## RESEARCH ARTICLE

## THE IMPACT OF INSTITUTIONAL SUPPORT, TECHNICAL EXPERTISE, AND ATTITUDES TOWARDS THE ACCEPTANCE AND USE OF TECHNOLOGY IN EDUCATION BY FACULTY MEMBERS OF FORENSIC SCIENCES AT THE UNIVERSITIES OF RIYADH.

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| Manuscript Info | Abstract |
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| | The institutional support is important for the effective implementation of technology based instruction (Farrell, 1999). The study aimed to find out the impact of the institutional support, technical expertise, and attitudes towards the acceptance and use of technology in education by faculty members of Forensic Science at the universities of Riyadh. The total sample of the study was 310 out of 984 which formed a very reliable sample according to sample calculations and equations. A questionnaire has been distributed and data was collected. The SPSS programme was used to find the ANOVA, Pearson, Linear regression method, and R-Square. The results show the availability of the institutional support for faculty teaching staff of Forensic Science towards the use of educational technology. The Pearson correlation is positive and statistically significant at the level of ($> 0.01$) and this shows that the faculty members accept and use technology in education throughout the institutional support, technical expertise and attitudes. The study proposes that more effective training and more incentives might help faculty members to use technology in education. |

## Introduction:-

There are three key factors for successful integration of technology which are the will (attitude), skill (technology proficiency) and tool (access to technology tools). Regarding to the three factors, the attitude is recognized as essential, but skills appears to be the strongest of all (Agyyei, & Voogt, 2010). Contrary that, most of teachers and faculty members in developing countries have been introduced to basic technology competencies that need pedagogical skill to use technology in instruction even if they have access to computers and internet (Sife, et al., 2007). Even though instructors are positive regarding the use of technology in education, most of academic staff lack enough knowledge to use technology in teaching. (Nihuka & Voogt, 2011). Generally, despite positive attitude of teachers and students towards technology use in education, it's important to recognize that there are other factors that can influence or affect the practice such as the institutional support, technical expertise and attitudes.

Mitrano (2011) pointed out that policies and plans within the institution provide framework for implementation of day to day activities. Institutional capacity to technological infrastructures is all about teachers and students' access to physical and technological resources to support technology-based instruction within a particular institution. The technologies may include websites, computers, mobile phones, internet, video, radio and television. Sife, et al.

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(2007) stated that, in Tanzania's higher learning institutions, teachers and students have access to internet, computers, mobile technology like mobile phones, audio CDs and DVDs; however, that access is very limited. In contrast, in China, about 80% of higher learning institutions had access to computers and internet in the year of 2006. About 76.6% of offices, 42.2% of classrooms, 49.4% of dormitories of all higher learning institutions have connection to internet. It was found that almost every Normal University in China is operating in a dual mode system, of distance and conventional education (Guo & Cai, 2006) such that by 2004, there were 67 universities engaged in distance education plus one Open University in China. Thus infrastructures in these institutions contribute to effective technology instruction and can help to encourage and implement technology-based learning and instruction. Those infrastructures can play roles such as improving communication, uploading and downloading e-learning materials to create more flexible learning environment.

According to technical support, the crash of a computer results in interruptions (Jones, 2004). If there is lack of technical assistance, then the customary repairs of the computer will not be carried out resulting in faculty members not using computers in teaching or instruction. Consequently, if there is no technical support for faculty members, they become frustrated resulting in their unwillingness to use ICT (Tong &Triniada, 2005). Even though, lack of technical support discourages teachers from adopting and integrating technology in classrooms. Korte and Husing (2007) revealed that schools in Britain and the Netherlands have appreciated the significance of technical support to help teachers to incorporate technology into their teaching/learning processes. They argued that ICT support in schools can influence teachers to apply ICT in classrooms without wasting time troubleshooting hardware and software troubles. Though infrastructure support is essential, school technology leadership is a stronger forecaster of teachers' use of computer technology in instruction (Anderson, & Dexter, 2005). Wong and Li (2008) conducted a study on factors that affected transformational integration of ICT in eight schools in Hong Kong and Singapore. The study revealed that leadership promotion of collaboration and experimentation and teachers dedication to student-centred learning affected the successful ICT transformation. Organizations exemplified by executive involvement and decision-making, strengthened by ICT plan, can effectively adopt ICT integration curriculum.

