

## Training Needs of Faculty Members in Al-huson College for Employing Multimedia in Teaching

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### Abstract

This study aims to determine raining needs of faculty members in Al-huson College for employing multimedia in teaching. The study instrument included (39) items divided into three domains (cognitive needs, emotional needs, and skill needs). A questionnaire was randomly distributed to (78) faculty members in ALHUSON College after confirming validity and reliability. The results demonstrated that there are high training needs for Al-huson faculty members to employ multimedia in teaching. It also showed that there is a significant statistical difference at ( $\alpha = .05$ ) between the means of the three domains and all of them together, attributed to specialization variable in favor of scientific major. Finally, it was found that there isn't significant statistical difference between the means attributable to the variables of years of experience and bilateral interaction between specialization variable and years of experience variable.

**Keywords:** Training needs, Multimedia, Al-huson College.

### Introduction

Since the nineteenth century, the interest of universities' professors started as a result of development in educational and psychological domains leading to the need for academic preparation. Clipper has indicated that the main factor of teaching decline in American universities returns to the fact that the majority of faculty members are not qualified for teaching in universities. Therefore, great universities around the world have taken interest in the development of faculty members' skills particularly, teaching skills such as USA, Britain, Canada, France, and the Arab world, especially in the universities of the Gulf states, Egypt, Jordan, Algeria, and Iraq (Shaheen, 2004; Mursi, 2002).

The new trend of developing the quality of higher education focuses on investing in human resources by development of individuals' skills. In his point of view, Saliz (1999) indicated that essential elements that must be achieved in the university to become invested in people are:

- 1- Strong commitment to the development of all employees in order to achieve the institution goals.
- 2- Having a strategic plan outlining the goals of the organization and the resources available to them determining the role of each employee employees to achieve them well.
- 3- Conduct periodic reviews of staff training and development on an ongoing basis.
- 4- Investment calendar in training and development, to review the effectiveness of staff training and development process.

As the university education is unable to cope with the challenges facing it away of faculty members, it has become necessary to seek the direction of their development as they can carry out the harmonious roles with the requirements of the times, in addition to enhancing their active role in achieving quality education despite the fact that interest in the preparation of faculty members teaching is not new, but it was moving very slowly, and was confined mostly to the US and British universities in its infancy.

The process of determining the training needs of the important processes to ensure the achievement of the desired goals. In order to do so, it should be based training activity or meaningful scheme is based on the scientific and practical study to detect the actual training needs effort, since the training problem is concentrated more often than not to determine the exact training needs which followed training programs and courses, and then, the effort loses purpose flour, and therefore dispersion and loss happens (peaceful and colleagues, 1984).

The definition of training needs and identify a clear definition and flour is expected to guarantee the success of the training in the performance of his message and the result (Olaimat, 1991). Malkawi (1987) says that the training needs of a teacher or a group of teachers with the same job, they are all professional needs of the school. The educational needs of the students is also part of the focus of the needs of teachers; because the aim of the training of teachers is to raise the level of education in the classroom, and what was the training of teachers is vital for the success of the educational process, it is when planning training programs should take into account a number of foundations, including: to combine the display theory and experimentation, and placed on the basis of the needs of the trainee teachers, and that the diversity of methods used in training (Khatib, 1991) this with the knowledge that the training process itself passes in three consecutive stages starting from preparation, which is determined by the training needs, through implementation, which is the through

implementation of the training program is to give trainees the knowledge, skills and trends, and the end of follow-up by which track the progress of the training program to ensure its success in achieving its objectives (al-Ahmad al, 1993). And the identification of training needs is one of the main roles that the training departments and development advancement. In the absence of a clear definition and precise needs of the training is wasted effort, time and money, we do not appreciate you determine the required trained personnel, and to identify training and results expected him type. Therefore, the identification of training needs of the organization is a step to detect the gap between the status quo and put desirable (Dora, 1991).

