THE EFFECTIVENESS OF INTERNET MEDIA AS LEARNING SOURCE TO IMPROVE SELF-CONFIDENCE AND LEARNING INDEPENDENCE OF STUDENTS

EFEKTIFITAS PENGGUNAAN MEDIA INTERNET SEBAGAI SUMBER BERLAJAR UNTUK MENINGKATKAN KEPERCAYAAN DIRI DAN KEMANDIRIAN PESERTA DIDIK

By: **Niken Dyah Permatasari**
Prodi Pendidikan Akuntansi Universitas Negeri Yogyakarta
Nikenpermatasari12@gmail.com

Abstract

The objective of this research is to examine the effectiveness of internet media as learning source for improving self-confidence and learning independence of students class XI social MAN 3 Yogyakarta in academic year of 2015/2016. This study was an experimental research. The sample of the research include class XI IPS 1 as experiment class amounted to 28 students and XI IPS 2 as control class amounted to 27 students. The result of the study showed that there were differences in self-confidence of students took part in the learning by using the Internet proven by significance of Anova test 0.001. There were differences in learning independence between students took part in the learning by using the Internet and those took part in the learning without using the Internet proven by significance of Anova test 0.018. There were an improvement in students' self-confidence after taking part the Internet-based learning proven by the result of the initial score of self-confidence, the lowest was 56, the highest was 94 and mean was 78.29, while for the final score of selfconfidence, the lowest was 69, the highest was 99, and the mean was 83.07, degree of significance 0.001 with T- Test. There were an improvement in learning independence of students took part in the Internet-based learning proven by the result of the initial score of learning independenc, the lowest was 43, the highest was 75 and the mean was 61, while for the final score of learning independence, the lowest was 50, the highest was 76 and the mean 63.32, degree of significance 0.030 with T-Test.

Keywords: The Internet as the Learning Source, Self-Confidence, Learning Independence

Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui efektifitas penggunaan media internet sebagai sumber belajar untuk meningkatkan rasa percaya diri dan kemandirian belajar siswa kelas XI IPS MAN 3 Yogyakarta tahun ajaran 2015/2016. Penelitian ini merupakan penelitian eksperimen. Sampel penelitian ini kelas XI IPS 1 sebagai kelas eksperimen sejumlah 28 siswa dan XI IPS 2 sebagai kelas kontrol sejumlah 27 siswa. Berdasarkan hasil penelitian terdapat perbedaan kepercayaan diri peserta didik yang mengikuti pembelajaran dengan menggunakan media internet sebagai sumber belajar yang ditunjukkan dari signifikansi uji Anova sebesar 0,001. Terdapat perbedaan kemandirian belajar peserta didik yang mengikuti pembelajaran dengan menggunakan media internet sebagai sumber belajar dan yang tidak menggunakan media internet sebagai sumber belajar yang ditunjukkan dari signifikansi uji Anova sebesar 0,018. Terdapat peningkatan kepercayaan diri peserta didik setelah mengikuti proses pembelajaran dengan berbasis internet ditunjukkan dari hasil kepercayaan diri awal, terendah 56, tertinggi 94 dan nilai rerata 78,29, sementara untuk kepercayaan diri akhir, terendah 69, tertinggi 99 dan rerata 83,07, pada taraf sig 0,001 dengan uji T-Test. Terdapat peningkatan kemandirian belajar peserta didik yang mengikuti proses pembelajaran berbasis internet ditunjukkan dari hasil kemandirian belajar awal, terendah 43, tertinggi 75 dan nilai rerata 61, sementara untuk kemandirian belajar akhir, terendah 50, tertinggi 76 dan nilai rerata 63,32, pada taraf sig 0,030 dengan uji T-Test.

Kata Kunci: Internet Sebagai Sumber Belajar, Kepercayaan Diri, Kemandirian Belajar

INTRODUCTION

Education was expected to realize the ideals of nation and the goals of national education. The aim at developing someone's potential could not be achieved without making any effort to actualize his potential as well as realize his attitude and personality. This could be achieved by someone having self-confidence first and therefore his development will be improved both by himself and his surroundings that would support this achievement. As time went by, now students are always demanded to be active and consequently they are required to have self-confidence. Recently, many media were used to improve students' self-confidence, one of which was the Internet. By means of the Internet, students could make use of it to support learning process. The Internet facilities indeed could supplement learning sources in order to improve students' knowledge that had impact on their learning outcomes. By getting lots of knowledge through the Internet, students will be more confident when they performed in front of the class, their courage in terms of answering questions would also improve. Therefore there would be change in students not only their learning outcomes, but also in their behaviour and attitude which tended to be courageous, active, and easy to actualize themselves in the teaching and learning process.

