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Development of E-Module of Teacher Professional Ethics Based on Team-Based Project with Onenote Office 365

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Keywords

E-module; Ethics; Office365; OneNote; Teacher

Abstract

This research revealed the effectiveness of e-module based on team-based project on teacher profession ethics in supporting online learning. This research was a development research with ADDIE. The e-module of Teacher Professional Ethics was developed based on OneNote application. The feasibility level obtained by the media from the average material validation result was 3.00 with a good category and the results of validation media obtained an average of 3.44 with a very good category. E-module learning media trials for students gained an average eligibility of 3.30 with a good category. Thus, it can be concluded that the learning media e-module of teacher professional ethics with Onenote Office365 in the Administrative Education study program can be used to improve knowledge and alternative online learning during the Covid-19 pandemic.

How to Cite

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INTRODUCTION

Advances in information and communication technology in recent decades have significantly changed the model and method of learning. Information systems and digitization to help the learning process has developed various types of tools and media to improve learning outcomes (Hsieh &Cho, 2011). Technology can influence, but not determine, everyday life by creating possibilities or "social affordances" (Wellman et al., 2003, p. 7). Some affordances of social media include social presence (Dunlap & Lowenthal, 2009), "enhanced social connectedness" (Rainie, 2010, p. 8), "access," "expression," "creation," "interaction," and "aggregation" (Siemens & Tittenberger, 2009, p. 41). Current studies identify young people's adoption of and proficiency in new media along generational lines. For example, a Pew Internet and American Life Project report found that teens and Generation Y (18-32 year olds born 1977–1990) are more likely than other generations to seek entertainment online (video, games, virtual worlds), to read and write blogs, to use social networking sites, and to instant message on their handheld devices (Jones & Fox, 2009). Perhaps new media disrupt more than define generational identity, disrupting traditional notions of how learners of different generations interact and relate (Ito et al., 2010, p. 5). Regardless, if adult learners are the fastest growing population in higher education, as some research suggests (Tierney & Hentschke, 2007). Studies in perceptual learning suggest students learn optimally in a multisensory environment as opposed to a single stimuli or "single sensory modality" (Seitz & Shams, 2008). Using multimedia elements such as sound and images might prove more efficient in learning environments (Neo & Neo, 2004, p. 10), as well as assist students with learning disabilities (Miller, 2001). With the covid-19 pandemic as currently the use of information and communication technology becomes a must in learning. But not all digital learners are alike and a greater understanding of their heterogeneity is needed to better account for the diversity of learners. Students demonstrate various levels of skills, competencies, and literacies, and varying rates of adoption of technologies based on their abilities and backgrounds. This must be taken into account when requiring student participation and designing the use of social media applications to promote social learning (Bodle R, 2011).

Utilization of information technology during the covid-19 pandemic is as a solution to keep the learning process running. Online learning

aims to meet the demands of education and provide experience to students through the learning process, so that learning objectives can be achieved even if they do not have to be face-to-face. Information technology can help in the learning process; one of them by utilizing digital learning media. Online learning has been enabled by the growth of technologies that have created a global digital world. By virtue of its platform, online learning brings with it exposure to new media tools and approaches. The contributions to this issue demonstrate that we are still coming to terms with how new media can be used in higher education to enhance and improve learning process and outcomes (Conway, 2004). Higher education is in transition, whether we like it or not. And that transition is marked by disruption. Christensen and Eyring (2011) book The Innovative University: Changing the DNA of Higher Education from the Inside Out is all about using this disruption to change the university "from the inside out" so that it can continue to thrive into the future. More generally, many writers believe that higher education and universities are being transformed by the impact of technology, including social media. Tapscott and Williams (2010, p. 1), when writing about the impact of the internet on education, indicate: The transformation of the university is not just a good idea. It is an imperative, and evidence is mounting that the consequences of further delay may be dire change is required in two vast and interwoven domains that permeate the deep structures and operating model of the university: (1) the value created for the main customers of the university (the students); and (2) the model of production for how that value is created. Scharmer (2009) writes, for innovation and new ways of operating to be developed, we have to let go to let come. Not letting go of old technologies or old organisational structures, but letting go of deeply valued assumptions and perspectives about the "right way" to teach and the "best way" to learn. Burrus and Mann (2011) describe this transition and the need to change more generally in these terms: There are two kinds of change: change from the outside in, and change from the inside out. The first happens to you. The second is an initiative that you take through conscious intention. Today there is an urgent need to anticipate and take the initiative to change from the inside out, even as all these transformations are coming at us from the outside in. Hagel and Seely Brown (2010) refer to it, the edges, "where the potential for innovation and growth is the highest. They are where unmet needs intersect with unexploited capabilities". This edge of learning is where the

