



COMPETENCIES NEEDED FOR THE TEACHERS OF VISUALLY IMPAIRED AND BLIND LEARNERS IN AL BALQAA PROVINCE AREA SCHOOLS

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Abstract

This study aimed at identifying the competencies needed for the teachers who teach learners with visually impaired and blind. The study was conducted at schools within the area of Al Balqa province, in Jordan .To this end, the researcher developed a special tool consisting of (31) statements. The sample of the study consists of 120 teachers of both sexes. It was selected from 50 schools and special educational centers (public and Private) (30 primary schools, 20 secondary schools). The criteria for the research element selection were- the teacher is teaching at least one visually impaired student, the teacher is blind, poor vision, or sightedness. After the data had been collected, suitable statistical approaches were used to analyze the data. The result of the study revealed no relationship between the variables (sex, education level, experience, class level) and the competencies, but there was a marked difference in competencies due to the characteristics of the teachers. Furthermore, the results indicate a significant difference in the quality and quantity of competencies due to the teachers characteristics. This was in favor of the sighted teachers. As for the difference between the blind and poor sightedness, the result was in favor of the latter

Key words: competencies, teacher, visually impaired learners.

Introduction

The exceptional learners are part of school community. This category of learners composes around (2.4%) of school age community in United states of America, regardless of ethnicity ,and the level of education (Disability statistics, American Community Survey, 2013).This catogery have the right to learn, live and grow physically, socially and psychologically, the same as well as the other non-exceptional learners (CEC, 2015). So that, all societies should consider them as collaborate partner in developing the country. Exceptional learners have an actual and potential capabilities to share the others their effort and participate in the community development as the non- exceptional learners (Hallahan, et al., 2011). As for blind and visually impaired students in Jordan, especial schools are limited to Amman. Not all province included, but the visual impaired and blind who are easily intergrated go to the regular schools which are not well prepared, but resource rooms are available in some of these schools, and the teachers aren't prepared and confidant to teach visually impaired and blind. However, in Jordan only two schools for blind students, they are Abdullah Bin Um Muktoom (The blind----) school which provide the basic (elementary) education from the 1st grade to the 6th grade. The second school is,the Blind High School which provides education from 7th grade to the Second Literary Secondary grade. Both schools are located on the capital (Amman) of Jordan. The two schools contain 220 blind students s and hires 120 teachers (Shaman Abd Al-Mujeed Al-Majalee et.al., 2008). For that, there is currently a critical need for teachers of learners with visual impairment or blindness. As there is worldwide shortage of professionals who work with learners with visual impairments. Many countries directed to over come this shortage. For example, in united states many universities created two professional programs (California university,Florida university, ect) which enables the teaching staff s to work with school age exceptional learners. One is a"Teacher of students



with Visual Impairment, the second is program of Orientation and Mobility Specialist.” The mentioned programs are based on a separate professional standards (teachingvisuallyimpaired.com). An article was reported on a descriptive study standarders and criteria for comptence in braille literacy within teachers preparation program and specific role played in the achievement of profenciency in braille literacy by university teachers preparation programs in blindness and visual impairment. It contains a summery of need for such research, historical background, research methods, discussion of standards and implication for personel preparation (JVIB,2011).

A little studies were presented to evaluate the competencies of the teachers who teach the visually impaired and deaf students. But (Derrick, et.al., 2009) in his study based on the opinions of more than 30 professionals set out to develop a set of assistive technology competencies for teachers of students with visual impairments. The result of the study was the development of highly reliable and valid set of (111) assistive technology competencies. According to national survey, nearly about (6%) of teachers who work with deaf-blind students have specialized training in the field. The few new graduate of teacher preparation program in the field coupled with the shortage of specialized trained teachers, indicates that there is a critical need to train more teachers to meet the unique needs of these students (JVIB,2016). Another study conducted by (Lizhou, et.al.2011) .Asurvey on 165 teahers of students with visual impairments from Texas examined perceptions of their knowledge of assistive technology. The result indicated that they had significant in knowledge in 55 (74.32%) of the 74 assistive technology competencies that were examined, and that 57.5% of them lacked adequate confidence about teaching assistive technology to students. While there are some programs for preparing the teachers of visually impaired and blind students in United states and Canada, there aren't in Jordan. Some Jordanian Universities deliver a general program , diploma and Bachelor, Master or even PHD in Special education in general which are not enough to teach specific disability such as visual impairment or hearing impairment and the other catogeries of exceptionl- learners (Jordan university , Special education department,2016). For this reason the curriculum of special education in Jordan need revising and modified to specified a certain knowledge and skills to build up programs to prepare these teacher for those students.(Higher council,2016). Astudy conducted by (Marie Knowlton & Karen Berger (note dated).the purpose of the study was to idenfify the valid competancies required for Braille teachers who teach in elementary and secondary school. A survey containing an extensive list of skills and asked the survey participants to rate those skills. A study conducted by (Sandra lewis,et.al.2010) to determine if there are differences in the teacher roles, training needs and perception of supervisors competencies. The results revealed that the paraeducators in local schools reported more training, the provision of less direct service, and greater supervision by more competent teachers of students with visual impairments than did their residential school counterparts. D.W. Rapp &Rapp.A.J (1992). Performed a survey for 72 secondary teachers of students with visual impairments. The researchers found that the teachers encounter continuing difficulties in providing materials and equipment for mathmetics instruction and that few students with visual impairment are participating in advanced mathmatics.

