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Introduction:

Think – Pair – Share learning model is normally used as a learning not training method for lower education levels comparing to higher education (HE) as it was first put into practice at the USA in the 1980s using a collaborative learning model where all students are engaged in the learning process and encouraged to work in pairs and groups to share knowledge, as well as, nowadays in some cases it’s a necessity to implement the same or a similar teaching and learning methodology for new university students to improve their learning skills and to enhance their critical thinking capacity. However, to put it in a higher education level and for better achievement the authors have added group active learning to the current TPS training model simply because higher education in Libya or any other state is a very important sector to the entire nation.

In addition, it is an extra priority to advance and develop the HE system because it is really needed to be put first comparing to other sectors and can never be separated from the development process. The development process in Libya refers to the enhancement of its qualified and potential human resources, as the main critical factor of a solid and concrete economy of a country can be achieved by having qualified human resources. Moreover, there are essential efforts that the Libyan government can do for enhancing the quality of higher education through curriculum Tuning according to ECTS, enhancing teaching methods and training strategies, implementing a variety of proactive self-learning methods, competency learning based model and TPS training style, as well as, provision of HE facilities and infrastructure. Furthermore, the process of studying using the TPS collaborative training model in Libyan university of Derna is expected to involve dedicated observation, motivating students to ask, team building, and to proactively communicate by using the right learning method.

At the University of Derna, all students are expected to be able to compete in a global level to be more capable for enhancing their learning techniques that can be seen because of effective and cognitive learning abilities and the embedding of Think Pair Share learning methodology has been recently used by the authors using the University of Derna as a case study to examine the effectiveness of this learning model on the group sample (Zubaidah, S. 2010).

This exploratory paper reports on Libyan students' improvement while applying TPS training model to a BS Management degree selecting the subject of statistics drawing on a range of issues relation to the generic learning skills at the University of Derna. However, this study was taken to improve the current teaching and learning skills at a higher education level, in line with the university's strategies of quality assurance enhancement hoping that this methodology would encourage our students to develop a broad range of generic learning techniques at all scientific fields which are needed for lifelong learning and a successful business career in the Libyan labor market. The authors have carefully used TPS model with their students while merging the targeted employability skills within a group sample of 80 university students from the first year using materials made explicit reference to the skills based intended learning outcomes (Akanmu O. 2011).

On the other hand, discussion and dialog are integral elements of an appropriate university classroom and online learning strategies allowing Libyan lecturers to gain more knowledge about their students' understanding. Moreover, gaining this knowledge is beneficial to Libyan academics because it will allow them to direct their instruction to their students' learning needs. Think pair and share as in a big class or in small groups would help new university students to practice critical thinking and freely defend their own arguments and using TPS with new university students in Libya is will make exposed to others' thought discussion, team work, brain storming and other cognitive activities. This may provide Libyan students' with appropriate models of critical thinking from a peer and will also support them correct their own misunderstanding which is important for developing their analysis and evaluation skills helping them to select the right occupation after graduation.

This TPS learning model was adapted by the authors to encourage their university students to build their own learning skills base as part of their pathway to higher levels of cognitive improvement (Malmir, A. (2012).

Study Hypotheses

As previously mentioned this study concerns with examining the impact of Think Pair Share (TPS) training model towards improving University students' self-efficacy for achieving the following:

- 1- Identifying the effectiveness of TPS group training and learning model towards our new management students' efficacy.
- 2- How to include other academic tasks and activities while implementing TPS group training model.
- 3- Deciding which TPS group training model is going help and motivate new university students with the targeted employability skills.

Study Objectives

This paper main objective is to point out the impact of (TPS) training model towards improving new University students' overall achievement.

The selected TPS training model implementation part is displayed in the experimental field study. The others essential mission was to apply an up to date students' cognitive learning model and from this perspective, the curriculum must consists of a set of academic tasks and duties that our new management students encounter in all classrooms throughout the entire semester (Rusyna, A, 2014).

Study Methodology

Literally speaking this study is looked at as qualitative rather than being a quantitative research based (Sugiono, 2017) and the authors carried out this scientific research on the principles of consistency, activity, students' feedback, integration at the level of interdisciplinary connections, reflecting teamwork activities side by side with using periodic practical analysis, generalization, and empirical – conversation, direct observation, qualitative analysis of students' final exam results to justify the gap between performance and achievement (Hinchliffe G, 2002). The authors have selected a group sample of 80 management students form the first year currently studying at the university of Derna in the state of Libya and the collected data was gathered then utilized internally throughout interviews, intensive online meetings and brain storming sessions to define and examine the impact of TPS learning skills for new university students while studying their BS Management Degree.

Firstly : The Concept of Think - Pair - Share Learning Model

Think Pair Share is a cooperative learning discussion strategy first developed Lyman at University of Maryland in 1981 and adopted by many writers in the field of cooperative learning since then. In addition, Kagan (2009) stated that Lyman created a very powerful frame sequencing three structures called Think-pair-Share. Since there are many ways to think, many ways to pair up, and many ways to share with the class.

