

## The Impact of Active Learning Strategies on Hospitality Students' Skills

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### ARTICLE INFO Abstract

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Hospitality industry is facing a big challenge regarding fulfillment of guests' needs and exceed their expectations, Hospitality higher education mainly take the responsibility for providing the industry with graduates whom have been well prepared through the modern education and learning strategies to fulfill the industry requirements. The aim of this research is to measure the impact of using Active Learning strategies in developing the practical food and beverage skills of hospitality higher education students. The research adopted a quantitative approach and used a notice skill card technique to collect pretest-posttest data on the experimental students' sample before and after applying the Active Learning strategies. Study sample represented at all the 92 students of the second year of hospitality department at the faculty of tourism and hotels Suez Canal University and the High Institute for Tourism and Hotels- EGOTH, Ismailia, the academic year 2017/2018. The findings of this study revealed that Active Learning strategies once applied at the learning process of F&B practical courses for the hospitality higher education students it has positively affected at increasing the F&B practical skills according to posttest mean compared to pretest mean of students' scores collected by the notice skill card and analyzed by using paired sample T-Test technique. It is revealed also that the effect size of using these Active Learning strategies was Large according to Eta-squared value ( $\eta^2$ ). It is recommended that hospitality higher education institutions need to adopt more implementation of Active Learning strategies and techniques within the practical F&B courses.

### 1. Introduction

Lo (2005) cited that to achieve more competitiveness, hospitality education should be designed to fulfill the needs of the industry professional skills required. In case of neglecting hospitality and tourism industry needs while designing curriculum, therefore hospitality and tourism education will not be sustainable and eventually will not be beneficial at the development of the hospitality and tourism industry. (Pearce, 2005) added that recently, an extensive trend has been to pay attention not just to the content of hospitality and tourism degrees, but to the qualities of graduates in terms of practical skills and abilities, which are referred to as basic skills and graduate attributes.

### 2. Literature Review

Mwasalwiba (2010) argued by Tasnim (2012) and Ahmad *et al.*, (2018) reported that most authors' divides teaching methods into two main groups; Traditional methods, and Innovative methods. First group is traditional methods it includes normal lectures, business plan, seminars, reading, project works. It is also known as "passive methods" also known as TCL,

teacher-centered learning. Traditional method approach to teaching and learning involves the directed flow of information from instructor as sage to student as receiver. Second group is Innovative methods these methods are more action-based pedagogy. It is also known as “active methods” or student-centered learning SCL. Innovative teaching and learning methods aim to improve students' creativity and analytical thinking.

## **2.1. Traditional Education and Active Learning**

### **2.1.1. Traditional Education**

Bligh (2000) and Eison (2010) agreed that, For keeping students' attention, the traditional lecture style in generally is ineffective instructional strategy. (Davis, 1993; Svinicki & Mesachie, 2011; Lambert, 2012; Lom, 2012; Millis, 2012) argue that lecturing method still the leading instructional method used in higher education all over the world as many academic instructors trust it as the most adequate and proper method to deliver content to learners. It is argued by (Komarraju and Karau, 2008) that simply trying to pass knowledge on through lectures is less effective compared with engaging students in the process of learning.

### **2.1.2. Active Learning**

Bonwell *et al.*, (1991) and Millis (2012) define Active Learning as “instructional activities involving students in doing things and thinking about what they are doing.” (Denicolo *et al.*, 1992) define Active Learning as “a search for personal and academic meaning”, same author also agree that it is a further stage after information absorption, it is having a deeper understanding of main concepts and accordingly learners will be able to express them creatively and in different ways.

Weltman (2007) stated that, there is no single, definitive definition of Active Learning, but a clarification of the term comes from Bonwell & Eison (1991) as he states that in Active Learning, students participate in the process and students participate when they practice some activity besides passively listening.