Accordingly, it can be said that the process of identification of training needs is a structured process leading up to the actual implementation of the training program, based on the study of the status quo for teachers through the poll competencies they own and listen to their comments and views on the educational process on a regular basis to find out the weaknesses and shortcomings have. And to build a training program that works to overcome the weaknesses, deficiencies and filling are unhappy and make them better able to perform their duties and responsibilities.

Al Khatib (1997) sees that the importance of identifying training needs **stand out by making sure the following principles:**

- Identifying training needs is a basic process, and thus the process becomes an objective starting point for the planning and design of training programs points.
- Assist in determining the required offset the shortage by training, and by comparing the different competencies and skills available in the organization with what will be determined training needs.
- Determining the actual training needs, and targeted training groups .
- Accuracy depends on the data and information collection and analysis, and thus determine training needs, according to the foundations of objective criteria based on scientific facts and the reality of work and personnel problems.
- Aimed at reducing costs and minimizing waste through the achievement of development goals in a comprehensive manner, as well as raising the performance efficiency rate, and get on top of labor productivity.
- Help detect problems and work obstacles faced by the organization or one of the main activities, which is not necessarily a problem that can be cured mediated Alto.

### Literature review

After reviewing the relevant literature and previous studies, the researcher chose to present the following studies:

Al-Atar (2012) conducted a study that aimed to identify the training needs of the faculty members of a community college in Makkah, KSA in the field of educational technology. The sample of this study consisted of seventy one (71) faculty members. This sample was chosen randomly. The study adopted a descriptive approach. The researcher also designed a questionnaire that consisted from five main statements with having sub-statements derived from each statement. Thus, the questionnaire included sixty one (61) statements. After that, he distributed the questionnaire forms to the sample he selected. Finally, it was concluded that most of the respondents were highly in need for being trained in matters related to the field of educational technology. It was also concluded that there were no statistically significant differences between respondents' training needs in this field which can be attributed to their gender or major. However, it was concluded that there are statistically significant differences between respondents' training needs in such matters which can be attributed to their academic qualifications for the favor of the ones who hold a PhD degree.

Al-Asmar (2010) conducted a study that aimed to identify the degrees of Saudi universities' faculty members' professional training needs in accordance with the professional roles they are assigned to perform; teaching, researching, managing, and participating in community service. That was investigated from the point of view of the faculty members at Umm Al Qura University that is located in Makkah, KSA. The number of the selected sample is (357) faculty members and the researcher designed a questionnaire that consisted from 68 statements. The researcher concluded that the degrees of Saudi universities' faculty members were highly in need for training to develop them professionally. The study also concluded that there are statistically significant differences between respondents' needs for being trained professionally which can be attributed to their gender and academic ranks. The study also concluded that there were no statistically significant differences between respondents' needs for being trained professionally which can be attributed to their gender, major and age.

Abed Algh'far (2011) conducted a study that aimed to identify the most important tasks that must be performed by faculty members when designing a curriculum and preparing for it. The study also aimed to identify the training needs of the faculty members at Jeddah Community College for girls at KSA that shall enable them to design a curriculum and prepare for it. The study also aimed to suggest the most important methods that shall participate in developing such needs. The researcher adopted a descriptive analytical approach in describing and analyzing the data collected from the respondents. When describing and analyzing these data, the researcher depended on the studies he reviewed and the information available to him from the field investigation. The sample consisted from one hundred and forty five (145) faculty members. The researcher

identified the most important tasks that must be performed to design the curriculum and prepare for it. First, he the instructor must understand students in relation to their general characteristics and the information they already have about the curriculum's content. Second, the instructor must set the curriculum's objectives, identify the sub-ideas of the curriculum's content, and determine the appropriate learning - teaching resources and organize the curriculum's content. Third, the instructor must prepare the appropriate materials and aids for the learning - teaching process and for delivering the curriculum's content to students. Fourth, the instructor must assess the curriculum through using various methods and he must set plans for the way of implementing the curriculum (i.e. teaching it and delivering its content to students). Such implementation shall include creating an appropriate teaching - learning environment and choosing the appropriate teaching methods and aids for teaching the concerned curriculum. Such implementation shall also include selecting various methods that shall be used for assessing students' performance in learning and benefitting from the assessment results.

