

# Do Implementation Of Accounting Learning Multimedia Affect Students' Soft Skills?

# Nyoman Trisna Herawati<sup>1\*</sup>, Ni Kadek Sinarwati<sup>2</sup>

<sup>1,2</sup> Universitas Pendidikan Ganesha

A R T I C L E I N F O Article history: Received 20 July 2018 Received in revised form 10 August 2018 Accepted 15 October 2018 Available online 28 November 2018

Keywords: multimedia, soft skill, accounting students.

# ABSTRACT

The objective in this research is to analyze inferential comparative advantages between the use of multimedia and print media to improve student soft skills. The study uses a quasi-experimental with pretest-posttest nonequivalent control group design. The population was students of S1 Accounting Study Program in their second semester who were taking Introductory Accounting courses 2. Sampling was done by simple random sampling. The data collected through observation methods and assignment values. Data were analyzed by descriptive statistical techniques and inferential statistics uses analysis of covariant (ancova) with pretest score as covariables. The results showed, the average of soft skills the experimental group is 24.49, higher than the control group. The results of the ancova test produce a statistical value of F of 5,400 with a significance of 0.023. This shows that after being controlled by the pretest covariables, there are significant differences in soft skills between the experimental groups that conduct learning with multimedia compared to the control group that conducts learning with conventional media (print media). Students who are given learning using multimedia have better soft skills than students who are taught using print media. The amount of adjusted R square value of 0.470 means that the variability of soft skills can be explained by the variability of learning media (multimedia) as much as 47.0%.

Copyright © Universitas Pendidikan Ganesha. All rights reserved.

## 1. Introduction

In the industrial revolution era universities are demanded to be able to adopt technology within its learning, from curriculum reorientation, hybrid/blended learning, and long life learning. This industrial revolution era also generates new literature that has to be mastered by young generations, which are data literature, technology literature, and humanities literature. Students have to be capable in utilizing and processing data, implementing it into technology and comprehending how to apply that technology. Furthermore, humanities literature teaches students to be able to function and interact well with fellows as well as their environment (Belmawa, 2018). For those purposes the utilization of technology in learning is something that has to be endeavored consistently in order to generate various skills needed in working world.Hard skill is not the only one needed, soft skill also matters. One of the learning media that adapts technology development is multimedia. Multimedia is one of the computer based learning media that combines a number or media such as text, picture/animation, audio, and video. Material delivery in the form of multimedia will provide good impact upon students. Multimediaenticement can motivate and bring satisfaction towards students. This is due to the fact that multimedia is a computer aided learning system that is capable of saving data, generating creations and presenting information through a combination of picture text, audio, animation and video so that information can be designed to be more lively as it can show factual as well as contextual elements (Baharuddin andWahyuni, 2015).

Learning result escalation as one of the learning process success is indeed becoming an expectation for both lecturers and students. Indicator of learning result escalation at university can be visualized from the increase of students' Grade Point Average (GPA). High GPA indicates that students' hard skills are good. Unfortunately research finding stated that only 20% of one's cause of success determined by their intellectual intelligence (IQ/hard skills) and 80% was a part of other supporting factors, including emotional intelligence/soft skills (Ghozally, 2005). Based on a tracer study conducted in Bachelor Accounting Program Undiksha, it was found that numerous graduates have not been absorbed maximally into working world. Aside from that, only a small number of graduates actually worked as accountants, such as public, government, educator or private accountant. This indicates that students were not capable of maximizing their skills, either hard skills or soft skills. The importance of soft skills as a success contributor motivates civitas academica to perform development followed by multimedia implementation in learning in order to enhance students' soft skills. A research conducted by Sinarwati and Herawati (2017) has developed an accounting learning multimedia by reason of material comprehension inequality phenomenon amongst students. This inequality does not solely affect learning result, it also affects students' confidence, participation, honesty, creativity and willingness to learn. In short it can be said that those problems occur due to students' low soft skills (Sinarwati and Herawati, 2017). This condition requires lectures as subject's custodians to be consistently creative and innovative in order to increase students' soft skills; one of them is by implementing multimedia in accounting learning.

One of accounting learning that requires special attention is Accounting Introductory 2. This is one of the finance accounting subjects that is expected to be able to introduce basic concepts upon posts in balance sheet. To introduce and provide comprehension to beginners is not an easy thing. This has caused students who are non-accounting high school graduates for example science major high school graduates experience obstacles in Introductory Accounting course. This condition has made students, especially those who were non-accounting graduates, to be lack enthusiasm if not apathetical attending classes. This demands a method or learning media that is interesting so that basic accounting can be introduced as the comprehension foundation in advanced finance accounting to the maximum.

