by means of a wire stapler and are placed on the face of the chart. Each end of the string is threaded vertically through the eyelets and the ends are tied on the reverse side of the chart to make a complete circuit. This makes it possible to raise and lower the gondolas by merely rotating the string.

The following are drawn to scale on the chart:

Mount Everest, 29,140.28 feet.

Pike’s Peak, 14,110 feet.

Mount Washington, 6,288 feet.

Airplane, 8.96 miles.
Basket balloon, 28,508.41 feet.
Piccard's gondola, approximately 15 miles.
Pilot balloons, 26 miles.
The level of the cumulus and cirrus clouds, along with the height attained by the kite, 29,000 feet.

A series of one-minute tests on straight-copy matter is used, and the net words a minute are computed for each student. The net words a minute, divided by 10, represents the altitude in miles. One mile is deducted for each error.

Comments:

The length of time for this game would depend upon how many one-minute timed writings were given, but regardless of how long it would take for a student to reach his peak, it is doubtful that he would tire of this idea. Students sometimes prefer to take more timed writings on one day than on the next and this game could be made optional.

Rothrock has given a description of the "Keyboard Clubs" for spectacular mass motivation of her typing classes.

Five clubs were organized: namely,

All beginners .......... "Beginners Club"
30 net w.a.m. group .... "Trying Club"
40 " " " " " ...... "Progressive Club"
50 " " " " " ...... "Excellent Club"
60 " " " " " ...... "Super-excellent Club"

Membership was determined by achievement on 10-minute writings.

Four hand-painted plaques--one for each of the first three clubs and one for the last two groups combined--were prepared to make membership in higher groups desirable. The plaques measured 14 by 16 inches, and each contained a scroll on which the names of all students in a particular club could be easily placed as they progressed. By adding such decorative notes as attractive colors and cartoons, the teacher can put both spirit and pleasure into the motivation plan.

Comments:

This plan could be integrated in the program for the whole year. As many motivation devices are dependent on gross speed per minute, the "Keyboard Clubs" could use net words per minute. Pins could also be attached to this motivation device, by awarding them for each achievement the individual makes.

The object of this game is to bring in the biggest "catch," with tonnage the main consideration. Each minute of typing represents one day on the seas. The following scale is used in estimating points, which are based in terms of speed.

<table>
<thead>
<tr>
<th>Catch</th>
<th>Weight in Speed</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shark</td>
<td>75-85</td>
<td>100</td>
</tr>
<tr>
<td>Sail Fish</td>
<td>65-74</td>
<td>75</td>
</tr>
<tr>
<td>Sword Fish</td>
<td>55-64</td>
<td>50</td>
</tr>
<tr>
<td>Tuna Fish</td>
<td>45-54</td>
<td>25</td>
</tr>
<tr>
<td>Cat Fish</td>
<td>35-44</td>
<td>10</td>
</tr>
<tr>
<td>No &quot;Catch&quot;</td>
<td>25-34</td>
<td>0</td>
</tr>
</tbody>
</table>

The author stated that material may be used from the textbooks for the tests.

Comments:

To be effective, this device should not be practiced often. Use it sparingly so that the students may not become discouraged.

The directions for constructing the motivation chart pictured below were included in this article by the author.

The materials needed for this chart are: one large sheet of poster paper, a snapshot of each student, and a small replica of an airplane for each student.

To make the chart, draw six large circles. According to the author, the landing strip should be about four inches long and three inches wide. The circles should be about a inch apart.

After the pictures are mounted and the lines to the landing strip are drawn, place a plane beside each picture. As soon as the student reaches the speed indicated on the outer circle, his plane is thumbtacked in place to the outer circle. As the student reaches each higher speed, his plane is moved toward the airport.

Comments:

The students may be given a five-minute test or a 10-minute test, depending upon the class.
The small circles outside the chart represent the students' pictures.

The following paragraphs describe the author's device for obtaining better results in typing.

At the top of a large piece of Bristol board, the author pasted an actual bond. (It is sometimes possible to obtain a cancelled bond or to have a photostatic copy made.)

Underneath this bond she hung a chart ruled off into 10 columns headed in the following order: October, November, December, January, February, March, April, May, Interest, and Total. The columns for the months were again ruled in narrow columns, one for each of the four weeks in the month. The students' names were listed in the space at the left.