Providing learner-centered environments is an important matter faculty can do to improve student learning. Learner-centered environments are different because they require learners to shift from taking notes and passing tests to implement new learning roles and responsibilities (Doyle, 2008). Problem-based learning (PBL) as learning approach is often related to Active Learning as it is mainly considered as a different educational model that should replace the traditional methods that adopt delivery of content from the educator (Greening, 1998; Watters, 2014). PBL approach is formulated to help learners to link between what they have learned and how to implement it in real life and career situations. PBL may be a method in which Active Learning is applied as it provides equal concern to both of content and learning process (Watters, 2014). La Lopa *et al.*, (2018) revealed the reasons for using Active Learning rather than passive learning in hospitality high education clarifying the fact that passive learning was:

- It was not very exciting to students.
- It was inadequate as a teaching method.
- Dull for both learners and instructors
- It was hard to develop critical thinking.
- It did not engage students in the learning.
- Professors couldn't keep students engaged and focused.

## **2.2. Active Learning Characteristics**

Some studies like (Bonwell and Eison, 1991; Rogers and Freiberg, 1994; Prince, 2004; Berry, 2008; Waters, 2014) argued that Active Learning has some characteristics such as:

- New skills learning and developing.

- Student responsibility for learning.
- Critical thinking.
- Practicing activities, projects, and discussions.
- Peers practice the collaboration.
- Learner engagement in the learning process.

### **2.3. Active Learning Strategies**

The term "Active Learning Strategies" (ALS) refers to a group of activities that all have as a key element getting students to participate in what they are doing and think about what they are doing. (Bonwell & Eison, 1991; Eison, 2010). Active Learning Strategies are mainly prepared and used to engage learners in the following:

- Creatively thinking.
- Communicate one peer, or with the entire class peers.
- Feedback in a two way with peers.
- Thoughts writing, and expressing ideas.
- Reconnaissance personal values and attitudes.
- Discovering values and attitudes.

Examples on Active Learning strategies showed in many literatures, in this research the strategies that have been employed at hospitality higher education especially at practical F&B courses were Brain Storming Strategy; Cooperative Learning Strategy; K.W.L. Strategy; SPTS Student Peer Teaching Strategy; Think-Pair-Share Strategy.

Active Learning techniques are appropriate to all disciplines, particularly hospitality education, which involves more hands-on experience. Thus, require recognition of practical skills development theory, and industrial requirements and practices (Barron 2008; Chau and Cheung, 2017).

### **2.4. Active Learning Role at Hospitality Skills Developing**

Baum and Nickson (1998) stated that a practical natured education should develop the skills to hospitality and tourism learners to fit employment. (Lolli, 2013) revealed a scarcity in preparing hospitality employees and leaders through bachelor level educational courses. (Trahan, 2009) stated that the main reason for graduating professionals with a lack of creativity and critical thinking is neglecting of Active Learning techniques. (Elsayed *et al.*, 2011) cited that hospitality students have highlighted Active Learning as giving them more career support compared with traditional lecture-style learning. In the competitive career field graduates must to be prepared by having advanced professional skills such as critical and creative thinking, communication, leadership and inter-cultural competence. Hence, these skills must be gained through higher education. Learners should to experience the creative learning tasks that help them to construct new knowledge (Stefani, 2009). Newman (2012) cited that good learning should be transformative in that it will change the learner way of thinking. (Wolfe, 2006) stated that Active Learning can also be clarified as students learning through practicing. Hospitality industry growth with no doubt will bring an increasing demand for professional human resources. Hospitality professional skills and behaviors that required for hospitality industry manpower can be achieved through hospitality education for the new generations (Holjevac, 2003; Chau and Cheung, 2017).

### **2.5. Food and Beverage Practical Courses in Hospitality Education**

Food and beverages production and serving are fundamental processes of hospitality industry operations and have particular interest from its management. Handling F&B raw materials and capability of services are most crucial elements of teaching F&B operations. It means that F&B management seems as an essential dimension of the curriculum in most hospitality

education programs (Cousins, *et al.*, 2002). Teaching F&B has been reported as an important element within hospitality management education programs. Courses have been reported important for career success includes F&B management, restaurant management, room service, menu preparation & planning, beverage management, convention, and banquet management were confirmed as very important courses for success of F&B operations within hospitality career (Agwa, *et al.*, 2017).

Hospitality education provides professional graduates for hospitality industry business career. The worthiness required within the hospitality industry is exceptional; hence, there is more demand for modern methods such as practical learning that actively involves the student in developing professional skills and abilities. Accordingly, techniques of active learning have acquired more popularity within the hospitality education field. (Tedesco-Schneck, 2013; La Lopa *et al.*, 2018).