authors have been exploring the emerging unmet needs of a new type of student and the unexploited capabilities of new media that can be used to meet those needs. Digitization of learning media is an answer to the implementation of distance learning in the pandemic as it is today. With digitally developed learning media, students are expected not only to listen to the description of the material presented by lecturers, but students are also active to observe, perform, demonstrate and so on. Teaching module is arranged digitally in a variety of dynamic formats. It is intended to motivate students in the learning process (Pakpahan &Fitriani, 2020).

We ARE SOCIAL Research, on "Digital Reports 2020" (Pakpahan &Fitriani, 2020) released at the end of January 2020 stated that almost 64 percentage of Indonesians are already connected to the internet, where the number of internet users in Indonesia has reached 175.4 million people out of the total population of Indonesia which amounts to 272.1 million, compared to 2019, the number of Indonesians who use the internet increased by about 17 percentage or by 25 million users. Technology upsets the traditional hierarchies and categories of education. It can put the learner at the center of the educational process. Increasingly this means students will decide what they want to learn, when, where and with whom, and they will learn by doing. Functions that have long held together, like research and teaching, learning and assessment, or content skills, accreditation and socialization, can be delivered separately (Kamenetz, 2010).

Pandemics that require distance learning also cause a variety of problems in learning. There are some problems that occur when learning is all demanded all-digital; including the lack of understanding of technology from some lecturers resulting in the online learning process has not been done in a maximal. This is due to the difficulty of finding and using the right media in the online learning process that corresponds to the subject matter and module in the lecture. Thus, students find it difficult to understand the module provided by lecturers in online lectures. With the decision letter from the ministry of education and culture related to the application of team-based project learning model for learning, this is also a limitation for lecturers in utilizing team-based project-based modules.

The ethics and profession of the teacher is a course taught to students majoring in economic education. To master the competence of course a lecturer needs to make an innovation in designing and making teaching module or modules that are adapted to the learning with the team-base project method. To support the achievement of such competencies, it is necessary to be supported by a module as a handle for students in mastering competencies in ethics courses and teacher professions. With the development of existing technology, modules develop into electronic modules that are often referred to as e-modules.

Electronic module (e-module) is the development of print module in digital form. E-modules have advantages compared to print modules where electronic modules are interactive and easy to navigate. In addition, the e-module can also display video audio and animations. As a test of capabilities in the e-module can also provide formative tests / quizzes that allow real-time feedback.

Another advantage of e-modules in the learning process lies in the stage of learning based on problems, so that in this case e-modules can support the implementation of team-based project methods that have been mandated by the ministry of education and culture in the learning process at the S1/D4 level, (Sugihartini, 2017). in order to improve the mastery of student concepts and graduate competencies, especially in the mastery of the concept of Pedagogic as a prospective teacher. To produce the expected product, the method to be used in the achievement of the goal is the development method using the ADDIE model consisting of five stages: 1 As for team-based project learning according to the regulation of the minister of education and culture can be done including: (1) Classes are divided into groups of more than one student to do tasks together for a predetermined period of time; (2) the group is given a real problem that occurs in the community or complex statement, then given space to create a work plan and collaboration model; (3) each group prepares a presentation/final work displayed in front of lecturers, classes or other audiences that can provide constructive good bait; (4) lecturers guide each group during the project period and encourage students to think critically and creatively in collaborating.