Alongside with that, development of accounting learning multimedia takes part in supporting elearning as well as blend learning that is being developed nowadays in various universities. In 4.0 industrial revolution era universities are expected to be able to create human resources that are innovative and adaptive towards technology. One of them is to conduct technology based learning media development such as multimedia. The utilization of multimedia in learning can provide some benefits. First, multimedia can be utilized to assist learner in shaping "mental mode" that will enable them comprehending a certain concept. Second, the utilization of multimedia can increase learning motivation, because multimedia makes learning presentation become more interesting. If learning motivation increases due to the fact that learning is done happily, then it can be stated that the utilization of learning multimedia not only increase hard skills, it also increases students' soft skills.

The virtue of this research compared to similar researches that have ever existed is that this research tested learning media that was not only expected to increase learning result (hard skills) but more importantly the multimedia that will be developed through this research is endeavored to increase students' soft skills.Students' hard skills and soft skills enhancement will provide positive impact towards university and the entire of its stake holders.

## The Definition of Multimedia

Learning is a process to create a connection between something (knowledge) that has already been comprehended and something (knowledge) new. From that definition then learning dimension comprises some elements, which are: (1) connection creation, (2) something (knowledge) comprehended, and (3) something (knowledge) new. So the meaning of learning here does not begin with something that is completely unknown (zero), but it is more to the interconnection of existing knowledge with the new one(s). Learning is a complex human activity aspect, which cannot fully be explained. Learning can be interpreted as a sustainable interaction product between development and life experience. IN a more complex meaning learning is essentially a conscious effort of a teacher to get the students learn (direct students' interaction with their learning source) in order to achieve the expected goal. From the meaning above it can be concluded that learning is a two-way interaction from a teacher and learner, in which between both parties a communication (transfer) takes place intensively and directed towards a previously determined target (Anthony Robbins dalam Trianto, 2009).

In the attempt of realizing good learning quality, there are 5 (five) interrelated and integrated components. The five components are as followed: (1) setting learning goal through planning the learning, (2) determining teaching materials (learning materials) (3) deciding an appropriate learning method, (4) the proper media usage, and (5) conducting evaluation and follow-up (assessment). In the course of learning in classroom generally lecturer is more focus on executing learning, starting from determining

materials, deciding method and media usage. The utilization of the proper media is highly needed so that the materials presented come out more attractively.Learning media is one of learning components that plays an important role in learning and teaching activity.

Multimedia is a combination of more than one media in a form of communication. Nowadays multimedia refers to incorporation and integration of media such as text, animation, graphic, voice, and video into computer system. Multimedia as a computer system that consists of tools and contents that provide convenience in allowing picture, video, photography, graphic, and animation to be combined with voice, data text that is controlled with computer program (Suwindra, et al, 2011).

The utilization of media can make learning to be more productive by enhancing learning spirit, students gain experience by spending available time doing directed activities, so that learning result obtained gets better. Media usage has to have a compatibility between learning process activity and media capability characteristics. Thus, determining media and learning sources have to consider the following: (1) media function in learning process, (2) instructional strategy, (3) learning content, (3) study group organization, (4) media procurement condition. These serves the purpose so that learning media benefit as a tool to smoothen interaction between lecturer and students can be realized effectively and efficiently (Rusman, 2010).

Multimedia din this research is a learning video in Introductory Accounting 2 course. This learning video was developed utilizing adobe flash player version 11 program that is adjusted with learning goals in Accounting Introductory 2 that covers: (1) cash and cash equivalents, (2) receivables (3) inventory, (4) fixed assets, (5) current liabilities, (6) obligation liabilities, and (7) share capital and retained profit.

## Soft Skills

Berthal in Sailah (2007) mentioned that soft skills are defined as "personal and interpersonal behaviors that develop and maximize human performance (e.g. coaching, team building, initiative, decision making, etc.). Soft skills do not includetechnical skills such as financial, computing and assembly skills".Soft skills are one's skills in connecting with others (including him/her). By that means, that soft skills attribute comprises values that peopleadopt, motivation, behavior, habit, character, and attitude. Soft skills or people skills can be divided into two parts, which are intrapersonal skills and interpersonal skills are the skill of a person in "managing" himself. Whereas interpersonal skills are the skill someone needs in relating with others. (Sailah, 2007).

