

# The Role of the Training Program “Making Learning Visible” in Developing Creative Teaching Competencies of Bahrain Teachers College Faculty Members in the University of Bahrain

S. Salah Alawi Salman<sup>1</sup> & Zainab Thamer<sup>2</sup>

<sup>1</sup>Educational Studies Division, Bahrain Teachers College, University of Bahrain, Kingdom of Bahrain

<sup>2</sup>English Education Division, Bahrain Teachers College, University of Bahrain, Kingdom of Bahrain

Correspondence: Zainab Thamer, English Education Division, Bahrain Teachers College, University of Bahrain, Kingdom of Bahrain. E-mail: zthamer@uob.edu.bh

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## Abstract

This study aims to investigate the role of the training program “Making Learning Visible” (MLV) in developing Creative Teaching Competencies of Bahrain Teachers College (BTC) faculty members at the University of Bahrain. The study sample consists of (35) faculty members in BTC (13 male and 22 female). To achieve the objective of this study, the researchers have developed a measuring scale of Creative Teaching Competencies for BTC Faculty Members, which contains five dimensions: Personal Competencies, Emotional Competencies, Cognitive Competencies, Educational Competencies (Professional), and Social Competencies. Results revealed the training program (MLV) has a significant role in developing Creative Teaching Competencies among faculty members at BTC. Further, there were no statistically significant differences ( $\alpha \leq 0.05$ ) in the role of the training program in developing the Creative Teaching Competencies of the faculty members at BTC by gender variable. The study also shows that there are statistically significant differences ( $\alpha \leq 0.05$ ) in the role of the training program in developing Creative Teaching Competencies among faculty members at BTC according to the variable of years of experience in favor of those with more than 20 years of experience.

**Keywords:** making learning visible, creative teaching, competencies, training program

## 1. Introduction

Most nations in the world place a high value on higher education because of its crucial role in developing and qualifying specialized abilities in a variety of scientific subjects, which in turn helps to progress social and economic development and contribute to the growth and advancement of society.

Teachers' colleges contribute to providing students with the necessary knowledge, values, attitudes, and skills that prepare them to enter the workforce and allow them to create and innovate. To achieve this, it is necessary to prepare and qualify faculty members for creative teaching competencies that contribute to meeting the different needs of students. Aziz and Akhtar (2014) diagnosed the impact of training on teachers' competencies at the higher education level, and they found that trained teachers show a significant difference in pedagogical competencies, management and assessment competencies, and research competencies. According to a study by Gibbs and Coffey (2004) on the effectiveness of university teacher training, which involved 22 universities in 8 different countries, there were a variety of positive changes in the teachers and students in the training group, in contrast to no changes or unfavorable changes in the untrained teachers in the control group.

The significance of the study lies in dealing with the creative teaching competencies of Bahrain Teachers College faculty members, where the central vision of the college is to prepare and qualify future teachers who can apply the best educational practices in their field. This study aims to analyze the role of the training program “Making Learning Visible” in fostering creative teaching competencies among BTC faculty members. We also aim to identify the teaching competencies that have developed by joining the training program concerning gender and years of experience.

We believe that the faculty members must be characterized by creative teaching practices as this should reflect the future teachers' creative teaching skills. These students will eventually be responsible for the education

development in Bahrain. Similarly, faculty members in Bahrain Teachers College have an essential role in preparing future leaders who can implement the best educational practices that meet students' different needs. For that, the two researchers have realized the vital need to develop creative competencies for the faculties at Bahrain Teachers College.

## 2. Literature Review

In the educational field, improving teaching and maximizing student's learning have always been the core concern of educators and researchers. In a rapidly changing world, teachers face many issues, such as competition, especially with the availability of technology, diversified students, and high expectations from parents and students (Siddiqui et al., 2011). The literature review will review the concepts of the importance of teachers' competencies and enhancing them through training programs, creative teaching, and visible learning.

