Students' Perspectives: ICT Usage in Vocational Education and Training (VET)

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Abstract

This study aims to determine the students' perspective regarding the Information, Communication, and Techologies (ICT) usage in learning activity at Vocational Education and Training (VET). This research is quantitative descriptive research using survey techniques and group interviews. The population of this study included all VET students from various expertise programs in Surabaya, Indonesia. Samples were randomly selected using 218 students. The results showed that as many as 97.25% of students argued that the use of ICT was very useful in learning to find learning material and complete assignments. Students even have access to ICT every day at home and access ICT at school once a week during learning in a practical laboratory. VET students already have much competence in using ICT in learning that can be seen from their ability to operate Microsoft Office programs (such as: Ms. Word, Ms. Power Point, Ms. Excel) and use the internet to communicate and find learning materials. Therefore, it can be concluded that from the students' perspective that ICT is very helpful in learning activity at VET. Students also feel that the use of ICT today is a demand that must be mastered to be able to compete in the world of work.

Keywords: Students' perspectives, ICT, VET.

Introduction

Nowadays, Information, Communication, and Technology (ICT) is developing so rapidly that it demands all field of life to be progressed so it is not outdated.This demand for ICT development also applies to the world of education in Indonesia. One example of the efforts made in the world of education in Indonesia to improve the quality and quality of education in accordance with the development of ICT is the change of curriculum. As we know, the education curriculum in Indonesia in recent years has been replaced as a form of innovation in education so that the substance in the learning process experiences increased quality from the previous curriculum. This curriculum is known as the 2013 Curriculum (K13). The learning process that was initially teacher-centered, is now turning into student-centered. Students are required to be able to obtain, develop, and apply knowledge that has been learned by themselves by utilizing various available media in student learning environments including using ICT (Yachina, Valeeva, &Sirazeeva, 2016: 433). So, it can encourage students to reflect on their knowledge, skills, and attitudes (Scott & Cong, 2010: 283).

The use of ICT in learning is an innovation in the world of education given the many technological results that can be used to improve the quality of education, such as the use of ICT for learning technologies both as tools or instructional media and management of educational information that can improve the efficiency of the learning process. ICT makes it easier for students to access the information needed in learning (Menkhoff, Yian, Wah, & Kee, 2011: 147). Students as the main object in the teaching and learning process play a dominant role in the success of educational innovation. The role of students in educational innovation is not only as recipients of lessons, but also as providers of subject matter to fellow friends, guidance, and even as teachers. Therefore, in introducing educational innovations up to their application, students need to be invited or involved so that they not only accept and implement these innovations, but also are responsible for the success of learning.

The accuracy of teachers in utilizing ICT is very influential on the success of learning to fit the learning objectives and specifically to create meaningful learning for students (Wankel &Blessinger, 2015: 5). This is because ICT can be used in presentation activities, assessment, monitoring, plus students can obtain, share and develop their knowledge and skills independently (Kang, et al., 2011: 19). ICT also helps schools in facilitating the automation of administration used for various interested parties in the school and can be used as information content that brings together the theories studied with conditions in real life. The benefits of ICT in education have influenced many countries to use ICT in education so that they can create skilled human resources using ICT and be able to overcome global challenges (Andoh, 2015: 1), including learning in Vocational Education and Training (VET) in Indonesia .

Vocational Education and Training (VET) is part of the level of secondary education and above which aims to produce graduates who are prepared to work in a particular field according to their expertise. As a consequence of this goal, VET graduates must meet the standards of graduates so that they are able to meet the demands of the world of work according to their respective fields of expertise and be able to develop professional attitudes (Himmah&Triyono, 2014: 233). Nowadays, in order to win the competition in the world of work, vocational graduates are not only equipped with competencies in accordance with their fields of expertise but also require other skills competencies such as the ability to use ICT. The ability to operate ICT can support and facilitate work in the field of expertise later (Yogiyatno&Sofyan, 2013: 392). Therefore, the use of ICT in learning in VET is not only used to simplify the learning process and familiarize students with using ICT but it is also used as a provision for VET students to face the world of work.

