



كلية التربية

كلية معتمدة من الهيئة القومية لضمان جودة التعليم

إدارة: البحوث والنشر العلمي ( المجلة العلمية )

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## **Attitudes of Faculty Members at Tabuk University on Teaching Computer Science Diploma In English for Deaf Students**

**By**

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**المخلص:**

تهدف الدراسة الحالية إلى التعرف على اتجاهات أعضاء هيئة التدريس بجامعة تبوك في تدريس دبلوم علوم الحاسب الآلي في اللغة الإنجليزية للطلاب الصم ، وقد ضمت عينة الدراسة جميع أعضاء هيئة التدريس (ذكور) في قسم علوم الحاسب الآلي في الجامعة. كلية المجتمع بجامعة تبوك التي قامت بتدريس برنامج الدبلوم للصم ، بلغت عينة الدراسة (١٨) عضوا موزعين على (٩) ذكور ، و (٩) إناث ، واستخدم الباحثون مقياس الاتجاهات ، والنتائج. نتج عن عدم وجود فروق ذات دلالة إحصائية بين متوسط درجات أعضاء هيئة التدريس من الذكور والإناث في اتجاهاتهم نحو تدريس الصم بالحصول على دبلوم علوم الحاسب الآلي في اللغة الإنجليزية ، وأظهرت النتائج اتجاهات عينة الدراسة من أعضاء هيئة التدريس حول التدريس. دبلوم علوم الحاسب الآلي في اللغة الإنجليزية للصم ، كما أظهرت النتائج علاقة ذات دلالة إحصائية بين متوسط الدرجات. من أعضاء هيئة التدريس على مقياس الاتجاه نحو تدريس الطلاب الصم الحاصلين على دبلوم علوم الحاسب الآلي في اللغة الإنجليزية نتيجة لبعض المتغيرات (الرتبة العلمية ، سنوات الخبرة ، التخصص العلمي والدورات التدريبية).

**الكلمات الرئيسية:** المواقف. علوم الكمبيوتر ؛ الطلاب الصم .

**Abstract:**

The current study aims to identify the attitudes of the faculty members of the University of Tabuk on teaching a computer science diploma in the English language for deaf students, the study sample included all faculty members (female males) in the Department of Computer Science at the College of Community, Tabuk University, who taught the deaf to the diploma program, The study sample reached (18) of the members divided (9) from males, (9) females, and the researchers used a measure of trends, and the results resulted in the absence of statistically significant differences between the average scores of male and female faculty members in their attitudes towards teaching the deaf With a diploma in Computer Science in the English language, the results showed the directions of the study sample from faculty members about teaching a diploma in Computer Science in the English language for the deaf, The results also showed the relationship of statistical significance between the average scores of faculty members on the scale of the trend towards teaching deaf students with a diploma in Computer Science in the English language due to some variables (scientific rank, years of experience, scientific specialization and training courses).

**key words:** Attitudes; Computer Science ; Deaf Students

## **Introduction:**

Disabled education has developed in the Kingdom of Saudi Arabia greatly as the education of members of this group finds great interest and great care. This is represented in the tangible expansion in special programs and institutes, especially higher education (university). The education of deaf students in the Kingdom of Saudi Arabia has become one of the areas that has received attention and care from those in charge of education in it, and institutes of hope and programs to integrate students in general secondary schools seek to achieve their goals, through developing the capabilities of deaf students, in line with their preparations, and training them to discover appropriate skills According to their according to well-thought-out plans and special programs, to reach the best level, prepare them for public life, and integrate into society (Al-Mousa, 2008). The issues related to the academic competence of deaf students are considered one of the most important topics touched upon by many studies in the field of special education, and raising the level of academic competence of deaf students is one of the goals that special education programs seek in many countries of the world, so many education programs are keen the private sector in many countries of the world to benefit from all the various data to achieve these goals, however, the level of academic competence of deaf students faces many challenges and variables that affect the academic performance of these students (Al-Zahrani, 2000).