Related to the Decree of the Minister of Education and Culture of the Republic of Indonesia Number 754/P/2020 concerning the main performance indicators of State Universities and Higher Education Service Institutions in the Ministry of Education and Culture in 2020 at the point of learning in the classroom at the S1 and D4/D3/D2 level courses that require the use of case-based learning or team-based project learning as part of the evaluation weight. In the decision letter in the criteria of learning methods

in the classroom must use one or a combination of case-solving learning. The learning steps with case solving or (case method) can be done by: (1) Students act as "protagonists" who try to solve a case; (2) the student shall analyze the case to build solution recommendations, assisted by group discussions to test and develop solution designs; (3) the class discusses actively, with the majority of the conversations conducted by students, while the lecturers only facilitate by directing discussions, giving questions, and observations.

Researchers chose the development e module based on team-based project with office one note 365 because they felt the need to develop an e module based on online applications to facilitate the implementation of online learning. The ethics courses of the teacher profession were selected in this study because it is in accordance with the field of researcher's expertise, namely economic education with a concentration of office administration education. This field prints educators / teachers so that knowledge is needed regarding the ethics of the teacher profession.

E module development research has been done by many researchers. However, e modules using office one note 365 applications are still very few so with the implementation of this research is felt to add new knowledge about the development of e modules, especially with office one note 365 applications coupled with the application of team based projects in it it will add new knowledge about the development of e modules Considering the learning carried out today is strongly emphasized to use team based project methods both in implementation and assessment.

Based on some of the learning methods contained in the decision of the minister of education and culture during the pandemic is still difficult to do, this is because learning is still done online. Therefore, this research raises the development e module based on team-based project with office One Note 365 to facilitate the implementation of online learning as a result of the covid 19 pandemic, especially in teacher professional ethics courses.

METHODS

This was a development research. The product was an electronic module of ethics courses and teacher professions. The development design that was used in this research was ADDIE. Addie model stands for Analysis, Design, Development or Production, Implementation or Delivery and Evaluations (Dick and Carey, 1996).

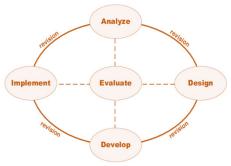


Figure 1. ADDIE Development Model Standards

Based on the picture above, the explanation of the stage of ADDIE in this study is as follows.

- (1) Analysis, the first stage at which researchers analyze the need for the development of teaching module and analyze the feasibility and conditions of development. Needs analysis is used to determine the right problems and solutions and determine student competencies
- (2) Design, the second stage began to design e-module ethics and profession of teachers with onenote in accordance with the previous analysis. Then determine the necessary elements in the e-module such as the preparation of the e-module needs map and the e-module framework as well as the references to be developed to the material. In addition, at this stage, the instrument is prepared as a tool to measure the feasibility of e-module ethics and teacher profession to be developed.
- (3) Development, The third stage is development; it realizes stage of the product in the form of e-module ethics and onenote-based teacher profession in accordance with the development design. At this stage the development of e-modules is carried out according to the design. It was developed using the *OneNote* app in Office 365. After the development is done then assessment or validation were conducted by expert validators, namely media experts, and material experts, using instruments that have been compiled at the previous stage.
- (4) Implementation, the fourth stage conducted product trials to students of Office Administration Education Faculty of Economics, UNNES who get ethics courses and teacher professions as many as 25 students. The trial was conducted by lecturers who mastered the course using e-module ethics and teacher profession. Researchers serve as observers and record everything on the observation sheet to assess the lack of e-modules. After the trial process is completed students are given a questionnaire or questionnaire to find out

the student's response to the use of e-module ethics and teacher profession.

