Analysis of 10 finger

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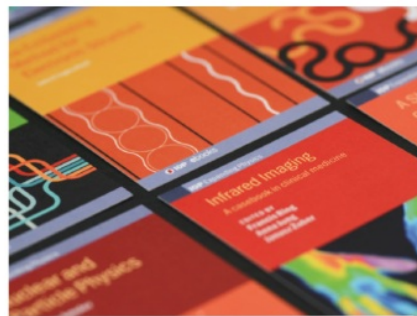
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The Analysis of 10 Finger Typing System Capabilities and Blind System as One of the Competitive Advantage in Entering Working World (Studies in Business and Management Students of Public Vocational High School (SMK N) of Padang)

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Abstract. The purpose of this study was to analyze: (1) The ability of students from Office Administration Department of Business and Management SMK N in Padang to type using 10 fingers and blind system, (2) The obstacles faced by students from Office Administration Department of Business and Management SMK N in Padang in typing using 10 fingers and blind system, and (3) The readiness of Office Administration's students of Business and Management SMK N of Padang in Working World. This research is a descriptive study using survey methods to describe the typing skill of students of Office Administration Department in SMK N of Padang, namely SMK N 2 and SMK 3 of Padang which included speed, accuracy, and the appropriate attitude while typing. Then, the research is described with the help of observation, interviews, and documentation. The data in this study were analyzed through the stages of data reduction, data presentation, and drawing conclusions. The results of the study showed that the overall speed of typing of the first grade students from Office Administration Department of SMK N 2 and SMK 3 of Padang is in the low category. The accuracy of typing is too low, despite their interest is high enough to brace the ability to type with 10 fingers using blind system. This is because of the lack of duration of typing lessons in the curriculum and frequency of students for practicing at school or home that caused students do not master function fingers on the keyboard.

1. Introduction

Among intense competition in entering the working world, prospective workers are required to have strong mental, knowledge and skills that are sufficient and suitable with the demands of the working world. The competition ensues not only with Indonesian labor but also with foreign labors since there are more foreign companies that conduct their business activities in Indonesia from time to time. Every company wants workers who are truly professional, has extensive knowledge, and strong mental skills and mastery of foreign languages, especially English.

This situation is a challenge for education, especially in preparing their students to be ready to compete in entering the working world. Competition is a "contest that requires all parties to compete against each other"[1]. So in the working world, each person are required to compete with each other to get what they want in life. These day, getting a job is not an easy thing, especially regarding the condition of the country today. Currently the number of workers is much greater than to the employment opportunities available. This requires people to compete and race in the labor market.

Various attempts were made by the world of education through training and educating to produce the Human Resources (HR) who have professional skills, knowledge, skills and extensive knowledge in accordance with the current market needs now and then. Of course, the process of educating and training should have characteristics that had been determined. The competencies needed, namely: *First,* competency-based education should have a goal of teaching in the form of behavior that can be observed and measured. *Second,* the students know and realize that they are expected to be able to demonstrate their competence to a set of level. *Third,* the education is aimed at individual improvement, in which the learning process is based on the ability of the learner[2].

Vocational High School with the Office Administration Competency attempts to prepare students to be able to work in an administrative profession which are assisting or supportive. This profession refers to an administrative task in which the job carried out routine work, administrative duties, or personal tasks from superiors. Office Administration Competency aims to equip students with skills, knowledge, and attitudes to be competent in communicating, managing documents, services toward relations, managing financial administration and other competencies. "The main categories of companies in selecting employees who are going to work at the company are: 1) the knowledge, skills and abilities, and 2) Personality, interests and preference[3]. The instrumentation that can be used to assess knowledge, skills, abilities, experience, and personality of the applicants is recruitment tests. The kinds of recruitment tests conducted by the company to determine which employees are eligible to work in the company include psychological tests, knowledge tests, and performance test[4]. 10 finger typing is one of the skills the students of Office Administration Department in Vocational School need to have. Students learn how to type correctly according to the procedure. Typing quickly could be implemented if 10 fingers work in accordance with their respective functions. Students tend to be faster on typing by focusing on the script that will be typed and their own hands without looking at the keyboard. In everyday practice, it is shown that there has been a lot of people who can type, but not everyone mastered typing or using an efficient manner. With the increasing number of chores, the way to work more efficiently and practical should be accomplished and mastering typing with 10 fingers system is expected to address this problem.Typing with 10 fingers system means each finger has a responsibility to press certain key part which is closely spaced, so that the fingers do not have to reach another keys far away. By using this system, typing would use minimal movement of the fingers with maximum result[5]–[7]. With the trained fingers, the students are no longer necessary to look at the keyboard. They could simply look at the script. So this system is often called blind system or typing without looking (blind system). This means typing without looking at the keyboard continuously. Eyes are fixed on the script. Therefore, the location of the letter on the keyboard and with which finger the keys must be put should be remembered.