### 2.1 *The Importance of Teachers' Competencies and Enhancing Them through the Training Programs*

The first concept that will be reviewed is the concept of the importance of teachers' competencies and enhancing them through training programs. Teachers' competencies are generally known as a teacher's skills and knowledge. Also, teaching competencies are essential for carrying out suitable personal and professional activities in the classroom (Bakhru, 2017) (Bakhura, 2017). According to Roelofs and Sanders (2007), there is no specific definition of teaching competencies, whereas Selvi (2010) states that the definition depends on the material that will be taught and the circumstances of the learning classroom. Although it seems that there is no agreement on defining competencies or the most critical competencies in teaching (Guskey, 2003), many recent studies have suggested that joining teacher-training programs can enhance the characteristics of teaching competencies (Bakhru, 2017; Bawane & Spector, 2009; Guskey & Sparks, 2002; Muñoz Carril et al., 2013). Based on what has been reported, researchers seem to have an overwhelming consensus on the positive impact of the training programs on students' learning experiences. Nevertheless, outlining specific competencies has yet to be fully addressed. Current and past papers have all stated that the training programs can improve academic performance and increase subject- knowledge (Bakhru, 2017; Guskey, 2002; Gusky & Sparks, 2002; Kayani et al., 2011; Siddiqui et al., 2011). Yet, the studies do not attain the full picture of the competencies that have been developed.

This hasn't been neglected by later studies, some findings demonstrate that teachers who prioritize their needed competencies before conducting training tend to have a positive result as the quality of teaching has improved, teaching has become less teacher-focused and more student-focused, and teachers' and administrators' attitude has altered (Aziz & Akhtar, 2014; Bawane & Spector, 2009; Gibbs & Coffey, 2004; Guskey & Sparks, 2002; Kayani et al., 2011; Muñoz Carril et al., 2013; Siddiqui et al., 2011)

However, the literature on the positive impact of training does not mention whether teachers were surveyed before training. This could affect the validity of the results especially if teachers haven't aligned the competencies with their teaching needs. A newly gained knowledge that is not practiced will not reach its full potential. A more precise study that is designed to align the program learning outcomes with the instructional teaching outcomes could be beneficial in this field.

Although some have suggested that communication, emotional management, and positive personality traits are the needed characteristics for teachers (Bakhru, 2017), Guskey (2003) has analyzed 13 primary research studies for common characteristics of teachers 'competencies and found no popular or common ones justifying that each research study has been prepared for a different purpose and audience. This might highlight a major inconsistency in understanding what competencies are. It could also suggest that training programs and competencies cannot be standardized. It could also imply that the training programs might not be a one-size-fits-all approach.

It is true that educational training is essential and could alter the teaching practice (Guskey, 1986), but there are many critiques of its actual validity. Guskey (2002) suggests that research findings are far from reality and exaggerated as teachers themselves report that training programs waste their time. Even though some teachers think receiving training is their right, the proper measurement of the gained knowledge and the learning outcomes must be calculated to measure the true effect (Guskey, 2002). In addition, Guskey (1986) asserts that many teachers face obstacles where they cannot plan or apply the newly gained knowledge. With the controversy where the training programs' effect seems ambiguous, further studies are needed to identify the key elements of the success of the training programs. This could include investigating the nature of the school environment, the ongoing support, and the level of collaboration. It is crucial to understand these basic elements to obtain a definitive conclusion.

## 2.2 Creative Teaching

This leads to the second concept of the review, which is creativity. Training programs are also linked to the development of teachers' creativity. Creativity is seen as essential and transformational in educational practice. It is also seen as a biological, physical, and psychological need for the students (Cannatella, 2004). Based on Crompton (1992), a teacher's creativity can be the source of student's creativity as students learn by observation. Supporting divergent thinking establishes a creative environment, producing an emotional status that helps students speak freely and interact with their peers (*ibid*). In other words, students who are encouraged to think of different situations and link them to their personal experiences can contribute to their classmates' discussions.

In previous studies, the literature about promoting creative teaching and factors that influence creativity has found that students need to be involved in the learning process. Students given the authority and the time to complete their projects and the opportunity to review and reflect on their tasks are more likely to be creative learners as they are involved in decision-making. As a result, Jeffrey (2006) argues that the sense of belonging will be enhanced, and students will feel valued and respected. This also supports the claim that teachers who build a positive relationship with their students and provide flexible use of time will have a role in modeling creativity (Davies et al., 2014). Such elements that stress understanding students' needs and learning styles and providing an enjoyable learning environment could make learning more meaningful (Davies et al., 2014; Horng et al., 2005; Jeffrey, 2006). Nonetheless, being a creative teacher could be hindered by the school culture or the lack of peer support (Davies et al., 2014). Not only that but Horng et al. (2005) support the previous claim that it requires a significant amount of work that could reach ten years of preparation. This extensive amount of time compared to the short-term amount of time spent during the training programs might raise a serious problem about the validity of the training programs. While being creative or being able to cultivate creativity might be an interpersonal trait, this doesn't rule out the validity of the training programs as they still play a significant role. Preparing pre-made materials as suggested by (Horng et al., 2005) might face some obstacles, for example, it could not be applicable across various subjects, or teachers might refuse to use such materials. A more rational approach will be to empower teachers with creative strategies and techniques.