(5) Evaluate, the fifth stage researchers make the latest revisions to the e-module ethics and profession of teachers developed based on inputs obtained from the response questionnaire and field notes on the observation sheet. This is done so that the e-module of ethics and teacher profession developed in accordance with the needs of students and can be used in a wider area.

The research subjects consisted of two expert validators, namely Expert 1. as a material expert, and Expert 2. as a media expert, and 25 students in group class A and B selected from Office Administration Education Study Program We chose the sample because the student concerned had taken a learning media course in the previous semester, so it was felt that we knew enough about the use of learning media. The type of data obtained was qualitative and quantitative data. Data collection instruments in the form of validation questionnaires and student response questionnaires to the learning media of e-module ethics and profession of teachers with onenote. Data analysis techniques used two ways, the first was to calculate the average of each aspect in the questionnaire, and the second was to calculate the average feasibility to determine the quality of learning media. Quantitative data was obtained through a test questionnaire with a Likert scale score as shown in table 1.

Table 1. Likert Scale

| Score | | Informatio | on |
|----------|----------|----------------------|---|
| Positive | Negative | Student Response | Materials Expert and Media Expert |
| 4 | 1 | Strongly Agree | Excellent |
| 3 | 2 | Agree | Good |
| 2 | 3 | Disagree | Less |
| 1 | 4 | Strongly Disagree | Very Lacking |

Table 2. Eligibility Quality

| Score | Average Score | Qualification |
|-------|---------------|---------------|
| 4 | >3.4 s.d 4.0 | Very Worthy |
| 3 | >2.6 s.d 3.4 | Good |
| 2 | >1.8 s.d 2.6 | Less Worthy |
| 1 | >1.0 s.d 1.8 | Not worthy |

Product e-module of ethics and profession of teacher with onenote can be defined feasible

if it has an average of more than 2.6 in the category "good". Therefore, the e-module developed is considered suitable for use if the final result of material experts, media experts, and student responses, is obtained with minimal value.

RESULT AND DISCUSSION

E-Module Development Process

The first stage in this development research was the analysis of needs by making observations in the Office Administration Education study program, Faculty of Economics, Universitas Negeri Semarang. The results of the analysis were used as a reference for the development of e-module of professional ethics of teachers. Referring to the analysis of needs, an overview of the problems faced and facilities in the Office Administration Education study program was obtained.

The second stage, namely the design stage was a follow-up to the analysis of needs, the design of ethical e-modules and the profession of teachers with onenote tailored to the analysis of needs. Flowcharts were used to help design e-module learning media of ethics and teacher professions with onenote.

The design in the form of a flowchart can be seen in the Figure 1.

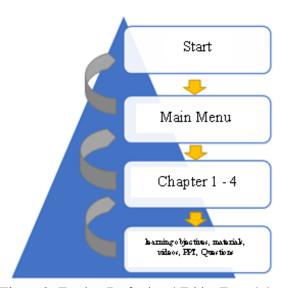


Figure 2. Teacher Professional Ethics E-module Flowchart with Onenote

The learning media flowchart above explained that media started when a user opened e-module in an Office 365 Onenote application. Users would automatically go to the menu view consisting of Chapter 1, Chapter 2, Chapter 3, Chapter 4, then in each Chapter there was a menu of learning objectives, Module, Power

Points (PPT), Videos, and questions. Process of using media can return to the start menu section when the user decided to return (Back).

The next step in the design phase after creating a flowchart was the preparation of a story-board with a double column model. It was used as a sketch using words. Storyboard e-module of professional ethics teachers with office 365 one-note was created in the table below.