### **2.5.1. Art of Cooking Practical Courses**

The aim of cooking arts program is to generate proficiencies in food cost controlling, F&B menu planning, developing hospitality operational leaders, and producing healthy safe food. That's According to (SOC code 35-1011) the Standard Occupational Classification (Cheng, *et al.*, 2011). Cooking tasks requires learners to have sound practical skills from culinary career field (Harun, *et al.*, 2018). The internship is the essential element in the every firm to build the precise ability and capability depend on the basic practical skills and psychomotor knowledge that learners gained from the syllabus (Harun, *et al.*, 2018). In hospitality industry careers culinary art skilled graduates are more required. Thus, more higher education institutions offer the F&B practical skills related programs. Students who desire to work as chefs in both domestic and foreign contexts will find a strong foundation in the curricula for culinary arts courses. The students receive training in the principles of cooking as well as details about the cognitive and psychomotor domain. High education sought to develop graduates with a strong foundation in theory and practical expertise. (Harun, *et al.*, 2018).

### **2.5.2. Art of Service Practical Courses**

Metwaly (2010) stated that F&B service practical courses at the hospitality higher education in Egypt provided numerous styles of food and beverages service and service standards required of professional F&B personnel. Taking order, welcoming the guests and dining room preparation were practically studied. Students gain experience through practice within a simulated service environment. After successful completion of art of service practical courses learners should be able to perform the follow:

- Perform and differentiate between the table service styles such as Russian, American and English style.
- Perform the service sequence starting from preparing the dining area till collecting payment in a simulated service environment:
  1. Set up dining halls for service.
  2. Set up buffet.
  3. Set up tables.
  4. Welcoming Guests.
  5. Taking orders.
  6. Serving and clearing food and beverages.
  7. Perform close down procedures of dining areas.
  8. Present bill to the guest.
  9. Serve vary types of beverage.
  10. Perform reservation taking actions.
  11. Implement a series of cloth napkin folds.
  12. Usage of standard restaurant equipment.

13. Recognize and explain the features of various F&B items and equipment.
14. Prepare the restaurant for a variety of dining occasions.

### 3. Methodology

#### 3.1. Data Collection Methods

The research adopted the quantitative approach using a Notice Skill Card form for a sample of 92 students. This sample represent all the students of the 02<sup>nd</sup> year of hospitality education in the Faculty of tourism and hotels Suez Canal University and High Institute for Tourism and Hotels- EGOH, Ismailia in the academic year 2017/2018 as experimental sample. The designed Notice Skill Card has been formulated to collect data about students' practical skills. It helped at collecting pretest-posttest data regarding students' scores before and after using Active Learning strategies. Paired Sample T-Test technique has been used within the SPSS software to analyze the data to be used at the results of the research.

#### 3.2. Research Hypothesis

- H1:  $\mu_1 \neq \mu_2$ , there is statistically significant difference between the mean of pretest and posttest students' scores of the Art of Cooking (1) practical course because of the effect of using Active Learning Strategies.
- H2:  $\mu_1 \neq \mu_2$ , there is statistically significant difference between the mean of pretest and posttest students' scores of the Art of Cooking (2) practical course because of the effect of using Active Learning Strategies.
- H3:  $\mu_1 \neq \mu_2$ , there is statistically significant difference between the mean of pretest and posttest students' scores of the Art of Service (1) practical course because of the effect of using Active Learning Strategies.
- H4:  $\mu_1 \neq \mu_2$ , there is statistically significant difference between the mean of pretest and posttest students' scores of the Art of Service (2) practical course because of the effect of using Active Learning Strategies.

### 4. Results and Discussion

Obtained pretest-posttest data about every one of the four F&B practical courses of the study sample has been analyzed according to the "One Group Paired Sample T-Test" in order to help at verification of research hypothesis. Before implementing the paired sample T-Test researcher should explore data for detecting any Missing or Outliers data, asses Normality distribution, Then to run the T-Test, and finally to detect the effect size.

