

Investigation Impact of E-learning (Moodle Learning Management System) on Self-expression Skills and Students' Social Adjustment

Narges Saedi¹ (Corresponding author), Esmail Sadipour²

¹ MA in Educational Technology Allameh Tabatabai University

² Associate Professor, Faculty of Psychology and Educational Sciences, Allameh Tabatabai University
n_saedi73@yahoo.com

Abstract: Using learning management system can provide a variety of web-based content, which in recent years it has been used significantly by people. One of the aspects that are taken into consideration in this study to determine impact of e-learning (Moodle learning management system) on self-expression skills and students' social adjustment. The research method was quasi-experimental and control groups. Target population was all of Allameh Tabatabai University students in 2016-2017. 170 questionnaires were distributed among the students of Faculty of Psychology and Educational Sciences and then according to data obtained by 50 students were selected by convenience sampling. Social Adjustment Scale Instrument Bell & Gamble and assertiveness were Ridgecrest. Educational content to help prepare instructional design models Reigeluth and the experimental group received eight sessions of sixty minutes using virtual training in assertiveness skills training and received social adjustment and control group were trained in a routine manner. Data between software SPSS version 20 was analyzed by covariance. The results showed a significant difference between control and experimental groups, and the difference in favor of the test group. Based on a study it can be concluded that e learning would be conspicuous escalation skills, self-esteem and social adjustment.

[Narges Saedi, Esmail Sadipour. **Investigation Impact of E-learning (Moodle Learning Management System) on Self-expression Skills and Students' Social Adjustment.** *Researcher* 2017;9(5):47-53]. ISSN 1553-9865 (print); ISSN 2163-8950 (online). <http://www.sciencepub.net/researcher>. 7. doi:[10.7537/marsrsj090517.07](https://doi.org/10.7537/marsrsj090517.07).

Keywords: e-learning, self-expression, social adjustment

1. Introduction

Mass media and their widespread use in teaching and learning and continuing after the passage of generations at the same time distance learning using multimedia in training, ICT in special educational support so that the composition of the field with the media to create media and cross-media educational and training system of e-learning course was remote. According to experts, and based on research results published, virtual learning space such as social networking and web-based learning environments with flexible and fast environment, For learners and for teachers to teach creative with maximum efficiency provides the possibility of training (Islam, Beer, & Slack, 2015).

Learning Management System software to facilitate the learning, online version of the software is widely used in universities and scientific centers inside and outside the country. The software, the most common way students communicate faculty and administrators is set in virtual education institutions. Managers, supervisors and teachers and students to access the site each able to remove, edit and extract website information and all training needs are manageable through this port. (Alshammari & Ali & Rosli, 2016). Usually, the successful use of learning management systems and educational institutions is limited to developed countries and these countries

significantly benefit from the advantages of this system platform. A typical traditional classroom, based on the theory that behavioral methods are run and achieve educational goals of the teacher becomes predictable routine training methods as well as questions and answers. Structuralist approach on capabilities of students and their development, and educational content impact on their mental growth model and learn the concepts of abstraction and making your way believes that partnership. This approach is widely accepted levels of higher education by combining technology and is used both synchronous and asynchronous. At the same time, more attention constructivism approach method, and in this way the "learning at any time and place" there is no way of compensation, but it is well understood, because students can not understand if the point of education through audio podcasts simultaneously, are complementary and creative production or interactive videos or discuss with others in forum discussions and access to it. (Kristensen, 2016).

Theoretical Foundations

Dynamic and complex environment punishment, distribution and control information and expert as an alternative to obsolete systems used. Many researchers believe that the personality characteristics of effective learning and encourage them to be progress. Chance that people, especially students in

this way to acquire, enabling them to identify management needs, the space features virtual education and freedom of choice in access to resources, content, dialogue and participation with other people, increasing learning skills, self-control and self-regulation as well as compatibility and delving into space and many researchers believe without the use of e-learning technology, learning a lot of self-regulation or late or not occur at all (Edmunds & Hartnett, 2014). Piaget and Vygotsky believed that cognitive psychologists, the interaction of people and depends on the context, and what it forms, is cultural and social environment. Learning management systems can be used to help create an environment in which students under the relevant instruments and constructive engagement, to cultivate their minds. Including abstract and spatial visualization ability of students, because learning can be modeled his training. This is useful for subjects such as engineering, students can see three-dimensional images and abstract concepts into concrete practices and modeling to understand. Educational factors, moving objects, and calculate the three-dimensional test, including the benefits of learning management systems, because in this way it is possible to create the space (Pedrosa, Barbero, & Miguel, 2014).