## 2.3 Visible Learning

The third concept that will be reviewed is the concept of visible learning. Hattie (2015), one of the most prominent pioneers and supporters of visible learning (VL), defines VL as a process of "seeing" where teachers see teaching and learning through the eyes of their students, and students become their teachers. In other words, students will perceive learning through their perspective. According to Hattie, VL is not about teaching. Instead, it is about the impact of teaching (*ibid*). Hattie (2012) perceives VL teaching strategies as simply a way of teaching that focuses mainly on the quality of students' learning rather than the teacher's knowledge of the subject. It is a process in which deep learning is provided where students can create relations and connections rather than surface learning, where facts and ideas are introduced (Hattie, 2012; Hattie, 2015). VL can influence students' learning not to give them higher scores but to help them be committed to learning, have a desire to master learning, and enjoy the challenge of learning (Hattie, 2012). This will create an optimal climate that allows students to make mistakes (*ibid*), as feedback will constantly be provided (Hattie & Yates, 2014).

One of the fundamental aspects of VL is that students are treated differently and with respect, and their voices are encouraged and recognized (Hattie, 2015; Hattie & Yates, 2014). Consequently, students' motivation and performance will increase (Hattie & Yates, 2014). Cook-Sather (2002) seems to support the VL concept indirectly by suggesting that teachers need to give authority to students by giving them the power to join conversations with no existing power structure and re-direct the teacher's direction. She also claims that without changing the persistent mindset, students will remain powerless in a system that claims to support them. VL is also defined as explicit as the word "visible." VL is seen as a memorable and profound way of learning that allows students to have accurate and concrete evidence of learning, such as videos or drawings (Krechevsky et al., 2013). Five principles were developed as part of visible learning, and they all relate in one way or another to Hattie's VL philosophy. They suggest learning is purposeful, social, emotional, empowering, and representational (*ibid*).

On the other hand, McKnight and Whitburn (2018) seem to be uncomfortable with the VL strategies and attack John Hattie and his ideas. They suggest that VL is more political than educational, and it encourages a "spy culture" that enables parents to spy on students and principles over teachers. It has also been claimed that teaching is not always visible or quantifiable. It could be messy and undesired (*ibid*). Others have found problems with his meta-analysis methodology, claiming that he only analyzed the final results and did not show details or transparency (Shanahan, 2017; Tehart, 2011). Hattie (2019) refutes all the claims against his principles

and suggests his message was not fully understood. He also mentions that he never suggests that a teacher should be separated from the educational process. Considering this dispute between Hattie and his disputants, it might suggest that giving more power to students and parents could threaten the teacher's image. It might even imply that the teacher is not needed during the learning process if students have to guide their learning. In that sense VL might be used but with limitations.

All in all, it could be concluded that creativity is linked to VL as teachers are required to organize their lessons uniquely and have an influence on their students (Hattie, 2012). In addition, training programs are linked to VL and creativity, as these programs could enhance both.

### 3. Method

The research used a quantitative design to determine the creative teaching competencies of Bahrain Teachers College faculty members by observing the dependent variables. The researchers used a self-designed scale with five dimensions and 50 items. The items are rated on a 5-point Likert scale from "always" to "never." The data collection period started from 2 May 20223 to 20 May 2023 using online Google forms. SPSS was used to perform a statistical analysis of the collected data and to estimate the scale's reliability by calculating Cronbach's alpha. In addition, they were using the Interrater Validity and Internal Validity of the scale to evaluate the validity of the designed scale. The questions of the current study were answered by extracting the mean and standard deviations of the total score on the scale and T-tests for independent samples.

#### 3.1 Participants

Participants in the study consisted of (N= 35) faculty members at Bahrain Teachers College who participated in the training program "Making Learning Visible" (MLV). The training program was offered online by Harvard University. They were male and female instructors with varying years of experience, as shown in Table (1). The questionnaire was distributed to the participants of the online program.