The important of the study The important of the study came from the following points

1. The study improves the theoritical knowledge and skills among the teachers of visually impaired and blind learners.
- 2.The study explores the issues and problems facing the the teachers of the visually handicapped learners.
- 3.The study takes into consideration the teachers points of view toward the problems they complain during teaching- learning process.
4. The study resultsused in improving and developing in-service and preparing rehabilitation programs for the teachers of visually impaired students.



Research questions

For the purpose of this study the following question were mentioned:

- 1- What are the teaching competencies of the teachers of visually handicapped learners in Balqa Province area?
- 2-Is there a significant differences in evaluating the teachers competencies in congruent of the study variables?
- 3- Do the competencies differe in the quantity and quality according to the characteristics of the teacher?

Study variables

Independent variables: sex, educational level, experience, characteristic of the teacher.

Dependent variable: The competancies of the teachers of visually impaired students .

Study terminology

Competencies: A group of changes that is needed to be occurred in the knowledge, skills, attitudes and behaviors of the teacher who works with the visually impaired students as it measured by the tool of the research.

Teacher: The teachers from the schools where the questionnaire were applied participate in the study whether he/she is sighted, poorly sight, or blind.

Visually impaired student: Any student who has visual impairment or blind and is registered in the school where the tool was applied.

Study limitation:

The results of the study are limited by the subjectivity of the participants.

The results of the study resmple sample of the teachers of visually impaired students at the governmenal and none-governmental schools in Balqa province area during the school year 20.15/2016.

The study is limited to some determinants (Sex, educational level, experience, School level, and teacher's characteristics).

Methodology

Study sample:

The study sample consists of 140 participants of the teachers who work for governmental and non-governmental schools in Balqa Province area .Fifty schools (30 primary schools, 20 secondary schools from both sexes. Twenty (20) of the participants responses were excluded because of incomplete information. For this the final sample was (120).

TABEL (1) Sample characteristics

Variable	Group	Frequencies]	Percentages
Sex	M	38	31.67
	F	82	68.33
	T	120	100.00
Educational level	Deploma	28	23.33
	Bechalor	74	61.67
	Graduate	18	15.00



	total	120	100.00
Experience	1-3yrs	30	25.00
	4-6 yrs	32	26.67
	More than6yrs	58	48.33
	Total	120	100.00
School level	Primary	82	68.33
	Secondary	38	31.67
	Total	20	100.00
Teacher Characteristics	Sightedness	60	50.00
	Visual impaired	18	15.00
	Blind	42	35.00
	total	120	100.00

Research tool: To answer the research questions, the researcher developed a questionnaire consists of 31 statements. To identify the teachers competencies. The researcher followed the next stages:

- 1- Reviewing the literatures and articles related to the subject (Penny R. Cox et.al, 2001)
- 2-Taking the opinions of some e experts in this field from public and private sectors
- 3- The researcher suggested 40 statements related to teaching competencies.
- 4- A draft of the suggested statements were sent by e-mail to 10 experts in the field of special education and other related fields (i.e psychology, curriculum, medicine) in Jordanian universities . The statement which approved by 80% of experts was considered and the statements which weren't approved was cancelled. By this method 9 statements of the questionnaire were cancelled. The number of final statements of the tool were (31) statements and general information (sex, experience class level, educational level). The Likert scale of the statements consist of four levels (Highly competent, moderately competent , little competent , no competent) coded 4,3,2,1,0 ,respectively.for the purposes of analysis. The tool was validated by a group of experts from Jordanian universities and some experts in the field. For the purpose of validation , the internal consistency of the statements were calculated by Kornbach's Alpha (0.921).

Data collection

After constructing the tool, the schools were assigned as the research purposes and objectives. An informed consent were signed by the participants. 140 copies of the research tool were handed to the teachers within 10 successive days. After 20 days, the copies were returned. 10 copies of the returned questionnaires were excluded because of incomplete information.