The results of Abed Algh'far (2011) showed that the faculty members' training needs were moderate in all areas. The study also identified the most significant training needs of the faculty members when designing a curriculum and preparing for it and were ranked respectively according to their significance. First, organizing the content of the curriculum was considered the most significant training need. The second significant training need include the tasks related to assessing students' performance in learning. As for the third significant training need, it included the tasks related to assessing the curriculum. The fourth significant training need included determining the curriculum's objectives was ranked followed by the tasks related to implementing the curriculum. The sixth significant training need included the tasks related to identifying the sub-ideas of the curriculum's content followed by the tasks related to choosing the appropriate teaching – learning methods. That was also followed by the tasks related to determining the appropriate teaching – learning resources. The tasks related to determining the appropriate teaching – learning aids were ranked as being the least significant one.

Al-Hadi (2011) conducted a study that aimed at investigating the quality of the professional development processes targeting the faculty members at higher educational institutions at Oman Sultanate from their perspective. It was concluded that quality of the professional development processes of those faculty members – in five areas: (teaching, scientific research, community service, academic supervision and students' assessment processes) - were within the range of (moderate to low). Thus, that means that the faculty members were highly in need for being trained in those areas. The study also concluded that there were statistically significant differences between faculty members' attitudes towards the quality of the professional development processes – in the areas of: (scientific research, academic supervision and students' assessment processes) – that can be attributed to the type of educational institutions in which the respondents are teaching in for the favor of the governmental higher educational institutions. However, there were no statistically significant differences between faculty members' attitudes towards the quality of the professional development processes – in the areas of: (teaching and community service).

There were also statistically significant differences between respondents' attitudes towards the quality of the professional development processes – in the area of: students' assessment processes – which can be attributed to their years of experience for the favor of the ones who possess 10 years of experience or less. There were also statistically significant differences between respondents' overall attitudes towards the quality of the professional development processes – in the five areas – which can be attributed to the academic degree for the favor of the ones who hold an MA degree. The study also concluded that were no statistically significant differences between respondents' attitudes towards the quality of the professional development processes – in the five areas – which can be attributed to the major of the instructor.

Nordkvelle (2008) conducted a study that aimed to re-consider some traditional professional development standards. The study also aimed at identifying the role of information technology in introducing new challenges facing the faculty members working at higher educational institutions in relation to their professional competence. The results showed that the most significant types of competence that must be developed among faculty members include: the ability to participate in distance learning activities that make use of information technology. The study concluded that the main responsibilities of the educational institutions include working in collaboration with the administrators and faculty members. Such collaboration should be in the aim of developing the competence of the faculty members in dealing with information technology and using it effectively.

Waters and Weeks (2008) conducted a study that aimed at developing a program that seeks developing the competence of the part- time faculty members in teaching at the Queensland University of Technology (QUT) that is located in Australia. In order to collect the required data, the researchers adopted two researcher methods; interview and survey. For instance, they distributed questionnaire forms to 800 faculty members and they interviewed them. After that, the researchers held a training workshop that included (200) part-time faculty members. However, the study's results because there weren't a significant development in the professional competence of those part-time faculty members

Fitzgibon (2005) conducted a study that aimed to identify the challenges facing the processes of

professional development of faculty members in a mixed teaching environment. The sample consisted of faculty members working at the Glamorgan University that is located in the United Kingdom (UK). The researcher concluded that one of the obstacles that has been facing the professional development processes of the faculty members is represented in not holding adequate training programs that shall develop the competence of those members in using technological means

Nedj (2003) conducted a study that aimed to identify the performance level of faculty members in teaching students about technology in universities and institutes. It was concluded that faculty members need to diversify teaching methods they adopt when teaching technology in order to meet students' needs. The researcher recommended developing those members' teaching skills and academic knowledge due to the changes that have been taking place in the jobs' nature all around the world. The searcher also recommended creating an environment that shall improve students' academic and personal skills as being an obligatory requirement rather than being something desired. The study recommended exerting efforts by the faculty members to merge technology into their teaching practices.