There is shortage in studies that dealt with exploring the effectiveness of institutional support, technical expertise and attitudes in using technology in education by staff members of Forensic Sciences in the world. Steered by this fact, the researcher tried to explore how technology in education can be influenced by institutional support to benefit faculty members of Legitimate Sciences in Saudi Arabia.

## Problem of the study:-
The Curriculum domain has been widened with many adopted elements and the traditional concept of knowledge is no longer useful for the implementation of the curriculum elements through traditional pedagogies to enhance educational experiences (Attar, 2011). The role of the faculty member is no longer limited to lectures but he/she afford the responsibility to spread the knowledge by simplifying it for students.  He/she need to deal with educational technology to achieve the interaction of the learners with the best that technology has to offer. So it becomes so necessary to upgrade the level of the faculty member scientifically, educationally, and professionally. It should so vital to improve his/her ability to deal with technology and employ them in the educational effectively to manage the process of education maintain a coherent, direct impact on his/her students since the faculty member beholds the most important success factors for university education (Mubarak, 2014; Salam, 2013; and, Mazen 2010; Al-Aqel 1432H; and Salim, 2004). The researcher did not find studies dealt with the fact or factors influencing the use of technology for the faculty members of Forensic Science Technology education. So, the current study attempted to identify some of the factors that affect their use of technology in education which include: Institutional support, technical expertise, and attitudes. Previous studies have shown the low level of technology use for faculty members in the educational process in the Arab region (Shayhob, Abdulghany, and Mohammad, 2014; Qahtany, 2012; Attar 2011). In addition to that, the researcher has many observations in the field of education during his academic studies.  As well as, a survey which has been carried out and through this he found that there are still negative indicators towards the use technology by faculty members of Forensic Science signaling of their lack of experience or enough training sessions to use technology. Based on the above, the problem of the study is to identify the reality of the use of technology by faculty members of Forensic Science technology at the Universities of Riyadh, and the impact of some external factors on their acceptance and use. Therefore, the study sought to find out the impact of institutional support, technical expertise, and attitudes to accept and use technology in education through applying model a new model towards the acceptance and use technology called (UTAUT) after adding some factors to this model (Venkatesh et al., 2012).

**Justification of the study:-**
Technology has enriched the field education hugely; which made the developed countries so concerned and attentive towards believing in its benefits in the present and future as well.

There is a need to create positive impression among the members of the teaching staff of Legitimate Sciences towards the use of educational technology in the teaching and learning process which will reflect positively on the acceptance and use of technology.

The Forensic Sciences are so important, and there is a necessity of care about all contributions to provide the best of technology that help inculcate true religion and high values in the individuals of the nation, and to direct their conduct properly, and to highlight high responsibility for the community in serving the potential of the nation.

**Study question:-**
Based on the above, the problem of the study is to try to answer: What is the impact of the institutional support, technical expertise, and attitudes towards the acceptance and use of technology by faculty members of Forensic Science in education at the universities of Riyadh? The chief extracted question of the study can be summarized: what is the availability of institutional support for the use of technology by members of the teaching staff of Forensic sciences in education at the universities of Riyadh?

**The objectives of the study:-**
The main objective of the study was to identify the impact of institutional support, technical expertise, and attitudes towards the acceptance and use of technology by faculty members of Forensic Science in education at the universities of Riyadh. In order to facilitate the possibility of achieving the main goal, the researcher tried to explore quantitatively and qualitatively the availability of institutional support of members of the teaching staff of Forensic sciences in using technology in education at the universities of Riyadh.

**Importance of the study:-**
The importance of this study comes according to the importance of the use of educational technology adopted by many universities in the developed countries, as well as exploring the need of technology by Forensic Sciences. It is considered the first study dealing with the factors affecting the use and acceptance of technology by university members in education. The importance of the study has two domains:

A. Scientific importance can be achieved through the application of the model of (UTAUT) and its consequences in a developing country like Saudi Arabia.  The researcher, according to the global data office, King Fahad National library, did not find any regional, Arab, or global layer model aiming to identify the factors that affect the acceptance and use of technology in education by Faculty members of Forensic Sciences. The study, therefore, aims to develop Faculty members of Forensic Sciences and to benefit from the scientific progress in the field of technology in education in order to cope with the use of modern technology in the educational process. Finally, the researcher hopes  to find  factors and variables that affect technology education.

B. Practical significance: This will provide effective solutions for the members of the Faculty of Forensic Sciences to use technology in education, whether by the members themselves, or those responsible for them at the Ministry of education and different departments of universities. Moreover, this study may enhance future policies to activate and support the use of technology by educational faculty members taking into account the factors that affect their use.

