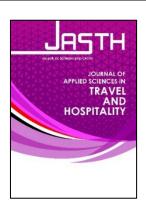
The Effectiveness of The Green-Based Bartending Learning in Improving The Competence of The Students of Hospitality Study Program

I Made Darma Oka^{1*}, I Nyoman Winia², I Wayan Pugra³, Ni Gst Nym Suci Murni⁴ Study Program of Hospitality, Politeknik Negeri Bali, Indonesia^{1,3,4} Study Program of Tourism Business Management, Politeknik Negeri Bali, Indonesia² madedarmaoka@pnb.ac.id^{1*}



Abstract

The aim of this article is to know the effectiveness of green bartending learning in improving the competence of the students of Hospitality Study Program Politeknik Negeri Bali. This study was conducted on the fourth semester students as the research sample. The sample of research is determined according to the number of students in each class that is as much as 28 people and analysis by using SPSS 17.0. The results show that the application of learning based on green Bartending very effective in improving the achievement of student competencies.

Keywords: effectiveness, learning, bartending, green, competence

INTRODUCTION

The gaps between the competence of graduates and the competency needs of the industries still occurs so that a solution needs to be found. In line with Muluk, et al. (2016) which mentions that there are gaps between competencies possessed by graduates with the actual needs of the field work. Furthermore, it is stated that to anticipate and overcome it, a comprehensive study that involves three elements, namely: the learning outcome (LO) of study program, competencies desired by the field work, and the current conditions of outcome are needed. Erlike and Atalina (2016) said that skill and menu knowledge of waiter/waitress down the grade. Difference with the research of Rais and Ambiyar (2019) that mentioned the service quality of the waiter at D'Nest Bar got the positive image from the customer.

In creating or producing graduates, a transformation process of attitude, knowledge, and skill is needed with the right approach. One of the common approaches taken is to organize competency-based training. Because the training is competency based, in the concept of competencies based training requires the assessment of the training results with competency-based assessments (BKSP, 2011). One of the solutions offered in training on campus is implement green-based learning.

The green-based learning material is a concept which should be developed in the future. The rapid development of technology requires people to be always prepared to seek after a new breakthrough in order to keep being competitive. As a concept, the green-based learning highly supports the development of the green-based school. Percik in Tarmiji (2014) stated that the green-based school should fulfill the following requirements: (1) it should have an environment-oriented curriculum; (2) the design of the building, the material used and the maintenance of infrastructure should be based on the environmentally friendly principle; (3) it should apply the environment-oriented management; (4) its programs should be supported by the community around the school; and (5) its members should highly care about environment. The research met that the students support to the lecture if they applied of green learning in the future because the student released green learning more attractive than conventional learning.

Based on what was stated in point 2 above that the design of the school building, the material used and the maintenance of infrastructure should be based on the environmentally friendly principle, the learning source/material used in the Bartending subject should be made to be relevant to the latest trend. The bar laboratory, as a room where the students put what they learn into practice, should be constructed in such a way that it refers to the environmentally friendly principle, causing it to be green-based. The learning process in the bar laboratory is a contextual learning process in which the real learning object is made to be real. Apart from that, the green-based learning can also give a positive nuisance to the learners through which they can change their learning paradigm from the textual learning into the contextual learning. Learning cannot only be done in the classroom but it can also be done using the laboratory work-based learning observational approach. This approach motivates the learners to appreciate the method and scientific attitude more comprehensively. The difference is the research especially discussed about green learning with the subject of green bartending learning, no one has researched about this topic.

The green-based learning, as far as the learning development method is concerned, teaches the learners why environment is essential. It is a concept which has been inspired by the stagnancy in the development of the positive attitude towards environment in which the learners tend to use material and equipment more than what is actually needed, causing them to be less aware of maintaining environment. In this case, environment refers to the bar laboratory with its real facilities. In the laboratory the students will be made to apply the green-based learning process in which the electronic media are used, as they are already prepared there. In this way, the students will not use books/paper excessively; therefore, the use of paper/board marker can be reduced. This way of learning will directly apply what to do to

maintain and love environment, and reduce the negative impact resulting from the excessive paper rubbish which contributes to the environmental degradation.