TPS as a cooperative learning and training model is the one of most popular teaching models simply because as a learning methodology evolves from a group approach to learning. Arends (2007) states that TPS as a cooperative learning model is beneficial for all new university students with lesser abilities to learn more by working together in groups to exchange knowledge and learning abilities and benefit more from the peer learning process. Another scholar; Larsen-Freeman (2000:167), stated that in TPS cooperative learning, university students often stay together and lecturers usually assigns them to certain harmonious groups so that the groups are mixed-males and females. This allow all new students to learn from each other, as well as, allow them to put into practice in how to make new friends and to get along with people from different ethnic backgrounds. On the other hand, Jolliffe (2007), stated that TPS cooperative learning model create a situation in which the only way group members can complete the task is if the whole group works together.

1. The Strategy of Think – Pair - Share

In many parts of the world Think-Pair-Share is a cooperative learning/ training strategy where new students think about their response to a prompt or question, then discuss their individual answers in pairs. Mc Candlish (2012) has stated that Think-Pair-Share is a collaborative discussion that has three parts to the process – a student think about a question or an issue, then they talk with a partner about their thoughts, then some student's share their discussion and use critical thinking with their class members. Furthermore, other authors such as Ledlow (2001) mentioned that Think Pair Share is a low-risk strategy to get many students actively involved in the learning process at classes of any size and the procedure is very simple at a school or a university level: after asking question, the lecturer tells students to think silently about their answer. As a variation, he/ she might have them write their individual

answer. Then the lecturer asks them to work in pair to compare or discuss their responses. Finally, the lecturer call randomly on a few students to summarize their discussion or give their answer. The random calls are important to ensure that students are individually accountable for their active participation. Use of this strategy will help new students in particular to; draw on background knowledge to understand ideas, gives students time to think, generate and analyze ideas, maintain a high level of engagement, participate in small-group interactions, synthesize information, develop and practice reading skills.

The use of TPS strategy also help lecturers increase their wait time, thus increasing student think time, as well. Wait / think time has been demonstrated to be a powerful factor in improving new student responses to prompts and questions.

2. Bridging TPS Training Model with reality

Looking at previous literature and different articles, the authors are certain that this is the first time to applicate the collaborative TPS Training model in a Libyan university for the following reasons:

- 1- It was very effective with new university students.
- 2- There was a direct need to improve new students learning skills.
- 3- It is a low-risk strategy to get new students involved in the learning process.
- 4- It was a new experience for the group sample, which means they have never been through such a cooperative learning style.

Furthermore, going with his group sample involvement of 80 management students was not random as the authors have selected the management department at the University of Derna and went through the following stages of the previously mentioned TPS training model as follows:

- 1 – Doing the normal teaching duty and preparing students to take question.
- 2- Asking open questions then the lecturer tells students to think silently about their answer.
- 3- Then the lecturer asks them to work in pair to compare or discuss their responses.
- 4- The lecturer call the students to form random groups for better active learning.

5- Finally, the lecturer call on students to summarize their discussion or give their answer.

Adding the group active learning stage was the innovative step while bridging the TPS learning model with reality to motivate students and for better classroom assessment cycle as shown below in **Figure (1)**:

Figure 1: TPS Group Learning Strategy for Better Classroom Assessment Cycle.



Source: <https://ltc.highline.edu/teaching-excellence/assessing/assessment/>

3. Challenges of Implementing TPS Training Model

Implementing this well designed TPS model for the first time at the University of Derna brought up some new challenges such as:

- 1-How to identify the intended learning outcomes while using this TPS model on a university level.
- 2-Will Libyan university students adapt the new TPS training model.
- 3- How to form the curriculum towards the TPS training approach.

4. TPS Training Model and Self-Motivation

Based on previous academic literature it's obvious that motivation is an essential construct to understand and explain students' academic performance. In addition, the different concepts of motivation establish together a frame of reference to think, feel and act about a specific subject (Griggs V, Holden, 2018). Thus, for example, the motivating beliefs regarding the subject of management have determined the selected group of 80 different students to complete their activities. Hence, genuine motivation is a set of behavioral factors that Libyan students perform for enjoying and learning new skills, find stimulating and allows them to perform when they exceed their own expectations. Moreover, accidental motivation normally refers to students' nature to achieve a certain objective or reward beyond the activity itself in a traditional teamwork style or technology-enhanced learning environments (REB. 2015a). However, learning motivating factors played an important role for the selected new Libyan university students (Barkley, E. 2014).

Furthermore, the TPS learning/ training model has directly supported the group sample of 80 new university students to be more competent through the acquisition of competencies and further development of the acquired professional skills, concluding that TPS learning model can be very diverse with respect to conventional/ traditional university teaching models and that's a big step forward for a better students achievement (Azlina, N. A. N, 2010)

Secondly : Field Study

During the responsibility of doing this study the authors have selected the group of 80 new university students who participated in meetings, intensive brain storming interviews, numbered discussion groups (A, B, C) in the forms of round tables to take their feedback regarding the TPS training method. However, another element was discovered proving that new Libyan university students are well motivated to have more training in the classroom. More significantly, the authors found that new students' direct involvement, daily practice, knowledge-sharing and group active learning method while using the TPS model secures their final achievement and equip them with the required employability competencies on the principle of quality assurance for active learning that was applied by the authors on regular bases. Finally, the authors

managed to identify the most developed skills among the group sample after using the TPS on a university level as follows:

- 1- Self-Efficacy Improvement.
- 2- Critical Thinking Enhancement.
- 3- Communication Skills Development.
- 4- Professional Skills Transformation.