# Review of  literature:-
Srivastava and Lee (2005) maintained that the institutional support of senior management could be achieved by the clarification of the future vision for workers by and giving approval to proceed with the completion of a task or a new idea, and by providing the necessary resources for their task-completion.  This material support includes spending money on what it takes to do the task under completion, and to evaluate the financial incentives of cash rewards. The moral support can be fulfilled by the approval and encouragement to perform a task and by providing verbal or written appraisal, such as certificates or letters of thanks and appreciation.

The operational definition of institutional support is to provide senior management to faculty members in various jobs and ranks in order to achieve the highest degree of the use of educational technology and its utilization, through

the provision of education technology innovations, and by giving material and moral incentives to ensure they use it to the fullest.

Definition of institutional support: According Srivastava and Lee (2005), the institutional support (senior management) is to provide and clarify the future vision of the workers, and to give approval for them to proceed in the completion of a task or a new idea by providing the necessary resources for their completed tasks. The material support includes spending money on what it takes to do the task under completion, and evaluate the financial incentives such as cash rewards or through moral support: such as encouragement to perform tasks verbally or in written, such as certificates of thanks and appreciation.

Young and Jordan (2008) defined the administrative institutional support is to value the time for the program information systems commensurate with its costs, and its expected outcomes, review plans, follow up results, to help overcome administrative difficulties relating to the integration of Information Technology and computers in the process of business management.

Subramanian and Lacity (1997) defined the administrative institutional support as the involvement of high managements in projects through the realms of three domains: a role model, presenting resources, and its participation in the project to achieve the intended goals.

The researcher thinks that the institutional support for technology in education is to provide departments and senior university officials or faculty members of various jobs or ranks with all that would push them to achieve the highest degree of the use of educational technology and its utilization through the provision of education technology innovations by giving material or moral incentives to ensure they use it to the fullest.

**Study population:-**
The population is defined by "all subjects of the phenomenon studied by the researcher. So the study population is all the individuals or objects who formed the subject problem" (Obeidat, et al., 2014). Based on the theme of the current study and its objectives the target community consists of all faculty members of Forensic sciences at Saudi universities in Riyadh (King Saud University, Islamic University of Imam Muhammad bin Saud, The Mujamea University, others). The members included teaching assistants or lecturers or doctors (assistant professors, associate professors, professor). The number of members of this community are (984) member of the Faculty of Legitimate Sciences, depending on the data contained in the websites of each University. They are distributed according to the following table:

**Table 1:-** Faculty subjects of Legitimate Sciences at Riyadh

| Total | Mujamaa University | Islamic University of Imam Muhammad bin Saud | King Saud University |
|---|---|---|---|
| **984** | **104** | **735** | **145** |

The study sample extracted from the community was summarized in Table 2. The total number of the study was 310 out of 984 which formed a very reliable sample according to sample calculations and equations as well.

**Table 2:-** Study Sample

| Pecentage | No. | University |
|---|---|---|
| **٪7.4** | **23** | King Saud University |
| **٪59.7** | **185** | Islamic University of Imam Muhammad bin Saud |
| **٪19.7** | **61** | Mujamea University |
| **٪13.2** | **41** | Others |
| **٪100** | **310** | Total |

**Results:-**
The institutional support items of the questionnaire answers the main question of the study. What is the on-going reality towards the availability of institutional support in the use of educational technology by members of the Faculty of Legitimate Sciences at Riyadh universities. The averages, deviations, and percentages of respondents' answers have been calculated in Table 3.

**Table 3:- Results of subjects' answers about the institutional Support towards technology in education**

| Order | Stan. Devi. | Mean Aver. | Level Of Agreement | | | | | | Statement | Item |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | S/D A | D/A | N | A | S/A | | | |
| 2 | 1.05 | 3.72 | 10 | 34 | 64 | 128 | 74 | F | The university provides technical assistance related to the use of educational technology | **1** |
| | | | 3.2 | 11 | 20.6 | 41.3 | 23.9 | ٪ | | |
| 3 | 1.03 | 3.65 | 8 | 42 | 65 | 132 | 63 | F | The University provides the resources necessary to use technology in Education. | **2** |
| | | | 2.6 | 13.5 | 21 | 42.6 | 20.3 | ٪ | | |
| 4 | 1.24 | 3.23 | 33 | 64 | 60 | 106 | 47 | F | The University gives material incentives for users of technology in education. | **3** |
| | | | 10.6 | 20.6 | 19.4 | 34.2 | 15.2 | ٪ | | |
| 5 | 1.19 | 3.06 | 27 | 88 | 78 | 74 | 43 | F | The University gives moral incentives for users of technology in education | **4** |
| | | | 8.7 | 28.4 | 25.2 | 23.9 | 13.9 | ٪ | | |
| 1 | 1.05 | 3.73 | 10 | 34 | 61 | 131 | 74 | F | The university organizes training sessions on how to use technology in education | **5** |
| | | | 3.2 | 11 | 19.7 | 42.3 | 23.9 | ٪ | | |
| **0.88** | | **3.47** | The overall average of institutional support towards the use of technology in education | | | | | | | |