The ability to increase flexibility and expand human intelligence helps and the development of emotional intelligence which has five components interpersonal skills, interpersonal skills, adaptability, stress management and to influence the general mood. Compatibility or valuable social skills and ability to communicate effectively with others. The lack of clarity in expression, causing behaviors such as lying, flattery and gossip and conflicts and dare thinking and creativity in people threaten (Mahmoudi Kahrizi, Bagherian and Haideri, 2014). The increased confidence and assertiveness to understand and predict the behavior of others and reduce anxiety. Incomplete learn social skills and lack of assertiveness, mental health endangered and helpless anxiety, low self-esteem and psychosomatic diseases and lack of consistency raises. Assertiveness is a person who works to help social adjustment. People with fewer depressive symptoms firmly when faced with the stress of the show (Weissman & Bothwell, 1976). One of the ways to promote social harmony, putting them in a participatory and multi-purpose learning environments as well as communication and enhance their communication skills. When people skills such as body language while talking, trying to show his vision, expressing honest emotion in behavior to show they have learned it, and position the right can be in the form appropriate to express this

theme they also effective social adjustment (Gerdes & Mallinckrodt, 1994).

The e-learning course because of the importance of the participation of learners and to create a space for learners to interact with each other and with the players, the coach sometimes deliberately creates this space, and to achieve this resort to strategies such as exercise participation, and the group score, consider telling score for participation, and provide challenging problems and engaging the learners to help Hall of dialogue or a private room to talk, to negotiate engage in problem-solving and partnership working are (believers Rod, Aliabad and Pourjamshidi, 2014).

2. Literature Review

After participating in e-learning to help people share their opinions and beliefs and feelings with each other, people who have low self-expression, the categories are not paid for their rights and reject similar feelings with others, in response to protests against the improper behavior of others fail and their demands are less important than others. Internal control and self-efficacy increased assertiveness, and social adjustment adds. This is the verbal password for participants rather than their real name is possible, when people know their names not known find, more courage in expressing themselves over time and with a training program could be the next step in strengthening the (Eisler, Hersen, & Miller, 1973). Despite this e-learning for social adaptation of persons with special features can also be effective. For example, in Research (Garrido, Morales, & Serina, 2016) with the use of case-based e-learning privacy, using artificial intelligence technology has potential application to support students who have had a stroke and can not in the classroom helped attend. In this way, which includes scenario, educational audio podcasts and so on, students can solve problems in a large number in terms of their mental and effective. Among the reasons for the application of e-learning system Moodle, it is at the same time interaction between groups can be created in the form of hypermedia and this is motivating for teachers and provide their assertiveness adds (Lin, Chen, & Nien, 2014). Although virtual environments real interaction do not have face to face communication there is, however, learning model creating feelings of anxiety and stress affect the environment as much as would be motivated to learn the cause of rapid learning disorders and the incidence in the community as well. (Cleveland-Innes & Campbell, 2012).

Including those that encourage social compatibility and emotional support for the child. People who have been encouraged to express feelings easily, more detailed work, and broader communication. Of course, students who are shy and

less connected social adjustment problems. In the meta-analysis (Durlak, Weissberg, Dymnick, Taylor, & Schellinger, 2011) on social emotional skills through collaborative learning emphasized imperceptible. Among the variables of social adjustment, the commitment and readiness to change, Kristansen believes that if educational factors that are used in e-learning, simulator real world, for example, were able to communicate with the user, in self-efficacy and positive attitudes that lead to committed action will affect. While (Nuangchalem, Sakkumduang, Uhwha & Chansirisira, 2014) in their research with the aim of using the Moodle e-learning methods, in general education concluded that E-learning in children has not merely use their academic progress because the children aged 7-12 need to face to face training electrical and better learning at this age should be used in combination. This means that the use of virtual learning, problem-solving system to position face to face as well. In this Pedresu et al (2014), with the help of online training, and the use of the Moodle learning management system, to measure people's spatial intelligence and determined that virtual education for those who have had difficult experiences (eg online games were hard done) and students who had no previous knowledge of the techniques of illustration of the method of ordinary people who were trained, was more effective. But research Islam et al (2015), to assess the challenges facing the development of e-learning and online training in higher education the barriers in doing their jobs, factors such as the lack of extensive view of the world, monetary policy and fiscal, the culture and the adoption of technologies in countries and training of the major obstacles in the area.

