EEAJ 13 (1) (2024) 1-10

Economic Education Analysis Journal

SINTA 3 Accredited

https://journal.unnes.ac.id/sju/index.php/eeaj

The Role of 21st Century Digital Skills in Office Practices for Sustainable Education

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DOI: 10.15294/eeaj.v13i1.1615

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Article History

Received: 18 October 2023
Approved: 12 December 2023
Published: 28 February 2024

Keywords

21st Century Digital Skills; Office Practices; Sustainable Education

Abstract

The office practice course uses a role-playing learning model to present real office situations in learning, learning is carried out in groups consisting of seven members who play seven office personnel. Each group member carries out office work alternately with flowing work. Management of letters and documents still uses manual methods such as recording in a correspondence agenda book which of course is no longer relevant to the development of 21st century learning that uses technology. ICT in office practice supports 21st century digital skills for sustainable education. Research objective: to determine the role of 21st century digital skills in office practices for sustainable education. The method used is descriptive research with a qualitative approach. Conclusion: office practices still use manual methods for managing letters and documents recorded in agenda books, no longer relevant to office management that utilizes technology and is not in accordance with 21st century digital skills for sustainable education. Educators as facilitators need to provide facilities for the use of ICT specifically designed according to the learning needs of office practice. Suggestion: The technology used can be continuously developed according to the needs of 21st century digital skills for sustainable education. In this study it also makes it easy for lecturers to prepare office practice materials and makes it easier to evaluate student assignments so as to facilitate the learning process.

How to Cite

Purasani, H.N., Joyoatmojo, S., Indriayu, M., & Sawiji, H.(2024). The Role of 21st Century Digital Skills in Office Practices for Sustainable Education. *Economic Education Analysis Journal*, 13 (1), 1-10.

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p-ISSN 2252-6544
e-ISSN 2502-356X

INTRODUCTION

In the 21st century science is interconnected and synergized quickly as a sign of the era of information openness and the swift currents of globalization, as well as the emergence of a process of transformation of the global economy from an agrarian society to an industrial society then towards a knowledge society and a modern economy (Osman, Hamid & Hasan 2009). The transformation process affects the use of information and communication technology in various aspects of life. Starting from business practitioners, education and even government, the use of information and communication technology (ICT) has become a trend center in all aspects of life following the flow of contemporary technological developments (Sumarlinda, 2015). Technological developments also affect the current condition of society with the need for individuals who can research, compile information, have critical thinking skills,

Routine jobs that have been replaced by computers require people to switch jobs with higher skills (Levy & Murnane, 2005). Although not all human tasks can be replaced by computers, computers cannot solve problems that require solutions from expert thinking, computers also cannot carry out complex communication tasks such as interacting with humans to obtain information, explain it, or convince other people who have implications. to action, then computers are used to complement human skills by making information more easily available (Levy, 2010).

The role of technology-based management information systems is very important in managing school management as an effort to improve service quality, processes and student learning achievements (Hidajat, 2013). Utilizing technology in the field of education is needed to improve the quality of service. Improving the quality of the educational process must be carried out (Dewi Ciptayani, Surjono, & Priyanto, 2018), one of which is to change the manual learning system to be more effective and efficient with the support of adequate facilities and infrastructure, one alternative is to utilize information technology facilities to overcome learning problems.

The office practice course uses a role-playing learning model to present real office situations in learning. This learning model is carried out in groups, each group consisting of seven members who play the role of seven office personnel, namely: administrative manager, secretary, junior secretary, outgoing mail agenda, incoming mail agenda, archivist, expeditor. Each group member carries out office work alternately with flowing work. Management of letters and documents still uses manual methods such as recording in a correspondence agenda book which of course is no longer relevant to the development of 21st century learning, 21st century learning has used ICT in learning.

The increasing interest in data and analytics in education, teaching, and learning is increasing the priority for increased and high-quality research into models, methods, technologies, and impact analytics (MacNeill, Lorna, Martin, 2014). Increasing interest in educational data is increasingly opening up insights into more complex learning. Multimodal learning analysis can offer new insights about student learning trajectories in more complex and open learning environments. Multimodal is meant by learning by offering the use of videos, logs, artifacts, audio, movement and brochures (Blikstein, & Worsley, 2016).

