

An Assessment of Computer Competency Level among Out-of-School-Youth in Partner LGU

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Abstract:

The mobilization of Information and Communication Technology (ICT) is crucial in fostering competitiveness in the context of a rapidly changing global economy. This study evaluated the effectiveness of a computer literacy training extension program for the out-of-school youth, particularly in basic word processing and multimedia presentation. The training program on the use of Microsoft Word and Microsoft Powerpoint Application among out-of-school youth of Brgy. Tanza, Estancia, Iloilo was evaluated using a descriptive-evaluative method. According to the respondents, the training program is beneficial as it allows them to improve their knowledge and skills using ICT tools, making their work easier and faster. They also used the training skills to gain employability, which makes them productive and creative. The participants believed that the extension training program greatly helped them in improving their skills. Additional training in other relevant fields was suggested by respondents.

Keywords—Out-of-School-Youth, Assessment, Computer Competency, Computer Literacy

I. INTRODUCTION

Globally, the importance of information and communication technology (ICT) cannot be overstated. ICTs are bringing about rapid changes in society. Being computer literate is more important now than it has ever been in the last few years that computers have been around. Almost everything is becoming computer-dependent, and several businesses have embraced technology. You won't be able to avoid computer literacy, and you shouldn't try. Humans are all about adapting, and computers are just another thing we must learn to adapt to. Because computers are so important in some everyday tasks these days, it stands to reason that computer literacy should be prioritized. It presents with unprecedented challenges that help the individual to acquire an acquiring, critical and

creative mind to capitalize the need of an individual to foster quality learning.

In many circles, information and communication technology (ICT) has been seen as an important part of strategies to deliver basic education to the low-skilled, the poorly qualified and the hard to reach [1]. Concerns about the relationship between ICT and illiterate youth have been heightened by the growing realization that, in information-rich societies, digital literacy is becoming a critical generic skill. The fear is that the digital divide and the literacy divide will converge to become one and the same. In particular, ICT is viewed as a set of potential delivery and instructional tools that can be used to help people acquire skills needed for their society's knowledge economy. In this approach, out-of-school youth are a crucial target population in a world increasingly concerned about literacy, employability and lifelong learning [1]. Out-of-

school youth (sometimes known as opportunity youth or disconnected youth) who are not in school or meaningfully employed [2].

Many individuals have a false image of “out-of-school-youth” or “drop-outs” abilities and capacities. This group is widely thought about the need to redo and re-learn the most fundamental literacy abilities. As a result, it is marginalized and shunned. In fact, out-of-school youth have some formal education experience. Furthermore, many of them have benefited much from their environment and culture. As a result, teaching fundamental literacy does not always imply teaching literacy in its most basic forms. The gained skills and knowledge, on the other hand, must be recognized, utilized, and enhanced. Out-of-school-youth may have dropped out of school for a variety of reasons, including socioeconomic or health challenges, urbanization, stigmatization, teacher/teaching characteristics, or curricular issues.

Out-of-school youth have long been a target population for social interventions, as programs seek to reconnect young people with school and/or the labor market. They often face unique challenges to succeeding in education and the workforce and may be forced to choose between preparing for their futures through continuing their education and supporting the immediate financial needs of their families [3].

With the advent of new technology, teaching computer literacy to Out-of-School-Youth (OSY) in the 21st century emboldens them to become educated with the use of technology, which can help them gain employability in the future. It involves the acquisition of the basic skills needed to cope with our complex and technological world, including IT and computer skills. Developing the literacy skills of out-of-school-youths is a complex process, which involves enhancing gained over the years and providing them with access to challenging learning opportunities. Digital learning technologies can enable learners to grasp concepts more quickly and fully, connect theory and application more adeptly, and engage in learning more readily while also improving instructional techniques. Digital learning technologies such as smartphones, computers, projectors and any other

gadgets that use electricity may be utilized in teaching and learning [4].

In connection to this, the proponents extend a support for the OSY through an extension training program on basic computer literacy using Microsoft Word and Microsoft Powerpoint Application to help the out-of-school youth to become technology savvy. This training will provide alternative pathways for the out-of-school-youth to learn employability skills to be able to have competence and confidence to use computer application. The skills developed through this training could help augment income and positive outlook in life for the participants. Indeed, embracing positive attitudes towards technology will develop while bridging the existing technological gap.

II. RELATED LITERATURE

According to [5], computer-based and web-based applications are as major instructional tools to increase undergraduates' motivation at school. In the recreation field usage of, computer and the internet based recreational applications has become more prevalent in order to present visual and interactive entertainment activities. Recreation department undergraduates should develop their knowledge and skills in the use of computer as entertainment tools as well as support and guide people to use these technologies for recreation activities. However, some drawbacks are encountered in the integration of computers to recreation classes. The aim of this study is to investigate how often recreation department undergraduates use computers and related software for recreational purposes.