The higher education program for deaf and hard-of-hearing students at the University of Tabuk is one of the pioneering programs at the level of the Arabic region, where the enrollment of deaf and hard-of-hearing people in higher education was something that some see as difficult to achieve, and now it has become a tangible reality, and is a

qualitative shift in their lives thanks to the support provided by the university And provide all the services that this category needs, and the program seeks to exert more effort in order to provide all services at the highest possible level to enable the deaf and hard of hearing people to achieve their goals and aspirations.

### **The Study problem:**

The field of education and education of deaf people has witnessed over the past forty years a dramatic shift in the educational field, manifested in educational environments, and patterns of communication that choose to teach deaf people, and provides deaf students with many opportunities, while they are challenged to achieve the standards of their hearing peers themselves, thereby preparing them for a future It has infinite potentials and capabilities that were not available to them before (Scheetz, 2012). These students who obtain a diploma from the University of Tabuk proves that deaf and hard of hearing people have the capabilities, and they only need to give the opportunity and provide the necessary support and integrated support services, and as an extension of the efforts made by the program to achieve its ambitious goals in providing all services for the deaf and hard of hearing, whether academic, social, or psychological, and overcoming all obstacles facing that group in their educational career, the program seeks to do more to provide all services at the highest possible level to enable the deaf and hard of hearing to achieve their goals And their ambitions. Hallahan and Kaufman (2008) mentioned that there are a number of technological developments that have made it easier for deaf people to communicate with other hearing persons, and to obtain various information from them. There is no doubt that deaf students need other types of preparation and equipment for their learning environment in order to facilitate the success of the collection process for them, Ali (2013).

Accordingly, the problem of the study lies in the attitudes of faculty members in teaching deaf students, all their university courses in the English language, and some variables that may have an effect on the teaching process, negatively or affirmatively, and providing this opportunity for Deaf people to complete their university studies in the light of what their capabilities and capabilities allow and guarantee their success In higher education.

**The study problem can be formulated in the following questions:**

- 1- Are there statistically significant differences between the average scores of male and female faculty members in their attitudes toward teaching deaf students with a diploma in computer science in the English language?
- 2- What are the directions of the study sample from faculty members about teaching Computer Science diploma in the English language for the deaf?
- 3- Is there a statistically significant relationship between the mean scores of faculty members on the scale of the trend towards teaching deaf students with a diploma in computer science in the English language due to some variables (scientific rank, years of experience, scientific specialization and training courses)?

**Study objectives :**

**The current study aims at:**

- 1- Knowing the directions of the study sample from the teaching staff about teaching the Computer Science diploma in the English language for the deaf.
- 2- Knowing the attitudes of male and female faculty members towards teaching deaf students with a computer science diploma in the English language.

- 3- Knowing the attitudes of the faculty members towards teaching deaf students with a computer science diploma in the English language according to the variables of the academic rank, years of experience, scientific specialization and training courses.

### **The importance of the study:**

In theory: The importance of the study lie in the fact that it facilitates knowing the attitudes of faculty members towards teaching deaf students with a diploma in Computer Science in the English language, and it is expected that the current study will contribute in knowing the attitudes of the faculty members who have taught courses to deaf students in the Department of Computer Science at the Community College, taking into account adding some variables, such as academic rank, years of experience, scientific specialization, and training courses.

From a practical point of view: The practical importance of benefiting from the results and recommendations of the current study is evident in the necessity of continuing to teach courses in the Computer Science Program as they are in descriptions in the English language similar to their regular peers.

### **Study limitations:**

- 1- Objective limits: It is determined by measuring the directions of the study sample from the teaching staff about teaching the Computer Science diploma in the English language for the deaf in the Department of Computer Science at the Community College, taking into account some variables such as the academic rank, years of experience, scientific specialization, and training courses.
- 2- Time limits: The study was applied during the second semester of the academic year 1440-1441 A.H.
- 3- Spatial limits: All faculty members (male and female) belong to the Computer Science Department in the Community College.