Table 3. Storyboard of Teacher Professional Ethics E-Module with Onenote Office 365

| Diamlary | Interaction | | |
|------------------------|---|----------------------------------|--|
| Display | Visual | Audio | |
| Home/ Start | Chapter View | No sound | |
| Materials Chapter | Four chapters with folder images and titles | No sound | |
| Learning Objectives | Text points – learning objective points | No sound | |
| Material | Material text | No sound | |
| PPT | Power app link point | Power points, pictures, No sound | |
| Video | Link Opens material video | Video, Sound | |
| Question | Link opens the prob- lem on Microsoft form | No sound | |
| Return | Back button on android or arrow to Return on each sub menu section | No sound | |

The plan contained in the storyboard was realized with multimedia elements in the form of text, images, voice notes, power points. Microsoft forms for questions, which can be accessed easily, quickly and for free. e-module was realized by the software system of The Onenote Office 365application, while other services that were useful as supporting multimedia content, such as material images were created by using power points. Voice notes as descriptions of recorded material were tailored to the required material and content.

Third, the development stage, with the activities of actualizing the system planned at the design stage, until it became the final product. The development phase had working procedures, including: (2) creating an e-module of teacher professional ethics with onenote office 365; (b)

conducting expert validation; (3) group trials.

E-module of professional ethics teacher with onenote office 365 was able to display menus such as: (1) CHAPTER 1 to CHAPTER 4; (2) learning objectives; (3) the material includes the content of the material and the summary of the material; (4) PPT includes material in the form of power points; (5) The video contains an explanation of the material with PowerPoint in the form of a video; (6) The question that Microsoft Form will direct. Here is a picture of the e-module of professional ethics teachers with onenote office 365.



Figure 3. E-Module of Teacher Professional Ethics with Onenote Office 365

The user first creates a Microsoft office account to sign in to the Office 365 Onenote app. After successfully loging in then the user will be displayed menu Chapter 1 to Chapter 4.

After selecting Chapters the user will find a view in the form of sub-menus learning objectives, module, PPT, Video, and Problems.

The Learning Objectives sub-menu contains basic competencies (KD) that will be achieved after the user learns the selected Chapter in the form of points visualized with text.

Material sub-menu contains module in the course of teacher professional ethics in the form of text description and explanation of the material in the selected chapter

The PPT sub menu contains a link that will then point to the PowerPoint application where there will be a PowerPoint view of the material from the selected chapter.

The Video sub-menu contains a link pointing to a video stored on OneDrive that contains

a PowerPoint exposure video of the selected material

The Problem sub-menu contains a link to the Microsoft application form which it contains evaluation questions about the selected material.

The fourth stage is the assessment of material experts, media experts, and e-module trials on 25 Students of Class IUP majoring in Economic Education concentration of Office Administration Education. The material expert who assessed was Wisudani Rahmaningtyas, M.Ed., as a lecturer in the Office Management study program in Office Administration Education, Faculty of Economics, Universitas Negeri Semarang. Wisudani Rahmaningtyas, M.Ed. provides four suggestions for improvement. First, the scope of matter is in the cognitive realm of C1 and C2, it can be developed in the cognitive realm of C3 - C6. Lecturers can display the case then invite students to analyze and make synthesis, secondly If possible exercise plus description questions so that it can reach the cognitive realm of C5 & C6, third After students work on the exercise question, it can be added by discussion of the question, so that students can simultaneously get enrichment module, and fourth If possible it can be added by a real time discussion forum.

On April 20, 2021, media validation activities were conducted by Mrs. Saringatun Mudrikah, M.Ed as a lecturer in Media and Accounting Teaching Module in Accounting Education, Faculty of Economics, Universitas Negeri Semarang. Comments and suggestions from Mrs. Saringatun Mudrikah, M.Ed provide advice related to the allocation of time for quiz questions that need to be added in the problem settings and readjusted (can be adjusted to the difficulty level of the question and the length / shortness of the question.

Trials were conducted on 3 to 5 March 2021. Students are given an online response questionnaire through a google form to assess media eligibility on a Likert scale. The results of the student's response were successfully obtained, accompanied by some input to know the lack of media from the user's point of view to serve as a reference for improvement. In practice, students can open learning media in the Office 365 Onenoteapp.