Students must be facilitated to take part in their learning progress. This was in line with what Sudjatmiko (2003: 4) argued to which learning activities enabled students to socialize by showing respect to the differences (opinion, attitude, achievement level) and practise to cooperate in communicating ideas, creations, and innovation both to the teacher and the other students. In addition to selfconfidence, students were also required to have independence for their learning, both alone and in a group to develop their potential.

Learning independence would be realized when students actively controlled themselves for all of the things done, evaluated, and planned what they would learn in the learning process as well as took part in the learning process. Students who had learning indepence were capable of analysing the complex problems, capable of working both individually and in groups, and courageous to express ideas. Related to the learning process in the school, the use of the appropriate method would influence the level of the students' learning independence. Learning methods which were commonly applied include lecture method, discussion method, and problem-solving method. Teacher and students were guided by the textbook and module developed by the teacher concerned. One of learning methods that supported students'

learning indepence process was by applying the facilities of electronic equipment of the Internet.

Madrasah Aliyah Negeri 3 Yogyakarta was an Islamic-based school which was quite famous in Yogyakarta municipality. It was assumed that many facilities were available to support learning process, for instance wi-fi to access the Internet. The school hoped that this kind of facility could be utilized by all of students in their learning process, such as to browse learning materials or learning sources. Besides books in the school library, students could also access the Internet for the sake of enhancing their insight. Madrasah Aliyah Negeri 3 Yogyakarta also permitted students to bring their Smart Phone. However, during school hours, they were prohibited from activating their Smart Phone—they had to unactivate it or put it on the locker instead. At certain times, teachers allowed them to use Smart Phone to access the Internet not only to browse textbook or coursebook but also to browse the references of learning materials teachers had already taught.

Unfortunately, by allowing them to browse through Smart Phone, there was still possibility for them to misuse the Internet. They might use it to chat with their friends both inside and outside the school instead of browsing learning sources. Furthermore they use it to access social media, like Twitter, Path, Instagram, Whatsapp, Line, etc. It showed that the use of the Internet as the source of learning was still less effective since students indeed misused instead of utilizing it.

Based on observations made, as what seen in the learning process, there were still many students who kept silent and hesitated to answer when they were asked by the teacher. They feel less confident in themselves. Eventhough teacher had already said that there would be acredit, both for the appropriate and less appropriate answer, however most of students still keep silent. If any, that was only one or two student(s). In the second semester of academic year 2015/2016 state schools were demanded to implement 2013 Curriculum which students were demanded to learn and find out by themselves learning material they learned in the school. In brief, students were demanded to learn independently. In MAN 3 Yogyakarta there were still students who had not been aware of the importance of learning independence. It was provem by the fact that there were still wtudents who were overdue to submit or even had not submitted their assignments.

Students could use their Smart Phone to browse the materials they would learn. However, most students didn't do this. They tended to be noisy in the classroom since they still had not

understood what they had learned. They should utilize the Internet facilities in their Smart Phone as the learning source as the supplement to their textbook. They could make use of the Internet to browse the materials they couldn't find in the textbook but unfortunately they didn't. By means of utilizing the Internet they should be able to improve their learning independence instead of browsing social media.

From the above illustration, the use of the Internet as a means of learning source, improving students' self-confidence and independece in terms of learning was still low. Therefore, the researcher decided to conduct the study entitled **"The Effectiveness of Internet Media As Learning SourceTo Improve Self Confidence and Learning Independence of Students Class XI Social MAN 3 Yogyakarta in Academic Year 2015/2016"**.

RESEARCH METHOD
Research Method

This research was an experimental method. According to Sugiyono (2009: 72), experimental research method was a method that is employed to see the effect of specific treatment upon the others in a controlled condition.

Place and Time of Research

This study was conducted in MAN 3 Yogyakarta in XI Social 1 and XI Social 2 which numbered 56 students. This school was located in Magelang Street Km. 4, Yogyakarta. The study included proposal writing, research implementation, and report writing which was done in April-June 2016.