The virtual training people from many occupations together are the same factors in England the acceptance and deployment of e learning in colleges and higher education attacked placed as managers of the institutions that people from families of lower disagreeable they are problematic. Maladaptive behaviors and annoying because I felt the frustration expressed is that what you called it right. This frustration, helplessness and frustration, anger and anxiety, and poor interpersonal relationships are created. Including methods of treatment of this phenomenon is group training. A group of people that are next to each other, well first listen, critique each other's comments and with sincere thoughts and feelings as well as practical exercises to learn to interact and communicate. If Malinkroud and Gerdes (1994), the education of adolescents and found a large social group is what this training is more effective. (Yang & Brown, 2015). The factors influencing the use of Facebook and affecting social competence, self confidence, and the usage patterns of paid and found

that personality traits and understand the effectiveness of media and evaluation of psychological consequences of social media useful for users and many of the students to help the social network and established relationships that could not solve the issues related to their thesis and added this On their satisfaction. Social networks can be used in self-consciousness and the desire of the Android operating system can be measured.

If (Jedari, Tie Qiu, Rahim, & Xia, 2017), this study showed that much greater consciousness on the passion he added. This study showed that as people become more aware on the passion he added. One way for assertiveness training, learning the game. If (Stettler, Signer, & Suter, 2004) to a group of children in variables such as confidence, independence and act quickly trained by electronic games and the results were positive. Given the role of e-learning in the skills of self-education, self-motivation, responsibility and skills of discussion and the use of online resources and expression capabilities of the professional, which is a critical component of self-expression, assessment and evaluation of this type of training on importance of this variable and because in the age of information all On Internet Catapults sitting and ready for launch and we are entering the era of digital technology to evaluate the effectiveness of virtual training and human psychological variables such as self-expression and social adjustment is necessary. The study is intended to examine the effectiveness of virtual training on assertiveness skills and social adjustment examine.

3. Methodology

The study was a quasi-experimental pretest-posttest control group. The population in this study available to students of the Faculty of Education and Psychology Allameh Tabatabai University in the first semester of the academic year 2016-2017, were social adjustment Instrument Bell (1961) and assertiveness questionnaire Gambrill and Ridgecrest (1975), respectively. How categorization for the first questionnaire was distributed among 170 students and according to the data obtained and available sampling method based on the questionnaire mentioned fifty of those with the lowest were selected. The subjects randomly, both experimental and control groups, respectively. Each group had 25 patients. Instrument expression Gambrill and Ridgecrest (1975), respectively. With 40 of the original 22 questions that were used. Answer with a five-item scale, and reliability provided is 0.81. The validity of the test substance between 0.39-0.75 and the reliability of the factor loadings is 0.39-0.70. Bell compatibility questionnaire to gather information about the social adaptability, adult form is used. The test reliability

Bell adjustment following data were obtained: Emotional Compatibility 0.91, social adjustment 0.88, academic adjustment 0.85, 0.81 physical compatibility, Family Compatibility 0.91, and overall compatibility 0.94, high score 13.76 is a sign of incompatibility. Cronbach's alpha test is 0.89 and 0.93 reliability of the test (Saeidian & Indigo, 2012).

E-learning to using the learning management system Moodle (e-learning) (the most recent version of the model fits the data center facilities) and to modules personal records, training units, select units (which here was only one course available), Registration and virtual training modules and virtual

test modules and module production and delivery of content etc., by help of hosting and domain (buy them), and finally installation, commissioning and support. Learn the use of management system Moodle, fast loading, without sound system, and the quality of its technical features. Content using instructional design models Reigeluth, designed and educational network and then is assigned to the experimental group for 8 sessions and each session to 60 minutes have been trained and control groups were trained in a routine manner. After completing the training of both groups were retested. Table 1 summarizes the training program:

Table 1. Summary of assertiveness training and social adjustment

Sessions	Educational content
First	Member introduction and welcome, defining categories through audio podcasts, and learn practical skills, provide practical training
Second	Report (Report exercise) (feedback training), education, communication styles, the difference aggressiveness and assertiveness, expression of positive and negative consequences of assertiveness, education, environment and social acceptance in the form of text-conformist style / providing practical training
Third	Report, the definition of a variety of problem-solving, active listener training / practice
Fourth	Report, define models of communication and body language, expression of feelings and thoughts / practice
Fifth	Reports, video displays redress in nature, peaceful protest and criticism training / practice
Sixth	Reporting, teaching methods effective conversation techniques of visual and verbal / practical exercises
Seventh	Reporting, teaching how to say no without feeling guilty, playing different roles, rejected the unreasonable demand / practice
Eighth	Provide feedback, skills training, anger management and how to deal with aggressive people / general practice

The above table shows educational topics. This content is mostly in the form of audio podcasts and voice coach who between them produced three videos were educational, at the end of each session participants practice was asking people what they

were trained in a virtual for practical and real world were doing and practicing the announced result.