4. Method

This research is a descriptive research and aims to describe real facts when the research is conducted: an exploratory study of typing skills from students of Office Administrative Department of *SMK N* 2

and *SMK* 3 Padang. The data collection technique is the way in collecting research data. The techniques used in this study were: 1) observation, to observe the students' typing activity directly and to find out the typing skills of students in terms of speed, accuracy, sitting posture, the division of finger tasks, and eye, 2) Interview, addressed to the subject teacher with typing. In this study, supporting teachers took parts as informants, and 3) documentation, in which a text is used as a speed test for students; drawings, or photographs; typing speed working sheets and Vocational Practice Exam assessment criteria.

Data analysis techniques used in this study were divided into several stages. As for the stages of the analysis into three steps: 1) Data Reduction, 2) Presentation of Data, and 3) Conclusion.

3. Result And Discussion

Based on the survey results revealed that the real interest of the students to be able to master the skill of typing with 10 fingers *blind system* is actually very high. Around 85% of students study who said that they have a keen interest in skilled typing with 10 fingers *blind system*. With high interest is of course expected to affect their ability in typing. In the world of work, especially in this era of globalization, everyone is required to have special skills or specific. For example, a secretary does not just have to be able to type and use a computer, but he also had to act effectively and efficient in moving the fingers and hands[6].

But the high interest was not accompanied by action to realize these interests. It looks at a frequency less exercise carried out by the students, both in school especially at home. *Exercise* activities in schools is only done when the lessons Office Automation course, precisely on the subject of 10 finger typing, but it was only for 7 meetings only. Moreover, the Office Automation lessons followed by materials such as Ms. sequel Word, Ms. Excel, Ms. Power Point, Ms. Publisher, Internet and E-mail.

With the frequency of exercise is lacking in schools, exercise at home is required. But due to lack of facilities owned by the student in the home, such as a computer or laptop, then exercise at home would not be maximized. Plus there are no charges that requires students to practice at home or have to reach a certain typing speed and was maximized with the exercises at home.

At the time of typing, typist should familiarize putting the fingers work in accordance with the duties and functions of each. Placing the fingers is the basic learning at the beginning of the introduction of typing with 10 fingers system. In line with this task finger, the eyes must also be noted that while typing, the person typing should not be looking at a monitor or *keyboard* and script interchangeably. Eyes should be to script, and only occasionally glancing *keyboard* or monitor to determine the position of the finger or the result of typing. What if the fingers cannot function properly when typing, in this case the duties have not memorized finger typist, the course will also affecting indiscipline eyes when typing. It certainly will affect the resulting speed in typing.

The results showed that about 39% of students have not been up in the placement of the fingers when typing students, there are still many students who often look to the *keyboard* and monitor. They are still searching for the location of the letter to be entered. After typing a single letter they sometimes forget to return to keys. It can be caused due to lack of supervision of teachers during lessons and also of course is the lack of discipline of students in typing. In addition, there are still about 28% of eyes were still undisciplined when typing the impact on the result of typing.