Reserch Subject

Research population was all students XI Social in MAN 3 Yogyakarta in the academic year 2015/2016 which numbered 85 people who are divided into three classes, namely XI Social 1, XI Social 2, and XI Social 3. In this sample research, XI Social 2 served as Controlled Class while XI Social 1 served as Experimental Class. Both were in similar condition, hence it was expected that the different treatment towards each class would be reflected by the result of the study.

Prosedure

In this study the research class was divided into two, namely Control Class and Experimental Class. Observation design was given two times, namely before and after experiment.

Class	Pre-test	Treatment	Post-test
$C_{control}$	O_1	-	O_2
$C_{experimental}$	O_1	$X_{internet}$	O_2

Research Instrument and Data Collection Technique

Instrument of Self-confidence and Learning Independence were the written questions employed to collect information from the respondents before and after treatment. This instrument was employed to collect data of students' self-confidence and learning independence. Instrument of self-confidence was adapted from Nunur Yuliana Dewi (2012), while instrument of learning independence was adapted from Mohammad Taufik (2011). Instrument in the form of questionnaire in this study was that had been fill in with the choice answers and therefore the respondents only needed to select the answers provided. Four scales of measurement employed in the instrument included Agree (A), Disagree (DA), Strongly Agree (SA), Strongly Disagree (SDA), with the score for each item was 4, 3, 2, 1 for positive questions and 1, 2, 3, 4 for negative questions. Instrument test was conducted in SMK Muhammadiyah 2 Klaten Utara which was XI Accounting 1 as the trial class consisted of 30 students. In order to collect valid data, instrument had to satified the requirements for validity and reliability.

Data collection technique in this study was divided into six phases. Firstly, determining trial class, control class, and experimental class. Secondly, conducting instrument validation in trial class. Thirdly, doing pre-test for control and experimental class by collecting initial data of students' self-confidence and learning independence after treatment. Fourthly, giving different treatment to each of the class in the form of learning. Experimental class learned by using the Internet while control class learned without using the Internet. The teacher uploaded learning materials on Facebook to enrich materials which can be downloaded by the students. The teacher also upload a quiz for the students, they do it offline and upload the answer on Facebook. Chatting activity is optional since it supplements the online learning for students discussion material. Fifthly, doing post-test for control and experimental class by collecting final data of students' self-confidence and learning independence after treatment. Sixthly, comparing control and experimental class to see whether there was differences or not in terms of self-confidence and learning independence in the two classes and also to see whether there was improvement or not in terms of self-confidence and learning independence in the experimental class.

Data Analysis Technique

Requirement analysis was conducted before analysis. It was necessary to determine analysis technique that would be conducted. It involved normality testing and homogenity testing. The formulated

hypotheses were necessary to test to see the truth of hypotheses thereof. Alternative hypothesis 1 (H$_1$) and 2 (H$_2$) was tested by using One Way Anova and Paired Sample T-Test by employing the following formula (Sugiyono, 2011: 122).

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2} - 2r\left(\frac{S_1}{\sqrt{n_1}}\right)\left(\frac{S_2}{\sqrt{n_2}}\right)}}$$

Information:

$\overline{X_1}$ = mean of sample 1

$\overline{X_2}$ = mean of sample 2

S$_1$ = standard deviation of sample 1

S$_2$ = standard deviation of sample 2

S_1^2 = variance of sample 1

S_2^2 = variance of sample 2

r = correlation between two samples

t = t *hitung*

The criterion determined whether hypothesis test 1 was accepted or not was if t$_{hitung}$ was more than or less than t$_{table}$. From this comparison it would be found that H$_1$ and H$_2$ was accpeted or rejected. Alternative hypothesis 3 (H$_3$) and 4 (H$_4$) was tested by using significance of coefficient correlation by employing T-Test with Separated Variance which the formula was as follows.

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\frac{S_1^2 + S_2^2}{n_1 + n_2}}}$$

Information:

t : t *hitung*

$\overline{X_1}$: mean of experimental class (obtained by comparing pre-test score and post-test score of experimental class.

$\overline{X_2}$: mean of control class (obtained by comparing pre-test score and post-test score of control class.

S : deviation standard.

n$_1$: number of subject in experimental class.

n$_2$: number of subject in control class.