Yonng & Shaw (2003) conducted a study that aimed to identify the factors that are responsible for determining the efficiency of the teaching processes in the faculty members of Northern Colorado University. The study dealt with the problems that face the faculty members in the university teaching environment when applying traditional teaching methods in comparison to apply modern ones that adopt modern technological tools. In order to achieve the study's objectives, the researchers designed a questionnaire that consisted of twenty five ( 25 ) statements. After that, the researcher distributed the questionnaire forms to nine hundred and twelve ( 912 ) students. This questionnaire aimed to identify the efficiency of the faculty members in teaching students and delivering the content of the curriculum to them. The study concluded that the best faculty members are the ones who raise students' motivational levels and encourage them to study and become involved in the teaching – learning process within the lecture halls.

#### **Comments on the aforementioned studies:**

We can notice that the aforementioned studies are restricted to emphasizing certain issues, such as: identifying the professional development needs of faculty members and identifying the main tasks required for designing a curriculum and preparing for it. Such issues included: investigating the quality of the professional development processes provided for faculty members in higher educational institutions and re-considering some traditional professional development standards. Such issues also included: identifying the role of information technology in introducing new challenges facing the faculty members working in higher educational institutions in relation to their professional competence. These issues also included: developing a program for improving the competence of part -time faculty members' in teaching and identifying the challenges that have been facing the professional development processes targeting faculty members in a mixed teaching environment.

As for the current study, it is similar to the aforementioned studies regarding its problem, which is represented in identifying the training needs of faculty members. However, it differs from the aforementioned studies in seeking to identify the training needs of the faculty members at Al-Huson University College – which is one of the colleges of Al-Balqa' University - in employing multimedia in teaching. In addition, the current study differs from the aforementioned studies in seeking to identify the impact of various independent variables. It also differs from them in relation to its temporal and spatial dimensions. For instance, the current study was conducted during the academic year of 2014 / 2015 and in Al-HUSON College which is one of the colleges of Al-Balqa' University.

Previous studies have focused on subjects on issues such as determining the degree of professional development needs for faculty members, and identifying the most important tasks required for the design of the school and to prepare for its implementation, and get to know the reality of professional development for faculty members in higher education institutions, and to re-examine some of the traditional professionalism indicators, and to reveal the role of information technology in bringing new challenges to the efficiencies faculty career in higher education, and to develop a program aimed at the development of teaching skills of faculty, part-time body, and the disclosure of the challenges that stand in the face of the development of professional competence of the faculty members in the integrated learning environment .

The current study aims to determine the necessary training needs of faculty members, and differs in its attempt to identify training needs to employ multimedia in teaching at Al-huson College of the Balqa Applied University, and also differs in the use of several independent variables, and in environment in which they were conducted, as applied to the teaching staff at Al-huson College for the academic year 2014/2015 faculty members.

#### **Problem statement and questions**

This study dealt with from the perspective of the researcher subject of training needs in the recruitment of multimedia to the teaching at University College Mustangs staff members, where lies the problem of the study in



the search for the most important training needs required by the faculty members in the university teaching and that will help them in raising the efficiency of their all magazines whether cognitive, or emotional, or skill to improve university education outputs, and raise their efficiency to keep pace with scientific developments and modernity in light of the explosion of knowledge and technology, and to achieve the principles of quality in education. This study sought to answer the following questions:

First: "What training needs of faculty members at the University College Mustangs to employ multi-media teaching?"

Second: "Is the training needs of the faculty members in the College of the fort university to employ multi-media teaching vary depending on variables: specialization and the number of years of experience?"

### Objectives of the study

1. Identify and clarify the roles and functions of a faculty member at the university.
2. Identify and clarify the training needs in the recruitment of Multimedia and its relation to the roles of faculty members.