To design the green-based learning, the teaching staff members should have a wide insight into the relatedness of the green concept in the learning process; they should be highly creative; they should have good learning methodology and skill; they should have high self-confidence, and they should be brave enough to package and develop the learning material. If well designed, the green-based bartending learning will become an effective and more meaningful learning experience to the students. The reason is that they can apply the electronic media as the learning media, allowing them not to use paper/books and board marker excessively.

RESEARCH METHOD

This current study used the experimental research approach (Jihad and Haris, 2009), where there were two groups of learners with different treatments; they were the Experiment Group (E) and the Control Group (C). The green-based Bartending learning was applied in group E, and the conventional learning was applied in group C. The population of the study included the students of the fourth semester of the academic year 2017/2018 of the Hospitality Study Program. The samples were randomly chosen from four classes of the Hospitality Study Program; they were from class IVA, class IVB, class IVC, and class IVD. After they were drawn, two classes turned out to be the samples of the study; they were class IVB and class IVD, meaning that the number of the students used as the samples could be determined in accordance with the number of the students in each class. Before the samples of the study were determined, the groupings in which what group of students would be used as the experiment group and what group of students would be used as the control group were determined. One group was treated with the green-based Bartending learning and the other group was treated with the conventional learning in which they used textbooks/handouts. They were grouped using the random sampling technique. The result was that class IV D became the experiment group and class IVB became the control group. To make the condition of the experiment group similar to that of the control group, each group was classified based on three categories made based on the scores obtained in the pretest; they were good, fair, and poor. The students who were under the good category were those whose scores were ≥ 81, the students who were under the fair category were those whose scores ranged from 66 to 80, and the students who were under the poor category were those whose scores were \leq 65.

Based on the scores obtained by class IVD through the pretest, as the experiment group, the students under the good category totaled 10, those under the fair category totaled 12, and

those under the poor category totaled 6; added together, they totaled 28. Based on the scores obtained by class IVB, as the control group, the students under the good category totaled 10, those under the fair category totaled 12, and those under the poor category totaled 6; added together, they totaled 28. To make the condition of the two groups of samples similar, each group was categorized into three; they are the good category, the fair category and the poor category with the same composition. Therefore, the samples of the study included 10 students from the experiment group who were under the good category, and 10 students from the control group who were under the good category; 12 students from the experiment group who were under the fair category and another 12 students from the control group who were under the fair category; 6 students from the experiment group who were under the poor category and another 6 students from the control group who were under the poor category, meaning that among 57 students who were used as the population of the study, 56 were used as the samples, as can be clearly seen in Table 1 below.

Table 1. Composition of The Research Population and Samples

	Popu	lation	Sample		
Category	Experiment	Control	Experiment	Control	
Good	10	10	10	10	
Fair	12	12	12	12	
Poor	6	6	6	6	
Total	28	28	28	28	

Source: The Number of Students of the Hospitality Study Program, 2018

In the current study, the technique of inferential statistical analysis was applied, which, in this case, the t test. This test was used to show whether the result obtained by the group of students in which the green-based Bartending learning applied was different from that obtained by the groups of students in which the green-based Bartending learning was not applied. After that, whether the average score obtained by the group of students, in which the green-based learning was applied (the experiment group) was better or worse than that obtained by the group of students in which the green-based learning was not applied (the control group).

RESULTS AND DISCUSSION

The Hospitality Study Program of Politeknik Negeri Bali, is the study program which runs vocational education. In the learning process the practical activities are more dominant than the theoretical activities in order to be able to achieve the learning achievement determined. The objective of the vocational education is being able to prepare the human resources that are able to apply their expertise and skill in the industry of tourism. In the future the learning

process technology plays an important role in improving the students' competence which is expected to be achieved. As stated by Oka and Sumawidari (2011) and Oka and Winia (2013) that the existence of the multimedia-based learning plays a highly important role in improving the students' competence which is expected to be achieved. Oka, et al. (2017) also stated that the students' competence which is expected to be achieved can be effectively and efficiently achieved through the application of the integrated learning model in which the related teaching members are involved. In this way, the learning process can be directed in such a way that the graduates will be able to do what is specifically supposed to do, causing them to be directly employed in the industry of tourism as required.