### **Study terms:**

#### **The following are the terms of the study procedurally:**

**Trends:** It is a set of negative or positive ideas towards a specific subject in an individual, and he adopts his point of view with conviction.

**Computer Science Diploma in Community College, Tabuk University:** It is a program aimed at preparing students scientifically, practically and professionally in the field of computer science, with the aim of providing distinguished educational services to graduate a qualified human cadres that are able to meet the needs of society and the development projects in the society.

**The concept of deaf procedural:** They are deaf students who study in the Department of Computer Science, and they are chosen according to communication skills, degree of disability, and gender at the University of Tabuk.

#### **Theoretical framework and previous studies:**

**A brief summary of the Computer Science diploma program - Community College - University of Tabuk.**

Based on the vision of the university and the college and their two messages, the vision of the Department of Computer Science and its mission are determined by the following:

The Vision: The Department of Computer Science, Community College (male and female students) was established with the establishment of the college in 1418 A.H. This department grants the degree of (participant) in my specialty (Computer Science), (Computer Network Management) and (Computer Graphic and Web Design), and it seeks to develop its study programs in order to provide the labor market with distinguished technical competencies in the field of computer science and information technology.



The Mission: Meeting the needs of the labor market by graduating specialized and highly qualified competencies that have different skills in the field of computer science and information technology. The Objectives: To build and develop programs in the field of computers and information technology to meet the requirements of the Saudi labor market. The department aims also at providing the job market with distinguished graduates in the field of computer science and information technology. In the light of what has been mentioned, the Department of Computer Science is known at the local and international levels.

Development of cooperation programs with local and international academic institutions.

The Department's Study Plan: The department offers an integrated program to obtain a degree of diploma in different fields. In the field of the Computer Science program, the student must complete (65) hours of study, and to obtain a degree of diploma in the path of the Computer Network Management program, the student must complete (64) hours of study and, to obtain a degree of diploma in the path of the computer drawing and web page design, the student must complete (71) hours of study as follows:

(18) Academic hours in the preparatory year.

(13) Academic hours as department requirements.

(34) Study hours as computer science program requirements, (33) study hours as computer network management program requirements and (40) school hours as computer drawing and web design program requirements.

Ali (2013) noted the importance of deaf people in different educational levels having skills of living independently, which qualifies them to deal with the requirements of life, and a challenge, taking into account the importance of developing curricula, and all that is related to teaching methods, educational, professional and recreational activities, in a manner that suits the needs of this group, and their capabilities and inclinations, because they are the focus of the educational process, And this would contribute to the development of their abilities to use what they learn in their daily lives. Ting & Gilmore (2012) study has explored the attitude of pre-service teachers towards deaf students and students studying English as a second foreign language. The sample of the study consisted of (200) pre-service teachers in the third or fourth stage at a large university in Brisbane, in the capital of the Australian state of Quite land, and the researcher used the descriptive method based on the questionnaires. The study of Abdullah and Turkestan (2017) came to identify the problems of the deaf and hard of hearing that hinder the goals of integration and education from curricula and support services, school buildings and provide awareness, in order to know how to provide support for the deaf. Therefore, Al-Enezi and Turkestan (2019) explained the perceptions of faculty members and deaf and hard of hearing women about the obstacles to integrating them into Saudi universities, and to reveal the challenges that faced deaf and hard-of-hearing students.

### **The Study Approach:**

In order to achieve the goals of the study, the two researchers relied heavily on the relational, descriptive survey method, which is the most appropriate method for this study, where each of the following: The descriptive approach is defined as a method based on collecting facts and information, then comparing, analyzing and interpreting them to reach acceptable generalizations (Badr, 1996). The survey method is the

approach and It aims to describe a studied phenomenon, or to identify the problem or justify the circumstances and practices, or to evaluate and compare, or to identify what others are doing in dealing with similar cases to develop future plans and the relational approach as a type of existing curriculum through which it is possible to know whether there is a relationship between two or more variables and then knowing the degree of that relationship.