Table (1) Missing cases, Outliers, and Normality distribution

Data Type	Valid Cases		Missing Cases		Outliers	Normality
	N	%	N	%		
Pretest Art of Cooking(1)	92	100 %	0	0 %	No Outliers	Approximately normally distributed, Q-Q plot
Posttest Art of Cooking(1)	92	100 %	0	0 %	No Outliers	
Difference between posttest-pretest Art of Cooking(1)						
Pretest Art of Cooking(2)	92	100 %	0	0 %	No Outliers	Approximately normally distributed, Q-Q plot
Posttest Art of Cooking(2)	92	100 %	0	0 %	No Outliers	
Difference between posttest-pretest Art of Cooking(2)						
Pretest Art of Service (1)	92	100 %	0	0 %	No Outliers	Approximately normally distributed, Q-Q plot
Posttest Art of Service (1)	92	100 %	0	0 %	No Outliers	
Difference between posttest-pretest Art of Service (1)						
Pretest Art of Service (2)	92	100 %	0	0 %	No Outliers	Approximately normally distributed, Q-Q plot
Posttest Art of Service (2)	92	100 %	0	0 %	No Outliers	
Difference posttest-pretest Art of Service (2)						

#### 4.1. Pretest-Posttest data analysis of practical course Art of Cooking (1)

From the tabulated data in Table (1), data about practical course Art of Cooking (1) clearly proved that there is no Missing data, no Outliers data, and data of difference score data was approximately normally distributed according to visually inspection of Normal Q-Q plot shown in figure (1).

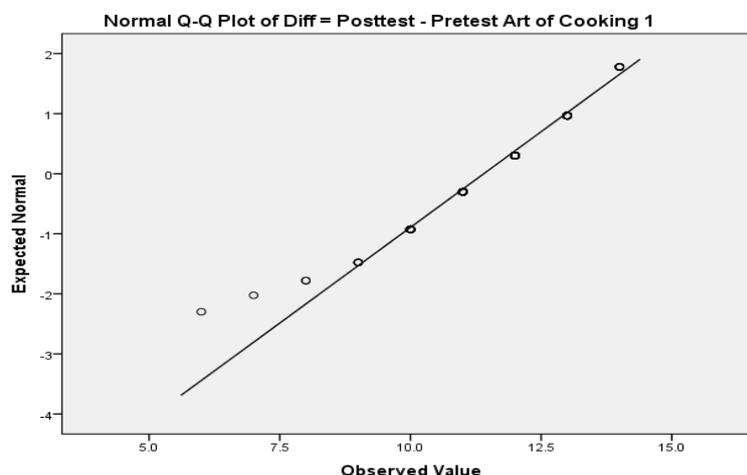


Figure (1) Normal Q-Q Plot for Art of Cooking (1) practical course

##### 4.1.1. Paired sample T-Test analysis for Art of Cooking (1) Practical course

After verified the complete data and normality distribution, paired sample *t*-Test has been implemented for verifying the study hypothesis (1) stated that:

- H<sub>0</sub>:  $\mu_1 = \mu_2$ , there is no statistically significant difference between the mean of pretest and posttest scores of the Art of Cooking (1) practical course after providing Active Learning strategies.
- H<sub>1</sub>:  $\mu_1 \neq \mu_2$ , there is statistically significant difference between the mean of pretest and posttest scores of the Art of Cooking (1) practical course because of the effect of using Active Learning Strategies.

Table (2) Paired sample *t*-Test analysis of Art of Cooking (1) practical course

	Mean	N	S.D	<i>t</i>	<i>df</i>	Sig.(2-tailed)
Posttest Art of Cooking (1)	14.98	92	1.967	69.689	91	.000
Pretest Art of Cooking (1)	3.58	92	1.092			

For testing the hypothesis that the mean of pretest scores ( $M = 3.58$ ,  $SD = 1.09$ ) and mean of posttest scores ( $M = 14.98$ ,  $SD = 1.97$ ) were equal, a dependent sample *t*-test was implemented. From the above tabulated data table (2) it can be concluded that there is a statistically significant difference between the mean of students' scores of the practical Art of Cooking course (1) pretest, and mean of posttest, the posttest mean (14.98) was statistically significantly higher than the pretest mean (3.58). The null hypothesis H<sub>0</sub> of equal means was rejected,  $t(91) = 69.69$ ,  $P < .05$  hence, the alternate hypothesis H<sub>1</sub> has been accepted. The study results concluded that, the use of Active Learning strategies was effective at increasing the practical food and beverages skills at the hospitality higher education students through practical course Art of Cooking (1).