In [6], they conducted a study that evaluates the reliability of self-assessment as a measure of computer competence. This evaluation is carried out in response to recent research which has employed self-reported ratings as the sole indicator of students' computer competence. To evaluate the reliability of self-assessed computer competence, the scores achieved by students in self-assessed computer competence tests are compared with scores achieved in objective tests. The results reveal a statistically significantly over-estimation of computer competence among the students surveyed.

Furthermore, reported pre-university computer experience in terms of home and school use and formal IT education does not affect this result. The findings call into question the validity of using self-assessment as a measure of computer competence. More generally, the study also provides an up-to-date picture of self-reported computer usage and IT experience among pre-university students from New Zealand and South-east Asia and contrasts these findings with those from previous research.

In paper [7], in a digital era in which technology plays a role in most aspects of a child's life, having the competence and confidence to use computers might be a necessary step, but not a goal in itself. Developing character traits that will serve children to use technology in a safe way to communicate and connect with others, and providing opportunities for children to make a better world through the use of their computational skills, is just as important. The Positive Technological Development framework (PTD), a natural extension of the computer literacy and the technological fluency movements that have influenced the world of educational technology, adds psychosocial, civic, and ethical components to the cognitive ones. PTD examines the developmental tasks of a child growing up in our digital era and provides a model for developing and evaluating technology-rich youth programs. The explicit goal of PTD programs is to support children in the positive uses of technology to lead more fulfilling lives and make the world a better place. This article introduces the concept of PTD and presents examples of the Zora virtual world program for young people that the author developed following this framework.

According to [8], the main purpose of their study was to explore and describe the vocational training needs of 15-25 years old out-of-school youths in Bauchi Metropolis of Bauchi State, Nigeria. The researchers sought to; describe their demographic characteristics, examine their vocational training needs, the influence of gender on the vocational needs, and also identify problems associated in their vocational training needs. The design for the study was survey that involved 128, 15-25 years old out-of-school youths. Since the study population frame did not exist, a cluster

sampling technique was employed in the study. The cluster sample was drawn from eight wards that constitute Bauchi Metropolis. Each ward taken as a cluster. The instrument used for the study was a 16-item questionnaire, which was constructed by the researchers and validated by experts from Vocational and Technology Education Programme of Abubakar Tafawa Balewa University. Data collected were analyzed using frequency and percentage statistical tools. Finally conclusions were reached and recommendations made.

In [9], they conducted a study that aimed to elucidate the level of computer literacy and exposure to the internet among Sri Lankan youth aged 15-29 years based on their main economic activity. In order to achieve this objective a two-layered data collection approach was adopted as the over-all methodology of the 2009 National Youth Survey. Quantitative data was collected from a randomly selected sample of 3000 households covering 22 districts out of a total of 25 districts. The conclusions reached from this study were that out of 2921 respondents 57% of youth were computer literate. Out of the 18-24 age group 65% could manage basic functions of the computer as opposed to the 25-29 year olds where only a 43% demonstrated knowledge in computer usage. This indicates that the older group had a lesser opportunity at gaining computer knowledge, which is a fairly recent development in Sri Lanka. It was also revealed that 33% of youth who have a basic knowledge in computer usage have their own computers while 33% have used the internet. In terms of usage and frequency out of the 57% youth who are computer literate 50% use their computers on a daily/weekly basis.

III. METHODOLOGY

2.1 Respondents of the Study

A total of fifty (50) OSY were catered during Computer Literacy Training. This extension activity was conducted last March 25-27, 2022 at NISU-West Campus, Estancia, Iloilo.

2.2 . Data Gathering Procedure

With this, the College of Information and Computing Studies conducted the Computer Literacy Training on Basic Word Processing Using Microsoft Word Application and Multimedia Presentation Using Microsoft PowerPoint last March 25-27, 2022, which aimed to give importance and increase knowledge in Microsoft Word and Microsoft PowerPoint for the out-of-school-youth of Barangay Tanza, Estancia, Iloilo. The learning sessions were divided into two parts: classroom lecture and actual hand-on application. The trainees further honed their newly learned skills by countless exercises given by the trainers. In this way, the OSY will be equipped with technological and pedagogical knowledge skills in the learning process.

This three-day Computer Literacy Training developed skills and techniques in using these applications which widen their abilities for effective and efficient use of these applications in the learning process. These two applications learned were essential in personal and professional development of the beneficiaries. There were fifty (50) OSY trained in this project. It was evident in the result of the pre-test and post-test that the knowledge and skills increase. After three (3) days of lectures, demonstrations, and actual hands-on activities, the post-assessment survey was given to see the progress of the training.