Table 1. Characteristics of the study sample/Units of analysis

NO.	Dimension	Internal consistency reliability value
1	The first dimension: Personal competencies	<b>0.787</b>
2	The second dimension: is Emotional competencies	<b>0.871</b>
3	The third dimension: Cognitive competencies	<b>0.849</b>
4	Fourth dimension: Educational competencies (professional)	<b>0.848</b>
5	Fifth Dimension: Social Competencies	<b>0.782</b>
6	Total Grade	<b>0.953</b>

Variable	Levels	No.	Percentage
Gender	Male	13	<b>37.1</b>
	Female	22	<b>62.9</b>
Qualification	BSc or equivalent	10	<b>28.6</b>
	MSc or equivalent	7	<b>20.0</b>
	Ph.D. or equivalent	18	<b>51.4</b>
Years of Experience	Less than 10 years	13	<b>37.1</b>
	10- 19	12	<b>34.3</b>
	More than 20 years	10	
	Total	35	<b>100.0</b>

#### 3.2 Results Reliability

The researchers calculated using the Cronbach-alpha reliability coefficient method, shown in Table 2:

Internal consistency of creative teaching competencies dimensions:

Table 2. Reliability coefficients of the dimensions

<b>NO.</b>	<b>Dimension</b>	<b>Internal consistency reliability value</b>
1	The first dimension: personal competencies	<b>0.787</b>
2	The second dimension: is emotional competencies	<b>0.871</b>
3	The third dimension: cognitive competencies	<b>0.849</b>
4	Fourth dimension: educational competencies (professional)	<b>0.848</b>
5	Fifth Dimension: Social Competencies	<b>0.782</b>
6	Total Grade	<b>0.953</b>

The results in Table 2 show that the value of the internal consistency of the scale as a whole was (0.953), for the first dimension (0.787), for the second dimension (0.871), for the third dimension (0.849), for the fourth dimension (0.848), and for the fifth dimension (0.782), which are acceptable indicators (Nunnally, 1978; Sekaran, & Bougie, 2016) to achieve the objectives of the current study.

### 3.3 Validity

#### 3.3.1 Interrater Validity

The results of the arbitration indicated that the validity of all items of the scale and their suitability to measure the creative teaching competencies of faculty members at Bahrain Teachers College in light of the criterion of approval of 80% or more of the arbitrators and the availability of the scale for the sincerity of the content during the construction procedures, by reviewing Previous literature and theoretical frameworks for several measures that have developed creative teaching competencies.

#### 3.3.2 Internal Validity of the Scale

Table 3. Internal Validity indicators for each item of the scale

<b>Item</b>	<b>Correlation with dimension</b>	<b>Correlation with scale</b>
<b>q1.1</b>	.626(**)	.450(**)
<b>q1.2</b>	.428(*)	.367(*)
<b>q1.3</b>	.741(**)	.556(**)
<b>q1.4</b>	.449(**)	.452(**)
<b>q1.5</b>	.506(**)	.405(*)
<b>q1.6</b>	.746(**)	.476(**)
<b>q1.7</b>	.721(**)	.515(**)
<b>q1.8</b>	.520(**)	.506(**)
<b>q1.9</b>	.790(**)	.635(**)
<b>q1.10</b>	.447(**)	.571(**)
<b>q2.1</b>	.657(**)	.697(**)
<b>q2.2</b>	.699(**)	.504(**)
<b>q2.3</b>	.851(**)	.671(**)
<b>q2.4</b>	.720(**)	.538(**)
<b>q2.5</b>	.690(**)	.510(**)
<b>q2.6</b>	.533(**)	.425(**)
<b>q2.7</b>	.682(**)	.683(**)
<b>q2.8</b>	.772(**)	.672(**)
<b>q2.9</b>	.717(**)	.705(**)
<b>q2.10</b>	.716(**)	.627(**)
<b>q3.1</b>	.410(*)	.519(**)
<b>q3.2</b>	.697(**)	.552(**)
<b>q3.3</b>	.816(**)	.789(**)
<b>q3.4</b>	.755(**)	.702(**)
<b>q3.5</b>	.522(**)	.436(**)
<b>q3.6</b>	.553(**)	.601(**)
<b>q3.7</b>	.717(**)	.707(**)
<b>q3.8</b>	.720(**)	.655(**)
<b>q3.9</b>	.662(**)	.599(**)
<b>q3.10</b>	.644(**)	.655(**)

q4.1	.759(**)	.789(**)
q4.2	.659(**)	.622(**)
q4.3	.591(**)	.510(**)
q4.4	.803(**)	.832(**)
q4.5	.663(**)	.747(**)
q4.6	.629(**)	.549(**)
q4.7	.582(**)	.506(**)
q4.8	.606(**)	.346(*)
q4.9	.636(**)	.462(**)
q4.10	.632(**)	.513(**)
q5.1	.674(**)	.644(**)
q5.2	.674(**)	.641(**)
q5.3	.516(**)	.357(*)
q5.4	.681(**)	.620(**)
q5.5	.726(**)	.458(**)
q5.6	.607(**)	.484(**)
q5.7	.585(**)	.446(**)
q5.8	.712(**)	.508(**)
q5.9	.743(**)	.694(**)
q5.10	.515(**)	.504(**)