(Sugiyono, 2011: 138)

To draw conclusion was done by comparing t *hitung* to t *table*. If t *hitung* was more than or equal to t *table* with degree of significance 5% then variable significantly influenced dependent variable. Otherwise if t *hitung* was less than t *table* then variable didn't significantly influenced dependent variable.

RESEARCH FINDINGS AND DISCUSSION
Research Findings

a. Description of Spesial Data Initial Data of Instrument of Self-confidence (Pre-Test)

Discription data pre-test eksperimen class it could be found that the lowest score for experimental class was 56 and for control class was 63. The highest score for experimental class was 94 and for control class was

91. Furthermore the mean for experimental class was 78.29 with standard deviation 7.659 and for control class 74 with standard deviation 7.114. Thus it could be concluded that the initial score of self-confidence for experimental and control class was equal.

Table 1. Identification of Tendency Category of the Initial Self-Confidence (Pre-Test) of Experimental Class

N o	Score	Frequency		Information
		Absolute	Relative	
1	>81,33	8	29%	High
2	68,67-81,33	18	64%	Average
3	<68,67	2	7%	Low
	Total	28	100%	
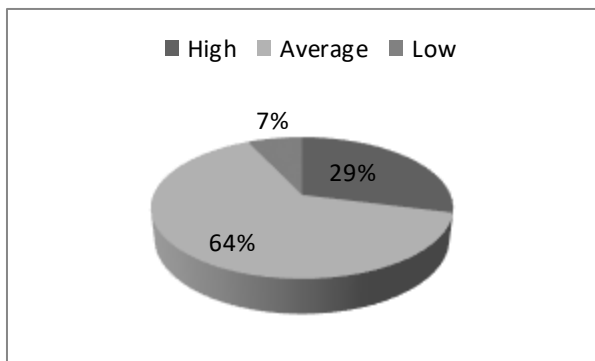
Picture 1. Pie Chart Tendency Category of the Initial Data of Self-Confidence Result (Pre-Test) of Experimental Class

Table 2. Identification of Tendency Category of the Initial Self-Confidence (Pre-Test) of Control Class

No	Skor	Frequency		Information
		Absolute	Relative	
1	>81,66	4	15%	High
2	72,34-81,66	12	44%	Average
3	<72,34	11	41%	Low
	Total	27	100%	
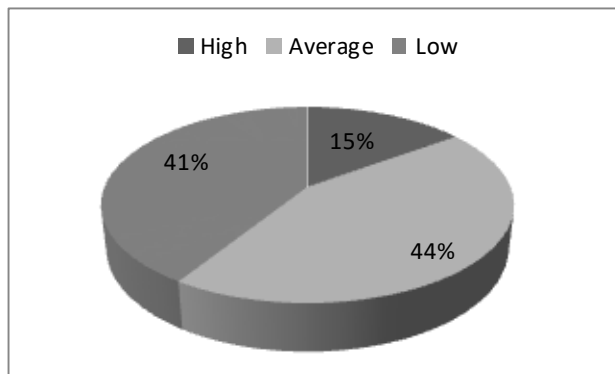
Picture 2. Pie Chart Tendency Category of the Initial Data of Self-Confidence Result (Pre-Test) of Control Class

b. Description of Data of Students' Self-Confidence (Post-Test)

Description data post-test self-confidence it could be found that the lowest score for experimental class was 69 and for control class was 59. The highest score for experimental class was 99 and for control class was 92. Furthermore the mean for experimental class was 83.07 with standard deviation

7.493 and for control class 74.93 with standard deviation 6.833. Thus it could be concluded that the final score of self-confidence for experimental and control class was significantly different.

Table 3. Identification of Tendency Category of the Final Self-Confidence (Post-Test) of Control Class

No	Score	Frequency		Information
		Absolute	Relative	
1	>90,33	6	21%	High
2	77,67 - 90,33	14	50%	Average
3	<77,67	8	29%	Low
	Total	28	100%	
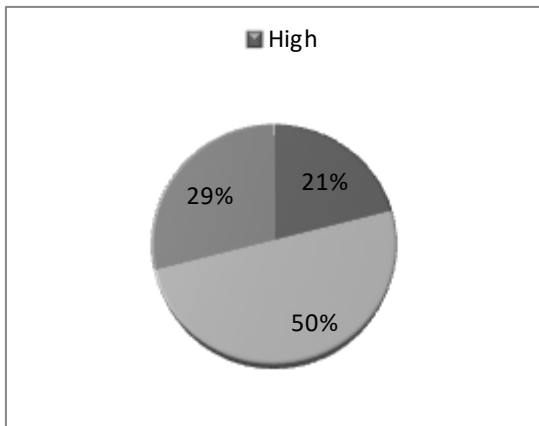
Picture 3. Pie Chart Tendency Category of the Final Data of Self-Confidence Result (Post-Test) of Experimental Class