4. Results:

As can be seen in Table 1, descriptive statistics such as mean and standard deviation are evaluated.

Table 2: Mean and standard deviation of the experimental and control groups in the variable-expression and social adjustment

Variable		Self-expression		Social adjustment	
Group		Average	S.D.	Average	S.D.
examination group	Pre-test	14.12	1.02	12.73	0.98
	Post-test	15.82	0.779	15.23	0.97
control group	Pre-test	13.64	1.15	13.39	0.96
	Post-test	14.29	0.914	14.08	0.967

As seen in the table above the average of each group at posttest increased and higher in the experimental group compared to the control group. To test the difference between the studied groups after the independent variable was analyzed using covariance analysis results are presented in Table 2. Defaults by analysis of covariance, equality of variances between

the dependent variable, normal distribution of the dependent variable, linear relationship between random variables auxiliary variables and the homogeneity of the slope of the regression in the group studied, which continues to test the assumptions. Assuming the normality of the data in the variable-expression and social adjustment

Kolmogorov-Smirnov test was performed to test the value of 1.322 and 1.099. Due to significance level is 0.05, the critical value table for a confidence level of 0.95 (1.96) less, so the data are considered to be

normal. It was used to investigate the homogeneity of variance Levene test results are shown in the table below.

Table 3. The results of the homogeneity of variances

Variable	df 1	df 2	Significant	f Ratio
Self-expression	1	48	0.42	0.24
Social adjustment	0.15	0.48	0.49	0.15

As the survey results show significant levels obtained in the table is greater than 0.05, so the default homogeneity of variances is confirmed. The

default is the homogeneity of regression. As a result the table below:

Table 4. Results of regression coefficients in the assumption of homogeneity of social adjustment

Change source	Sum of squares	Pretest	df	Mean Square	Calculated f	significance level
Pretest	403.324		1	406.324	38.37	0.000
Experimental groups	29.73		1	29.73	2.81	0.1
Group interaction and Pretest	4.27		1	4.27	0.403	0.52
Error	487.071		46	10.589		

Table 5. Results of regression coefficients in the assumption of homogeneity of expression

Change source	Sum of squares	Pretest	df	Mean Square	Calculated f	significance level
Pretest	533.27		1	533.27	77.62	0.00
Experimental groups	7.26		1	7.26	1.05	0.00
Group interaction and Pretest	1.48		1	1.48	0.21	0.64
Error	1.48		50	6.86		

As the results obtained can be seen from Table 2 and 3, this is because the calculated $F < \text{critical } F$, so

data from the assumption of homogeneity of regression slopes support.

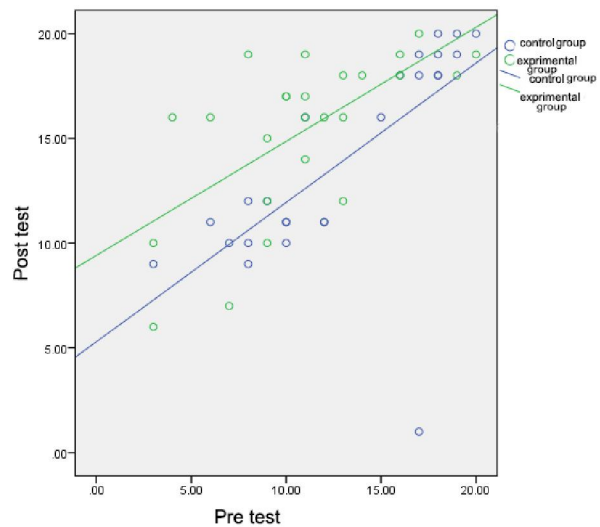
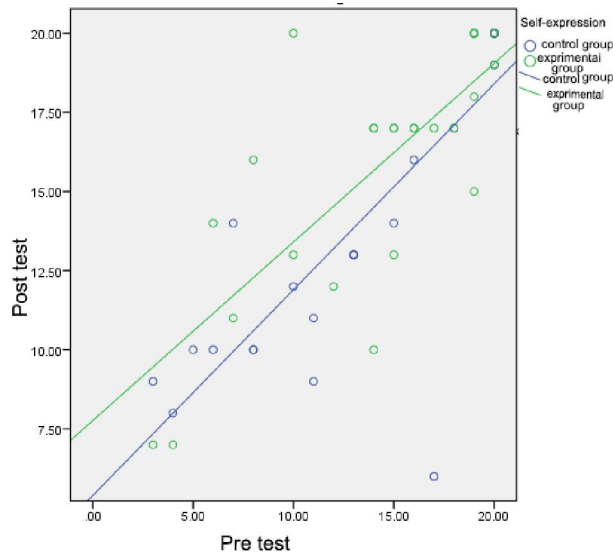