### **The study sample:**

The study was applied to all faculty members (male and female), in the Computer Science Department in the Community College, University of Tabuk, who taught the deaf in the diploma program.

### **Characteristics of the study sample individuals:**

The Statistical description of the study sample according to the characteristics and personal characteristics is designed for the purpose of identification and benefiting from it. The researchers analyzed the personal data of the sample, which relates to (sex, experience, educational level, scientific specialization in the course that the teaching member teaches for the deaf and the training courses for dealing with the deaf. The following is a presentation of the study sample results:

### **A- Distribution of sample individuals according to gender:**

**Table No (1) Distribution of the sample population according to gender**

Sex	Repetition	percentage
Mention	9	50%
female	9	50%
Total	18	100%

It is clear from Table No (1) that (50%) of the sample is male, while (50%) of the sample is female.

**B- Distribution of sample individuals according to years of experience:**

**Table No (2) Distribution of the sample population according to years of experience**

Experience	Repetition	percentage
Less than 5 years	3	16,7%
From 6 years to less than 10 years	3	16,7%
More than 10 years	12	66,7%
Total	18	100%

It is noticed from Table No. (2) that the percentage of (16.7%) of the sample members have their experience ranging from one year to less than five years, while the ratio (16.7%) of the sample members have their experience ranging from 6 years to less than 10 years While (66.7%) of respondents have more than 10 years of experience.

**C- Distribution of the sample population according to the scientific rank:**

**Table No. (3) Distribution of the sample population according to the scientific rank**

The rank of the scientific of	Repetition	percentage
Teaching Assistant	2	11,1%
lecturer	3	16,7%
Assistant Professor	7	38,9%
Co-professor	6	33,3%
professor	0	0%
Total	18	100%

It is noted from Table No. (3) that (11.1%) of the respondents are teaching assistants, while (16.7%) of the respondents are lecturers, while (38.9%) of the respondents are an assistant professor, while (33.3%) of the respondents Co-professor.

**D- Distribution of the sample members according to the scientific specialization in the course that he is teaching for the deaf:**

**Table No. (4) Distribution of the sample population according to the scientific specialization of the course the teaching staff member is teaching to the deaf**

Scientific specialization in the course he teaches for the deaf	Repetition	percentage
Yes	17	94,4%
No	1	5,6%
Total	18	100%

It is clear from Table No. (4) that the percentage of (94.4%) of the sample is specialized in the scientific course that the teach to the deaf, while (5.6%) of the sample members are not specialized in the scientific course that they teach to the object of the study.

**I- Distribution of sample individuals according to the training courses for teaching the deaf:**

**Table No. (5) Distribution of sample individuals according to training courses for teaching the deaf**

Training courses for teaching the deaf	Repetition	percentage
Yes	11	61,1%
No	7	38,9%
Total	18	100%

It is clear from Table No. (5) that (94.4%) of the sample members got training courses for teaching the deaf, while (5.6%) of the sample did not receive training courses for teaching the deaf.

### **The Study tool:**

The current study sought to measure the attitudes of faculty members in the Department of Computer Science for male and female students towards teaching courses in the English language, and the study tool consisted of a scale that includes (30) words that are concerned with the educational process of deaf courses at the university.

### **The verification of the accuracy and reliability of the scale:**

A- Reliability Statistics scale was calculated using Cranach's Alpha Coefficient, as the stability coefficient for all paragraphs (964), which reassures the researchers to use the study tool, as a tool to collect information to answer study questions and trust the results of their application.

**Table No. (6) Stability factors of the study tool**

N of Items	Cronbach's Alpha
30	.964

The stability of the scale was also calculated due to the fact that the variance here is equal, so the split half reliability method was used in the correlation between forms method and the coefficient of the stability. (915)

### **B- Validity of the scale:**

The internal consistency of the scale was achieved by calculating the correlation coefficient between individual grades on each phrase of the scale and the overall degree of the scale.