It must be said that the selected new students' feedback indicated that not all Libyan lecturers are capable of training their students to gain the necessary knowledge and professional skills to be ready for joining the labor market.

Eventually, the final exam's result proved how beneficial the TPS learning/ training model was for new Libyan university students' achievement comparing to with the previous semester's final exam result as shown next:

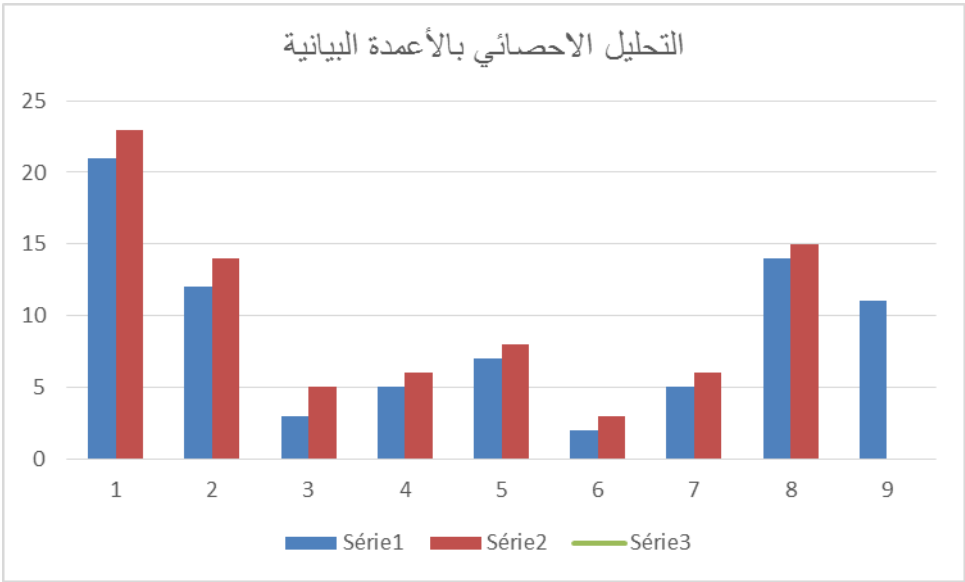
Table 1: Students' Final Exam Results Statistical Analysis

Grade	M Limits	Points	1 st Semester result	2 nd Semester result
Exceptional	95 – 100	4.00	21 Students (26%)	23 Students (29%)
Excellent	90 – 95	3.75	12 Students (15%)	14 Students (17%)
Superior	85 - 90	3.5	3 Students (3%)	5 Students (6%)
Very good	80 - 85	3.00	5 Students (6%)	6 Students (8%)
Above average	75 - 80	2.5	7 Students (9%)	8 Students (10%)
Good	70 - 75	2.00	2 Students (3%)	3 Students (4%)
High pass	65 - 70	1.5	5 Students (6%)	6 Students (8%)
Pass	50 - 65	1.00	14 Students (17%)	16 Students (20%)
Fail			11 Students (14%)	0 Students (0%)
Total Students			80 Students	80 Students

Source: Author's data analysis

Moreover, the below figure shows a clear visual analysis with comparing 1st and 2nd semesters’ final exams results and how the overall students’ achievements were a lot better in the second semester with 0 failed students as shown in the below figure:

Figure 2: Visual Analysis of the *First and Second* semesters' Results



Source: Author’s visual data analysis

Study Findings and Conclusion

The presented statistical and visual analysis of this academic work has confirmed that second semester final exam results of 80 management students were significantly better than the first semester of the same group sample and not a single student has failed which means that the selected TPS training model was positively responding to the study objectives with considerable learning outcomes that are mostly relevant to all students knowledge enhancement and their future career progression.

The authors also found that this TPS training methodology is a valid solution for the gradual development of competencies and differing elements of learning outcomes and pedagogical approaches pertaining to

different sorts and stages of higher education in Libya and thus makes it real tangible, measurable and effective training style.

Study Recommendations

According to the final exam results, the authors strongly recommend that investing in human resource improvement in Libya is depending on the quality of Libyan graduates and Libyan educators must train their students with the best tools to gain the necessary employability skills which are in extra priority to be integrated with each subject and what features that must be put in use for merging them competencies while preparing our Libyan students for practicing their experience in real life.

On the other hand, Libyan academics should mix teaching with training after knowing that each individual learning subject has to be empowered with the necessary specific and generic professional skills depending on the nature of each scientific field to provide the Libyan economy with the required high skilled graduates who are confident to meet their employers' expectations (Sugiono, 2017).

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