E-Module Feasibility Level

Validation of material experts was carried out to assess aspects of the scope and accuracy of the material, completeness of the material and the suitability of the material with the motivation of students' learning. Validation results and analysis from material experts can be seen in the Table 4.

Based on the results of the assessment, it obtained an average score of 3.00 with a good category. Increasing the feasibility of e-modules as a learning medium based on Onenote Office 365 bot based on expert validation of module was in a good category; therefore the media was suitable to be used as a learning medium for professional ethics courses for office administration education courses.

Validation of media experts was done to assess aspects of media relevance, technical quality, display, and software engineering, as well as the accuracy of media with student learning motivation. The results and validation analysis of media experts can be seen in the Table 5.

Based on the results of the assessment from media experts, an average score of 3.44 was obtained in the Very Worthy category. The feasibility of the Teacher Professional Ethics e-module with Onenote Office 365 based on the validation of media experts was in the good category, therefore the media was suitable for use as a learning medium for the Teacher Professional Ethics course for the Office Administration Education study program.

Aspects of Validation assessed at the trial stage were the quality of content, module, appearance and presentation, software engineering, and the suitability of the media to the student's learning motivation. The results of the full implementation phase can be seen in the Table 6.

Based on the results of the assessment, an average score of 3.30 was obtained in the good category. The level of eligibility of e-modules as a learning medium based on Onenote Office 365 based on student response assessment was in the good category; therefore this medium was suitable for use as a learning medium for Teacher Professional Ethics courses. from the results of expert assessments and users or students it can be said that e module based on team-based project was effectively used in teacher professional ethics course.

Development of e-modules as learning media with Onenote Office 365 through five stages, namely Analysis, Design, Development or Production, Implementation or Delivery, and Evaluation. The process of creating media was done gradually and produced the right learning media, a series of material expert validation, media expert validation, and student responses were performed.

Material expert validation results showed that this Office 365-based Onenote-based e-mo-

Table 4. Material Expert Validation Results

| Aspects | Indicators | Score | Category |
|---|--|-------|-----------|
| Material Coverage | Conformity of indicators with Basic Competencies | 3 | Good |
| | Conformity of learning objectives with indicators | 3 | Good |
| | Conformity of the material with indicators and Learning objectives | 3 | Good |
| | Completeness of the material in accordance with Basic Competence | 3 | Good |
| | Systematic presentation of material | 2 | Less |
| Accuracy | Clarity of language | 4 | Excellent |
| of Mate- rial | Clarity of terms | 4 | Excellent |
| Hai | Clarity of matter | 3 | Good |
| | Adequacy of giving training | 2 | Less |
| | Image clarity | 3 | Good |
| | Formulation of questions in accordance with Basic Competence | 3 | Good |
| | Difficulty level of problem | 3 | Good |
| | Suitability of presentation of the problem | 3 | Good |
| Material | There is a voice note listening activity | 4 | Excellent |
| Servings | There is an activity to listen to voice notes | 3 | Good |
| | There is an evaluation of the questions. | 3 | Good |
| | There is a conclusion. | 3 | Good |
| under- standing of con- cepts understand learns There are multiple material There is a concept | There are questions that require students to listen to <i>voice notes</i> and understand learning materials. | 3 | Good |
| | There are multiple options to improve students' understanding of material | 3 | Good |
| | There is a concept presentation | 3 | Good |
| | There are exercises that can lead students to listen carefully to the material. | 3 | Good |
| Motiva- | Material encourages student curiosity | 3 | Good |
| tion to | Adequacy of giving feedback | 2 | Less |
| learn | There are activities that make students interact socially (processing) | 3 | Good |
| | There is an activity of presenting and communicating the material that has been studied. | 3 | Good |
| Sum | | | 75 |
| Average | | 3 | Good |

dule was viable with an average of 3.00. The assessment was conducted on aspects of the scope and accuracy of the material, completeness of the material, and suitability of the material with the motivation of learning students. Increasing the feasibility of e-modules as learning media with Office 365 Onenote based on expert validation of module was in good categories, so the media was suitable for use as a learning medium for Office Management courses for Office Administration Education courses.