What has been observed so far by the researcher shows that the learning process in the Study Program of Hospitality, the Politeknik Negeri Bali, has not fully applied the green-based learning, as it still uses text books, although the use of e-books has been recommended. However, the Department of Tourism has instructed all the teaching staff to seek after a new breakthrough in order to keep being competitive to anticipate the competition which is getting tighter. The teaching staff members are required to apply the green-based learning process using all the resources they have to improve the students' competence expected to be achieved. Now the students of the Study Program of Hospitality of the Politeknik Negeri Bali are more proud as they can access the material related to the topic discussed in every meeting. In addition, the students tend to save the material they acquire on their mobile phones, allowing them to be able to learn the learning material they need every time they have time, and causing them to be getting updated when they access the material taught.

The data, which were in the form of the scores achieved by the students used as the subjects of the study were used to see how effective the application of the Bartending-based learning process at the Hospitality Study Program was. The data used in the current study were the scores showing how competent the students, as the prospective professional bartenders, were in blending cocktail and presenting it to the guests who would like to enjoy the beverage at the bar. The data were taken from two groups of the students of the Hospitality Study Program of the Politeknik Negeri Bali who were in the fourth semester in the academic year 2017/2018. The samples totaled 56 and were divided into two groups; the experiment group and the control group, each consisted of 28 students. The experiment group was treated with the green-based bartending learning but the control group was not, as displayed in Figure. 1 below.

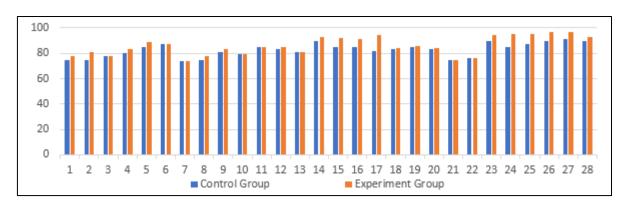


Figure 1. The Posted Result Obtained

The scores obtained by the students used in the current study were processed using SPSS and the technique of t test analysis with paired sample test. The t test with paired samples was used to evaluate whether the average score obtained by one group was statistically different from that obtained by the other group. The result showed that the green-based bartending learning really contributed to the competence of the students in blending cocktail and serving it at the bar As can be seen that what was achieved by the experiment group was better than what was achieved by the control group, indicating that the experiment group's achievement was significantly different from the control group's achievement, as displayed in Table 2. The Result of Data Processing from which the t Score was Obtained Using SPSS.

Table 2. Paired Samples Test

		Paired Differences							
М		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		т	df	Sig. (2- tailed)
				Mean	Lower	Upper			
Pair 1	x1 - x2	-3.28571	3.33175	.62964	-4.57763	-1.99380	-5.218	27	.000

Source: The Result of Data Processing, 2018

The population of the study included the students of the fourth semester of the Hospitality Study Program. The samples were randomly chosen from four classes of the Study Program of Hospitality (IVA, IVB, IVC, and IVD). After they were drawn, two classes turned out to be the samples of the study; they were class IVB and class IVD, meaning that the number of the students used as the samples could be determined in accordance with the number of the students in each class. Before the samples of the study were determined, the groupings in which what group of students would be used as the experiment group and what group of students would be used as the control group were determined. One group was treated with the green-based Bartending learning and the other group was treated with the conventional learning in which they used textbooks/handouts. The data were taken from two

groups of the students of the Hospitality Study Program of the Politeknik Negeri Bali who were in the fourth semester. The samples totaled 56 and were divided into two groups; the experiment group and the control group, each consisted of 28 students. The experiment group was treated with the green-based bartending learning but the control group was not. The data score shown at Graph 1 above, after than analyzed by statistic paired sample test (SPSS 17.0).