Typing with 10 fingers system means each finger has a responsibility to type (pressing) of certain key parts, closely spaced. So that the fingers do not have to jump from a remote distance. By typing this system can move the fingers with minimal, but have maximum results[7]. At the time of typing there is a provision where there are some keys that had always been inhabited by a certain radius, so that the fingers are increasingly know where the key to certain letters were located. With untrained fingers to press certain buttons, does not need to look at the keypad, but must see the manuscript. So the system is often called *blind system* or typing with no view (blind system).

To have 10 fingers typing skills are correct, then the discipline necessary to be considered. Discipline is meant in this case is in the use of the right fingers, eyes and how to sit

properly. With accustomed to discipline, the typist will gradually be able to easily add and increase the speed of typing. However, if this discipline is ignored, then the increase in typing speed it is an impossible thing to achieve[8]–[10].

Correct posture when typing a thing which also affects students' ability and speed in typing. Posture when typing should be noted that the student body to avoid distractions such as fatigue in the back, hand, eye health and other body parts. At the time of the study found that many students who complained of feeling fatigue and soreness. That's because their sitting position when typing is still not right. About 43% of students seen typing positions that are not quite like the backs bent, hands leaning on the *keyboard,* distance to the monitor too close, resting on one leg, and foot looped on a chair.

The minimum standard speed of typing students need to have is 200 EPM (tugs per minute). From the conducted research, 4 students, or about 3% only students who have typed above 150 EPM. The remaining approximately 97% of students do not meet the minimum standards that must be mastered typing speed. From interviews with teachers in mind that the constraints faced by teachers in training students to be able to master the skills of 10-finger typing is the first technical problem. According to the teachers usually a major constraint on computers that were damaged on the channel, if it were so the teacher will ask a technician to repair. It was later confiscated quite a long time in the repair and will have an impact on learning hour is wasted.

The accuracy of typing trained in tandem with the speed of typing. The accuracy of typing is not only seen on the accuracy of the results of typing of student, but also the result of typing neatness and conformance result of typing the manuscript or worksheet provided. Typing fast but a lot of errors is also not a good result. Good typing is typing quickly, precisely, and neatly correspond to a given command. The minimum standard typing accuracy that must be owned by the students is 98%. From the research conducted, only 9 students, or 6.8% that the accuracy of typing over 91%. The rest of course not meet the minimum standards that must be mastered typing accuracy.

Listening to the results of research that has been in the mentioned above, it is known that the typing skills of students after attending lessons Office Automation is far from satisfactory. Most students still have a typing speed and low accuracy and too much indiscipline appear so violates the concept of *a blind* 10-finger typing *system*. When this condition is observed, and is not considered, then of course the students of SMK can be said to be not ready to face the demands of the world of work, related to competence in typing quickly. Therefore, it is of course necessary to get attention from all sides.

4. Conclusion

Based on the research that has been done through observation, interviews, and documents, it can be summed up as follows: The typing skills of the first grade students from Office Administration Department of Public Vocational High School of Padang viewed from: 1) the first grade students that have picked Office Automation subjects showed a keen interest in skilled typing with 10 fingers and systems without looking keyboard and monitor, 2) Some students, or about 75% has been doing exercises in the school, that is only when the Office Automation lesson in doing, right on typing material submitted, 3) Most respondents spend less all the time to practice typing at home. A small fraction, or about 12% that train speed typing in the house, 4) Some students, about 60% has been trying for 10 finger typing correctly and 40% are not able to type 10 fingers properly, 5) Approximately 27% students still often see the keyboard and monitor when typing, 6) Some students' typing speed are still below 90 beats per minute. Only approximately 10% that could reach110 beats per minute, 7) most students have low typing accuracy, or below 90%. Only 6.8% of typing accuracy is above 90%.

The difficulties faced by students of Business and Management Vocational High School in Padang in typing with 10 fingers and blind system are; (a) the weight of materials that are lacking in the curriculum, (b) Lack of exercising in schools, (c) Lack of exercising at home, (d) memorizing the position of the letter and the function of the fingers and discipline in the use of fingers and eyes, (e) Rigidity of fingers in typing.

The first grade students of Business and Management Vocational High School in Padang are not yet ready to enter the working world concerning their typing skills.

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