Results extracted from Table 3 shows the consent of the respondents on all elements of the domain concerning the availability of the institutional support for faculty teaching staff of Forensic Science towards the use of educational technology. The arithmetic mean was (3.47) and the standard deviation was (0.88). As shown in the table the answers of members of the Faculty of Forensic Sciences towards the availability of institutional support regarding the use of educational technology, the views are divided in terms of degree of approval into two groups: (1) According to the arithmetic average, opinions which (Agree) are those views with arithmetic average of (3.41-4.20), namely, the university organizes ongoing training sessions on the use of educational technology which came in first with an average of (3.73), and the university provides ongoing technical assistance related to the use of technology in education was the second with an average of (3.72), then comes 'the University provides necessary resources for the use of educational technology' in third place with an average of (3.65).

There were also opinions which are divided (Neutral) with arithmetic average of (2.61-3.40), and according to this ranking, the university gives material incentives for uses of technology in education, with an average of (3.23), and the university provides ongoing moral incentives for uses of educational technology with an average of (3.06).

The general question was what is the impact of institutional support, technical expertise and attitudes towards the acceptance and use of technology in education by faculty members of Forensic Sciences at the universities of Riyadh? To find the impact of institutional support, technical expertise and attitudes towards the acceptance and use of technology in education by faculty members of Forensic Sciences at the universities of Riyadh, the researcher used Pearson correlation coefficient (Pearson Correlation) and he also used linear regression model to demonstrate the impact of institutional support, technical expertise and attitudes to accept and use of technology in education by faculty members of Forensic Science at the University of Riyadh. The results came as follows:

**Table 4: Pearson's correlation between the acceptance and use of technology in education by the members of the Faculty of Forensic sciences and all the institutional support, technical expertise and attitudes**

| Pearson Correlation | Use and Acceptance Degree Domain |
|---|---|
| **\*\*0.179** | Institutional support |
| **\*\*0.362** | Technical expertise |
| **\*\*0.179** | Attitudes |

**\*\*** Significant at **(0.01)**

Table 4 shows that the correlation is positive and statistically significant at the level of (p < 0.01) and this shows that the faculty members accept and use technology in education throughout the institutional support, technical

expertise and attitudes. It shows that the more the ongoing institutional support, technical expertise and attitudes increased, the more they accept and use technology in education by faculty members of Forensic Sciences. As can be seen from the table, the technical expertise is more closely related to institutional support and attitudes.

**Table 5:- Linear regression method between the acceptance and use of technology in education by of the members of the Faculty members of Forensic sciences and all the institutional support, technical expertise and attitudes.**

| Statistics | | Factors | | | |
|---|---|---|---|---|---|
| Statistical Value | Statistical Equations | Prop-Value | T-Value | Factor Value | Variable |
| 0.15 | $R^2$ | *.010 | 2.60 | 0.91 | **Constant** |
| 0.72 | S.E. of regression | *.025 | 2.26 | 0.11 | **Institutional support** |
| 17.52 (0.000) | F-test | **.000 | 5.73 | 0.39 | **Technical expertise** |
| | | .688 | 0.40 | 0.03 | **Attitudes** |

 **Significant at 0.01,  *Significant at 0.05

Table 5 shows the results of Linear Regression Model between the dependent variable, which is the acceptance and use of technology in education by faculty members of Forensic Sciences, and the independent variables, namely institutional support, technical expertise and attitudes as follows:

1. The value of determination coefficient of R Square was 0.15 which shows that the institutional support, technical expertise and attitudes explains (15%) of the differences that occur for the use and acceptance of technology in education by faculty members of Forensic Sciences.
2. The standard Error of the estimate was 0.72
3. That the value of (F) is 17.52, and that the calculated significance value was (0.000), and this argue that the linear assumed model demonstrate the validity of the linear model to represent the relationship between acceptance and use of technology in education by the members of the Faculty of Forensic Science as the dependent variable, and the institutional support, technical expertise and attitudes as explained variables.
4. For the test of the coefficient regression observed from the second column of Table 6 (the calculated Sig. value), it seems that:

A- For institutional support and technical expertise, the calculated significance was less than (5%). This indicates that institutional support and technical expertise towards the acceptance and use of technology in education by the members of the Faculty of Forensic Science Technology education are the most influential factors
B- For attitudes, the calculated value is greater than (5%). This indicates that the attitudes do not impact the acceptance and use of technology in education by the members of the Faculty of Forensic Sciences.

## Discussion of Results:-
The study addressed the institutional support, technical expertise and attitudes and their impact on acceptance and use of technology in education by faculty members of Forensic Sciences at the Universities of Riyadh in Saudi Arabia. The study is so focused to answer the main question: What is the impact of institutional support, technical expertise and attitudes to accept and use of technology in education by faculty members of Forensic Sciences at the Universities of Riyadh in Saudi Arabia?

One of the objectives of the study was to identify the different statistical significance in the responses of members of the Faculty of Forensic Sciences, attributable to the variables of personalities and career in association with the systematic objectives of the study, the theoretical and practical importance of the study, concepts and terminology of the study, and limits of human objectivity and spatial and temporal scales.

The new model of (UTAUT) was displayed throughout exploring its features, then clarifying of the amendments made in this study to the model from an Islamic perspective, and how the faculty members can use and accept the model of (UTAUT) from an Islamic and Arabic thought.

The researcher indicated that there is lack of direct studies addressing the factor of institutional support and its availability from the point of view of members of teaching staff of Forensic Science; except the study of Hassanein's (2011), which dealt with members of the faculty at the Sudanese universities on the whole. There are also differences in the results of the current study with the results of Hassanein's (2011). This study showed that distance education programmes in the Faculty of education in Sudanese universities lag behind the reality of technology in education in these programs, which means "weak" institutional support for the programmes of distance learning, with reference here to the different locations of the present study (Saudi Arabia) and of Hassanein's (Sudan), and to the different majors since the present study dealt with (Forensic Sciences) and Hassanein's with (Education).

There are statistically significant differences in the domain of institutional support for the use of technology in education, and technical expertise to use educational technology, and the ease of use of Technology in Education by faculty members of Forensic Sciences attributed to the variable of 'gender' in favor of non-Saudis, while no statistically significant differences in the rest of other domains.

The researcher believes that superiority of faculty members from other nationalities (non-Saudi nationalities) in the domains of the institutional support, technical expertise, ease of use and actual use is primarily referred back to individual differences between the respondents, in terms of taking advantage of the institutional support provided by universities, motivation in training on the use of educational technology, the functional diversity among the members of the Faculty, motivation in job rank, and fixed-term work. Aside of that, the process of qualifying faculty members of non-Saudis in their own country may be distinguished from the programs received by the faculty members of Saudi universities in Saudi Arabia in terms of the presence of courses in English while studying throughout general education or university education which is one of the strongest contributing factors in the use of technology.  The technology, in other countries,  adopt the English language in their programmes and their applications and they run them significantly, while rarely having these programs and applications in Arabic.

There are statistically significant differences in the domains of institutional support for the use of educational technology by faculty members of Forensic Science at King Saud University and Al Mujamma University in contrast to the members of the Faculty of Forensic Sciences at the Islamic University of Imam Muhammad bin Saud and other universities. There are also statistically significant differences in the domain of the actual use of technology in education for the favour of the members of the Faculty of Forensic Sciences in the University of King Saud and Al Mujamma University in contrast to the Islamic University of Imam Muhammad bin Saud, while there are no statistically significant differences in the rest of the domains attributable to the university to which he/she belongs to.

The researcher believes that the reason why the Faculty members of Forensic Sciences in King Saud University, and Al Mujamma university are more distinctive compared to members of the Faculty of Forensic Sciences at the Islamic University of Imam Muhammad bin Saud in the domains: institutional support, and actual use of educational technology dates back to the establishment of the deanship of special e-learning and distance education in the two universities, with the knowledge that there are deanships for e-learning and distance education at Islamic University of Imam Muhammad bin Saud, except that access to the tasks that the deanship and functions in the three universities, one can note that the deanships of e-learning at King Saud University and Al Mujamma are more active. Both deanships provide more services of e-learning than that at the Islamic University of Imam Muhammad bin Saud. This can be seen also through the websites of those universities.