##### 4.1.2. Effect of size

To detect the size effect, the study has applied two different methods, it is concluded that the effect of size according to the levels shown at the table (3) as follow:

Table (3) Effect size description for Cohen’s *d*, and Eta squared  $\eta^2$

Description of Effect Size	<i>d</i>	$\eta^2$
Trivial	-	$\eta^2 < .01$
Small	$d < 0.2$	$.01 < \eta^2 < .09$
Medium	$0.2 < d < 0.8$	$.10 < \eta^2 < .25$
Large	$d > 0.8$	$\eta^2 > .25$

Source: (Privitera, 2017)

- Eta-squared ( $\eta^2$ ):
- Eta-squared,  $\eta^2 = \frac{t^2}{t^2+df} = (0.98)$ , (i.e.  $\eta^2 > 0.25$ ) then, as result of Eta-squared, confirm that the effect of size of Active Learning strategies is large.
- Cohen’s *d*:  
 $d = \frac{M-\mu}{SD} = \frac{14.98-3.58}{1.569} = (7.27)$ , (i.e.  $d > 0.8$ ). Then the result of Cohen’s *d* reconfirm that the effect size is large.

**4.2. Pretest-Posttest data analysis of practical course Art of Cooking (2)**

From the tabulated data in Table (1), data about practical course Art of Cooking (2) clearly proved that there is no Missing data, no Outliers data, and data of difference score data was approximately normally distributed according to visually inspection of Normal Q-Q plot shown in figure (2)

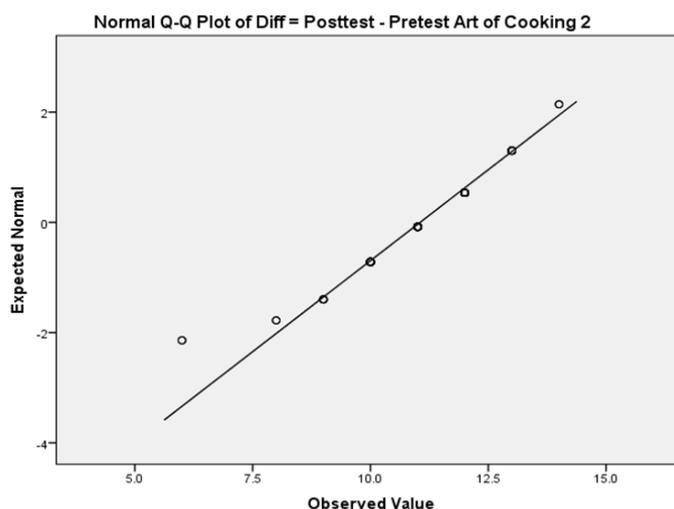


Figure (2) Normal Q-Q Plot for Art of Cooking (2) practical course

**4.2.1. Paired sample T-Test analysis for Art of Cooking (2) Practical course**

After verified the complete data and normality distribution, paired sample *t*-Test has been implemented for verifying the study hypothesis (2) stated that:

- H0:  $\mu_1 = \mu_2$ , there is no statistically significant difference between the mean of pretest and posttest scores of the Art of Cooking (2) practical course after providing Active Learning strategies.
- H1:  $\mu_1 \neq \mu_2$ , there is statistically significant difference between the mean of pretest and posttest scores of the Art of Cooking (2) practical course because of the effect of using Active Learning Strategies.

Table (4) Paired sample *t*-Test analysis of Art of Cooking (2) practical course

	Mean	N	S.D	<i>t</i>	<i>df</i>	Sig.(2-tailed)
Posttest Art of Cooking (2)	15.47	92	1.788	70.01	91	.000
Pretest Art of Cooking (2)	4.41	92	.841			

For testing the hypothesis that mean of pretest scores ( $M = 4.41$ ,  $SD = .841$ ) and mean of posttest scores ( $M = 15.47$ ,  $SD 1.788$ ), a dependent sample  $t$ -test was implemented. From the above tabulated data table (2) it can be concluded that there is a statistically significant difference between the mean of students' scores of the practical Art of Cooking course (2) pretest, and mean of posttest, the posttest mean (15.47) was statistically significantly higher than the pretest mean (4.41). The null hypothesis  $H_0$  of equal means was rejected,  $t(91) = 70.01$ ,  $P < .05$  hence, the alternate hypothesis  $H_1$  has been accepted. The study results concluded that, the use of Active Learning strategies was effective for increasing the practical food and beverages skills at the hospitality higher education students through practical course Art of Cooking (2).