University students as millennial generation are expected to be young professionals that consistently offer distinctive things on each side. Viewing such competitive working world competition, it requires skills that do not merely touch hard skill (knowledge) but also soft skill. A number of soft skill attributes that are necessary in working world are as followed: (1) the ability to be responsive towards environment's need, (2) good cooperation ability, (3) the ability to communicate well with others, (4) creativity level, (5) working enthusiasm, (6) honesty, (7) discipline, and (8) high responsibility (Kusumastutiand friends 2013). In line with that according to Glints.com, there are 10 types of soft skills that are required to be possessed by a professional in order to succeed in conquering working world. Those ten soft skills are: (1) critical thinking, (2) good communication, (3) information access, analysis, and synthesis, (4) curiosity, creativity, and innovation, (5) leadership, (6) adaptive ability, (7) cooperation and collaboration, (8) public speaking, (9) time management, (10) networking.

In this research soft skill is developed in six aspects in class learning, which are:(1) the ability to communicate verbally, (2) participation, (3) initiative, (4) creativity, (5) honesty, and (6) willingness to learn. The ability to communicate verbally is student's skill in expressing his opinion. How a student is capable of conveying his concept and ideas in discussion process has to be endeavored consistently. In this case a lecturer's role is essential to provide stimuli so that each student is able and willing to express his opinion in front of class.Participation involves student's alacrity in class. It is still common to find in a class discussion that there are only a small number of active participants who are practically the same persons. This shows that class discussion does not run well, because it cannot involve the liveliness of all students in class. Initiative is an act to decide something right without being told ahead. Nowadays learning is mostly directing students into waiting for orders without allowing them to start first, whereas this initiative is highly needed these days to anticipate the current lifestyle changes. Creativity reveals how someone is capable of creating something new. In learning, creativity can be seen from how a student is able to perform tasks in ways that no other person uses. Honesty is an attitude shown by a person as it is. A lot of students only care about getting grades and put aside honesty values by for example cheating, copying tasks from online media not in a proper way, etc. The last is willingness to learn. Willingness to learn can be seen from how enthusiast a student is into learning something. This can be seen from their comprehension scores before attending classes. Those who are enthusiast will always learn first before the material is presented by the lecturer. This shows that they are always ready before receiving new comprehension and knowledge in class.

For that purpose the use of multimedia and stimuli provided by lecturer is expected to be able to escalate skills in communication, participation, initiative, honesty, and willingness to learn.

#### Hypothesis Development

Learning multimedia is a learning delivery system component that can be used to support learning process. Multimedia development is based on perception that learning will run better, more effectively and more fun if it is supported with learning media that is capable of attracting student's interest and attention (Purbo,OW,2002). Multimedia is interpreted as a set of various different tools utilized for presentation; in this case multimedia is interpreted as media variety that is utilized for presenting learning materials.

Mertasari (2010) found that the use of web module with incentive patterns in learning English subject could increase the ability in comprehending English.Sinarwati and Kertiasih (2015) found that the use of Finance Accounting E-Module could increase students' soft skill.Candiasa and friends, (2010) found that the implementation of hypertext module is able to overcome lecturer's limitation and practice resource limitation problems that have been the obstacles all this time. Meanwhile Candiasa and friends, (2011) stated that in general hypertext module with on-line evaluation that was developed with ADDIE model for Research Methodology subject was in a fairly good category.

Sujanem Rai and friends (2009) developed a web based interactive contextual physics module that was able to enhance High School Physics concept comprehension and learning result in Singaraja. Moreover, attractive display and sound facility attracted user to be interested in learning. Application program made could be utilized for computer organization subject material. Suarsana and Mahayukti (2012) conducted an E-Module development research that was oriented in problem solving to enhance critical thinking skill upon students.

Viewing from the previous research, they analyzed more on the impact of multimedia usage towards students' cognitive ability or their academic achievement. Considering nowadays one's success does not merely depend on academic achievement (hard skill) but also soft skill. Soft skill is one's skill to be able to empower his entire potential in him to achieve success. Thus, this research attempts to develop and implement multimedia to enhance soft skill among students. Based on that, the hypothesis submitted is as followed.

H1: Once controlled by pretest covariable, will there be any difference in soft skill between students who are presented learningmaterials through multimedia and students who are presented learning materialsthrough printed media?.