In addition to that, there are development projects and services that are more diverse at the University of King Saud and Al Mujamma university, such as: the development of digital content, management system of online learning, virtual classroom, SMS, digital library, direct technical support, training courses in the field of smart boards, management of e-learning education, and many other areas (http://ksu.edu.sa). These services also attract the human cadres in the field of Information Technology and e-learning, whiteboard, interactive electronic projectors. The deanship of e-learning at Mujamma University has units of e-learning which seeks to spread the culture of e-learning, providing educational hardware in all faculties of the University along with many of other goals (www.mu.edu.sa).

Therefore, after the comparison between the three universities in the present study, one can conclude that the institutional support in relation to the use of educational technology by Faculty members of Forensic Sciences in the

three universities, that there is a diversity of institutional support for the advantage of University of King Saud, and AL Mujamma University in contrast to the Islamic University of Imam Muhammad the Son Saud which limited its support to increase awareness about the importance of e-learning, preparing e-courses, the development of its content, and the observance of quality standards in e-learning and distance learning, contributing to strategic plans for e-learning, training faculty on the best use of technology in education (www.imamu.edu.sa).

It is already clear that the institutional support is effective and purposeful in these two universities; thus the impact is clear in the use of technology, and therefore the will to change is available, and policies supporting the use of technology are also available, as well as preparing the environment, and ongoing training may have the greatest impact towards the actual use of educational technology by members of the Faculty of Forensic  Sciences  at University of King Saud and Al Mujamma University. This is in harmony with Mazen;s (2010) who noted that management should include project management, resources, exchange systems, communication management, information management, and organizational sources. These areas can be enhanced by technology in education, along with using diverse means that care about multi-media in education, and educational innovation.

## Conclusion:-

To conclude, the results of the study showed a positive statistically significant correlation between the acceptance and use of technology in education by faculty members of Forensic Sciences and the institutional support, technical expertise and attitudes. The more practice on the ongoing institutional support and the technical expertise and attitudes, the more the staff accepts and uses technology in education. It turns out that technical expertise is more closely related to institutional support and attitudes towards the acceptance and use of technology in education by faculty members of Forensic Sciences. As shown by the results of the study that institutional support and technical expertise have spiritual influences towards the acceptance and use of technology by the members of the Faculty of Forensic Science. However, the attitudes do not impact the acceptance and use of technology by the members of the Faculty of Forensic Science.

The researcher explains these results in terms of a positive correlation between institutional support, technical expertise and attitudes on the one hand, and the acceptance and use of technology in education by faculty members of Forensic Sciences on the other hand. He noted that these factors affect each other dramatically. This leads to stratify the acceptance and use of technology in education. Moreover, each one of these factors play a key and essential role in this area. Thus, the institutional support as reported by (Srivastava & Lee, 2005), is to provide the future with a vision for workers, and to give them the approval to proceed with the completion of a task or idea and to also provide the necessary resources for their tasks, including providing material and moral support, and by reviewing the tasks, activities, and goals that are utilized by the three universities through the representative of the deanship of e-learning and distance education. One can perceive the amount of influential institutional support for faculty members to accept and use technology in education.

And finally can you explain the result related to the presence of the impact of the institutional support and technical expertise, while the attitudes have not influenced the acceptance and use of technology in education by the members of the Faculty of Forensic Sciences. The institutional support and technical expertise often come back to things which are perceptible for the individual, in terms of both material support, encouragement and appreciation, or in terms of practical experience that enhance human trust. The attitudes deal with the position of the individual towards a certain thing or a certain event or particular case either of acceptance or rejection as a result of experience (El-Demerdash, 1994). Therefore, attitudes,  in nature, have not got the effect that support the institutional support and technical expertise. This does not mean to neutralize and minimize its impact, it is reported here that the researcher did not find studies that examined the relationship between the three factors: institutional support, technical expertise and attitudes, with the exception of a study by (Gogus, et al., 2012) which addressed the efficiency of the computer on workers. The results of the current study were in harmony with the results of (Gogus, A. et al., 2012) which showed an impact to the efficiency of using computers on 'intention to use'and not on 'the acceptance and use of technology'highlighting the importance of the intention on the acceptance of technology.