### The importance of the studying

The importance of the study of being seeks to identify and clarify the training needs of the faculty at University College Mustangs members in the recruitment of multiple teaching media, and to allow other educational institutions to take advantage of them, in addition to that it is seeking to develop the scientific competence of faculty members and faculty development skills including achieve the desired educational goals in accordance with the overall context of achieving quality in education.

### Operational definitions of study's terms

- Training needs is a set of changes required and developments set in a faculty member regarding their knowledge to his skill and trends and to raise the scientific competence in university teaching.
- Multimedia: is a group of different means of communication of voice and image and video that can be used in university teaching by faculty members teaching in order to achieve efficiency in the teaching process which leads to raise the efficiency of learners, and improving the quality of education outcomes.
- Faculty: They are working at the College of the fort in the academic field belonging to the Balsa Applied University for the academic year 2014/2015 m.
- College of the fort university: University College fort established on 1981, and then the college turned to one of the colleges of Balsa Applied University, and teaches interdisciplinary phases bachelor's degree and diploma and characterized by University College Mustangs large number of administrative and technical cadres eligible where the number of faculty of staff members in the college 140 The number of teachers and administrators, technicians and workers 160 employees.

### Methodology

#### Study population

The study population consisted of all faculties at ALHUSON College/ Balqa Applied University members who teach students in the two degrees of bachelor and diploma's (133) and a school teacher.

#### The study sample

A random sample of the population were selected (78) teachers representing 60% of the study population. A questionnaire was distributed to the study sample to identify training needs to employ multiple university teaching media in college. Table 1 shows the distribution of the study sample depending on the variables of specialization and years of experience.

**Table (1) the distribution of study sample depending on the variables of specialization and the number of years of experience**

Total	Years of Experience			Specialization
	Of 10 years and over	- 5less than 10 years	Less than 5 years	
42 53.8%	11 14.1%	14 17.9%	17 21.8%	the number scientific Percentage
36 46.2%	8 10.3%	9 11.5%	19 24.4%	the number Humanitarian Percentage
<b>78</b> <b>100.0%</b>	<b>19</b> <b>24.4%</b>	<b>23</b> <b>29.5%</b>	<b>36</b> <b>46.2%</b>	the number Total Percentage

### The study tool

To afflict the goal of this study, the researcher prepared a questionnaire depending on previous studies. This questionnaire included three domains (cognitive, emotional and skill), distributed on (39) paragraphs in its final form after a presentation to a group of arbitrators and specialists in this field.

To verify reliability of the construction scale, it has been linked paragraph dimension to which they belong transaction values are calculated, and also has been linked to transactions values are calculated (the debugger correlation coefficient:) and scale as a whole, and the criterion should not be less debugger correlation coefficient for (20.0) (Kline, 1986), table (2) debugger correlation coefficients values.

**Table (2) Correlation coefficients of correlation values debugger paragraph dimension to which they belong**

The link to the debugger correlation coefficient (emotional dimension)			The link to the debugger correlation coefficient (skill dimension)			The link to the debugger correlation coefficient (cognitive dimension)		
Measure as a whole	Dimension	Paragraph No.	Measure as a whole	Dimension	Paragraph No.	Measure as a whole	Dimension	Paragraph No.
.51	.50	28	.47	.49	16	.34	.32	1
.40	.32	29	.43	.20	17	.29	.31	2
.57	.38	30	.61	.38	18	.51	.54	3
.33	.38	31	.58	.52	19	.56	.53	4
.58	.52	32	.25	.46	20	.44	.29	5
.60	.48	33	.62	.47	21	.34	.31	6
.47	.55	34	.45	.50	22	.62	.22	7
.39	.51	35	.33	.58	23	.45	.27	8
.28	.34	36	.57	.57	24	.39	.40	9
.24	.56	37	.23	.54	25	.41	.45	10
.34	.63	38	.28	.49	26	.35	.34	11
.32	.60	39	.36	.69	27	.29	.35	12
						.21	.48	13
						.45	.21	14
						.34	.51	15

It is noted from table (2) that all the debugger correlation coefficients values acceptable, check out the previous standard, and thus did not delete any paragraph of the scale. To study the stability of the scale, Cranach's alpha coefficient for internal consistency, which is calculated for each dimension of the scale and dimensions of the measure as a whole, and Table 3 shows the consistency of the scale transactions values, using Cranach's alpha equation.