Before students discover important concepts, solve problems, write creatively, students must acquire basic information and skills. Basic information and skills associated with logic can help students to think critically, for example before writing a draft letter which suggests they need to master basic sentence construction, correct word use, self-discipline to complete writing assignments. The point is that the subject area needs to learn the intricacies of mechanics before its use. Mechanical intricacies acquired improve skills (procedural knowledge) and factual knowledge that is taught step by step (Arends, 2013). Skill-based

learning is an independent learning approach with the support of instructors or educators or peer facilitators,

Digital skills in the 21st century are needed skills that can become provisions to keep up with the rapid pace of technology for sustainable education. In addition to having or developing collaborative skills, characteristics and skills are considered important for the success of students, namely: (1) having a strong academic self-concept; (2) demonstrating fluency in the use of e-learning technology; (3) having interpersonal and communication skills; (4) understanding and values interaction and collaborative learning; (5) has an internal control center; (6) demonstrates independent learning skills; (7) advances the need for affiliation (Dabbagh, 2007). 21st century digital skills are different from 21st century skills (Van Laar, Van Deursen, Van Dijk, & De Haan, 2018).

Related Research Reviews

Some of the findings reveal that the implementation of offices in the field has used technology, mainly utilizing ICT. Offices benefit from organizational development that utilizes ICT-based applications, especially in managing incoming and outgoing mail (Sasongko, and Dwi 2009). ICT in organizations also supports management activities such as: (1) supports control; (2) supports planning; (3) supports decision making. ICT was developed primarily with the aim of: (1) meeting the information needs of all levels of management, such as operational, strategic and managerial; (2) ICT meeting the information needs of all functional areas of the organization. The significance of the function of ICT leads to its implementation in office administration.

The findings of research on employee management ICT information systems at the Regional Civil Service Agency (BKD) in Samarinda produced a positive effect on improving the quality of personnel administration services (Mardy, 2013). The research findings state that in general according to academic administration officials the use of ICT plays an important role in managing the academic administration of vocational schools (SMK), such as curriculum, student affairs, personnel, finance, and facilities (Hidajat, 2013). Development of ICT-based systems in strengthening administrative systems when designing and creating Site-Based Modeling Applications Application Systems Information Registration Systems for Special Children New Units equipped with SMS Gateways with Rapid Application Development (rad) (Sumarlinda, 2015). The findings of the research results that the impact of digital technology towards the industrial revolution 4.0 in the next 5 (five) years there will be 52.6 million types of jobs that will experience a shift or disappear from the face of the earth (Suwardana, 2018). The results of this study provide a message that every self who still wants to have their own existence in global competition must prepare mentally and skills that have competitive advantages over others, especially skills in the use of developing technology.

Employee training in the use of ICT plays an important role in achieving successful performance. The performance targets in the Baitul Maal Foundation are the RKAT (Annual Budget Work Plan) (Kusnaini, et al. 2019). Employee training can be stable because of the SR theory approach to achieving successful performance in order to face the Industrial Age 4.0. Based on the results of previous research, the use of ICT-based systems has made a positive contribution to office management in general in various fields. Therefore, in response to the development of an ICT-based office system there is a need to support office practice learning by utilizing ICT, especially in accordance with the development of 21st century digital skills for sustainable education. Office practical learning that utilizes ICT can prepare students according to skills for sustainable education.

21st Century Learning

The educational aspect has an important role in equipping students with skills that are suitable for the needs of the 21st century

so that they have competitiveness in line with the development of science and technology (IPTEK) (Partnership for 21st Century Skills, 2008). Support for the rapid development of information technology requires change (Bibi, & Jati, 2015), the view of Teacher Centered Learning is to place educators as subjects or actors and students as objects to become Student Centered Learning, namely to place students as the center of the learning process, students are expected to be active and independent in the learning process, take responsibility, and take the initiative to recognize their learning needs, find sources of information to answer their needs, build and present their knowledge based on the needs and sources they find. Educators are no longer the only source of learning in the digital era, learning resources can be obtained with the help of information technology (Widiara, 2018). Meanwhile, educators change their function as teachers to become learning partners and facilitators. Educators who utilize computer technology with internet access can provide information, reading materials and materials in order to facilitate the needs of students.

Online learning has grown as a major method of management education over the past decades. Supportive culture, access to computers, online environment systems and supplies, computers and online learning self-efficacy then user perceptions of usability and ease of use are critical success factors that influence students' perceptions and use of online learning environments. There are other studies that assess the use of online learning among students to be more meaningful when it is designed according to a particular context (Barclay, Donalds, & Bryson 2018).

Apart from this, there are several shifts in the old education paradigm and the 21st century education paradigm. In bold 1, these differences are shown in the following Table 1.