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

The table above shows that all values of Pearson's correlation coefficients for items with dimension and with the scale were statistically significant at the significance level ( $\alpha \leq 0.05$ ), indicating a high internal validity of the items, and therefore were accepted without deletion.

### 3.4 Findings

#### Q1: What is the role of the training program in developing the creative teaching competencies for Bahrain Teacher College faculty members?

Table 4. Mean scores and standard deviations for the Role of the training program in developing the creative teaching competencies of faculty members at Bahrain Teachers College

Items	Mean	Std. Deviation
q1.1	4.457	.8168
q1.2	4.486	.6122
q1.3	4.629	.6456
q1.4	4.429	.5576
q1.5	4.486	.6585
q1.6	4.571	.8148
q1.7	4.314	.7581
q1.8	4.371	.6456
q1.9	4.457	.6572
q1.10	4.543	.5606
q2.1	4.229	.6456
q2.2	4.486	.6122
q2.3	4.571	.6547
q2.4	4.886	.4038
q2.5	4.486	.6585
q2.6	4.943	.2355
q2.7	4.143	1.0331
q2.8	4.314	.6311
q2.9	4.200	.6325
q2.10	4.229	.7311
q3.1	4.686	.5298
q3.2	4.229	.7311

q3.3	4.429	.6081
q3.4	4.371	.6456
q3.5	4.029	.7065
q3.6	4.200	.6774
q3.7	4.143	.7724
q3.8	4.229	.6897
q3.9	4.200	.6774
q3.10	4.343	.6835
q4.1	4.400	.6945
q4.2	4.371	.6897
q4.3	4.486	.5071
q4.4	4.429	.7391
q4.5	4.314	.7581
q4.6	4.657	.4816
q4.7	4.486	.6585
q4.8	4.143	.8452
q4.9	3.943	.8382
q4.10	4.514	.7017
q5.1	4.457	.5606
q5.2	4.486	.7811
q5.3	4.800	.4058
q5.4	4.714	.4583
q5.5	4.829	.3824
q5.6	3.200	1.3016
q5.7	4.886	.4038
q5.8	4.743	.4434
q5.9	4.629	.5470
q5.10	4.829	.3824
The first dimension: personal competencies	4.474	.3973
The second dimension: Emotional competencies	4.449	.4448
The third dimension: Cognitive competencies	4.286	.4393
Fourth dimension: Educational competencies (professional)	4.374	.4553
Fifth Dimension: Social Competencies	4.557	.3648
Total Degree	4.428	.3643

Table (4) shows that the mean score of the total score on the scale of creative teaching competencies was (4.428) with a standard deviation of (0.3643), which indicates that the training program has a significant role in developing creative teaching competencies among faculty members at Bahrain Teachers College. We also note that the social competencies dimension obtained the highest mean score (4.557) with a standard deviation (0.3648) out of the five dimensions of the scale. In contrast, the cognitive competencies dimension obtained the lowest mean score (4.286) with a standard deviation (0.4393). We also note that the sixth item in the social competencies dimension has the lowest mean score of (3.22) and the sixth item in the emotional competencies dimension has the highest mean score of (4.93).

### Q2: Are there any significant differences in the creative teaching competencies list according to the faculty members based on gender?

Mean and standard deviations were calculated by gender variable and T-tests for independent samples were used:

Table 5. Significance of Differences in the Role of the Training Program in Developing Creative Teaching Competencies among Faculty Members at Bahrain Teachers College by Gender Variable

Dimensions	Gender	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
The first dimension: Personal competencies	1	13	4.346	.4612	-1.493	33	<b>.145</b>
The second dimension is Emotional competencies	2	22	4.550	.3433	-1.130	33	<b>.266</b>
The third dimension: Cognitive competencies	1	13	4.338	.5531	-1.130	33	<b>.266</b>
	2	22	4.514	.3655	-1.130	33	<b>.266</b>
	1	13	4.269	.4715	-.168	33	<b>.867</b>