Table 4. Identification of Tendency Category of the Final Self-Confidence (Post-Test) of Control Class

No	Score	Frequency		Information
		Absolute	Relative	
1	>81	3	11%	High
2	70 up to 81	19	70%	Average
3	<70	5	19%	Low
	Total	27	100%	
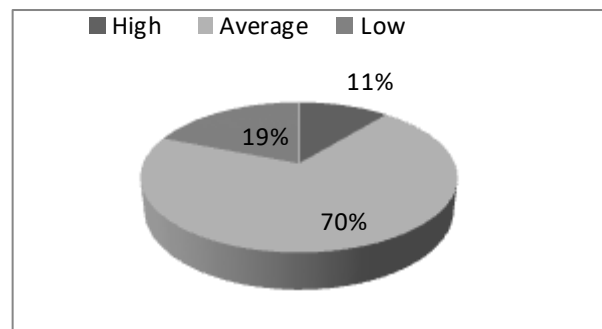
Picture 4. Pie Chart Tendency Category of the Final Data of Self-Confidence Result (Post-Test) of Control Class

c. Description of Data Students' Learning Independence (Pre-Test)

Description data pre-test learning independence it could be found that the lowest score for experimental class was 43 and for control class was 41. The highest score for experimental class was 75 and for control class was 74. Furthermore the mean for experimental class was 61 with standard deviation 6.423 and for control class 59.26 with standard

deviation 6.055. Thus it could be concluded that the initial score of self-confidence for experimental and control class was equal.

Table 5. Identification of Tendency Category of the Initial Learning Independence (Pre-Test) of Experimental Class

| No	Score	Frequency		Information
		Absolute	Relative	
1	>64,33	5	18%	High
2	53,67 – 64,33	20	71%	Average
3	<53,67	3	11%	Low
	Total	28	100%	
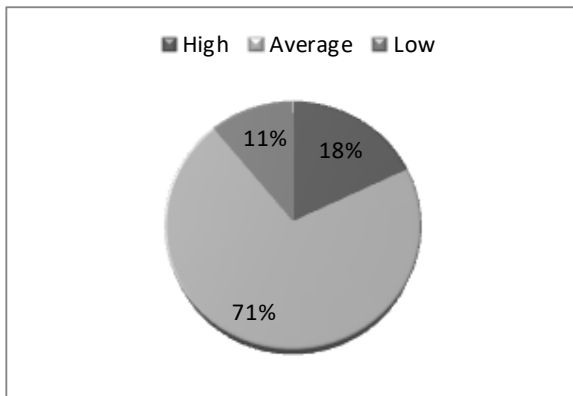
Picture 5. Pie Chart Tendency Category of the Initial Data of Learning Independence Result (Pre-Test) of Experimental Class

Table 6. Identification of Tendency Category of the Initial Learning Independence (Pre-Test) of Control Class

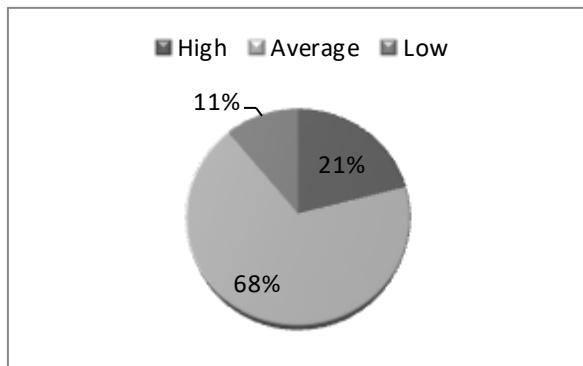| No	Score	Frequency		Information
		Absolute	Relative	
1	>63	4	15%	High
2	52 up to 63	22	81%	Average
3	<52	1	4%	Low
	Total	27	100%	
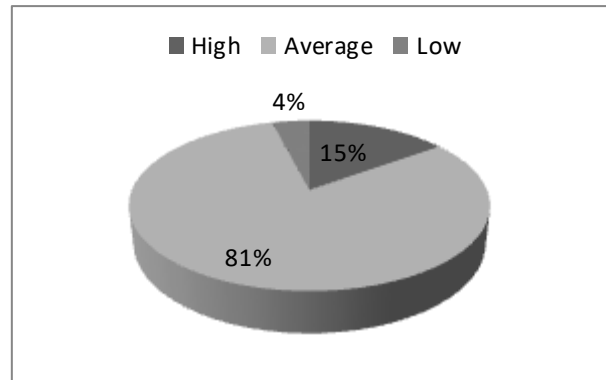
Picture 7. Pie Chart Tendency Category of the Initial Data of Learning Independence Result (Pre-Test) of Control Class