The rapid development of technology in various aspects of life including in the field of education, especially teaching, online learning has received high interest in the last decade. Students need to be equipped with higher skills in order to be able to keep up with the rapid development of technology.

Table 1. Old Education Paradigm and 21st Century Education Paradigm

Old Education Paradigm	The 21st Century Education Paradigm
Teacher centered	Learning
Direct teaching	Penginteractive teaching
Knowledge	Skills
Material	Process
Skills base	Penginteractive teaching
Facts and principles	Questions and problems
Theory	Practice
Material based	Project Based
Limited time	According to the needs
Competitive	Collaborative
One-size-fits-all	Personalized
One-size-fits-all	Focus on global community
Text based	Web-based
Summative test	Formative evaluation
Study to continue school	Learn for life

Source: (Suwardana, 2018)

Office Practice

The office practice course is one of the courses that has graduates as prospective teachers who master professional administration skills. This course provides a basic understanding and skills about office management. This course is designed to resemble real conditions in offices that play seven office personnel consisting of; administrative managers,

secretaries, junior secretaries, administrative staff outgoing mail agendas, incoming mail agendas, archivists and expeditors. The office practice course applies the role playing learning model, namely role playing.

The goal is that students can find out and process and get to know the flow of work from one officer to another. The use of this method will foster creativity in students. It is important to maintain and increase creativity among students (Kim, 2006). The practice module is used as teaching material which contains job specifications, job descriptions, job sheets, required materials, and evaluation for each role of the practitioner, this module is prepared according to the required competition.

21st Century Digital Skills

21st century learning is broader than 21st century digital skills, 21st century learning is not necessarily supported by ICT. 21st century digital skills consist of: (1) Technical skills are skills in operating ICT on both computer and mobile devices and applications to complete practical tasks as an effort to recognize certain online environments; (2) Information Management Skills are skills in using ICT to search, select , organize information efficiently so as to determine the appropriate use of information sources for specific tasks; (3) Communication skills are skills in using ICT in sending information messages effectively to other people so that it can be ensured that the meaning expressed can be conveyed as expected; (4) Collaboration skills are skills in using ICT to develop social interaction and work in teams to exchange information, negotiate agreements, and make decisions with mutual respect and respect for each other to achieve common goals; (5) Creativity skills are skills in using ICT in producing new or previously unknown ideas, or treating familiar ideas in new ways so as to turn these ideas into a product, service, or process that can be recognized as novelty within a certain scope; (6) Critical thinking skills, is the skill of using ICT in making judgments and choices of information about the information obtained and communicating in a manner based on reflective reasoning and sufficient evidence to express an idea; (7) Problem Solving skills are skills in using ICT to process cognitively and understand problem situations which are then combined with the active use of knowledge so as to find a solution to a problem problem (Van Laar, Van Deursen, Van Dijk, & De Haan, 2017).

Framework of thinking

The office practice course uses a role-playing learning model to present real office situations in learning. This learning model is carried out in groups, each group consisting of seven members who play the role of seven office personnel, namely: administrative manager, secretary, junior secretary, outgoing mail agenda, incoming mail agenda, archivist, expeditor. Each group member carries out office work alternately with the work flowing in processing incoming and outgoing mail. Management of letters and documents still uses manual methods such as recording in a correspondence agenda book which of course is no longer relevant to the development of 21st century learning, 21st century learning has used ICT in learning. There needs to be the use of ICT in learning with the aim of supporting 21st century digital skills that can be beneficial for sustainable education. Implementing 21st century digital skills as a strategic step for students to be ready to face real office situations that already use technology.