Based on the result of the data processing displayed above, it was revealed that the application of the green-based Bartending learning significantly contributed to the competence achieved by the students of the Hospitality Study Program of the Bali State Polytechnic, causing them to be getting more competitive in the job market. The result of analysis showed that the competence achieved by the group of the students who were treated with the green-based bartending learning was significantly different from that achieved by the group of the students to whom the green-based learning was not applied. Therefore, it can be stated that the green-based Bartending learning could more effectively improve the competence achieved by the students of the Hospitality Study Program of the Politeknik Negeri Bali.

The research conducted by Arjana, et al. (2012) showed that the integrated practical learning could affectively improve the competence achieved by the students in the flight ticket reservation, as the concept was learned through direct and real experiences. In this way, the students could understand the concept completely. Ardika (2012) stated that it is necessary for the teaching staff to apply pragmatics in the speaking skill as the students will generally feel happy that the learning process taking place in the classroom can be affectively undertaken. The application of the integrated learning is intended to improve the creativity of the students and motivate them to learn. This can be seen during the learning process. The students will get more motivated, feel more intimate and brave to present their opinions when answering the questions raised as the teaching staff always involves the students in preparing the learning media, causing the learning process to become active, creative, effective and pleasant. Similarly, Coll, et al. (2002) stated that the learning activity could be done through process of actively controlling the work place, causing the students to have more selfconfidence through the assignments and motivations given by the teaching staff, and to evaluate themselves; as a result, the expected competence can be acquired. Kanah, et.al (2019) showed that the three factors are attitude, knowledge, and skill had a significant influence to the achievement of the students' competency. The most dominant factor determining student competence is skill factor, followed by knowledge factor, and then an attitude factor. Thus, it is suggested to the management to emphasize the attitude factor in providing education and training at the campus in order to win an increasingly competitive competition.

Apart from that, Oka, et al. (2017) claimed that the application of the integrated practical learning significantly contributed to the competence achieved by the students of the Study Program of Hospitality in the food and beverage services, as indicated by the result of the statistical test showing that the competence achieved by the group of the students treated with the integrated practical-based learning was significantly better than that achieved by the group of the students treated with the partial practical learning. It is suggested to the management of the Study Program of Hospitality of the Bali State Polytechnic that it should motivate and facilitate the teaching staff, especially the teaching staff responsible for the core subjects that they should apply the integrated practical learning to make the students more easily achieve the competence in the material taught to them.

The active learning makes the learners concentrate, do their best to improve achievement, and acquire new knowledge. Media can be used to transmit message from the sender to the receiver. If the media transmit instructional messages or contain teaching objectives, then the media can be referred to as the learning media. Sanjaya (2008) claimed that the choice of media in the learning and teaching process needs to consider the following principles: (1) the objective which is intended to be achieved; (2) based on the clear concept; (3) the learners' characteristics; (4) the learning style of the learners and teachers; and (5) being adjusted to the environmental condition, the facilities and time available for the learning need.

Therefore, it is suggested in the future that the teaching staff should be able to choose and apply the learning model which is in accordance with the learners' characteristics. Now a lecturer functions as a provider of information, facilitator, supervisor, challenger, speaker and an organizer. The application of the green-based integrated learning model can give wide opportunities to the students to excavate and discuss through more open activities. In this way, the negative effect on environment can be reduced. The students' active participation in all the learning stages, starting from designing, implementing, reflecting and evaluating the learning material can help them acquire knowledge more effectively.

CONCLUSIONS

Based on the result of analysis above, it can be concluded that the application of the green-based Bartending learning could highly effectively improve the competence of the Hospitality Study Program of the Politeknik Negeri Bali in bartending, as proved by the result of the statistical test showing that the competence achieved by the students treated with the green-based Bartending learning was significantly different from that achieved by the students treated with the conventional Bartending learning in which textbooks/handouts were used. It

is suggested that the management of the Hospitality Study Program should motivate and facilitate the teaching staff to apply the green-based learning so that the students can improve their competence and reduce the negative impact on environment.