Surabaya is one of the cities in Indonesia that has the highest number of VETs and has good quality. In Surabaya there are 99 VETs consisting of 87 private VETs and 12 public VETs which 6 of 12 public VETs have become international standard schools (ISO). Based on preliminary observations of the use of ICT in VET since the last few years, research from Pratiwi, Siswandari , and Santosa (2018: 222) show that almost all SMK students already have tools that can be used to conduct ICT-based learning, such as smartphones and laptops. On the other hand, the curriculum currently used in VET namely Curriculum 2013 also requires the use of ICT in learning according to the times and the needs of the workforce. Based on these conditions, this study wants to know how students' perspective about ICT usage in VET from the aspects of ICT usage, ICT access, ICT competencies, and ICT self-efficacy.

Method

The method of this research is a quantitative descriptive research. The population in this study includes all VET students from various expertise programs in Surabaya, Indonesia. The sample was chosen using a simple random sampling technique because it was assumed that all VET students in Surabaya, Indonesia had the ability to access the same ICT in learning. The number of samples used was 218 VET students and representative of the benefits of ICT use for VET students in Surabaya, Indonesia. The research instruments used were questionnaires and interview guides. Sampled students were asked to fill out questionnaires that had been provided to find out students' perspectives about the benefits of using ICT in learning at VET. Then conducted group interviews to find out the condition of students in depth so as to strengthen the results of the analysis of the questionnaire. The data obtained were then analyzed descriptively quantitatively to be able to describe clearly and accurately the results of the research obtained.

Based on the results of these studies it is expected that information can be obtained about the benefits of using ICT in learning at VET from the perspective of students as users. Furthermore, this information can be used as a provision to improve learning in VET and improve the quality of ICT use in learning in VET according to the needs of students. This is done in view of technological developments that can no longer be avoided in the lives of students as the millennial generation who are called upon to always develop according to the progress of the times. This research is limited to VET students in Surabaya and has not been specific to knowing ICT-based learning as what students

want in learning. It is expected that further research can cover the scope to be able to develop this research.

Results and Discussion

To find out students' perspectives on the use of ICT in learning in VET, the surveys and interviews conducted are based on 4 important points, namely: (1) Students' ICT usage, (2) Students'perceptions of ICT access, (3) Students' perceptions of ICT competencies, and (4) Students' perceptions of ICT Self-efficacy. The results of the study showed that of 218 VET students consisting of 14% of public VET students and the remaining private VET students from various skill and level programs can be presented as follows:
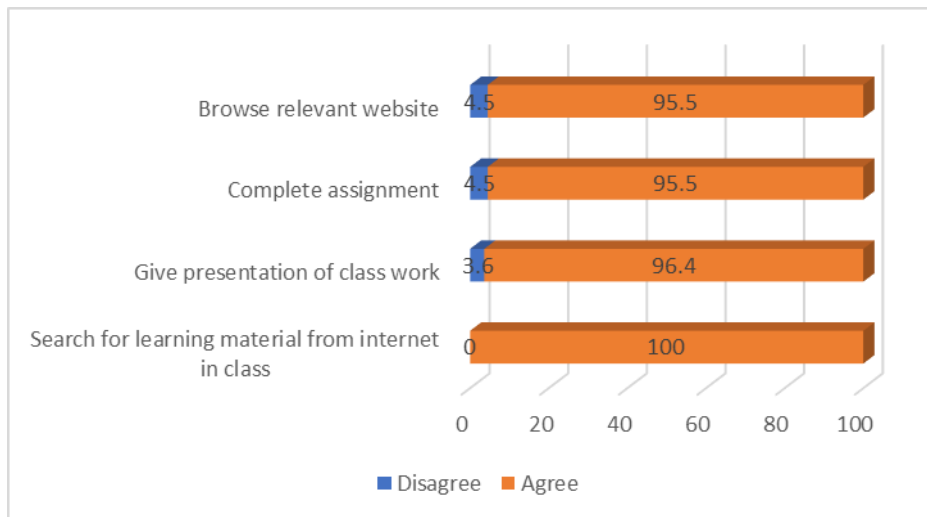
1. Students' ICT Usage