**Table (3) Cranach's alpha values for each transaction after the dimensions of the scale and the scale as a whole**

(Cranach's alpha)	The dimension
0.78	Cognitive
0.83	Skills
0.86	Emotional
<b>0.89</b>	<b>Measure as a whole</b>

Notes from the table (3) that the values of the stability of the internal consistency Cranach's alpha coefficients ranged from (0.78-86.0), and the measure as a whole amounted to (0.89) and considers all these values are acceptable for the purposes of this study.

To correct component (39 meter) items distributed on three dimensions: Dimension (cognitive) and has (15) items, dimension (skills) and has (12) items, dimension (emotional) and has (12) paragraph. Screened puts signal (x) in front of each paragraph to indicate the extent the content of paragraph match with what he sees fit. Note that the choices were as follows: (very high), which was given class (5), or (high), which was given class (4), or (medium), which was given class (3), or (low), which given class (2), or (very low), which was given class (1). To determine the level of training needs for members of the study sample as well as after each of the scale dimensions, the use of standard statistical follows - based on the means and shown in the table (4).

**Table (4) Statistical standard and to determine the level of training needs for members of the study sample as well as after each of the scale dimensions**

Level of need	SMA
Low	Less than 3.34
Average	From 2.34 - less than 3.67
High	From 3.67 - 5.00

**Variables of the study: The study included the following variables:**

**First, the independent variables (taxonomic)**

- Specialization: It has two categories: (a scientific, humane).
- Years of Experience: He has three levels: (less than 5 years, from 5 - less than 10 years, 10 years and over).

**Second: The dependent variables:**

- Training needs as a whole: it is represented by the averages of the responses as a whole.
- The dimensions of training needs scale: it is represented by the average of the estimates of study sample clauses after each of the three dimensions of the scale (of knowledge and skills, and emotional)

#### Statistical processors

To answer questions about the study, the researcher used many statistical methods including means and standard deviations, One Way ANOVA, One Way MANOVA.

#### Results of the study and discussion

First results on the first question: "What are the training needs of the faculty members at Alhusun College to employ multi-media teaching?"

To answer this question; the averages and standard deviations of the estimates of study sample of the three training needs scale dimensions (knowledge, and skills, and emotional), and Table 5 shows that.

**Table (5) Averages, standard deviations, estimates of study sample within three training needs scale dimensions (knowledge, and skills, and emotional) in descending order according to averages**

Level of need	Rank	standard deviation	SMA	The dimension	No. Dimension
	1	0.43	4.10	<b>Cognitive</b>	1
	2	0.49	4.04	<b>Skills</b>	2
	3	0.45	3.85	<b>Emotional</b>	3
		<b>0.37</b>	<b>4.01</b>	<b>Needs as a whole</b>	

\* Minimum class (1) and upper class (5)

Table (5) shows that the training needs of faculty members at ALHUSON College for employing multi-media teaching is high (4.01). Where (cognitive) dimension ranked first with a mean (4.10) and level (high), followed by the second dimension (skills) with a mean (4.04) and level (high), while the (emotional) dimension came in third place with a mean ( 3.85) and level (high). Attribute the researcher to a combination of factors, including, that faculty members need to increase their awareness of the importance of the interaction between teacher and students when hiring educational systems using multimedia, which contributes to educating students in the classroom is and help in the treatment of behavioral and emotional problems and help them to social adjustment and contribute to develop their abilities to the fullest extent possible, leading to afflict a better understanding of their learning. Lack of classroom is equipped with technologies education, there are some teachers who are not eligible to use these techniques, if available, and the unwillingness of many teachers to move from the ideas of behavioral philosophy to the structural knowledge of philosophy, especially of the elderly, and this was confirmed by previous studies (Attar, 2012; Brown, 2012; AbdulGhaffar, 2011; Hadi, 2011; Mutairi, 2009; Nordkvelle, 2008) .