#### 2. Method

Referring to the determined goal, this research is a quasi-experimental research. This is undertaken by the reason that not all variables (symptoms that appear) and experiment condition can be measured and controlled strictly (Dantes, 2012). Experimental designed applied in this research is "pretest-posttest nonequivalent control group design".Research subjects are S1 Accounting Program students that take Introductory Accounting 2 course that are in their second semester. Students who are made into research subjects are as much as 2 (two) classes with equivalent academic capabilities. One class is treated as a control class and the other as experimental class. Control class is the class that is presented learning materials through conventional media (printed media), while experimental class is the class that is presented learning materials through multimedia. Both control and experimental classes are provided cooperative learning model.Cooperative learning is an approach of constructivism theory in learning. In constructivism, learning is a process in finding and transforming complex information, checking information within the available regulation and revising it if possible (Rusman, 2010). Cooperative learning in this research is designed by forming groups of 3-4 persons.

In order to perform scoring against soft skill attributes, a lecturerobserves students' learning activity and performs scoring against soft skill attributes according to the previously designed rubric. There are a number of soft skills attributes being observed, which are: (1) verbal communication ability, (2) participation, (3) initiative, (4) creativity, (5) honesty, and(6) willingness to learn. Scoring verbal communication ability (1) and participation (2) is performed by observing students activeness in providing questions as well as responses given by either lecturer or fellow students during discussion in class.Scoring initiative (3), creativity (4), and honesty (5) is performed by giving out task or practice case. Honesty point can also be viewed from self-assessment rubric in teaching book that is mandatory to be filled by students after the end of each chapter. At the end of each material, students are directed to

perform self-assessment (reflection). This can be executed by giving out a "yes" or "no" appraisal questionnaire at each sub material (indicator) that has to be achieved in that chapter by also mentioning reasons or which points that have not yet been comprehended. At this point students' honesty is viewed from their ability in communicating which points that have been or have not been mastered. Willingness to learn (6) point is scored through a quiz before starting a new chapter, and the quiz result is scored based on the rubric.

Variables in this research cover independent variables which are multimedia utilization and dependent variables which are students' soft skill. Students' soft skill data is obtained from assessment based on soft skill assessment rubric with the score range from 5 to 30 points. Soft skill data is analyzed using descriptive statistic and inferential statistic (analysis of covariant/ANCOVA) with the pre-test score as the controlling variable (covariable). Descriptive statistical analysis is used to get mean and deviation standard, while inferential statistic is used to test hypothesis whether there is a significant difference in mean between students presented learning materials through multimedia and those through printed media.All statistic tests utilize SPSS 20 for Windowscomputer program with a significance rate of 5%.

## 3. Results and Discussion

The result of data descriptive statistic that shows mean and standard deviation values on both pretest and post-test scores is presented in the following Table 1.

	Learning Model	Nu	Mean		Std. Deviation	
	_	mber of	Pre	Pos	Pretest	Posttest
		Students	test	ttest		
So ft Skill grou	Control group	33	23. 03	23. 97	2.79	2.45
	Experimental oup	33	21. 78	24. 49	3.38	4.41
	•					

Table 1. Mean and Standard Deviation of Control and Experimental Group Learning Results

Source: Processed Data

Data in table 1 showed that the number of respondents (N) was 66 persons that were divided into two groups. The first group was in the amount of 33 students in their second semester from class G that was the control class who attended learning using learning media in the form of conventional module (printed), whereas the second group was students in their second semester from class F that was the treatment class who attended learning using multimedia as the learning media.

Soft skill pre-test average of control class was 23.03 and average post-test was 23.97, so there was an increase of 0.94.In the experimental class the average soft skill pre-test was 21.78 and post-test average was 24.49, so there was an increase of 2.71. Based on that data we can see that experimental class average had better soft skill increase than control class. This can also be viewed from the average of experimental class post-test that was better than control class.

The next step was to perform testing inferentially against the effect of multimedia implementation towards accountingstudents' soft skill improvement. This testing was conducted utilizing ANCOVA technique which had been previously performed classic assumption test in the form of normality and homogeneity testing. Normality testing was conducted using Kolmogorov-Smirnov. Testing result showed significance value (sig.) of 0.200 > 0.05, then it can be stated that normality testing was fulfilled so the next testing could be continued. The next was variants homogeneity testing using Levene's test. Based on the testing it was found out that significance value was (0.002) < $\alpha$  (0.05), then it could be stated that homogeneity test was not fulfilled which meant that each compared group had different variants.In (Gozali, 2005)homogeneity testing using levene test could be broken with the assumption that the analysis was still robust and the group had the same sample size. Based on that opinion, ancova analysis could be proceeded.