Figure 1. Students' ICT Usage (in Percentage)

Based on figure 1, it can be seen that all students use ICT in learning to search for learning material through the internet. According to students, learning according to the curriculum that is used today is very demanding for students to be able to find and develop learning materials which will then be applied in accordance with their respective program of expertise. Therefore, as many as 96.4% of students agree if ICT can help present learning tasks that must be understood. In addition, ICT also assists students in completing tasks given by the teacher during learning by accessing relevant websites so that 95.5% of students agree if ICT is said to be able to help students complete tasks and be used to access appropriate websites.
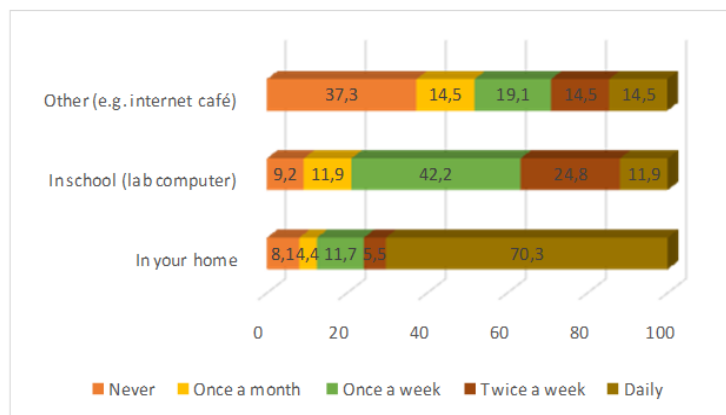
2. Students' Perception of ICT Access

Figure 2. Students' Perception of ICT Access (in Percentage)

Now, VET students already have various media that can be used to access ICT in learning, such as: smartphones and laptops. Students access these media in almost every activity they do. Based on figure 2, it can be seen that most students access ICT at home every day (70.3%). These results are not surprising because currently almost all students cannot be separated from their personal smartphones, while the rest who rarely access ICT at home are caused by the limitations of their media and the limitations of accessing ICT at home by their parents. At school, ICT access for students is done once a week (42.2%) because the average VET student subject conducted in the school lab is scheduled every 1 week because the availability of the number of school labs with the number of students is not balanced especially for skills programs that not too related to ICT, such as business and management program. For students who come from ICT expertise programs, it turns out that they have a schedule that uses more school labs, which is twice a week (24.8%), some even every day (11.9%). In addition to at home and at school, students also access ICT in other places such as cafes that provide internet networks(Wi-fi), although not often, only once a week (19.1%) or twice a week (14.5%), even some are never at all (37.3%). Access to ICT outside the home or school is done when students get school assignments that must be completed and need information or data from the internet. In addition, there are many places that offer free Wi-fi access nowadays and offer comfortable places and low prices so they can be reached by students.

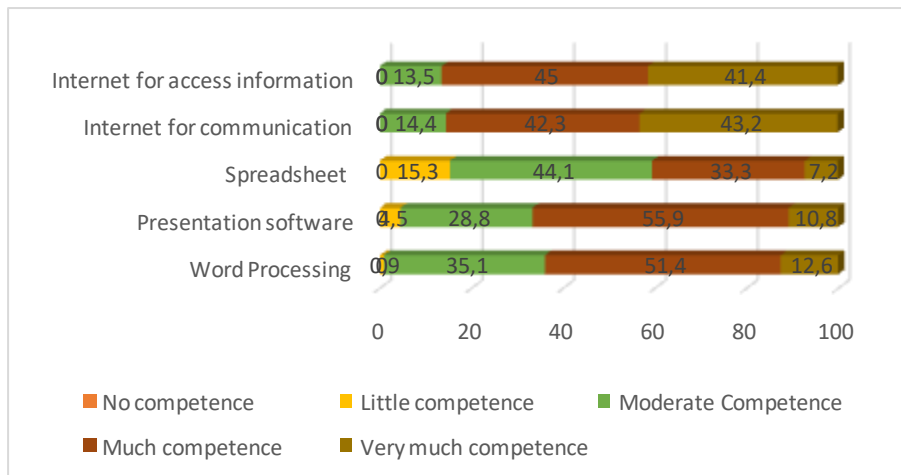3. Students' Perceptions of ICT Competencies