Data analysis: The researcher used SPSS program (version 21) to analyze the participants responses (Mean, SD, Sig, T-test., scheffe's test, Anova, Ancova)

Results : As the data were treated, the researcher used the following scale to calculate the means for the questionnaire statements:
(2.33 or less)"little competent (LC)", (2.34-3.66)" Moderate competent" MC(, 3.67 or more" Highly competent" HC).

Table (2)

Statement no.	Mean	SD	Percentages	Catogory	Rank
Q7	3.52	1.37	87.92	MC	1
Q29	3.47	1.26	86.67	MC	2
Q24	3.33	1.47	83.33	MC	3



Q26	3.17	1.33	79.17	MC	4
Q23	3.15	1.52	78.75	MC	5
Q5	3.13	1.52	78.33	MC	6
Q22	3.12	1.28	77.92	MC	7
Q30	3.12	1.26	77.92	MC	8
Q31	3.07	1.23	76.67	MC	9
Q27	3.00	1.21	75.00	MC	10
Q3	2.98	1.36	74.58	MC	11
Q28	2.97	1.21	74.17	MC	12
Q20	2.95	1.24	73.75	MC	13
Q1	2.88	1.38	72.08	MC	14
Q21	2.88	1.35	72.08	MC	15
Q25	2.88	1.61	72.08	MC	16
Q4	2.85	1.38	71.25	MC	17
Q6	2.82	1.37	70.42	MC	18
Q8	2.77	1.45	69.17	MC	19
Q9	2.75	1.41	68.75	MC	20
Q2	2.62	1.53	65.42	MC	21
Q18	2.55	1.58	63.75	MC	22
Q14	2.53	1.50	63.33	MC	23
Q16	2.45	1.32	61.25	MC	24
Q13	2.42	1.23	60.42	MC	25
Q19	2.40	1.56	60.00	MC	26
Q12	2.38	1.44	59.58	MC	27
Q17	2.35	1.40	58.75	MC	28
Q11	2.32	1.46	57.92	MC	29
Q15	2.27	1.34	57.67	MC	30
Q10	2.07	1.41	51.67	MC	31
Total	2.81	0.90	70.28	MC	

As it appears in (Table 2), the statement No (Q7): The need for the early intervention programs such as (A VISI) occupied the first priority between the statements (i.e Mean =3.52 and the percentage = 87.92%, while the statement no. (Q10) which stated “**the need for training reading and writing with braille system**”, has the lowest rank (i.e Mean=2.81) with percentage of 70.28%. these values indicate the moderate need according to the scale value. Also the total mean in general was(M= 2,81) and the percentage was 70.28

Table 3

Variable	Test	Value	Sig
sex	T-Test	0.43	0.673
Educational level	ANOVA	2.46	0.094
experience	ANOVA	0.85	0.434
School level	T-test	0.99	0.322
Characteristics of the teacher	ANOVA	6.37	*0.003

Table (3) shows the differences in competencies in training among the teachers according the sex, educational level, experience and school level and the characteristics of the teacher. The t- values for competencies according to sex ,educational level , experience, school level were not significant because the significancy value is greater than (0.05)., while the F -value for the competencies



according to the variable characteristics of the teacher ($F=6.37$) at the significant level (0.003) and this value is significant because it is less than 0.05. To differentiate the competencies according to the characteristics of the teacher, Post Hoc Comparison -Scheffe's test was used, (Table 4).

Mean	Teacher characteristics	Visually impaired	blind
3.06	sightedness	-0.13	*0.76
3.19	Visually impaired		0.89
2.30	blind		

As a result of post Hoc comparison- S'cheffe test for comparing the dimensional to identify the source of differences in needs for the teachers related to their characteristics. The differences were between the blind and the sightedness and its on the favor of sightedness teacher (Mean= 3.06) and between the blind and partially sight and it is on the favor of partially sightedness (mean= 3.19).

In more details the following tables explain the means, SD and T- values for training needs of the teachers of the visually handicapped learners according to the independent variables (sex, experience, level of education teachers characteristics and school level (Tables 5- 9)

Table 5

variable	sex	no	mean	SD	t-value	sig
total	M	38	2,74	0.54	0.43	0.673
	F	82	2.85	1.03		

As the values of means, SD and t- value were calculated for teachers and the Significance compare with the sig. value (0.05) with competencies compare the calculated (0.673) which is greater than (0,05), so that there is no significant differences related to sex.