#### 4.2.2. Effect of size

To detect the size of effect, the study has applied two different methods, it is concluded that the effect of size according to the levels shown at the table (3) as follow:

- Eta-squared ( $\eta^2$ ):  $t$  value of the practical Art of Cooking (2) course = (70.010), and degree of freedom ( $df = N-1$ ) = (91).
- Eta-squared,  $\eta^2 = \frac{t^2}{t^2+df} = (0.98)$ , (i.e.  $\eta^2 > 0.25$ ) then, as result of Eta-squared, the effect size of Active Learning strategies is large.
- Cohen's  $d$ :  $d = \frac{M-\mu}{SD} = \frac{15.47-4.41}{1.515} = (7.30)$ , (i.e.  $d > 0.8$ ). Then the result of Cohen's  $d$  reconfirm that the effect of size is large.

#### 4.3. Pretest-Posttest data analysis of practical course Art of Service (1)

From the tabulated data in Table (1), data about practical course Art of Service (1) clearly proved that there is no Missing data, no Outliers data.

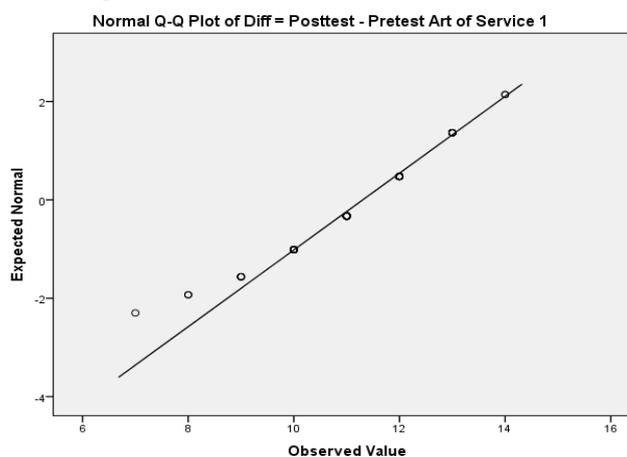


Figure (3) Normal Q-Q Plot for Art of Service (1) practical course

Data of difference score was approximately normally distributed according to visually inspection of Normal Q-Q plot shown in figure (3).

#### 4.3.1. Paired sample T-Test analysis for Art of Service (1) Practical course

After verified the complete data and normality distribution, paired sample  $t$ -Test has been implemented for verifying the study hypothesis (3) stated that:

- $H_0: \mu_1 = \mu_2$ , there is no statistically significant difference between the mean of pretest and posttest scores of the Art of Service (1) practical course after providing Active Learning strategies.
- $H_1: \mu_1 \neq \mu_2$ , there is statistically significant difference between the mean of pretest and posttest scores of the Art of Service (1) practical course because of the effect of using Active Learning Strategies.

Table (5) Paired sample *t*-Test analysis of Art of Service (1) practical course

	Mean	N	S.D	<i>t</i>	<i>df</i>	Sig.(2-tailed)
Posttest Art of Service (1)	15.16	92	1.666	84.60	91	.000
Pretest Art of Service (1)	3.86	92	.933			

For testing the hypothesis that mean of pretest scores ( $M = 3.86$ ,  $SD = .933$ ) and mean of posttest scores ( $M = 15.16$ ,  $SD 1.1666$ ), a dependent sample *t*-test was implemented. From the above tabulated data table (5) it can be concluded that there is a statistically significant difference between the mean of students' scores of the practical Art of Service course (1) pretest, and mean of posttest, the posttest mean (15.16) was statistically significantly higher than the pretest mean (3.86). The null hypothesis  $H_0$  of equal means was rejected,  $t(91) = 84.60$ ,  $P < .05$  hence, the alternate hypothesis  $H_1$  has been retained. The study results concluded that, the use of Active Learning strategies was effective at increasing the practical food and beverages skills at the hospitality higher education students through practical course Art of Service (1).