Cognitive competencies	2	22	4.295	.4304			
Fourth dimension: Educational competencies (professional):	1	13	4.269	.4715	-1.051	33	<b>.301</b>
Fifth Dimension: Social Competencies:	2	22	4.436	.4446			
Total degree	1	13	4.454	.4294	-1.301	33	<b>.202</b>
	2	22	4.618	.3157			
	1	13	4.335	.4204	-1.162	33	<b>.254</b>
	2	22	4.483	.3247			

Table (5) shows that there were no statistically significant differences ( $\alpha \leq 0.05$ ) in the role of the training program in developing the creative teaching competencies of the faculty members at Bahrain Teachers College by gender variable. We also noted from the table that the significance level in all five scale dimensions ranged between (0.145) and (0.867). These are not statistically significant at the significance level (0.05). Therefore, we conclude that there are no differences due to the gender variable in the role of the training program in developing the creative teaching competencies of faculty members at Bahrain Teachers College.

### Q3: Are there any significant differences in the creative teaching competencies list according to the faculty members based on the number of years of experience?

Arithmetic averages and standard deviations were calculated by the variable of years of experience:

Table 6. Arithmetic averages and standard deviations of the training program's role in developing faculty members' creative teaching competencies according to the variable of years of experience

Dimensions	Years of Experience	Mean	Standard Deviations
The first dimension: Personal competencies	Less than 10 years	4.185	<b>.4298</b>
	10- 19 years	4.517	<b>.2691</b>
	More than 20 years	4.800	<b>.1414</b>
The second dimension: Emotional competencies	Less than 10 years	4.169	<b>.5170</b>
	10- 19 years	4.450	<b>.3000</b>
	More than 20 years	4.810	<b>.1524</b>
The third dimension: Cognitive competencies	Less than 10 years	3.908	<b>.4271</b>
	10- 19 years	4.367	<b>.2015</b>
	More than 20 years	4.680	<b>.2201</b>
Fourth dimension: Educational competencies (professional):	Less than 10 years	4.077	
	10- 19 years	4.400	<b>.4112</b>
	More than 20 years	4.730	<b>.2627</b>
Fifth Dimension: Social Competencies:	Less than 10 years	4.331	<b>.3326</b>
	10- 19 years	4.583	<b>.3589</b>
	More than 20 years	4.820	<b>.2150</b>
Total degree	Less than 10 years	4.134	<b>.3375</b>
	10- 19 years	4.463	<b>.2312</b>
	More than 20 years	4.768	<b>.1708</b>

Table (6) shows apparent differences in the means of the responses of the study sample on the study tool according to the variable of years of experience and to identify the significance of the differences between these means.

A one-way analysis of variance (ANOVA) was conducted to test the differences in faculty members' years of experience. The analysis revealed that there were statistically significant differences ( $\alpha \leq 0.05$ ) in the role of the training program in developing creative teaching competencies among faculty members at Bahrain Teachers College according to the variable of years of experience. Specifically, the results of Scheffe's Test showed that the differences were between those with experience (less than ten years) and those with experience (more than 20 years) in favor of those with more than 20 years of experience on all dimensions. For example, we can see from Table (6) that the mean of the first dimension, personal competencies, for faculty members with experience less than ten years was (4.185), the mean was (4.57) for faculty members with 10-19 years of experience, while the mean was (4.8) for faculty members with experience more than 20 years of experience.



Table 7. Significance of Differences in the Role of the Training Program in Developing Creative Teaching Competencies among Faculty Members at Bahrain Teachers College by Years of Experience Variable

Dimensions	Source of Variance	Sum of Squares	Df	Mean Square	F Value	Level Significance
The first dimension: Personal competencies	Between Groups	2.173	2	1.087	10.888	<b>.000</b>
	Within Groups	3.194	32	.100		
	Total	5.367	34			
The second dimension is Emotional competencies	Between Groups	2.321	2	1.160	8.426	<b>.001</b>
	Within Groups	4.407	32	.138		
	Total	6.727	34			
The third dimension: Cognitive competencies	Between Groups	3.491	2	1.745	18.183	<b>.000</b>
	Within Groups	3.072	32	.096		
	Total	6.563	34			
Fourth dimension: Educational competencies (professional):	Between Groups	2.423	2	1.211	8.383	<b>.001</b>
	Within Groups	4.624	32	.145		
	Total	7.047	34			
Fifth Dimension: Social Competencies:	Between Groups	1.365	2	.683	6.912	<b>.003</b>
	Within Groups	3.160	32	.099		
	Total	4.526	34			
Total degree	Between Groups	2.296	2	1.148	16.568	<b>.000</b>
	Within Groups	2.217	32	.069		
	Total	4.513	34			