d. Description of Data of Students' Learning Independence (Post-Test)

Description of data post-test learning independence it could be found that the lowest score for experimental class was 50 and for control class was 54. The highest score for experimental class was 76 and for control class was 68. Furthermore the mean for experimental class was 63.32 with standard deviation 5.843 and for control class 59 with standard deviation 3.731. Thus it could be concluded that the initial score of self-confidence for experimental and control class was equal.

Table 8. Identification of Tendency Category of the Final Learning Independence (Post-Test) of Experimental Class

| No | Score | Frequency | | Information |
		Absolute	Relative	
1	>67,33	6	21%	High
2	58,67-67,33	19	68%	Average
3	<58,57	3	11%	Low
	Total	28	100%	

Picture 8. Pie Chart Tendency Category of the Final Data of Learning Independence Result (Post-Test) of Experimental Clas

Table 9. Identification of Tendency Category of the Final Learning Independence (Post-Test) of Control Class

| No | Score | Frequency | | Information |
		Absolute	Relative	
1	>63.33	4	15%	High
2	58.67-63.33	8	29%	Average
3	<58.67	15	56%	Low
	Total	27	100%	
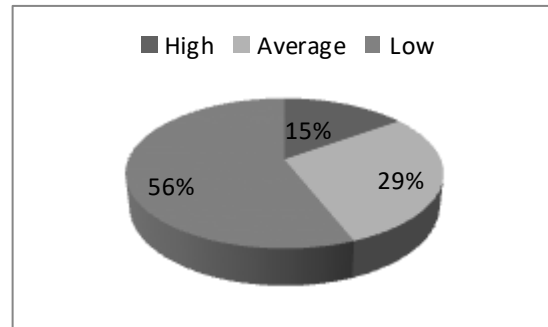
Picture 9. Pie Chart Tendency Category of the Final Data of Learning Independence Result (Post-Test) of Control Class

Discussion

Based on the result of the first hypothesis test (H1) it was found that there was differences in self-confidence between students learned by using the Internet as learning source and those learned without using the Internet as learning source was accepted. It was proven by the result of Anova test which was 0.001 which was less than 0.05 which meant that there was differences. This result showed that there was differences in self-confidence between class learned by using the Internet as learning source and those learned without using the Internet as learning source (lecture and exercises method).

Based on the result of the second hypothesis test (H2), it was found that there was differences in learning independence between students learned by using the Internet as learning source and those learned without using the Internet as learning source. It was proven by the result

of Anova test which was 0.018 which was less than 0.05 which meant that there was differences. This result showed that there was differences in learning independence between students learned by using the Internet as learning source and those learned without using the Internet as learning source (lecture and exercises method).

The result of study showed that students would have higher score mean after they got treatment than before they got treatment. This was proven by the result of T-Test showed that the lowest score in the initial test (Pre-Test) was 56 and the highest score was 94 while mean score was 78.29 with standard deviation 7.629. The lowest score in the initial test (Pre-Test) was 69 and the highest score was 99 while mean score was 83.07 with standard deviation 7.493. Besides, the score of test of differences using T-Test in experimental class before and after treatment which was learning by using the Internet in the degree of Sig. (2-tailed) was 0.007 which was less than 0.05.

The result of study showed that students would have higher score mean after they got treatment than before they got treatment. This was proven by the result of T-Test showed that the initial test (Pre-Test) was 43 and the highest score was 75 while mean score was 61 with standard deviation 6.423. The lowest score in the initial test

(Pre-Test) was 50 and the highest score was 76 while mean score was 63.32 with standard deviation 5.843. Besides, the score of test of differences using T-Test in experimental class before and after treatment which was learning by using the Internet in the degree of Sig. (2-tailed) was 0.030 which was less than 0.05.