Evidenced by the results of the Open-ended question with respect to the  material and moral incentives that encourage faculty members of Forensic Sciences in the use of technology, the respondents in the three universities under study: King Saud University, the Islamic University of Imam Muhammad bin Saud, and AL Mujamma have highlighted the importance of these incentives With regard to the relationship between institutional support and the use of educational technology, respondents have "neutral" attitudes in relation to the material and moral incentives

for staff members of Forensic Sciences, as the physical and moral incentives were classified in the current study under the factor of institutional support.

The second proposal, as shown from the results of key question was the attention to training; which shows the importance of training for members of the Faculty of Forensic Sciences, being an important factor in facilitating the use of educational technology. They provided their suggestions on some of the specifications and conditions during the process of training, including: flexibility in training commensurate with age, self-training and easy training addressing and dealing with some of technical malfunctions, and linking the training material with functional incentives. The researcher believes that the training process must take into account the previous specifications to be more effectual, as they stem from the needs of the faculty members themselves. This was in accord with the results of Salam's study (2013) and its recommendations in terms of the presence of statistically significant differences between the use of educational technology attributed to the variable 'training courses' offered to faculty members. While there were differences between the results of this study with the results of Al-Seif's (2009), there were no statistically significant differences regarding the variable of 'training' offered to faculty members in universities.

With regard to the proposal to provide special equipment of technology in education and providing technical support such as wireless connection to the internet, this underlines the importance of the availability of these facilities in achieving the optimal use of educational technology. This perhaps what was confirmed by the respondents and the members of the Faculty of Forensic Sciences expressing the degree of "often" in the 'use of e-mail', 'laptops' and 'software (word and excel) in the preparation of lessons', the degree of "sometimes" in 'using electronic programs', 'PowerPoint presentations', 'programs linked to smart phones to interact with students outside the University', and the degree of "rarely" in the 'use of the tablets', and finally the degree of "never" in relation to the 'use of the Smart Boards'.

On the other hand, the researcher believes that the previous proposal to provide the technical equipment confirms what is stated in the literature review about the benefits of using educational technology. Technology in education will increase the effectiveness of the learner's knowledge, enrich the teaching-learning process, assist teachers in the preparation of educational materials, compensate the lack of experience they have, promote learning through the development in the interests of learning, increase the positive engagement of the learner in self-learning, and save time and effort (Mujahed Mazen, 2010; Al-Qahtany, 2012; and Al-Harthy, 2013)

## Recommendations:-
The researcher proposes four educational technology support services that might be very helpful for university faculty members of Forensic Sciences, including
1. A faculty teaching/ learning excellence center that provides expertise on IT.
2. Sustained opportunities for faculty members to experiment with emerging learning/teaching technologies in instruction.
3. Training on incorporating students' use of mobile devices such as smart phones and tablets during class.
4. Special grants or incentives for innovative use of instructional technology.

Dahlstrom (2015) maintained that optimizing the use of technology in teaching and learning radically depends on the ability of the institutional and academic leadership to help faculty members develop their digital competence and then to continue to provide learning opportunities to keep their competencies up-to-date. Faculty members need ongoing digital literacy opportunities that enable them to better understand the educational technologies but also the social technologies that affect their everyday lives. 21st century students who expect engagement in their instruction and technology can arbitrate engagement. Faculty need to understand instructional technologies and the implications of media as part of their technological means in presenting their knowledge to their students. This is more than just training on a exact technology. It is, as the saying which maintains , 'the difference between giving a man a fish and teaching him how to fish, 'or the saying which goes as ' you can lead the horse to the stream but you cannot force it to drink'.