*Analysis Of Covariance (Ancova)* to test hypothesis which stated that there was significant difference in soft skills score between a group of students that attended learning utilizing multimedia with a group of students that attended learning utilizing printed media. The result of Ancova analysis is presented in Table 2.

Tests of Between-Subjects E	ffects							
Dependent Variable: Softski	ll Posttest							
	Type III	III Mean						
Source	Sum of Squares	df	Square	F	Sig.			
Corrected Model	400.593 <sup>a</sup>	2	200.296	29.	.00			
				832	0			
Intercept	46.675	1	46.675	6.9	.01			
				52	1			
Z	396.214	1	396.214	59.	.00			
				011	0			
Х	36.259	1	36.259	5.4	.02			
				00	3			
Error	422.998	63	6.714					
Total	39563.0	66						
	00							
Corrected Total	823.591	65						
a. R Squared = .486 (Adjusted R Squared = .470)								

## Table 2. The Result of Hypothesis Testing

Source: Result of SPSS

The result of SPSS processing provided F valuecalculation in the amount of 6.952 for intercept and significant at 0.05, and so as learning media variable with F value of 5.400 and significant at 0.05.Learning media significance value was 0.023 implied that there was a significant difference between soft skills score between students who attended learning utilizing learning media in the form of multimedia and students who attended learning utilizing learning media in the form of conventional module (printed). Aside from that, z value (pre-test score) showed sig. value < 0.05, which means that pre-test score was capable of controlling the difference in students' soft skill. The amount of adjusted R square value of 0.470 implied that soft skills variability could be explained by learning variability as much as 47.0%.

Descriptive analysis result against soft skills average (mean) between control group and experimental group showed that experimental group average that performed learning with multimedia held the value of 24.49, which was higher than the average control group that performed learning with conventional media (printed) with the average of 23.97.

Ancova testing result showed that there was a significant difference in soft skills between experimental group that performed learning with multimedia compared to control group that performed learning with conventional media (printed). *Test of between-subjects effect* resulted F statistic value of 5.400 with a significance of 0.023. This significance number is smaller than significant level of 0.05. Statistically this research result showed that there was a significant difference in soft skills between experimental group that performed learning with conventional media (printed) compared to control group that performed learning with conventional media (printed) compared to control group that performed learning withmultimedia.

#### Discussion

Based on descriptive analysis result and ancova analysis then it could be justified that multimedia gave a better influence upon students' soft skills compared to conventional module (printed). A number of reasons could be used as justification base that multimedia is better in improving soft skills compared to conventional module (printed) which are as followed. *Firstly*, the utilization of internet in learning at least provides three positive impacts which are students can easily attend any subject anywhere, students can conveniently learn from the experts in their interested field, and class can easily be conducted without relying on university where the student studies (Purbo, 2008). Secondly, soft skillis one's skill in relating with others (including him/her). Therefore, soft skill attributes cover adopted values, motivation, behavior, habit, character, and attitude (Sailah, 2007). Learning with multimedia can enhance student's positive attitude. Thirdly, online learning environment allows students to explore information from various sources fast and easily. This will encourage initiative and increase students' creativity. Creativity from cognitive side is the ability to think that has smoothness, flexibility, authenticity, and details. As from the affective side, creativity is marked with strong motivation, curiosity, interested in multiple tasks, dare to take risks and is not easily discouraged. Creative works are marked with originality and having values. Creativity as one of soft skills indicators in this research is measured by giving tasks that makes students imagine as company owners that purchase and manage assets carefully. This research result is in line with Mertasari's findings (2010) which stated that the utilization of web module and learning with media would guarantee students' control, flexibility, context free and relatively social convention free. Fourthly, online discussion forum encourages all students to express their opinion so that they are trained to respond or criticize their peers' opinions that dissent from their understanding. This is in line with the findings of Suarsana and Mahayukti (2012) which stated that the use of e-module offered the opportunity to ask and respond widely and largely open in online discussion forum so that it encourages the formation of learning community. Based on that discussion, then multimedia assisted learningcan be referred as alternative learning facility to optimize accounting learning, especially accounting aside from finance accounting as an attempt to improve students' soft skills.