Table (6):The results of Ancova for teachers competencies related to educational level

variable	Source of variance	Total square	Degree of freedom	Mean Square	F-value	sig
Total	Inter-catogeries	3.77	2	1.89	2.426	0.094
	Intra-catogeries	43.70	57	0.77		
	total	47.48	59			

As we compare the results of Ancova analysis for teachers competencies related to educational level the significant value attendant the F-value is (0.094) which is greater than (0.05). this mean there is no significant differences in teachers competencies related to difference in the level of education.

Table (7) The results of ANCOVA analysis for teachers competencies related to experience

Variable	Source of variance	Sum square	Degree of freedom	Mean Squares	F-value	Sig
total	Inter-catogeries	1.37	2	0.69	0.85	0.434
	Intra- catogeries	46.11	57	0		
	total	47.48	59	.81		



The result of ANCOVA analysis for teachers competencies according to the experience and comparing the sig. value attendant to the value $F(0.85)$ which is (0.434). That is greater than (0.05) which indicated no significant difference in teachers competencies related to experience (Table 7)

Table (8) ANCOVA analysis for teachers competencies according to school level

Variables	Shool level	no	mean	SD	t-value	sig
total	primary	41	2.73	0.91	0.99	0.322
	secondary	19	2.98	0.88		

As the values of means and SDs, t-values for teachers' competencies related to school level wer calculated and compared the value of significancy attendant t-value (0.99) which is(0.322), that is greater than (0.05). This means there no significant differences related to the school level.

Table (9) Ancova analysis for teachers' competencies according the teachers characteristics

Source of variance	Sum of squares	Degree of freedom	Mean square	F- value	Sig.
Inter-catogeries	8.68	2	4.34	6.37	*0.003
Intra-catogeries	38.80	57	0.68		
total	47.48	59			

Table 9 shows the results of ANCOVA analysis for the teachers competencies according to the characteristics of the teachers and comparing significant value(0.003) attending the f- value(6.37) with (0.05). This means that there is signifcant differences in teachers' competencies related to the teacher characteristics

Discussion

Concerning the first question which involved the identification of the teachers competencies "What are the competencies for the teachers of visually handicapped learners?". The study revealed that all the questionnaire statements were answered by **moderate** and the total mean is(2.81). and the total percentage for the statement were ($M=72.28$) and ($SD = 0.90$). This result is a clear evidence that all the teachers need training and knowledge related to visual impaired and blind ,but the statement Q7 which states "**I need to know early intervention programs**" has the highest percentage among all the questionnaire statement (87.92%) while the statement(Q10) which states" I need to know how to read and write by brille system" has the lowest percentage.(51.6).This result reveals the actual needs for the teachers .This result is applicable with result of (Grooser, 2005) which stated that the workers needs knowledge and skills in early intervention ,assessment and evaluation of developmental growth for children below thirteen. As for the second question" **Is there asignificancy differences in evaluating the teachers' competencies in congruent of the study variables?** The study reveals that there is no significant differences in teachers evaluation for their competancies related to the sex, educational level, experience and school level. However there is significant differences in teacher responses related to the teachers' characteristics (Parially blind, sighteness, blind). This study is congruent with the study by Al Hadideen (1990) which stated that the age and experience does not play an important role in specifying the teachers knowledge and training skills. The researcher indicate the present of statistical significancy related to teacher characteristics might be due to the absent of knowledge and training skills as it for the blind and partially sighted teachers who are the target category. They own their students characteristics. In other word, they don't need training on braille system and tailer or to know the cause of visual impairment. The oppose is said about the sighted teachers who form a different category. They have characteristics dissimilar with the target group, so that they need



knowledge and skills more than their counterpart. In other word the teacher don't know who to use braille system for reading and writing, or the art of orienting and transportation

Concerning the third question: - Do the competencies differ in quantity and quality according to the characteristics of the teachers(blind, partially sighted, sightedness?

The study results revealed that the differences between the blind and the sightedness and the difference were on flavor of the sightedness. That is the mean was 3.06. As for the blind and partially sighted the significancy was on flavor of partially sighted, the mean was the higher ($M=3.19$). The researcher give the rational for the results concerning this question, even though both blind and partially sighted represent the visual handycap, the teachers' competencies are dissimilar in quality and quantity because the partially sighted teacher has more functional residual vision and he/she used it better than the blind teacher

Recommendation

According to the study results the researcher recommended the following point to improve the teachers' competencies .

1. Develop special educational system through criteria and standards and competencies for the teachers of visually impairment students .
2. Correlate between knowledge and practice in preparing special education teachers specialized visual impairments and blind.
- 3- Develop continuing educational training programs during their work.
4. Follow up the programs objectives in the practicum.
- 5- The managers and the Principals of the special education institutions and schools should actually be involved in the programs.

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