The heading of the chart read as follows:

Save and Buy a Bond
Net Typing Speed
Converted into Cash

The net speeds made by the students each week in a 10-minute timed writing represents "dollars." The amount in "dollars" was credited to the student's bank account to accumulate interest until the following May. The interest rate was two per cent. The interest earned was entered in red ink to make the amounts show up clearly.

On May 31, the students who had accumulated $1,000 credit "purchased" a bond, the interest rate on which might be as high
as four or five per cent. The students whose savings did not amount to the $1,000 needed to buy a bond invested in Government bonds. If the original investment in the Government bond was $750 or more, it would yield $1,000 within 10 years.

Comments:

The author's primary motive of the device was to increase speed in typing, but it also may be used to teach the value of thrift and systematic saving.
The materials for the following device, which the author has used with a great deal of success in her typewriting classes, are:

A long, narrow cardboard box about two inches deep. Thin wooden sticks (lollypop sticks.) Bits of colored construction paper cut in the form of pennants and glued onto the sticks.

Two large wall pennants--one red, the other blue.

A score card bearing the names of the two teams, with space provided for the dates of the speed tests.

At the beginning of each month, a preliminary speed test is given. The two students who attain the highest speed are appointed captains. The captains immediately choose members for their teams. Each side chooses its color--red or blue.

Twice a week, the teacher gives a timed writing, setting the standard at a specified speed, with a maximum of five errors. The students who attain the required speed are allowed to fly an individual pennant.

Each time a test is given, the date on which it is given and the scores of the team are entered on the score card. The team making the highest score has the privilege of displaying its banner in the typewriting room until the next test.

Comments:

Occasionally, the teacher may establish the rule that
whoever achieves the highest score with only five errors or less in the timed writing could fly an individual pennant.
<table>
<thead>
<tr>
<th>Date</th>
<th>Reds</th>
<th>Blues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 7</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>10</td>
<td>26</td>
<td>28</td>
</tr>
<tr>
<td>14</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>17</td>
<td>32</td>
<td>30</td>
</tr>
</tbody>
</table>

In both the first and second year typewriting classes for one term, the author used a candle-decorated tree and in the next term she used a cherry and hatchet chart as motivating devices to increase speed and accuracy.

Each branch of the tree represents a week of the six weeks' term. The candle on the edge of the branch indicates the higher rate of speed and the candle in from the edge, the lower rate. The candles in the center of the tree are merely decorative.

For the second device, each student was given a hatchet with his name on the handle. These hatchets were arranged in order around the wheel in the center of the chart. The number in the center of the wheel designates the class. The boy and the girl who had the highest speed each day received a cherry for his and her hatchet.

In the first term, five-minute tests were given on Monday, Wednesday, and Friday of each week; in the following term five-minute tests were used on each Monday, Tuesday, and Wednesday, and a 15-minute test on each Friday. The papers were first checked by the students and re-checked by the teacher.

The daily record of words and errors was tabulated as shown in the accompanying illustrations.
Comments:

The ultimate goal of any motivating device is controlled writing in all typewritten work.

In her article, "Decorating Christmas Trees," Beldon described the use of this device which may be interrelated with Sister Mary John LaSalle's idea. Instead of using candles, Beldon let the students decorate the tree with paper dots in different colors. When the students' rate of speed was high, the dots were placed high on the tree.

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Typewriting Speed Project

1st Division

Typewriting Speed Chart

2nd Division
The author, in order to stimulate her pupils to attain higher speed in typing, divided the class into two sections, called Set I and Set II. During one period of the week each set takes a speed test. The pupils type the test several times during the period and submit their best papers.

The results of these tests are shown on a race track which is made from an old typewriter chart covered on one side with black cambric. The track is drawn in bright colors on this cambric-covered side. There are only two horses on the track—Sunflower, who represents Set I, and Rainbow, who runs for Set II. The net averages for individuals and for teams are entered on charts.

When the scoring is completed and the results are recorded, the horse belonging to the side that has attained the higher average is placed ahead of the other.

Comments:

This game not only provides for group work, but individual scores are recorded as well. The game could be varied a bit so that each student could have a horse to run.
Sister Mary of the Divine Compassion, "An Attainment Chart,"

The accompanying chart was designed by the author for use as an incentive to her students to attain the Gregg shorthand and typewriting awards.

The outer edge of the large circle, as well as the edge of the small inner circle, is painted blue. The intertwined ovals for the transcription tests are also blue. The emblems for the other awards are gold and blue, the former color being used for the background.