## 4. Conclusions and Suggestions

A number of items that can be concluded from this research are among others as followed. First, accounting introductory 2 multimedia that had been implemented in learning was proven to be effective in improving students' soft skills. This can be seen from significant difference in the soft skills score of students who attended class equipped with multimedia compared to the one using conventional/printed module.

Based on the findings above, a number of advices recommended are as followed: (1) institution is advised to keep striving in developing learning media that is capable of improving not only students' hard skill but also soft skill, (2) the next researchers who are interested in performing researches on the impact of multimedia utilization upon students' soft skills can use other soft skill attributes that were not examined in this research, (3) lecturer and custodian's roles are still highly needed to mediate students into multimedia usage. Media utilization will be effective if lecture's role as a facilitator is capable of providing feedback towards students' learning result.

## Refferences

Belmawa, "Era Revolusi Industri 4.0: Perlu Persiapkan Literasi Data, Teknologi dan Sumber Daya Manusia", Januari 2018, htpp://belmawa.ristekdikti.go.id, diakses tanggal 10 Mei 2018.

Baharuddin dan Wahyuni. 2015. Teori Belajar dan Pembelajaran. Yogyakarta: Ar-Ruzzmedia.

- Candiasa, I Made., Sri Mertasari, Ni Made., Setemen Komang, 2011. Modul Hiperteks Dengan Evaluasi On-Line Sebagai Suplemen Pembelajaran Reguler Di SMA Dalam Upaya Peningkatan Dan Pemerataan Mutu Pendidikan. Jurnal Penelitian dan Pengembangan Pendidikan. Volume 5, Nomor 1, April 2011. Hal 18-35. Lembaga Penelitian Universitas Pendidikan Ganesha. Singaraja.
- Candiasa, I Made., Sukajaya, Nyoman., Ratnaya, Gede., 2010. Modul Hiperteks Dengan Pendekatan Heuristik Untuk Pembelajaran Teknologi Informasi dan Komunikasi di Sekolah Menengah. Jurnal Penelitian dan Pengembangan Pendidikan. Volume 4, Nomor 1, April 2010. Hal 17-32. Lembaga Penelitian Universitas Pendidikan Ganesha. Singaraja.
- Chong, J. L., Yunos, J. M., & Spahat, G. 2005. The development and evaluation of an E-Module for pneumatics technology. Malaysian Online Journal of Instructional Technology. 2(3). 25-33. Tersedia pada http://pppjj.usm.my/mojit/. Diakses pada tanggal 1 Maret 2013.

Dantes, Nyoman.2012. Metode Penelitian. Yogyakarta: Penerbit Andi.

Endrotomo. 2010. Implementasi Pembelajaran Student Center Learning. Makalah diseminarkan dalam rangka Implementasi PHK-I.di STIE Triatma Mulya Badung.

Ghozally, Fitri R. 2005. Kecerdasan Emosi dan Kualitas Hidup. Jakarta : Edsa Mahkota.

Gozali, Imam. 2001. Aplikasi Analisis Multivariate dengan Program SPSS. Semarang: Penerbit Andi.

Kusumastuti, Ngadiman, Sohidin. 2013. Upaya SMK Bidang Studi Bisnis Manajemen Dalam Memenuhi Kebutuhan Softskill Dunia Industri. Jurnal Pendidikan Ekonomi. Online.http://jurnal.fkip.uns.ac.id/index.php/ekonomi/article/view/2564. diakses tanggal 5 September 2018.