IV. RESULTS AND DISCUSSION

3.1 The Pre and Post Evaluation of prior and acquired knowledge and ability of the participants before and after training conducted on Microsoft Word Application

Figure 1 shows the result in Microsoft Word Application training as indicated in the pre-evaluation result, twenty-five (25) out of fifty (50) or 50% of the trainees have prior knowledge and skills in the parts and functions of the word processing screen; twenty (20) or 40% have knowledge and ability to use different tabs and command icons; viewing of documents before printing. On the other hand, ten out of fifty (20%)

have the knowledge to insert illustrations, symbols, borders, page numbers, and tables; formatting of paragraphs, text, columns, bullets, numbers, and tables. There were twelve (12) or 24% of the trainees had prior knowledge to use spelling thesaurus and grammar commands. Further, fifteen out of fifty (30%) of them have the ability to use the editing commands such as cut, copy, and paste commands. Eighteen (18) or 36% have the ability to use page setups such as margin, page orientation, and paper size. Moreover, there were thirty (30) out of fifty (50) or 60% of the trainees have the prior skill to use alignment such as left, center, right, and justify alignment. After three (3) days of training, all fifty (50) or 100% of the trainees indicated that they learn and gain knowledge and ability in all areas of assessment in Microsoft Word Application.

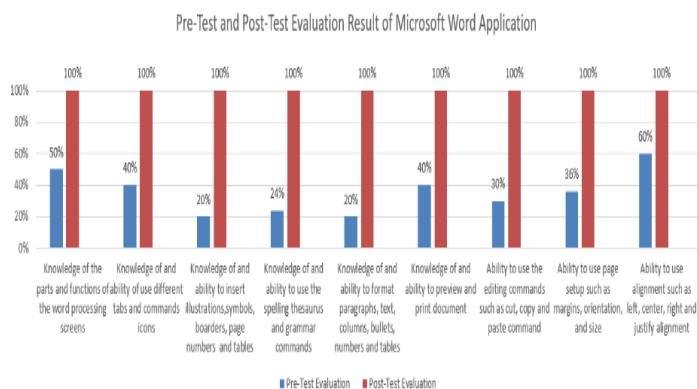


Figure 1. Result of Pre and Post Evaluation in Microsoft Word Application

3.2. The Pre and Post Evaluation of prior and acquired knowledge and ability of the participants before and after training conducted on Microsoft PowerPoint Application

Figure 2 shows that fifteen (15) or 30% of the trainees have prior knowledge of the parts and functions of the multimedia presentation screen; the ability to use and format text, columns, bullets, numbers, images, and tables. Ten out of fifty (20%) trainees have the knowledge and the ability to use different tabs and command icons. Moreover, there were seven (7) or 15% of them knew how to insert slides, images, sound, videos, charts, and tables into the presentation. Twenty (20) out of fifty (50) or (40%) have the ability to insert animations and

transitions. Further, twenty-five (25) or 50% of the trainees have prior ability to use appropriate font and font style that can be clearly read. After the training, fifty (50) or 100% of the participants indicated that almost indicators in the area of Microsoft PowerPoint were learned and mastered, except for knowledge and ability to insert slides, images, sound, video, charts, and tables; using appropriate font and font style used for a presentation where forty-five (45) or 90% of the trainees indicated their response. The increased in the knowledge and skills of the trainees on Microsoft PowerPoint Application based on Pre and Post Evaluation shows in Figure 2 below.

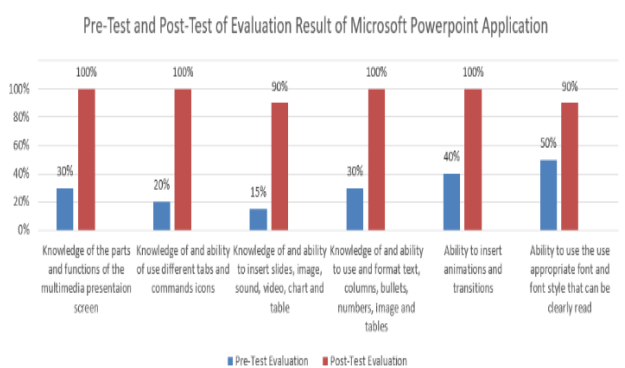


Figure 2. Result of Pre and Post Evaluation in Microsoft PowerPoint Application

V. CONCLUSION

It has been proved that out-of-school youths have a vast repertoire of knowledge and skills that simply need to be recognized, tapped into, and enhanced in order for their abilities to improve significantly in a short period of time. Working with out-of-school youth has revealed that the quality of teaching/teachers and the curriculum are major factors in school 'drop-outs.' There is a need to place a greater emphasis on quality as the foundation of all forms of educational development. The training has been helpful to the extent that they were able to share their newly gained knowledge and also they are now interested in jobs that use the applications they have just learned.

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