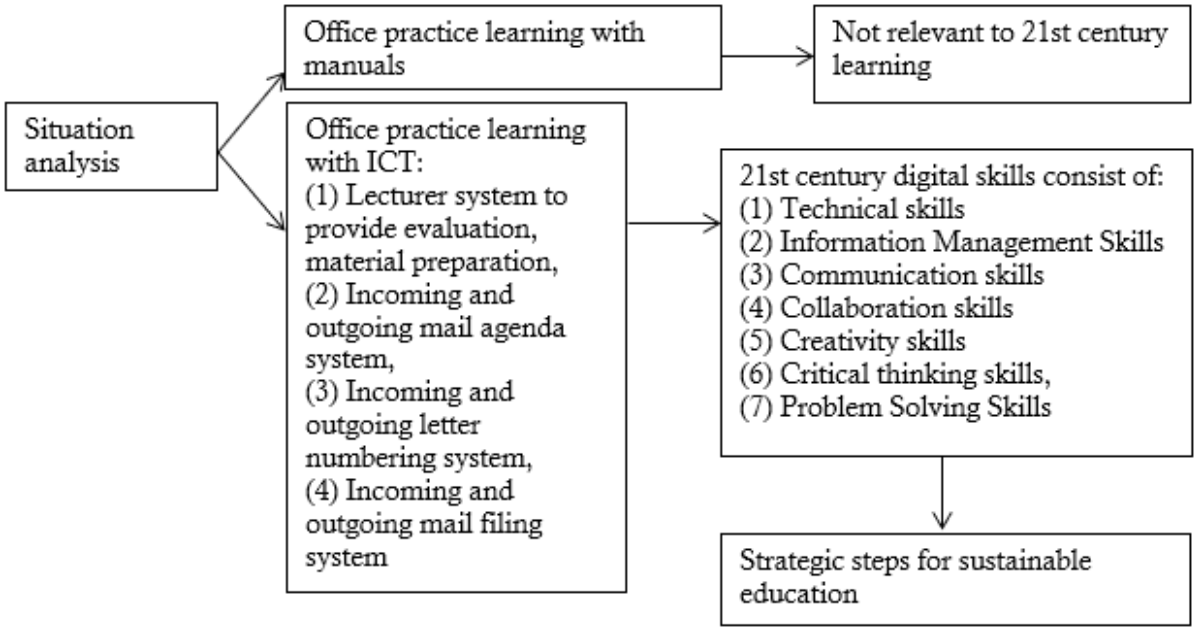

Figure 1. Thinking Framework

METHODS

This study uses a qualitative descriptive method, which aims to collect data, analyze data, and interpret data to find out the bigger picture in a systematic, factual, and accurate manner regarding the facts of phenomena related to the use of ICT-based office practice learning.

RESULTS AND DISCUSSION

The office practice course uses a role-playing learning model to present real office situations in learning. This learning model is carried out in groups, each group consisting of seven members who play the role of seven office personnel, namely: administrative manager, secretary, junior secretary, outgoing mail agenda, incoming mail agenda, archivist, expeditor. Each group member carries out office work alternately with work flowing for processing incoming and outgoing mail. The following is a description of the duties of office personnel played by students. The job description of the office administration manager includes: (1) giving the disposition of incoming letters; (2) giving memos/dictations for a draft letter to be sent; (3) mark a correction to the draft letter and provide initials; (4) put a date stamp for outgoing letters; (5) signing outgoing papers and affixing company stamp; (6) requires archives (borrowing archives) through the processor. Secretary job description includes: (1) has the task of receiving memos to draft outgoing letters; (2) ask for the initials of the leadership for the draft letter; (3) give the task to the junior secretary to type the draft letter; (4) Checking the typing/recording results of the original draft and marking corrections if there are errors or assigning them to retype if there are more than 3 (three) errors; (5) request the number of outgoing mail to the administrative staff of the outgoing mail agenda (number written manually); (6) ask for a date stamp, signature, and company seal to the administrative manager for outgoing mail (using the signature application folder); (7) provide letter waiver marks for letters (incoming/outgoing) to be stored; (8) submit 2 copies of outgoing letters (to be sent and kept as archives) to the agendar; (9) receive an incoming letter from the director after recording by the agendar; (10) submit the incoming letter

to the leadership; (11) receive the disposition of incoming letters from the leadership to be replied to, stored and others.

Job descriptions for junior secretaries include: (1) receiving assignments from processors in the form of draft letters to be typed/recorded on a computer; (2) type and print the draft letter in accordance with the correction marks on the draft letter in 2 (two) copies (the first sheet is to be sent and the second sheet is to be kept); (3) choose the form of the letter according to the instructions given; (4) submit the results of computer typing/recordings to the processor; (5) fix the results of typing/recording if there is an error; (6) include identification initials (processor/typist).

The task description of the administrative staff for the outgoing letter agenda includes: (1) receiving incoming letters from agendaists that have been recorded in the agenda book; (2) submit incoming letters to the leadership through the processor; (3) complete the outgoing mail that will be sent from the processor to be manually numbered; (4) request information about archives (related to borrowing archives) through the agenda book on the agenda; (5) fill out and complete the archive loan card required by the leadership; (6) ask for a signature from the leadership (as the archive borrower) through the processor; (7) submit the archive loan card that has been completed to the archivist; (8) submit the archives needed by the leadership through the processor.