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## References:-

1. Agyei, D. D., & Voogt, J. M. (2011). Exploring the potential of the will, skill, tool model in Ghana: predicting prospective and practicing teachers' use of technology. *Computers & Education,* 56, 91–100.
2. Al-Qahtany, S. (2010). Model of acceptance of technology: toward a theoretical pioneer study from an Islamic perspective. Magazine of Studies, Management Science, (37) (1): 130-145.
3. Al-Qahtany, A. (2012). The development of technical skills education for coach of educational programmes and continuous training at King Saud University in the light of their training needs (Proposed Program). Unpublished Doctoral dissertation: College of Education, King Saud University, Riyadh.
4. Al-Mubarak, E. (2014). The reality of the application of smart classrooms in university teaching in the College of education at Juuf University. Unpublished Master thesis, College of Education, Department of technical education, King Saud University,  Riyadh.
5. Al Seif, M.  (2009). The availability of e-learning competencies and constraints, and methods of their development from the point of view of faculty members. Unpublished Master thesis. College of Education, King Saud University, Riyadh.
6. Anderson, R. E., & Dexter, S. (2005). School technology leadership: An empirical investigation of prevalence and effect. *Educational Administration Quarterly*, 41 (1), 49-82, 2005.
7. Attar, A. (2011). Training needs for faculty members in University College at Makkah in the field of educational technology and innovations. *Journal of studies in curriculum and supervision*, 3(1).
8. Dahlstrom, E. (June,2015). *Educational Technology and Faculty Development in Higher Education*. Research report. Louisville, CO: ECAR.  Available from http://www.educause.edu/ecar.
9. El- Demerdash, S. (1994). Introduction in the teaching of Science (2$^{nd}$ Ed.). Al Falah Publishing, Kuwait.
10. Farrell, G.M.(1999). The development of virtual education: A global perspective. *A study of current trends in the virtual delivery of education*. Vancouver, the Commonwealth of Learning.
11. Göğüş, A., Nistor, N., & Lerche, T. (2012). Educational technology acceptance across cultures: A validation of the unified theory of acceptance and use of technology in the context of Turkish national culture. *Turkish Online Journal of Educational Technology, 11*(4), pp. 394–408.
12. Guo,W. & Cai,Y (2006). Responses of Chinese Higher Education to the Information Society. *E-Learning*,3, pp.353-360.
13. Hasnain, M. (2011). The employment of educational technology in distance learning programmes in the College of education from the point of view of faculty members. *The Palestinian Council for open Distance learning*, 3 (5), pp 43-95.
14. Jones, A. ( 2004). A Review of the Research Literature on Barriers to the Uptake of ICT by Teachers. *British Educational Communications and Technology Agency*. Retrieved May 20, 2010 from http://www.becta.org.uk
15. Korte, W.B., &Husing, T. (2007). Benchmarking access and use of ICT in European schools 2006: Results from Head teacher and a classroom surveys in 27 European countries.  E-Learning Papers, 29 (10), pp. 1-6.
16. Mazen, H. (2010). Educational  technology and learning. House of Science and Faith. Egypt.
17. Mitrano,T. (2011).What is policy? Retrieved  Oct. 2016 from.www.insidehighered.com.
18. Nihuka,K.A & Voogt,J. (2011)E-learning course design in teacher design teams: Experiences in the open university of Tanzania. *International Journal of Learning Technology,* 6 (2) pp 107-124.
19. Obeidat, T., Addas, A. & Abulhaq, K. (2014). Educational Research: concepts, tools and methods (16$^{th}$ Ed.). Dar Al Feker for Publishing: Jordan.
20. Salam, M. (2013). The degree of availability of e-learning competencies for aculty members at the University of Ibb, Republic of Yemen. Unpublished Master thesis, College of Education, Department of technical education, King Saud University, Riyadh.
21. Sheihob, I., & Abed Ghany, Q.  & Moh., N. (2014). Evaluation of  faculty  members in Islamic universities. The International Conference and the fourth Fair for Islamic  Education. Kota Bharu, Clintan, 31 May – 2 June 2014. Malaysia.
22. Sife, A.S Lwoga, E.& Sanga,C. (2007). New technologies for teaching and learning: Challenges for higher learning institutions in developing countries. *International Journal of Education and Development Using ICT*, 3 (2) pp 57-67.
23. Srivastava, A., & Lee, H. (2005). Predicting order and timing of new product moves: the role of top management in corporate entrepreneurship. *Journal of Business Venturing*, 20(4), 459-481.
24. Subramanian, A., and Lacity, M.C. (1997). Managing Client/Server Implementations: Today's Technology, Yesterday's Lessons.  *Journal of Information Technology, 12*(3), 169-186.

25. Tong, K.P., &Triniada, S.G. (2005). Conditions and constraints of sustainable innovative pedagogical practices using technology. *Journal of International Electronic for leadership in learning*, 9 (3), pp. 1-27.
26. Venkatesh V., Thong J. Y. L. Xin X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36 (1) 157-178.
27. Wong, E.M.L. & Li, S.C. (2008). Framing ICT  implementation in a context of educational change: a multilevel analysis.  *School effectiveness and school improvement*, 19 (1),pp. 99-120.
28. Young, R. & Jordan, E. (2008). Top Management Support: Mantra or Necessity. *International Journal of Project Management, 26*(7), 713-725.