#### 4.3.2 Effect of size

Effect of size according to the levels shown at the table (3) can be as follow:

- Eta-squared ( $\eta^2$ ): *t* value of the Art of Service (1) practical course = (84.60), and degree of freedom ( $df = N-1$ ) = (91).
- Eta-squared,  $\eta^2 = \frac{t^2}{t^2+df} = (0.99)$ , (i.e.  $\eta^2 > 0.25$ ) then, as result of Eta-squared, the effect size of Active Learning strategies is large.
- Cohen's *d*:  $d = \frac{M-\mu}{SD} = \frac{15.16-3.86}{1.282} = (8.82)$ , (i.e.  $d > 0.8$ ). Then the result of Cohen's *d* reconfirm that the effect of size is large.

#### 4.4. Pretest-Posttest data analysis of practical course Art of Service (2)

From the tabulated data in Table (1), data about practical course Art of Service (2) clearly proved that there is no Missing data, no Outliers data, and data of difference score data was approximately normally distributed according to visually inspection of Normal Q-Q plot shown in figure (4)

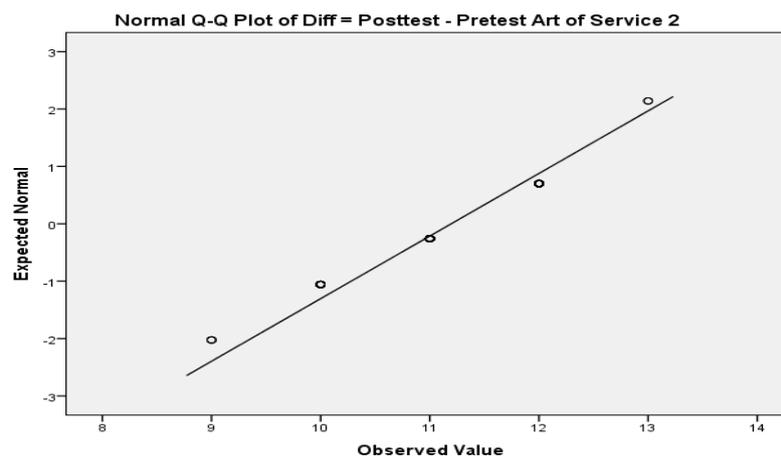


Figure (4) Normal Q-Q Plot for Art of Service (2) practical course

#### 4.4.1. Paired sample T-Test analysis for Art of Service (2) Practical course

After verified the complete data and normality distribution, paired sample *t*-Test has been implemented for verifying the study hypothesis (4) stated that:

- H0:  $\mu_1 = \mu_2$ , there is no statistically significant difference between the mean of pretest and posttest scores of the Art of Service (2) practical course after providing Active Learning strategies.
- H1:  $\mu_1 \neq \mu_2$ , there is statistically significant difference between the mean of pretest and posttest scores of the Art of Service (2) practical course because of the effect of using Active Learning Strategies.

Table (6) Paired sample *t*-Test analysis of Art of Service (2) practical course

	Mean	N	S.D	<i>t</i>	<i>df</i>	Sig.(2-tailed)
Posttest Art of Service (2)	15.96	92	1.429	117.14	91	.000
Pretest Art of Service (2)	4.76	92	.930			

For testing the hypothesis that mean of pretest scores ( $M = 4.76$ ,  $SD = .930$ ) and mean of posttest scores ( $M = 15.96$ ,  $SD 1.429$ ), a dependent sample *t*-test was implemented. From the above tabulated data table (6) it can be concluded that there is a statistically significant difference between the mean of students' scores of the practical Art of Service course (2) pretest, and mean of posttest, the posttest mean (15.96) was statistically significantly higher than the pretest mean (4.76). The null hypothesis H0 of equal means was rejected,  $t(91) = 117.137$ ,  $P < .05$  hence, the alternate hypothesis H1 has been retained. The study results concluded that, the use of Active Learning strategies was effective at increasing the practical food and beverages skills at the hospitality higher education students through practical course Art of Service (2).