CONCLUSION AND SUGGESTION
Conclusion

There was differences in students' self-confidence between students learned by using the Internet media and those learned without using the Internet media proven by the result of Anova test 0.001 which was less than 0.05 which meant that there was difference in self-confidence. There was difference in students' learning independence learned by using the Internet media and those learned without using the Internet media proven by the result of Anova test 0.018 which was less than 0.05 which meant that there was difference in learning independence.

There was improvement is students' self-confidence after learning using the Internet. It was supported by the initial result of self-confidence test (pre-test) with the lowest score 56, the highest score 94, and mean 78.29 with deviation standard 7.629. Furthermore, for post-test score, it was obtained the lowest score 69, the highest score 99, and mean 83,07 with

deviation standard 7.493. Moreover, for test of difference using T-Test with degree of significance (2-tailed), it was obtained the result 0.007 which was less than 0.05. There was improvement in students' learning independence after learning using the Internet. It was supported by the initial result of learning independence test (pre-test) with the lowest score 43, the highest score 75, and mean 61 with deviation standard 6.423. Furthermore, for post-test score, it was obtained the lowest score 50, the highest score 76, and mean 63,32 with deviation standard 5.843. Moreover, for test of difference using T-Test with degree of significance (2-tailed), it was obtained the result 0.030 which was less than 0.05.

Suggestion

For students, it was necessary for them to be more enthusiastic and concentrated on the learning process using the Internet. This aimed at making students understood the learning materials so that they could express ideas regarding the materials they had not been understood yet and be responsible for the Internet-based learning. For teacher of Economics subject, the result of this study reflected that the use of the Internet was beneficial to improve students' self-confidence and learning independence, it was better to make use of the Internet as part of the lesson plan. For the next researcher : this study was expected to develop by employing another research instrument. Interview as another research instrument was expected to give information directly regarding the effect of the use of the Internet as the learning source for students, It was better for the researcher to review another primary factor influenced the alteration of students' self-confidence and learning independence, such as affective aspect. This was because this factor reflected the formation of self-confidence and learning independence.

REFERENCES

Abu Ahmadi dan Nur Uhbiyati. (2001). *Ilmu Pendidikan*. Jakarta: Rineka Cipta.

Ahmad Sultoni. (2013). *Pengaruh Pemanfaatan Internet sebagai Sumber Belajar Sejarah terhadap Motivasi Belajar Siswa Kelas XI IPS SMA N 1 Wiradesa Kabupaten Pekalongan Tahun Pelajaran 2011/2012*. Skripsi. Semarang: Universitas Negeri Semarang.

Arikunto, Suharsimi. (2006). *Prosedur Penelitian (Suatu Pendekatan Praktik)*. Jakarta: Rineka Cipta.

Danang Sunyoto. (2007). *Analisis Regresi dan Korelasi Bivariat*. Yogyakarta: Amara Books.

Departemen Pendidikan Nasional. (2004). Peraturan Menteri Pendidikan Nasional. Jakarta: Pusat Kurikulum.

Mohammad Taufiq. (2011). *Efektifitas Penerapan E-Learning guna Meningkatkan Kemandirian Belajar Mata Kuliah Akuntansi Internasional*

Mahasiswa Pendidikan Akuntansi FISE UNY Tahun Akademik 2009/2010. Skripsi. Yogyakarta: Universitas Negeri Yogyakarta.

Nunur Yuliana Dewi. (2012). *Upaya Meningkatkan Kepercayaan Diri Melalui Layanan Bimbingan Kelompok Pada Siswa Kelas X1 SMA Negeri 1 Sumber Rembang 2012*. Skripsi. Semarang: Universitas Negeri Semarang.

Sugiyono. (2009). *Statistika untuk Penelitian*. Bandung: Alfabeta.

Sugiyono. (2011). *Statistika untuk Penelitian*. Bandung: Alfabeta.

Sukmadinata, Syaodih Nana. 2006. *Metode Penelitian Pendidikan*. Bandung: Rosydakarya.

Sutrisno Hadi. (2004). *Analisis Regresi*. Yogyakarta: Andi Offset.

Thantoway. (2005). *Kamus Istilah Bimbingan dan Konseling.* Jakarta: Grasindo