The job description of the administrative staff for the agenda of incoming mail includes: (1) receiving letters to be sent from the leadership through the processor; (2) schedule outgoing mail; (3) submit the outgoing letter to the expeditor; (4) submit outgoing letters (as archives) to the archivist; (5) receive incoming letters from the recipient/sender of the letter (expeditor); (6) Agenda is scheduled incoming mail; (7) submit incoming letters that have been recorded to the leadership through the director; (8) submit to the archivist of incoming letters (as archives) for safekeeping.

Archivist job descriptions include: (1) Receiving incoming mail that has been processed/signed as an archive; (2) Receiving outgoing mail as an archive; (3) Store archives with an archive storage system; (4) Receive messages from the leadership through the referrer to borrow the required archives; (5) Finding and submitting archives borrowed by the leadership through the referrer; (6) Returning archives that have been borrowed from archive borrowers. Expeditor's job description includes: (1) receiving incoming letters from outsiders; (2) affix a receipt stamp on incoming letters and note the date of receipt; (3) record in the expedition book for incoming letters and forward it to the agendarist; (4) receive outgoing letters from the agenda to be sent to outside parties and record them in the outgoing expedition book; (5) complete the identity (letter number, intended address and company stamp) on the mailing envelope; (6) Fold letters according to standard letter folds; (7) send outgoing letters according to the intended address.

Management of letters and documents still uses manual methods such as recording in a correspondence agenda book which of course is no longer relevant to the development of 21st century learning, 21st century learning has used ICT in learning. There needs to be the use of ICT in learning with the aim of supporting 21st century digital skills that can be beneficial for sustainable education.21st century digital skills by utilizing ICT in office practice learning will bring up several skills such as: (1) Technical skills are skills in operating ICT on devices and applications both computer and mobile to complete practical tasks as an effort to recognize certain online environments; (2) Information Management Skills are skills in using ICT to find, select, organize information efficiently so that you can determine the use of information sources that are suitable for certain tasks; (3) Communication skills are skills in using ICT in sending information messages effectively to other people so that it can be ensured that the meaning expressed

can be conveyed as expected; (4) Collaboration skills are skills in using ICT to develop social interaction and work in teams to exchange information, negotiate agreements, and make decisions with mutual respect and respect for each other to achieve common goals; (5) Creativity skills are skills in using ICT in producing new or previously unknown ideas, or treating familiar ideas in new ways so as to turn these ideas into a product, service, or process that can be recognized as novelty within a certain scope; (6) Critical thinking skills, is the skill of using ICT in making judgments and choices of information about the information obtained and communicating in a manner based on reflective reasoning and sufficient evidence to express an idea; (7) Problem Solving Skills are skills in using ICT to process cognitively and understand problem situations which are then combined with the active use of knowledge so as to find a solution to a problem problem.

ICT-based systems support office practice learning: (1) Lecturer systems for providing evaluations, material preparation; (2) Incoming and outgoing mail agenda systems; (3) incoming and outgoing letter numbering systems; (4) incoming and outgoing mail filing systems. Continuous education as a concept with learning that pays attention to various environmental, economic and social aspects of society as a unit in the learning process. Continuous education by implementing 21st century digital skills that utilizes the use of ICT as a learning process that makes experience a medium of learning or learning to gain new knowledge.

CONCLUSION

The office practice course uses a role-playing learning model to present real office situations in learning. This learning model is carried out in groups, each group consisting of seven members who play the role of seven office personnel, namely: administrative manager, secretary, junior secretary, outgoing mail agenda, incoming mail agenda, archivist, expeditor. Each group member carries out office work alternately with work flowing for processing incoming and outgoing mail. Management of letters and documents still uses manual methods such as recording in a correspondence agenda book which of course is no longer relevant to the development of 21st century learning, 21st century learning has used ICT in learning. There is a need for the use of ICT in learning with the aim of supporting 21st century digital skills that can be beneficial for sustainable education. ICT-based systems support learning: (1) Lecturer systems for providing evaluations, material preparation; (2) Incoming and outgoing mail agenda systems; (3) incoming and outgoing letter numbering systems; (4) incoming and outgoing letter filing systems.

Office practice learning can use sisikantor.com which has been designed by researchers to support the office practice learning process. Learning by utilizing ICT can provide benefits for students in understanding real office situations that have implemented the use of technology. The technology used can be continuously developed according to the needs of 21st century digital skills for sustainable education. In this study it also makes it easy for lecturers to prepare practical materials because practical materials can be prepared in a structured manner by using the right application.

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