#### 4.4.2. Effect of size

For detecting the effect of size, researcher has applied two different methods, it is concluded that the effect of size according to the levels shown at the table (3) as follow:

- Eta-squared ( $\eta^2$ ): *t* value of the Art of Service (2) practical course = (117.137), and degree of freedom ( $df = N-1$ ) = (91).
- Eta-squared,  $\eta^2 = \frac{t^2}{t^2 + df} = (0.99)$ , (i.e.  $\eta^2 > 0.25$ ) then, as result of Eta-squared, confirm that the effect of size of Active Learning strategies is large.
- Cohen's *d*:
- $d = \frac{M - \mu}{SD} = \frac{15.96 - 4.76}{.917} = (12.21)$ , (i.e.  $d > 0.8$ ). Then the result of Cohen's *d* reconfirm that the effect size is large.

#### Conclusion and Recommendations

From the findings of this study it can be concluded that there is statistically significant difference between the mean of pretest and posttest scores of the F&B practical courses Art of Cooking (1) and (2), and Art of Service (1) and (2) because of the use of Active Learning strategies as teaching and learning method. The posttest mean of the four courses respectively) were statistically significantly higher than the pretest mean. Active Learning strategies positively affected the practical F&B skills gained from studying the F&B practical courses. According the Eta-squared value ( $\eta^2 > 0.25$ ), and Cohen's *d* ( $d > 0.8$ ) then the effect size of using Active Learning strategies within the F&B practical courses was large size effect. This research recommended that hospitality higher education institutions need to adopt more implementation of Active Learning strategies and techniques within the practical courses for students of the hospitality higher education.

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## تأثير استراتيجيات التعلم النشط في مهارات طلاب الضيافة

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### المخلص

### معلومات المقالة

تواجه صناعة الضيافة تحديًا كبيرًا فيما يتعلق بتلبية احتياجات النزلاء وتجاوز توقعاتهم ، ويتحمل التعليم العالي في مجال الضيافة المسؤولية بشكل أساسي بخصوص تزويد الصناعة بالخريجين الذين تم إعدادهم جيدًا من خلال استراتيجيات التعليم والتعلم الحديثة بهدف تلبية متطلبات صناعة الضيافة. الهدف من هذا البحث هو قياس أثر استخدام استراتيجيات التعلم النشط في تطوير المهارات العملية لمقررات الأغذية والمشروبات لطلاب التعليم العالي للضيافة. اعتمد البحث نهجاً كمياً واستخدم تقنية بطاقة ملاحظة المهارات العملية لجمع بيانات الإختبار القبلي والبعدي للعينة التجريبية من طلاب التعليم العالي للضيافة وتمثلت عينة الدراسة في جميع طلاب قسم الضيافة بالفرقة الثانية للعام الدراسي ٢٠١٧/٢٠١٨ بكلية السياحة والفنادق جامعة قناة السويس بالإسماعيلية والمعهد العالي للسياحة والفنادق - إيجوئ بالإسماعيلية كعينة تجريبية علي التعليم العالي للضيافة بمصر قبل وبعد تطبيق استراتيجيات التعلم النشط وكان عدد الطلاب ٩٢. أظهرت نتائج الدراسة أن استراتيجيات التعلم النشط عند تطبيقها في عملية التعلم للقرصات العملية في الأغذية والمشروبات لطلاب التعليم العالي للضيافة ، فقد ثبت أنها أثرت بشكل إيجابي على تنمية المهارات العملية للأغذية والمشروبات وفقاً لمتوسط الإختبار البعدي مقارنة بمتوسط الإختبار القبلي لدرجات الطلاب التي تم جمعها بواسطة بطاقة ملاحظة المهارات وتحليلها باستخدام تقنية إختبار "ت" للعينة المزدوجة. تم الكشف أيضاً أن حجم تأثير استخدام استراتيجيات التعلم النشط كان كبيراً وفقاً لقيمة مربع إيتا ( $\eta^2$ ) Eta-squared. ومن اهم توصيات هذا البحث هو ضرورة تبني مؤسسات التعليم العالي الفندقي لزيادة استخدام استراتيجيات التعلم النشط في عمليات تدريس المقررات العملية للأغذية والمشروبات كبديل لطرق التدريس التقليدية.

### الكلمات المفتاحية

استراتيجيات التعلم النشط ؛ المهارات العملية للأغذية والمشروبات ؛ بطاقة ملاحظة المهارات العملية.

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