#### 4. Discussions

The research findings suggest that the training programs significantly impacted the development of creative teaching competencies among Bahrain Teachers College faculty members. Also, there is no significant difference in the effectiveness of the training program based on gender. However, although the results of both genders were slightly consistent, it is notable that males had a similar low mean score on the third dimension, the cognitive competencies, and the fourth dimension, the educational dimension, with a mean score of 4.269. Finally, the findings suggest a significant difference in the effectiveness of the training program by the years of experience. Faculty members with more years of experience received higher scores than those with fewer years of experience.

In this research, it is essential to note that the faculty members had the choice of participating in the program. This explains the high results of all the five competencies in the scale, as shown in Table (1). Moreover, all the fifty items of the scale were statistically significant at ( $\alpha \leq 0.05$ ), as shown in Table (2). It implies that faculty members will be more productive when they are aware of the outcomes of the training program that they will join. The implication of the program has affected the faculty members at both levels, professionally and personally. According to what has been found in the previous literature, surveying teachers about the programs that they will join can maximize the benefits (Bawane & Spector, 2009; Muñoz Carril et al., 2013). No literature has stated that their faculty were surveyed before joining the training programs. However, even though the faculty at Bahrain Teachers College were not surveyed about their competencies' preferences, giving them the freedom of choice seems equally beneficial.

The first research question indicates that the social competencies dimension received the highest mean score, while the cognitive competencies dimension received the lowest mean score. The social competencies include social interaction, classroom management, promoting dialogue, and communication. Considering these elements, there is no surprise that they have surpassed the other competencies. One of the most essential values instructors follow at Bahrain Teachers College is creating a safe teaching environment where each student feels encouraged to speak and share. Faculty members indicated that the training program had enhanced their interaction with their students and assisted them in creating a teaching atmosphere where students can share their viewpoints with their peers and instructors. This result was relevant to the previous literature, which found that the training programs assist instructors with managing their emotions when dealing with their students (Bakhru, 2017) and improve their communication skills (Guskey, 2002; Guskey & Sparks, 2002; Kayani et al., 2011; Siddiqui et al., 2011).

On the other hand, the lowest mean score of the competencies was the cognitive dimension. This dimension consists of elements such as deep knowledge of their specialization, proficiency in scientific research methods,

and identifying new teaching methods. This result means that the training program had the most negligible impact on developing higher-order and research skills. It could be concluded that the program focus of the training was not to enhance such skills in its participants. Similarly, the previous literature did not mention the cognitive benefits of the training programs. Moreover, a major analysis was done to thirteen lists to find the most common characteristics of professional development programs, none of which mentioned cognitive competency (Guskey, 2003).

Within the fifty items on the scale, the highest mean core was the sixth item in the emotional competency, which states, "I can provide a warm and safe classroom atmosphere that gives the students the freedom to express their ideas." This indicates that most faculty members had adopted this strategy in their teaching. Creating such an environment means the students are the center of the educational process. It also means that their environment is free of judgment, and this will allow more participation in the class. Consequently, the more involved the students are in their class, the more diverse perspectives will be shared. Such a positive climate built on trust will make it a perfect place for creative learners. Jeffrey (2006) and Davies et al. (2014) state that teachers with a safe class environment tend to make their learning experience enjoyable and creative.

The lowest mean score within the fifty items was the sixth item in the social competency which states, "I can communicate effectively with parents and college and inform them about their children's learning plans." It should be noted that there is limited teacher-parent engagement since instructors teach young adults. Therefore, it is understandable that this statement would receive the lowest mean score.

The second research question indicates that the training program had relatively similar effects on both genders. However, males have a similar low mean score for the third dimension, the cognitive competencies, and the fourth dimension, the educational dimension. These two competencies are involved in deepening knowledge in specialization, identifying new teaching strategies, designing lessons, and implementing assessment methods. These findings indicate that females and males have different preferences when it comes to teaching. However, considering the sample size where the female participants are higher, it could justify the slight difference in the variables.