Figure 1. Diagram variable distribution of self-expression and social adjustment of the separation between experimental and control groups

Based on the charts and regression lines can be seen that there is a linear relationship between the

variables in the two groups. The results of analysis of covariance checked the following table:

First hypothesis: a virtual manner on increasing assertiveness training affects students.

Output of the show, and thus reject the null hypothesis significance of the effect of virtual training on social adjustment of female students.

Table 6. Results of analysis of covariance variable of self-expression

Change source	Sum of squares	Mean Square	F statistic	significance level	η Ratio
Pretest	548.54	548.54	81.20	0.00	0.63
Group	18.96	18.96	2.71	0.03	0.05
Error	315.994	6.869			
Total	1222.93				

The results of these tests show because $F=2.71$, and $P=0.03$, and $df= 1.47$, there is a significant difference between the experimental and control groups and the difference between the interest groups. So we can say with 95% confidence that learning is effective in increasing assertiveness students.

Second hypothesis: virtual education methods to increase students' social adjustment affects girls.

Covariance analysis in this variable also represents a rejection of the null hypothesis, and render meaningless the effect of virtual training on social adjustment of female students.

Table 7. Results of analysis of covariance social consistency

Change source	Sum of squares	Mean Square	F statistic	significance level	η Ratio
Pretest	416.99	416.99	39.88	0.00	0.45
Group	97.41	97.41	9.31	0.004	0.16
Error	491.34	10.45			
Total	935.351				

The results of these tests show because $F=9.31$, and $P=0.004$, and $df= 1.47$, the calculated value is more critical and less significant than 0.05, so the hypothesis is accepted and the 95% confidence interval, to the conclusion that virtual learning has had an impact on the social adaptation.

5. Discussion and Conclusion:

This study Effect of electronic means learning management system Moodle's assertiveness skills and social adjustment of students. The results showed that the experimental and control groups in terms of self-expression and social adjustment there is a significant difference. Based on the literature review was conducted, most previous studies on the effect of e-learning in comparison with conventional methods either within the country and abroad merely to examine the impact of this model on learning has a limited number of studies to evaluate variables psychological they have payed. The result of this research study Pedrosa, Barbero, & Miguel (2014), Gerdes & Mallinckrodt (1994) consonants. The result of this research has shown that cooperative learning in spatial ability and emotional intelligence such as social adjustment are effective. As Lin et al. (2014), achievement motivation in E-learning system to review and concluded that when the content of virtual learning through a model of instructional design, especially of Adi used, meant to facilitate learning better, and this compared to is more typical. In this

study the production of educational content instructional design models that are designed Reigeluth used in its manufacture, is consistent with the current result. Mahmoudi Kahriz et al. (2014) believe that social adjustment behavior has a purpose, and this purpose the students the power of recognition and determination and choice. The employment of parents of children less opportunity to learn to communicate consistently and most of their time spent on the virtual world and suggests that virtual apps available, children have the educational and age-appropriate and direction of the community they are ultimately this by designing training learning content can be observed. Baron and Hertner (2014), believe that if the technology acceptance model learning management system designed to teach children basic individual use, if learning to be part of the classroom, as a tool to support learning and learning management systems, in that case between individual learning and collaborative learning effective communication is established according to the survey of students and teachers in New Zealand have this learning model is satisfactory.