**Second: The results of the second question: "Is the training needs of the faculty members in ALHUSON College to employ multi-media teaching vary depending on variables: specialization and the number of years of experience?"**

To answer this question; the averages and standard deviations of the estimates of study sample calculation on the training needs scale, depending on the variables: specialization and the number of years of experience as shown in Table 6.

**Table (6) Averages, standard deviations, estimates the study sample on training needs scale, depending on the variables: specialization and the number of years of experience**

Overall		Humanities		Scientific		Years of Experience
Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean	
<b>0.36</b>	<b>3.91</b>	0.44	3.76	0.13	4.07	Less than 5 years
<b>0.31</b>	<b>4.06</b>	0.38	3.90	0.20	4.17	5- 10 years
<b>0.42</b>	<b>4.12</b>	0.47	3.83	0.22	4.34	above 10 years
<b>0.37</b>	<b>4.01</b>	<b>0.42</b>	<b>3.81</b>	<b>0.21</b>	<b>4.17</b>	Overall

Its noted from table (6), the existence of morphological differences between the averages of estimates of study sample on training needs scale depending on the variables: specialization and the number of years of experience, and to determine the statistical significance of these differences, it was the application of two-way analysis of variance (Two way ANOVA).

**Table (7) Analysis of variance binary arithmetic averages of estimates of study sample on training needs scale depending on the variables: specialization and the number of years of experience**

Statistical significance	Average squares	Degrees of freedom	sum Squares	variable
.000	*22.541	1	2.325	Specialization
.145	1.984	2	.409	Years of Experience
.481	.739	2	.152	Specialization × Years of Experience
	.103	72	7.425	error
		<b>77</b>	<b>10.311</b>	<b>Total</b>

\* Statistically significant at the level of statistical significance ( $\alpha = 0.05$ )

**Notes from the table (7) as follows:**

- There is no difference statistically significant at the level of statistical significance ( $\alpha = 0.05$ ) between the means to estimates from the study sample on the training needs of a whole scale, due to the variable of specialization, where the value of statistical significance (0.000), which is below the level of statistical significance ( $\alpha = 0.05$ ), and averages a table (table 8) shows that the difference statistically significant in favor of the study sample with specialized personnel (scientific). Attribute the researcher, because the teachers with scientific disciplines may come into contact with a large digital data and illustrations and graphs and diagrams need to be viewed using multimedia, only the best of the display the way the narrative verbal, Improved process of teaching and increase student interaction with the lecture and increase the understanding they have, this has been confirmed by both (Omari 0.2007; beholder 0.2007 studies; Aharoa, 2007; Nedj, 2003). Teachers in the majors is the scientific understanding of using the method of lecture and dumping a method suitable materials that teach more than the offer by the computer and multimedia as the way from the point of view is an effective method, and serve their purpose, not to mention the lack of classroom is equipped to use the offer by multimedia, and the weakness of the means necessary for that equipment.
- There were no statistically significant differences at the level of statistical significance ( $\alpha = 0.05$ ) between the averages of estimates of study sample on the training needs of a whole scale, due to the variable number of years of experience, where the value of statistical significance (0.145), which is greater than the level of statistical significance ( $\alpha = 0.05$ ).
- There were no statistically significant differences at the level of statistical significance ( $\alpha = 0.05$ ) between the averages of estimates of study sample on the training needs of a whole scale, attributed the bilateral interaction between the two variables: specialization and the number of years of experience, where the value of statistical significance (0.481), a greater than the level of statistical significance ( $\alpha = 0.05$ ).