For the third question, there is a significant difference in the role of the training program in developing creative teaching competencies in favor of the members with more than twenty years of experience. All five dimensions showed a superiority for the faculty members with more than twenty years of experience. This finding was surprising and contrasted our expectations, for we speculated that faculty members with more experience would benefit less than those with less experience. This could be due to the program's content, which contained elements of the principles of visible learning and untraditional teaching methods. Moreover, the training program was delivered online, starting with accessing the materials, discussing them with peers, and receiving feedback. This could be one indicator of the reason for obtaining such results. Moreover, visible learning teaching is a strategy that puts the burden of learning on the students. It requires a significant change in the curriculum and the design of new creative activities. According to the previous literature, a visible learning strategy could be messy and undesirable (McKnight & Whitburn, 2018). It was also stated that changing teaching requires much preparation that could reach up to ten years of work (Horng et al., 2005). It could be justifiable why the training program benefited the faculty members with more than twenty years of experience. The program introduced practical strategies that could be applied directly in the classrooms regardless of the age of the students or the subject that will be taught. It could be considered an icebreaker for the instructors to try something unconventional.

From a different viewpoint, it could also be concluded that the faculty members with over twenty years of experience have already obtained these competencies; however, the program has only enhanced or inflated their skills. On the other hand, the younger generation of faculty members with less than ten years of experience received a lower mean score. This could be explained by the younger generation using technology and digital platforms more frequently in their classrooms. In addition to that, most of the younger faculty members have recently just finished their training. They might have already been trained on such strategies, so this training program supported their previous knowledge. All in all, at first look, the result of this question could be alarming and unusual. However, considering these justifications above, the results are logical.

Based on the available evidence, allowing the faculty members to choose their participation in the program has addressed a gap in previous literature, as it was indicated that teachers were not surveyed before joining their training program. This research has also shown that faculty members are crucial in creating a modern classroom environment where students are encouraged to speak and participate. As a result, this has enhanced the students' creative and critical thinking. It also indicates that the faculty members follow the best educational practices in

their classrooms. This indicates that Bahrain Teachers College is an elite pioneer in fostering lifelong learners. Moreover, it has been stated that there was no popular competency within the previous literature. Even though mass research was done to find common characteristics, no specific category was found. Interestingly, due to having a specific research focus, our research has explored a popular competency within the college level, social competency.

Unlike previous research that tends to exaggerate results to praise the effectiveness of the research, our research was characterized by fairness and specificity to find the highest and lowest competencies within the faculty members. As a result, it could be said that there is a need for more training programs in research methodologies. It is also evident that male members have less interest in lesson design, implementing strategies, and assessing objectives. This could be a valuable asset in college-level task disruption. Finally, we recommend frequently involving experienced teachers in training programs with a modern approach by encouraging the young generation to share their experiences with their peers. We also believe that the young generation could be given more leading roles in conducting workshops to shed light on their approaches.

Apart from the positive impact of the study, there are some limitations to this study. First, the results are entitled explicitly to Bahrain Teachers College members and cannot be generalized to other regions or contexts. As much as it seems like a limitation, it is essential to note that the research's main objective aimed to explore this precisely at the college level. Second, the research only highlights the benefits of social competencies but does not highlight the barriers or challenges of following such a strategy. This could be followed up by separate research. Finally, the study only captures the competencies from the instructor's viewpoint and lacks the students' input. Collecting students' feedback can provide a comprehensive understanding of the effectiveness of the training programs on the teaching competencies.

## **5. Conclusion**

In light of the findings, it could be concluded that training programs are essential for the development of teachers. It can enhance the creative teaching competencies and improve the quality of teaching. Since students' learning and improvement is Bahrain Teachers College's goal, it is recommended that teachers' training continues to be given according to their years of experience and according to preference. The training program is essential in creating a desirable environment for learners due to the effective use of visible learning strategies. The training program also shapes the teachers' personal and social traits, facilitating communication between students and teachers. The smoother the communication is, the better the outcomes are, as both parties will understand the other's needs. Further investigation is required to determine if other training programs have the same positive impact on teachers. Also, there should be a focus on students' viewpoints on teachers' creative competencies. Observational studies can determine which creative competencies are applied following the students' perceptions.

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## **Authors contributions**

Dr S. Salah Alawi Salman is the main author who proposed the idea of this research. He is responsible for the study design, the research scale, data collection, data analysis, and seeking approval from BTC and UOB for the research.

Research Writing: Abstract, Introduction, Method section, Finding section.

Ms. Zainab Thamer is the second author. She helped with writing the research proposal to BTC and translated any relevant documents. She is the one responsible for contacting journals.

Research Writing: Literature Review, Discussion, Conclusion, and the reference list.

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**Data sharing statement**

No additional data are available.

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