The results of media expert validation by Saringatun Mudrikah, M.Ed. showed that The Office 365-based e-module was very good with an average score of 3.44. Validation of media experts was done to assess aspects of media relevance, technical quality, display and appearance, and software engineering, as well as the suitability of the media with students' learning motivations. Based on the results of the assessment from media experts, an average score of 3.44 was obtained in the Very Worthy category.

Table 5. Media Expert Validation Results

| Aspects | Indicators | Score | Category |
|-------------|---|---|----------------|
| Media | Conformity of media with learning objectives | 3 | Good |
| relevance | The compatibility of the media with the characteristics of students | 3 | Good |
| | Language suitability | 4 | Very Good |
| | The language used | 3 | Good |
| | Linkages between indicators | 3 3 4 3 3 4 4 3 4 4 3 3 4 4 4 4 3 3 4 4 4 4 3 3 4 4 4 4 3 3 4 4 4 4 3 3 4 4 4 4 3 8 4 4 4 4 | Good |
| | Interrelationships between materials | 3 | Good |
| | Language suitability | 4 | Very Good |
| Technical | Clarity of instructions for use | 4 | Very Good |
| quality | Ease of operation of media | 3 | Good |
| | Accuracy of menu usage | 4 | Very Good |
| | Ease of menu selection | 4 | Very Good |
| | Consistency of menu order | 4 | Very Good |
| | Ease of processing of content appearance every menu | 3 | Good |
| | Text efficiency | 4 | |
| | Image efficiency | 3 | Good |
| | Ease of process of answering questions | 2 | Good |
| Display and | Layout suitability and lay outs | 3 | Good |
| impression | Explain icons and buttons | 3 | Good |
| quality | Interrelationships between views | 3 3 4 4 4 3 4 4 3 3 4 4 4 3 3 4 4 4 3 3 4 4 4 3 4 4 3 4 4 3 4 3 4 4 3 4 4 3 4 4 3 4 4 3 4 4 3 4 4 3 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 3 4 4 4 4 3 4 4 4 4 3 4 4 4 4 3 4 4 4 4 3 4 4 4 4 4 3 4 | Good |
| | Background and pictures | 3 | Good |
| | Suitability of voice notes with material | 4 | Very Good |
| | Clarity of letters, symbols, and symbols used | 4 | Very Good |
| | Type readability and font size | | Very Good |
| | Explained appearance and color | 3 | Good |
| | Attractive media packaging | 3 | Good |
| | Conformity of the proportion of images presented | 4 | Very Good |
| Software | Creative in the pouring out ideas or ideas | 4 | Very Good |
| engineering | Ease and simplicity in operation | 3 | Good |
| Motivation | Presentation of the initial view facilitates the determination of the next activity | 4 | Very Good |
| to learn | Presentation of Materials allow students to learn independently | 4 | Very Good |
| | Media can be used anytime and anywhere. | 4 | Very Good |
| | The media is attracting attention to learning. | 3 | Good |
| | The media can repeat the material studied. | 4 | Very Good |
| | Media can show training | 3 | Good |
| Sum | - | | 117 |
| Average | | 3,44 | Very Worthy |

The feasibility level of e-modules as a learning medium based on Office 365 Onenote based on the validation of media experts was in the good category; therefore the media was suitable for use as a learning medium for the course of Teacher Professional Ethics for the Office Administration Education study program.

Once eligibility was declared by module and media experts, this Office 365-based electronic module was tested on students. The number of assessment scores based on trial data for Office Administration Education students grades A and B involving 25 students with 23 indicators was 1,913 with an average rating of 3.30. Referring to the conversion results wizard table, the criteria for e-modules based on Office 365 Onenote by student were in the worthy category.