Each student is supplied with a blue and a gold airplane on which the name of the student is written. As the students obtain their certificates they move their planes up the spaces on either side of the chart until they attain the Certificate of Achievement, which is their goal.

**Comments:**

Although the attainment chart includes shorthand awards as well as typewriting awards, the motivating device is excellent to warrant recognition.
Sister Mary Therese, O.S.F., "Type into Stardom," *The Business Education World*, October, 1947, p. 84.

The author made the chart, "Type into Stardom," to stimulate the drive and enthusiasm necessary for typewriting essentials—speed and accuracy.

Each speed is represented by a star drawn on a poster, with the outer star at 40 words a minute and the innermost star at 75 words a minute. See illustration.

Each student brings to class a snapshot of himself. This snapshot is trimmed and pasted on the poster as soon as the owner's skill reaches 40 words a minute. Thereafter, each time his skill climbs another five words a minute, a star is added beside his picture, and gradually his line of stars leads inward to the stardom of typewriting competency.

As an added growth of color, the stars used to indicate growth in achievement are each distinctive:

- 40 w.a.m. red star
- 45 w.a.m. blue star
- 50 w.a.m. green star
- 55 w.a.m. silver star with a red dot added in the center
- 60 w.a.m. gold star with a blue dot added in the center
- 65 w.a.m. blue star with a silver star placed over it to make a 10-pointed two-color star
- 70 w.a.m. red star with a silver star placed over it, and a red dot added in the center
- 75 w.a.m. blue star with a gold star placed over it, and a blue dot added in the center.
The scores recorded are based on the net words a minute achieved on 10-minute writings.

**Comments:**

This is definitely a device to be used in the advanced typewriting classes. According to the author, this device greatly stimulates the typewriting students to greater effort and greater pride in their ability.

To indicate the students' increase in speed, Sister M. Therese\(^1\) described the use of photographs which students pasted inside a star when they reached their goal of typing.

Type Into Stardom

The author of this article gives a description of the automobile race, which is shown in the accompanying illustration used for a motivating device in typewriting.

Each road represents a different class. This encourages group competition, as each class strives to have the greatest number of cars at the highest speeds, and the plan offsets the individual competition whereby each student tries for the lead.

A student is permitted to receive a car for entry in the race when he has written at least 20 words a minute. The rate may be determined in accordance with the International Typewriting Contest rules. During the first semester, five-and 10-minute tests are used; during the second semester, 15-minute tests are used. At mid-semester, students who exceed 30 words a minute are given cars of the new year's models. After entering a race, any car that fails to attain at least 15 words a minute is withdrawn.

Pictures of the cars may be obtained from the advertising material of the various automobile sales agencies. Wall board or a strip of wrapping paper may be used for the chart.

Comments:

Not many timed writings of 15 minutes are given in high school. However, the length of the test would be optional.
Banker\textsuperscript{1} and Edwardson\textsuperscript{2} contributed a similar automobile racing device.

In Ervin's\textsuperscript{3} article, "Three Typing Devices," the author has described an automobile race to arouse in the students a keen desire to excel.

\footnotesize{\textsuperscript{1}Banker, Harriet P., Editor, "The Lamp of Experience," \textit{The Business Education World}, June, 1937, p. 819-820.}

\footnotesize{\textsuperscript{2}Edwardson, Astrid, "Typists' Auto Race," \textit{The Business Education World}, April, 1938, p. 671-672.}

\footnotesize{\textsuperscript{3}Ervin, Velma L., "Three Typing Games," \textit{The Business Education World}, October, 1938, p. 156.}
Automobile Race Chart for Typing Classes

10  15  20  25  30  35  40

[Diagram of cars representing different typing speeds]

According to Robert Steffes, using games as a typing incentive, rather than following the usual procedure, is fine as long as the games are used only often enough to become a spice of the lesson.

To motivate students, the author has used the "stand-up" game, in which the students rise as soon as they are conscious of making an error in a timing and remain standing until the end of the timing.

The author has pointed out in this article that when students attempt to look at the keys, or at the carriage return lever, interest can be heightened through two devices. The first device is a simple game: the teacher dictates short sentences while the students type with their eyes closed. The second requires "peekers" to blindfold themselves during a similar typing-from-dictation drill.

He also believes in the use of the automatic pacer that clicks out rhythmic beats and helps the students develop good rhythm typing.