**Table No. (7) The internal consistency of the scale phrases correlations**

Phrase number	Correlation coefficient	Phrase number	Correlation coefficient
1	.887 (**)	16	.848 (**)
2	.880 (**)	17	.881 (**)
3	.414 (*)	18	.516 (**)
4	.865 (**)	19	.479 (**)
5	.680 (**)	20	.622 (**)
6	.649 (**)	21	.513 (**)
7	.658 (**)	22	.873 (**)
8	.883 (**)	23	.787 (**)
9	.796 (**)	24	.388 (*)
10	.876 (**)	25	.723 (**)
11	.770 (**)	26	.861 (**)
12	.878 (**)	27	.757 (**)
13	.637 (**)	28	.844 (**)
14	.276 (*)	29	.764 (**)
15th	.693 (**)	30	.634 (**)

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

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

Therefore, all the values of correlation coefficients are statistically significant at the significance level (0.01) except for the phrase (14), they are statistically significant at the significance level (0.05).

### **The results of the study and its discussion:**

#### **The first question: The question states:**

Is there a statistically significant relationship between the average scores of male and female faculty members in their attitudes towards teaching deaf students with a diploma in computer science in the English language?

In order to answer this question, a test was used and the following table shows that as follows: (Mann-Whitney Test) for small, uneducated samples.

**Table (8) the significance of the statistical differences between the average scores of male and female faculty members in their attitudes towards teaching deaf people in the English language**

Dimensions	Male N (9)		Female N (9)		Z	Sig. (2-tailed)	Significance level
	Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks			
Overall score for scale	7.89	71.00	11.11	100.00	-1.284	.199	Not significant

It is clear from the previous table that there are no statistically significant differences between the average levels of the sample individuals according to gender (males and females) in the total score on the scale of the faculty members' attitudes towards teaching computer science diploma in the English language.

### **Second question:**

The question states: (What are the directions of the study sample from faculty members about teaching a Computer Science diploma in the English language for the deaf?)

Given the absence of statistically significant differences between males and females as stated in the first question, the sample was dealt with as a whole without distinguishing between males and females, and to answer this question, the descriptive statistics and the statistical characteristics of the sample responses were calculated on the scale of trends.