Ravan Hart (2006) believes that instructional strategies and learning activities, tutorials and influence technology adoption. He believes that lifelong learning as e-learning systems such as quality, interactive, classroom teachers, and accountability is maintained. Increase the quality of interaction, and quality of content and simulation training content

helps some aspects of the behavior of a system of abstract human samples closer and this will enhance the skills of human communication. High life skills and a sense of personal control over the events in a positive adjustment and cope with the increase in mental health problems and effective. People who have strong compatibility, easier to express themselves act. Working on personality characteristics, enhance trust and self-person and cause her positive attitude and desire to work in the virtual world and virtual learning. Virtual and continuous indirect relationship with the teacher and classmates with the advantage that it can be used to address mental health problems. The limitations of this study, access to content was sometimes difficult for participants. To fix this problem, it is recommended that the application be used persian lms its launch easy and less expensive as well. Due to the bright future of e-learning in most countries and a plurality of smart schools, Learning can be psychology students in variables such as generalized anxiety disorder, as well as useful function for special needs students can be useful.

References:

1. Saeidian, F. and Nili, MR. (2012). Effect of assertiveness training and social fitness positive self-concept of female-headed households. *Journal of Clinical Psychology* 6 (2), 2-25.
2. Mahmoudi Kahrizi, B. Bagherian, F and Haidari, M. (2014). The role of self-regulation in the social adjustment of students. *Developmental psychology: Iranian psychology*, 10 (40), 383-393.
3. Momeni Rad, A.; Ali Abadi, Kh.; Pourjamshidi, M. (2014). Influence of personality on the participation of learners in the learning management system Moodle. *Strategies for Medical Education*, 7 (5), 293-297.
4. Stettler, N., Signer, T. M., & Suter, P. M. (2004). Electronic Games and Environmental Factors Associated with Childhood Obesity in Switzerland. *Obesity research*, 12(6),896-903.
5. Alshammari, S. H., Ali, M. B., & Rosli, M. S. (2016). The influences of technical support, self efficacy and instructional design on the usage and acceptance of lms: a comprehensive review. *The turkish online journal of educational technology*, 15(2),116-125.
6. Cleveland-Innes, M., & Campbell, P. (2012). Emotional Presence, learning, and the online learning environment. *The international review of research in open and distributed learning*, 13(4).
7. Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students social and emotional learning: ameta - analysis of school-based universal interventions. *Child development*, 82(12),405-432.
8. Edmunds, B., & Hartnett, M. (2014). Using a learning management system to personalise learning for primary school students. *Journal of open, flexible, and distance learning*, 18(1),11-29.
9. Eisler, R. M., Hersen, M., & Miller, P. m. (1973). Effects of modeling on components of assertive behavior. *Journal of behavior therapy and experimental psychiatry*, 4(1),1-6.
10. Garrido, A., Morales, L., & Serina, I. (2016). On the use of case-based planning for e-learning personalization. *Expert systems with applications*, 60,1-15.
11. Gerdes, H., & Mallinckrodt, B. (1994). Emotional, social, and academic adjustment of college students: a longitudinal study of retention. *Journal of counseling and development*, 72(3),281-288.
12. Hart, R. (2006). Using e-learning to help students develop lifelong learning skills. Ottawa: Heritage branch.
13. Islam, N., Beer, M., & Slack, F. (2015). E-Learning challenges faced by academics in higher education: a literature review. *Journal of education and training studies*, 3(5),102-112.
14. Jedari, B., Tie Qiu, L., Rahim, A., & Xia, F. (2017). A game-theoretic incentive scheme for social-aware routing in selfish mobile social networks. *Future Generation Computer Systems*, 178-190.
15. Kristensen, T. (2016). A distributed intelligent e-learning system. *Multi conference on computer science and information systems* (pp. 134-144). Madeira, Portugal: IADIS.
16. Lin, H.-M., Chen, W.-J., & Nien, S.-F. (2014). The study of achievement and motivation by e-learning a case study. *International journal of information and education*, 4(5),421-425.
17. Nuangchalerm, P., Sakkumduang, K., Uhwha, S., & Chansirisira, P. (2014). Implementinge-learning designed courses in general education. *Asian Journal of education and e-learning*, 2(4),259-263.
18. Pedrosa, C. M., Barbero, B. R., & Miguel, A. R. (2014). Spatial visualization learning in engineering: traditional methods vs. a web - based tool. *Educational technology and society*, 17(2),142-157.
19. Weissman, M., & Bothwell, S. (1976). Assessment of social adjustment by patient self-report. *Arch gen psychiatry*, 33,1111-1115.
20. Yang, C.-c., & Brown, B. B. (2015). Factors involved in associations between Facebook use and college adjustment: Social competence, perceived usefulness, and use patterns. *Computers in Human behavior*, 245-253.

5/17/2017