Figure 3. Students' Perceptions of ICT Competencies (in Percentage)

Next, we discuss the ability of students to access ICT to support the learning process. Students give opinions about their ability to use various features offered by various ICT media currently in learning. Based on figure 3, it can be seen that students feel they have much competence in using word processing programs such as Ms. Word (51.4%) and presentation software such as Power Point (55.9%). Students are already accustomed to using the program / software because of the tasks they do and presentations made while at school, even 12.6% and 10, 8% of students feel very much competence of using Ms. Word and Ms. Power point. Meanwhile, in a spreadsheet program (Ms. Excel) students feel they have moderate competence (44.1%) because on average they have not mastered all the formulas available in spreadsheet programs, but as many as 33.3% of students feel they have much competence because taught in learning especially for students in business and management skills programs. The use of the internet for communication and searching for information was also very much competence by students because as many as 43.2% of students felt very much competence at using email and chat applications to communicate and 45% of students felt much competence using the internet to find information related to learning material. This result is certainly very good for the value added expertise of VET students in facing the world of work later.

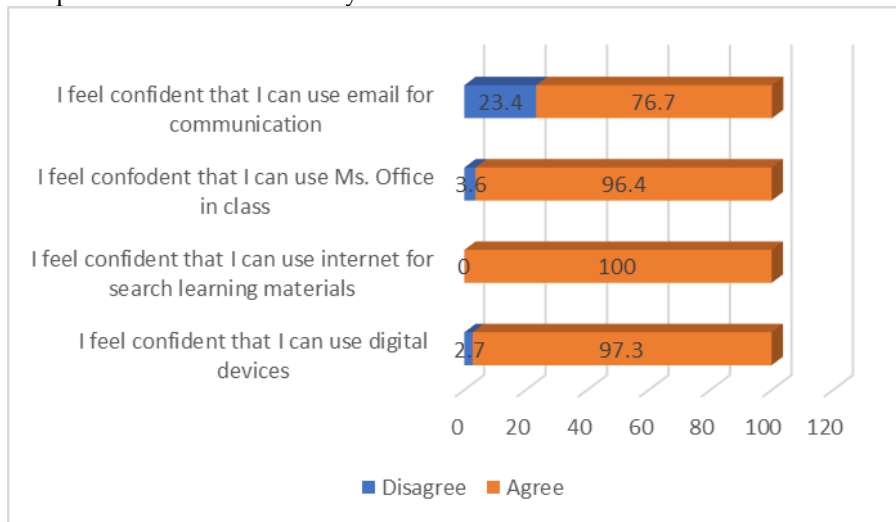4. Students' Perceptions of ICT Self-efficacy

Figure 4. Students' Perceptions of ICT Self-efficacy (in Percentage)

Finally, based on figure 4, information can be obtained about students' self-efficacy towards the use of ICT in learning. As many as 97.3% feel confident when using digital devices in learning and even all students are confident when using the internet to find learning material. This is because ICT makes it easier for students to access information related to learning materials using digital devices. Then, students also feel confident when they can use Ms. Office and email to communicate in learning. The use of these two programs is an age-old demand and they as VET students already have good expertise in operating the program.

Conclusions

Based on the results of the above research it can be concluded that in the view of VET students the use of ICT in learning is very helpful and facilitates them in finding learning material and completing assignments (Linberg, et al., 2017: 126; Zweekhorst& Maas, 2014: 15). VET students also have good skills in accessing various ICT-based media wherever they are. The use of ICT can also make students feel confident because they have added value that can be used as a provision in facing the world of work (Pratiwi, Siswandari, &Santosa, 2017: 77). Thus, it is expected that the use of ICT in learning at VET can be optimized so that they have better quality according to the demands of the learning curriculum and technological development.

Acknowledgments

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