**Table (9) shows frequencies, percentages, standard deviation, and mean for the responses of the sample individuals**

Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean		Std.	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
1	18	3.00	2.00	5.00	69.00	3.8333	.27116	1.15045	1.324
2	18	3.00	2.00	5.00	72.00	4.0000	.21390	.90749	.824
3	18	4.00	1.00	5.00	70.00	3.8889	.30129	1.27827	1.634
4	18	2.00	3.00	5.00	78.00	4.3333	.19803	.84017	.706
5	18	2.00	3.00	5.00	82.00	4.5556	.16612	.70479	.497
6	18	2.00	3.00	5.00	77.00	4.2778	.17723	.75190	.565
7	18	2.00	3.00	5.00	75.00	4.1667	.18524	.78591	.618
8	18	3.00	2.00	5.00	76.00	4.2222	.22222	.94281	.889
9	18	3.00	2.00	5.00	75.00	4.1667	.21768	.92355	.853
10	18	3.00	2.00	5.00	72.00	4.0000	.24254	1.02899	1.059
11	18	3.00	2.00	5.00	75.00	4.1667	.20211	.85749	.735
12	18	4.00	1.00	5.00	74.00	4.1111	.27876	1.18266	1.399
13	18	3.00	2.00	5.00	78.00	4.3333	.19803	.84017	.706
14	18	4.00	1.00	5.00	73.00	4.0556	.27383	1.16175	1.350
15	18	4.00	1.00	5.00	62.00	3.4444	.29397	1.24722	1.556
16	18	3.00	2.00	5.00	65.00	3.6111	.24440	1.03690	1.075
17	18	4.00	1.00	5.00	65.00	3.6111	.25742	1.09216	1.193
18	18	2.00	3.00	5.00	75.00	4.1667	.16667	.70711	.500
19	18	2.00	3.00	5.00	72.00	4.0000	.16169	.68599	.471
20	18	3.00	2.00	5.00	76.00	4.2222	.20699	.87820	.771
21	18	3.00	2.00	5.00	75.00	4.1667	.20211	.85749	.735
22	18	4.00	1.00	5.00	65.00	3.6111	.31456	1.33456	1.781
23	18	4.00	1.00	5.00	55.00	3.0556	.32812	1.39209	1.938
24	18	4.00	1.00	5.00	76.00	4.2222	.23647	1.00326	1.007
25	18	4.00	1.00	5.00	71.00	3.9444	.23532	.99836	.997
26	18	4.00	1.00	5.00	68.00	3.7778	.26266	1.11437	1.242
27	18	2.00	3.00	5.00	78.00	4.3333	.16169	.68599	.471
28	18	3.00	2.00	5.00	69.00	3.8333	.21768	.92355	.853
29	18	4.00	1.00	5.00	61.00	3.3889	.34432	1.46082	2.134
30	18	4.00	1.00	5.00	66.00	3.6667	.31311	1.32842	1.765
Valid N (listwise)	18								

in the light of the previously mentioned and proven data in the previous table it is clear that the terms are important and the phrases have high ratios.

**The third question:**

The question states: (Is there a statistically significant relationship between the average scores of faculty members on the measure of the trend towards teaching deaf students with a diploma in computer science in the English language due to some variables (academic rank, years of experience, scientific specialization, and training courses)?

In order to answer this question, a Mann and Tennessee Wilcoxon test was used, one-way contrast analysis, and the following tables illustrate this.

**A- Regarding the variable of the academic rank:**

**Table No. (10) illustrates the differences between the average scores of the department’s employees in their attitudes toward teaching deaf students with a computer diploma in the English language according to the variable of the academic rank (n = 18)**

Dimensions	Academic rank	N	Mean	Std. Deviation
Overall score for scale	Associate Professor	6	135.6667	9.70910
	Assistant Professor	7	124.1429	15.86851
	lecturer	3	89.6667	10.59874
	Teaching Assistant	2	96.5000	14.84924
	Total	18	119.1667	21.51949

ANOVA Table

	Sum of Squares	df	Mean Square	F	Sig
Between Groups (Combined)	14.278	14	1.020	1.147	.521
Within Groups	2.667	3	.889		
Total	16.944	17			

It is clear from the previous table that there are no statistically significant differences between the averages of the faculty members' scores on the scale of the trend towards teaching deaf students with a diploma in computer science in the English language according to the variable of the academic rank.

**B- Regarding variable years of experience:**

Table No. (11) illustrates the differences between the average grades of the department's employees in their attitudes toward teaching deaf students with a computer diploma in the English language according to the variable of years of experience (n = 18)

Descriptive

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bund		
1.00	12	123.1667	22.65887	6.54105	108.7699	137.5634	80.00	150.00
2.00	3	122.3333	18.47521	10.66667	76.4384	168.2283	101.00	133.00
3.00	3	100.0000	10.44031	6.02771	74.0648	125.9352	88.00	107.00
Total	18	119.1667	21.51949	5.07219	108.4653	129.8681	88.00	150.00

**Attitudes of Faculty Members      Dr. Sahar Zedan Zaien**  
**Dr. Manssour Mohammed Habbash**

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1324.167	2	662.083	1.517	.251
Within Groups	6548.333	15	436.556		
Total	7872.500	17			

It is clear from the previous table that there are no statistically significant differences between the averages of the faculty members' scores on the scale of the trend towards teaching deaf students with a computer science diploma in the English language according to the variable years of experience.