Based on the results of material expert assessments, media experts and student responses as a test of Office 365 Onenote-based e-module products in Office Management courses, it had advantages, for example: 1) E-modules can be

Table 6. Student Response Assessment

| Aspects | Indicators | Score |
|--------------------------------------|--|-------|
| Quality of Content and Purpose | The material presented in this e-module is clear. | 3.4 |
| | The material in the e-module is presented so intricately. | 2.8 |
| | Image suitability | 3.3 |
| | Understand the concept of matter | 3.3 |
| Technical | Ease of using <i>e-module</i> | 3.8 |
| quality | Easy to operate learning media | 3.6 |
| | Menus in <i>Onenote Office 365</i> according to the material | 3.6 |
| | This menu in <i>Onenote Office 365</i> is quick to display the material presented | 3.6 |
| | Easy in the process of answering questions | 3.4 |
| Display and | Onenote Office 365-based e-module with a fun look | 3.4 |
| impression | Interesting backgrounds and images | 3.4 |
| quality | Voice note is in accordance with the material presented | 3.3 |
| Software | Onenote Office 365-based e-modules are practical and flexible | 3.6 |
| engineering | There is a lack of E-module Based Onenote Office 365 | 2.8 |
| Motivation | Onenote Office 365-based e-module increases motivation | 3.4 |
| to learn | Uncomfortable using e-modules | 3 |
| | Difficulty learning to use e-modules | 3.1 |
| | Feeling lazy to learn with the Onenote Office 365 e-module | 2.9 |
| | Increasingly confused to understand office management materials after using onenote-based e-module <i>Office 365</i> | 3.1 |
| | Satisfied with e-module with Onenote Office 365 | 3.4 |
| | Students can learn independently. | 3.5 |
| | Can repeat the material to be studied | 3.5 |
| | Flexibility of e-modules with Onenote Office 365 | 3.5 |
| Sum | | 76.5 |
| Average | | 3.3 |
| Category | | Good |

accessed through the Office 365 Onenote application;2) the media has fast response capabilities; 3) the media has an attractive appearance; 4) the media displays module and questions that can be done independently or in groups; 5) the media can display text, images, audio, and video; 6) the media can be used anytime and anywhere. The Onenote-based Electronic Module Office 365 developed also has some drawbacks, such as 1) to access media must create a Microsoft account first; 2) the media requires an internet network; 3) the media still depends on the source of the reference material; 4) The process of creating the question is done with a separate microsoft form application from Onenote Office 365.

Another research on the use of media in online learning has also been conducted for example research conducted by Thomas Mhenkoff et al with the title "Engaging knowledge management learners through web-based ICT: an empirical study" found that The study showed some positive correlations between online faculty to student interaction, the degree of presence in a web-based learning environment, as well as personal e-learning experiences as potential drivers of students' desire to learn more about the subject matter KM (Mhenkoff et al, 2011). Compared to this study there are similarities about the positive impact and effectiveness of learning media used in the implementation of online learning that makes online learning feel easier, fun and interactive.

CONCLUSION

An e-module assessment with Office 365 Onenote described Office Management module that came with practice questions. Material expert ratings scored an average of 3.00 in the good category. Evaluation of e-modules with Office 365 Onenote by media experts earned an average of 3.44 in the good category. Media eligibility was tested on Students of Education Administration of The United Nations, who scored 3.30 which was also in the good category. Based on this conclusion, the e-module with Onenote Office 365 was suitable for use in teacher professional ethics courses of office administration education study program, Faculty of Economics, Universitas Negeri Semarang.

The implication in this study is that to increase student acceptance of the use of teambased project-based e modules with the one note 365 application, lecturers must ensure quality interaction between students, a strong social presence achieved with intrinsically beneficial group interactions and enriching the problem-based personal e-learning experience. Systematic performance monitoring and multilevel knowledge tests are also very important

This research can be used as a basis for the development of e modules by using applications / software this can be a reference for research - research that will come in particular in the development of application-based learning media that can facilitate online learning.

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