Through the use of such devices, these interest-heighteners lend a feeling of informality and lessen the tension that some students feel in their typing classes.
Comments:

The "stand-up" game could best be used at the close of the period. To use this game at the beginning of class might incline the students to become restless for the rest of the period. This game should be used for only a few minutes.

By dictating to the students, concentration and control of the fingers will be developed.

A description of the chart, "Who Will Be the First to Join Bugs Bunny?" was given by the author of this article.

Heavy cardboard was used for the chart, and in the upper left-hand corner, "Bugs Bunny" is pictured at a typewriter writing at the rate of 50 words per minute while eating a carrot, the reward for reaching this goal. Vegetables in the order of their appeal to the rabbit kingdom designate progress from 10 words per minute to 50 words per minute, with turnips at 10 words per minute, cabbage at 35 words per minute, and carrots at 50 words per minute. Individual bunnies, representing the students, begin the course across the chart when a score of 10 words per minute is reached.

Comments:

Each student may make his bunny and it may be placed on the chart with common pins or thumbtacks.

This chart is a simple scheme, but high school students will always respond whenever competition is involved.
"Who Will Be The First To Join Bugs Bunny?"

Walker states that there is a disadvantage to the elimination tourney as a motivating device in typewriting. The students tend to lose interest after elimination.

He suggests to arrange the tourney so that losers type against losers, the winning loser in turn to type against the winner on the winning side of the bracket to find the grand champion. Such a plan sustains interest and gives a good typist who lost an early round another chance for the championship.

The author has given the following diagram to illustrate the arrangement. The numbers below the names indicate the scores made by the contestants.

Comments:

This suggestion made by the author is worth practicing. No one should fail in typewriting and this device eliminates no one.

Three activities in which students typed on wallpaper are contributed by Henry Yankow in this article. The author states that his students contacted local wallpaper dealers for their supplies of old, discarded sample books and the department purchased typewriter ribbons in several colors. Each typewriting student was required to hand in at least three projects as follows:

1. A design, preferably original. Students with little or no artistic ability were allowed to trace their designs lightly and fill in various shades or colors with typewriters on either 8½ by 11 plain paper or wallpaper cut to the same size.

2. A poem or short story, composed or copied, selected to fit the design on the sheet of wallpaper used. (See illustration.)

3. A poem centered accurately on plain wallpaper.
His belief was that this project relieved the monotony of typewriting the same thing day after day and also forced the students into the use of various machines and models while, unconsciously, they were becoming proficient in centering, tabulating, line gauging, paper-release manipulation, back spacing, and crowding. The author states that he placed the colored ribbons to be used on various models and styles of typewriters, and in this way each student became familiar with each different type of machine in school.

Comments:

Teachers can use this type of stimulation in an "Artistic Typewriting Contest," with prizes to be awarded to the winners at a school assembly. The student can also be encouraged to make Christmas cards and valentines but only in his spare time. As the author has already pointed out, this kind of assignment gives the student an opportunity to use the different machines in the classroom.
The Birds of Passage

Birds, joyous birds of the wandering wing!
Whence is it ye come with the flowers of spring?
"We come from the shores of the green old Nile,
From the land where the roses of Sharon smile,
From the palms that wave through the Indian sky,
From the myrrh trees of glowing Araby."

"We have swept o'er the cities in song renowned,
Silent they lie with the desert round!
We have crossed the proud rivers whose tide hath rolled,
All dark with the warrior-blood of old;
And each worn wing hath regained its home,
Under the peasant's roof or Monarch's dome."
According to Charles Yerian, students of high school age can be stimulated through the two desires of novelty and recognition. They are interested in that which is new and different.

He has given the following motivating devices that will keep with the spirit of novelty and recognition for the student.

1. An adaptation of the basketball game is the tournament idea. Each student is given a number and in turn each number is placed in a regular tournament bracket. Brackets must contain places for four, eight, sixteen, thirty-two places, et cetera. If the teacher does not have the correct number of students, "byes" can be given in the first round. (Consult the coach for an explanation of tournament play.) Below is a diagram for four players:

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          Consolation  Championship
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Students who lost in the first round will proceed toward the consolation bracket to the left.

2. One of the most popular relay races is where the first person in each row is handed a sheet of paper and at the signal to start, types a pre-determined sentence until he has a perfect copy, removes the paper from the machine (properly) and hands it to the next person behind him who repeats the process. The first "end man" to hold up his hand signalling that he has typed the sentence correctly ends the race and represents the winning team.