**Table (8) Averages, standard deviations, estimates of study sample within three training needs scale dimensions (knowledge, and skills, and emotional) depending on the variables: specialization and the number of years of experience**

Overall	Years of Experience						Specialization	The dimension	
	Above10 years		5-10 years		Less than 5 years				
S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean		
0.26	4.22	0.28	4.33	0.23	4.27	0.24	4.11	scientific	Cognitive
0.53	3.96	0.52	4.03	0.59	3.99	0.53	3.92	Humanities	
0.43	4.10	0.42	4.21	0.42	4.16	0.42	4.01	Overall	
0.40	4.20	0.23	4.49	0.40	4.15	0.39	4.04	scientific	Skills
0.53	3.87	0.53	3.80	0.40	3.94	0.59	3.86	Humanities	
0.49	4.04	0.51	4.20	0.41	4.07	0.51	3.94	Overall	
0.30	4.09	0.35	4.18	0.22	4.05	0.33	4.06	scientific	Emotional
0.42	3.56	0.46	3.61	0.41	3.75	0.39	3.45	Humanities	
0.45	3.85	0.49	3.94	0.34	3.93	0.47	3.74	Overall	

Table (8) displays that the existence of morphological differences between the averages of estimates of study sample on each dimension of the three training needs scale dimensions (knowledge, and skills, and emotional), depending on the variables: specialization and the number of years of experience, and knowledge of the statistical significance of these differences, it was the application of analysis contrast multi duo (Two Way MANOVA), and the table (10) shows that.

**Table (9) Multi-contrast duo on the steps of the analysis of the study sample members on each of the three after training needs scale dimensions (knowledge, and skills, and emotional), depending on the variables: specialization and the number of years of experience**

Statistical significance	Average Squares	Degree of freedom	sum Squares	The dimension	Source of variation	
.010	*6.946	1	1.173	Cognitive	Specialization	
.001	*11.458	1	2.328	Skills	Hotelling's Trace=0.517	
.000	*33.573	1	4.309	Emotional	Statistical significance*0.000=	
.322	1.150	.194	2	.388	Cognitive	
.305	1.207	.245	2	.491	Skills	Years of Experience Wilks' Lambda=0.937
.209	1.602	.206	2	.411	Emotional	Significance Statistical 0.592=
.854	.158	.027	2	.053	Cognitive	Specialization ×
.126	2.134	.433	2	.867	Skills	Years of Experience Wilks' Lambda=0.885
.271	1.328	.170	2	.341	Emotional	Significance Statistical 0.19=
	.169	72	12.155	Cognitive	The error	
	.203	72	14.628	Skills		
	.128	72	9.241	Emotional		
		77	13.769	Cognitive	Total	
		77	18.313	Skills		
		77	14.302	Emotional		

\* Statistically significant at the level of statistical significance ( $\alpha = 0.05$ )

As table (9) shows, there is no statistically significant difference at the level of statistical significance ( $\alpha = 0.05$ ) between the means to estimates from the study sample on all dimensions of training needs scale, due to the variable of specialization, where the statistical significance values less than the level of statistical significance ( $\alpha = 0.05$ ), and table averages table (10) shows that the difference statistically significant in favor of the study sample with specialized personnel (scientific).

- There were no statistically significant differences at the level of statistical significance ( $\alpha = 0.05$ ) between the averages of estimates of study sample on all dimensions of training needs scale, due to the variable number of years of experience, where the statistical significance values greater than the level of statistical significance ( $\alpha = 0.05$ ).

-There were no statistically significant differences at the level of statistical significance ( $\alpha = 0.05$ ) between the averages of estimates of study sample on all dimensions of training needs scale, attributed the bilateral interaction between the two variables: specialization and the number of years of experience, where the statistical significance values greater than the level of significance statistical ( $\alpha = 0.05$ ).

### Recommendations

- The need to hold more training workshops for the faculty members at ALHUSON College and the rest of the Balqa Applied University colleges training courses in the field of modern technology and trained in modern techniques.
- The provision of adequate labs at ALHUSON College and the rest of the Balqa Applied University colleges, which include equipped to implement multimedia technology, and sensitization of teachers to the need to activate the use of these laboratories in teaching university courses laboratories.

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