- Mertasari, N.M.S. 2010. Modul Web dengan Pola Insentif untuk meningkatkan Kemampuan Memahami Materi Bahasa Inggris. Jurnal Pendidikan dan Pengajaran.Jilid 43 Nomor 3. Hal 246-252.
- Mills, C Steven. 2006. Using the Internet for Active Teaching and Learning. Ohio: Pearson Merrill Prentice Hall. Http://www.wikipedia.com. Diakses tanggal 1 Maret 2013.
- Montgomery, D. C. 1984. Design and analysis of experiment. Second edition. New York: John Wiley & Sons.
- Purbo, OW. 2002. Technology e-learning berbasis php dan sysql. Jakarta: Elex Media Komputindo.
- Rochintaniawati Diana, Ari Widodo dan Tuszie Widhiyanti, 2012. Pengembangan Buku Elektronik untuk Sains di SMP SBI dan RSBI. Jurnal Pendidikan. Volume 13, No. 2 September 2012. Hal 89-93. LPPM Universitas Terbuka.
- Rahayu Endang Sadbhudy, I Made Nuryata. 2011. Pengembangan Soft Skills di SMK. Bandung: Sekarmita
- Rusman. 2010. Model-Model Pembelajaran. Jakarta: PT Raja Grafindo Persada.
- Sailah Illah. 2007. Pengembangan Soft skills di Perguruan Tinggi. Makalah di sampaikan dalam rangka Sosialisasi Soft Skills di Undiksha. Singaraja.
- Sabar Nurohman. 2011. Pengembangan Modul Elektronik Berbahasa Inggris menggunakan ADDIE Model Sebagai Alat Bantu Pembelajaran Berbasis Student Centered Learning Pada Kelas bertaraf Internasional. Prosiding Seminar Nasional Penelitian. Pendidikan dan Penerapan MIPA. Fakultas MIPA. Universitas Negeri Yogyakarta. 14 Mei 2011. Http://www.wikipedia.com. Diakses tanggal 1 Maret 2013.
- Sujanem Rai, and friends. 2009. Pengembangan Modul Fisika Kontekstual Interaktif Berbasis Web Untuk Meningkatkan Pemahaman Konsep dan Hasil Belajar Fisika Siswa SMA di Singaraja. Laporan Penelitian Hibah Bersaing. Lembaga Penelitian Universitas Pendidikan Ganesha Singaraja.
- Santyasa, I Wayan 2006. Pembelajaran Inovatif: Model Kolaboratif, Basis Proyek, dan Orientasi NOS. Makalah Disajikan dalam Seminar di Sekolah Menengah Atas (SMA) Negeri 2 Semarapura. Tanggal 27 Desember 2006, di Semarapura.
- Sinarwati, Ni Kadek dan Trisna Herawati, Nyoman. 2012.Penerapan Model Pembelajaran Kooperatif Dengan Strategi TTAR Berdasarkan Tri Kaya Parisudha Dalam Pembelajaran Akuntansi Untuk Meningkatkan Soft Skills Mahasiswa. Laporan Penelitian Pemula. Singaraja: Universitas Pendidikan Ganesha.
- ------ 2013.Penerapan Model Pembelajaran Kooperatif Tipe STAD Dalam Pembelajaran Akuntansi Untuk Meningkatkan Soft Skills dan Hard Skills Mahasiswa. Laporan Penelitian Pemula. Singaraja: Universitas Pendidikan Ganesha.
- Sinarwati, Ni Kadek dan Kertiasih, Ni Ketut. 2015. E-Module Akuntansi Keuangan Dengan Setting Pembelajaran Kolaboratif Untuk Meningkatkan Soft Skills Mahasiswa. Laporan Kemajuan Penelitian Hibah Bersaing Institusi. Singaraja: Universitas Pendidikan Ganesha.
- Sinarwati, Ni Kadek dan Trisna Herawati, Nyoman. 2017.Multimedia Pembelajaran Akuntansi untuk Meningkatkan Softskill Mahasiswa. Laporan Penelitian Hibah Bersaing. Singaraja: Universitas Pendidikan Ganesha.
- Suarsana, I Made dan Mahayukti Gusti Ayu, 2012. Pengembangan E module Berorientasi Pemecahan Masalah untuk Meningkatkan Keterampilan Berpikir Kritis Mahasiswa.Laporan Penelitian Institusional PPKP. Singaraja: Universitas Pendidikan Ganesha.
- Sugiarta, I Made. 2009. Pengembangan Model Pembelajaran Matematika Berdasarkan Kearifan Lokal Masyarakat Bali "Tri Kaya Parisudha" Berbantuan Modul Untuk Meningkatkan Kualitas Perkuliahan Analisis Real 2. Laporan Penelitian Lanjut. Universitas Pendidikan Ganesha. Singaraja.

Suwindra P, I Nyoman, Sujanem Rai, Suwandi Iwan. 2011. Pengembangan Modul software Multimedia Interaktif Dengan Strategi Pembelajaran Berbasis masalah Untuk Meningkatkan Pemahaman Konsep Dan Hasil Belajar Fisika Siswa SMA. Laporan Penelitian Hibah Bersaing Tahun III. Singaraja: Universitas Pendidikan Ganesha.

Trianto.2009. Mendesain Model Pembelajaran Inovatif Progresif. Jakarta: Kencana Prenada Media Grup..