3. Concentration practice also can be put on a team basis. One member of each team is seated at a typewriter while his teammates gather around him. A one-two- or three-minute timed writing is started. As soon as a typist makes an error, another team member (pre-determined order) slips into his seat, retypes the word in which the error was made and continues until he in turn makes an error or until time is called. The team having completed the greatest number of gross words per minute is the winner. No deduction is made for errors, because the penalty of having to change typists is sufficient in most cases.

Comments:

The third device illustrated is not one to be used frequently. The time element should be considered by each teacher because in some classes, a three-minute timed writing may be too long for some students.

Ehrenhardt¹ also contributed a game called, "Relay Race," which is very similar to the one above. She included the sentence, "We took a breezy excursion and gathered jonquils from the river slopes," in her game.

¹Ehrenhardt, Irma, "Motivating Typewriting Classes," The Business Education World, April, 1939, p. 675.

The game, "Rescue," was utilized in the classroom by Melba Patton for typewriting students. Her description of the game is as follows:

Two or more teams may be organized, each with the same number of students. The teacher reads a short, simple sentence and all the students type it. Students who make errors are eliminated from the game and do not type the next sentence. These team members who drop out may be rescued if all the remaining members of the team type the next sentence correctly. If all members of a team are eliminated, the team is retired because a rescue is not possible. When the previously-set time has expired, the team having the fewest members out is the winner.

Comments:

The value of a game such as this one is that it forces the students to do their best in performing a good technique for speed in stroking and establishing an accurate touch at the same time.

This type of game would be a typical activity for producing encouragement in obtaining an accurate rate of speed for a particular typing certificate which can be obtained from the Gregg Publishing Company.
An activity whereby the students work together for competition promotes a healthy situation in establishing good social relations with each other.
CHAPTER V

SUMMARY AND RECOMMENDATIONS

The purposes of this study were:

1. To analyze the literature on motivation devices in the field of typewriting.

2. To screen out the motivation devices which appear to be most significant for the teacher in the classroom.

3. To write brief descriptions of the motivation devices or plan of motivation.

Data were collected from 83 magazine articles that included motivation devices that had already been put into effect in the classroom. The writer discovered that articles were written on the value of motivation in typewriting alone. These articles that include the authors' viewpoints on the subject were omitted from the analysis.

The motivating devices were taken from articles written during 1935-1951 and over half of the material gathered was dated between 1935-1940.

The following observations were made during this analysis:

1. The ultimate aim in typewriting is the acquirement of speed and accuracy and the majority of the motivation devices analyzed in this study were utilized for the purpose of increasing speed and accuracy.
2. Devices that involved student competition are valuable as a motivating technique.

3. Since the budget was used in the typewriting classroom during the 1930-1940 period, many of the devices were set up accordingly and may be of little value to the teachers of today.

4. The exercises used in conjunction with motivation devices which were analyzed usually ranged from one minute to 10 minutes.

5. A great many motivation devices were constructed to develop perfect-copy writing. The teacher should be careful not to over-emphasize accuracy at the expense of developing typing power, especially in the beginning stages of learning to typewrite.

6. Students were motivated in the correct use of number keys as well as letter keys for acquiring speed and accuracy.

7. Charts, written work in foreign languages, games, tabulations, timed writings, relays and artistic designs were the kinds of motivation devices illustrated by the authors.

8. An analysis of the literature on motivation indicates that a pleasant atmosphere with complete lack of tension is very essential for maximum learning.

9. Competition devices, a kind of motivation, may be divided into three kinds: individual competition that often tends to develop selfish tendencies, group competition that
tends to encourage each pupil to do the best he can for the group, and competition with oneself that is an attempt to better one's own previous records.

10. In most of the articles, motivation devices are so constructed that either speed or accuracy, but not both, is emphasized.

Recommendations

1. A survey may be made to determine whether or not teachers are using motivation devices in their typewriting classes.

2. A study may be made to determine whether or not high school students in first-year typewriting need more motivation to retain their interests than do college students in beginning typewriting.

3. A comparative analysis may be made of the leaders' viewpoints in the articles written on the discussion of motivation in typewriting. This study includes only the description of motivation devices for classroom use and excludes opinions of the authors concerning the value of motivation in typewriting.
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