**C- Regarding the variable of scientific specialization:**

Table No. (12) illustrates the differences between the average scores of the department's employees in their attitudes toward teaching deaf students with a computer diploma in the English language according to the variable of scientific specialization (n = 18).

Dimensions	specialized N ( 17 )		Non- specialist N ( 1 )		Z	Sig. (2-tailed)	Significance level
	Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks			
Overall score for scale	168.00	9.88	3.00	3.00	-1.2 56	. 209	Not significant

It is clear from the previous table that there are no statistically significant differences between the averages of the faculty members' scores on the scale of the trend towards teaching deaf students with a computer science diploma in the English language according to the variable of scientific specialization.

**D- Regarding the variable of training courses:**

**Table No. (13) clarifies the differences between the average scores of the department's employees in their attitudes towards teaching deaf students with a computer diploma in the English language according to the variable of training courses (n = 18).**

Dimensions	Training courses N ( 1 1 )		Non- training courses N ( 7 )		Z	Sig. (2- tailed)	Significanc e level
	Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks			
Overall score for scale	11.41	125.50	6.50	45.50	-1.907	.05	Significant

It is clear from the previous table that there are statistically significant differences between the average scores of faculty members on the scale of the trend towards teaching deaf in a computer science diploma in the English language according to the variable of training courses for the benefit of members who took training courses in sign language and ways to communicate with the deaf, which clarified the differences between the members that were Training them on ways to communicate.

### **General comments on the study results:**

The attitudes of the study sample from employees of the department of male and female members, in their attitudes towards teaching deaf students with a diploma in computer science in the English language at the Department of Computer Science at the Community College in general are generally positive. There are no statistically significant differences between the average scores of male and female faculty members in their attitudes toward teaching deaf students with a diploma in computer science in the English language.

- There is no statistically significant relationship between the mean scores of faculty members on the scale of the trend towards teaching deaf students with a diploma in computer science in the English language due to some variables (scientific rank, years of experience, and scientific specialization).
- There is a statistically significant relationship between the main scores of faculty members on the scale of the trend towards teaching deaf students with a diploma in computer science in the English language according to the variable of training courses.

This indicates that the deaf people must be given the opportunity to complete their university studies in the light of what their abilities and capabilities allow them to study. Achieving these goals in the Hope Institutes, and the programs for integrating deaf people into general education schools contribute greatly to making the educational process of high quality, and increasing job opportunities for deaf people and life satisfaction.

**This is what the Ting & Gilmore (2012) study confirmed to a number of results, the most important of which are:**

- 1) The teachers' expectations for Deaf students and confidence in their teaching are higher than those who study the language English as a second foreign language.

- 2) That training may improve teachers 'attitude towards students studying English as a foreign language again, which leads to better achievement results for students.
- 3) Teachers are not aware that deaf students are like students who study English as their second foreign language and they have their unique language and culture.

This agrees with the study of Abdullah and Turkestan (2017) which recommended that a comprehensive evaluation of programs to integrate the deaf and hearing impaired should be considered.

In the light of the real reality of the capabilities of deaf and hard-of-hearing students, a qualification program has been created, which took place in the community college. The program aims at training deaf and hard-of-hearing students to develop their skills in reading and writing, qualifying them to enroll in the preparatory year, ensuring the continuation of their university studies according to scientific foundations, ensuring the provision of an environment Suitable for the characteristics and capabilities of deaf and hard-of-hearing students, and ensuring their success in higher education.

### **The study recommendations.**

**In the light of the study the researcher recommends the following:**

- Working to provide the opportunity for the deaf people to have universal access to education.
- Taking advantage of global and local experiences in higher education for the deaf.
- Using the modern electronic means to help the faculty members to communicate with the deaf.
- The need to take into consideration the rights of the deaf and hearing impaired in higher education.
- The need to provide professionally qualified translators.
- Providing support services for the deaf in higher education.

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