ACKNOWLEDGEMENT

I am thankful to respondents to for providing me information and kind support throughout the research work. I am also thankful to the God.

REFERENCES

- Anonim, (2018). *Administrasi Akademik.* Program Studi Perhotelan Jurusan Pariwisata Politeknik Negeri Bali.
- Ardika, I. W. Dana. (2012). Penerapan Pragmatik dalam Pembelajaran Bahasa Inggris. *Jurnal Soshum*, *2*(1), 72-81.
- Arjana, I. W. Basi, Nadra M., & Ernawati, N. M. (2012). Pembelajaran Praktek Terpadu Untuk Meningkatkan Kompetensi Penerbangan bagi Mahasiswa Program Studi Usaha Perjalanan Wisata Politeknik Negeri Bali. *Jurnal Soshum*, *2*(1), 13-27.
- Arsyard. (2005). Media Pembelajaran. PT Raja Grafindo Persada.
- BKSP (Badan Koordinasi Sertifikasi Profesi). (2011). *Percepatan dan Pengembangan Kompetensi SDM Indonesia*. Kadin Jawa Tengah-DIHK Jerman.
- Coll, R.K., Lay, M., & Zegwaard, K. E. (2002). Enhancing acces to experiental learning in a science and technology degree program. *Journal of Vacational Education Training*, *54*(2) 197-217.
- Earlike, F.A.S., & Atalina, T. M. M. (2016). Pentingnya Peranan Skill dan Menu Knowledge Waiter/Waiters terhadap Kepuasan Pelanggan di Food snd Beverage Service Departement (Studi Kasus di Casa Del Rio Melaka Malaysia). *PESONA*, *18*(1), 1-11.
- Jihad, A., & Haris, A. (2009). Evaluasi Pembelajaran. MultiPressindo.
- Kanah, K., Sumawidari, I. A. K., & Oka, I. M. D. (2019). Analisis Kompetensi Mahasiswa Program Studi Perhotelan. *Epigram*, *16*(1).
- Muluk, M.R.K., Ulum, M. C., & Widodo N. (2016). Graduate Employability pada Lulusan Program Studi Administrasi Publik Fakultas Ilmu Administrasi Universitas Brawijaya Tahun 2015. *Jurnal Ilmiah Administrasi Publik*, *2*(3), 88-99.
- Oka, I. M. D., Darma, I. N. W., & Oka, I. M. (2013). Pengembangan Modul Pembelajaran Tata Hidangan Berbasis Multimedia untuk Meningkatkan Kompetensi Mahasiswa Program Studi Perhotelan Politeknik Negeri Bali (Persepsi Mahasiswa Terhadap Modul Tata Hidangan). *Jurnal Teknodik*, *15*(2), 133-144.
- Oka, I. M. D., Sadia, I. K., & Pugra, I. W. (2017). Integrated Practice Learning Model to Improve Waiter/S'competency on Hospitality Study Program, Politeknik Negeri Bali. *International Journal of Applied Sciences in Tourism and Events*, 1(2), 171.
- Oka, I M. D., & I. A. K. Sumawidari. (2011). Eksistensi Multimedia dalam Pembelajaran Materi Tata Hidangan pada Program Studi Perhotelan PNB. *Analisis Pariwisata*, *11*(1), 49-55.

- Rais, S., & Ambiyar. (2019). Pengaruh Kualitas Pelayanan Bartender terhadap Kepuasan Pelanggan di D'nest Bar & Grill Crown Vista Hotel Batam. *Journal of Accounting & Management Innovation*, *3*(1), 44-58.
- Sanjaya, W. (2008). Perencanaan dan Desain Sistem Pembelajaran. Prenada Media Group.
- Tarmiji, A. (2014). *Menuju Green School: Penerapan Kurikulum Pembelajaran Berwawasan Lingkungan di Institusi.* Pascasarjana IPB oleh PS S3 Sosiologi Pedesaan IPB dan Forum Ekologi, Kebudayaan, dan Pembangunan, Departemen SKPM FEMA IPB, Kampus IPB Dramaga.