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LIB2017-2400

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This paper should be cited as follows:

Al-Hijji, K. Z. H., Karim, S. E A., and Al-Shabibi, M. H. (2018). **"The Impact of Specialized Certificate Program on the Performance of School Librarians in the Sultanate of Oman",** Athens: ATINER'S Conference Paper Series, No: **LIB2017-2400.**

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URL Conference Papers Series: www.atiner.gr/papers.htm

ISSN: 2241-2891
23/02/2018

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Abstract

This study aims to measure the impact of the Training (Specialized Certificate) Program of the Ministry of Education on the performance of school librarians at Sultanate of Oman. Adopting Kirkpatrick Model of Four Levels Evaluation Certification Program, the study utilized a triangulation of survey, interviews, and observation to evaluate the four levels of the Model. Collecting data for the research has passed through three stages. The first one aimed to collect data for the first and second levels of the Model from the 96 librarians who have already completed the training program. The questionnaire was used for this stage and 75 librarians out of the 96 answered it. The second stage was consisted of 32 supervisors who agreed to participate in the 3rd level through the observation method. The final stage however, included 17 participants of trainees who took place for open-ended interviews to measure the 4th level of the Model. Results of the study indicate that participants are highly satisfied with the program components and facilities; most of them have learned and earned more knowledge and better professional skills enabled them to enhance the quality of their duties. The application of the program topics have been varied, while the administrative issues were rated highly applied, the application of technical issues, especially related to computer software was indicated weak. To improve outputs of further training programs, the study has come out with the following recommendations: first; extending the period of the program to provide participants with more training supervised sessions; second, providing the training program with facilities and web applications that are adequate to number of trainees and consistent to new developments in the field.

Keywords: *Training evaluation; Specialized Certificate Program; Kirkpatrick Model; Learning Resources Centers; School Librarians.*

Introduction

Training is indispensable in the ever swelling world of information to cope with the fast changes in the working environment. Studies by Rich (2011), Waddill (2005) and Whiteford (2009) have highlighted the positive impact of the training on the knowledge and motivation of trainees. However, there is a general complaint that most training programs concentrate on theory more than application (Mussa, 2013), and this indicates the importance of evaluating training programs to explore their strengths or weaknesses. Evaluating training is typically linked with measuring change, and quantifying the degree of change in terms of enhancing performance. Measuring gains in organizational effectiveness as a result of training interventions is probably the most difficult task in training evaluation (Chong, 2005; Shenge, 2014). This study therefore is an attempt to bridge a gap in this area by highlighting to organizers of training programs the obstacles that they may face, through shedding light on the largest training program in Information Science in the Sultanate of Oman. The training program under investigation is the Professional Program titled the "Specialized Certificate Program for Learning Resources Centres Specialists (LRCS) in the Sultanate of Oman". The program was constructed by the Department of Information Studies at Sultan Qaboos University, in collaboration with the Ministry of Education of Sultanate of Oman, to improve the performance of LRCS working in Centers of Educational Resources of the Ministry. It consisted of 100 training hours divided into two stages: 50 hours for the First stage which aimed to involve all LRCS in the country (see Table 1), while the remaining 50 hours were directed toward those who achieved high evaluation scores from the first level (Table 2). The four criteria of the Kirkpatrick Model: satisfaction, learning, behavior and outcomes, were found to provide effective guidelines for this evaluation process.

Table 1. *Topics in the First Level*

S	Topic	hours
1	Management principles and practice	10
2	Information literacy	5
3	Social media for LRCs	5
4	Collaboration between LRCs	5
5	Search strategies for E- resources	5
6	Electronic Publishing	10
7	Educational Technology	10

Table 2. *Topics in the Second Level*

	Topics	Hours
1	Management and development of learning resource centers	10
2	Applications of cloud computing in information centers	5
3	Applications of open resources programs in information centers	5
4	Quality assurance and control	5
5	Applications of Adobe Indesign2 in E-publishing	10
6	Information specialists in the digital environment	5
7	Skills of writing reports according to APA rules	10

The study investigates the first stage of the program, since the second one has recently commenced and needs more time to be investigated.

Aim and Questions of the Study

The aim of the study is to evaluate the impact of the Specialized Certificate Program for LRCS in the Sultanate of Oman in developing skills of LRCS in the country. Utilizing the Kirkpatrick Model, four measurement areas were identified: satisfaction, reaction, and behavior of trainees, in addition to the impact of final outcomes on the trainees' career. Hence, to assess the efficacy of the training program in general, and in particular to evaluate achievement of the four levels of the Kirkpatrick Model, the following research questions were formulated:

1. To what extent are the participants satisfied with the program?
2. To what extent have the trainees' skills, knowledge, or attitudes changed following the program?
3. To what extent have the trainees applied the knowledge and skills that they gained from the training program?
4. To what extent has the training had an impact on the larger organizational outcomes?

Literature Review

Training is an investment activity for better performance (Sanders (2011). It improves the employees' knowledge, capabilities and skills (Rich, 2011) to the level that improving their performance which consequently leads to better outcomes of their organizations (Aguinis and Kraiger, 2009). However, Mussa (2013) reported that there is a general complaint that most of the training programs concentrate on the theoretical aspects more than the application. This argument stress the need for standards or criteria for assessing effect and

outcomes of training programs that should be taken into account when preparing for one of them, as for better effectiveness of training evaluation criteria is essential part (Edens and Bell, 2003). In this regard, and more than fifty years ago, Kirkpatrick developed his framework as a basic model for the identification and targeting specific –training interventions in business, government, the military and industry alike (Donald Nick Rouse, 2011). Yardley and Dornan (2012) pointed to an explanation of Donald Kirkpatrick in his recent book, *Kirkpatrick Then and Now: A Strong Foundation for the Future*, on how he arrived at the set of four descriptors that are now widely used to evaluate the impact of interventions in education. According to them his purpose was to provide managers with measures for evaluating outcomes of training in learners and their organizations. During the last fifty years the Model has been applied in assessing various training programs around the world. In the early years of its establishment it was commonly used by companies that wanted to evaluate their training programs (Nathan, 2009). However, over the time many researchers and practitioners have used the Model for evaluating training programs in nonprofit including educational organizations. Farjad (2012) for instance employed the Kirkpatrick Model for evaluating the effectiveness of training courses in Islamshahr University. He indicated that the programs should be improved and receive additional support. A year later Abulwafa (2013) reported that directors of high schools in Egypt were not satisfied with their training programs. In this regard, some researchers used this Model for evaluating the four levels: satisfaction, learning, behavior, and results, with the investment reward, which was added by Jack Phillips in a later stage. (Jasim, 2012, Alshabibi, 2016). Despite the fact that the Kirkpatrick's Model was seen appropriate for training evaluation by many researchers as indicated above, some point to several limitations in the Model that raise risks for evaluation clients and stakeholders. These risks, plus the inability of the model to address both summative questions (was training effective?) and formative questions (how can training be modified in ways that increase its potential for effectiveness?), limit the capacity of human resources professionals to fulfill their core ethical duty and beneficence (Abdalhadi, 2011). The present investigation aims at using the KirkPatrick Model for evaluating the (specialized certificate) training program that was developed by the Department of Information Studies of Sultan Qaboos University in collaboration with Ministry of Education of Sultanate of Oman, in order to come out with recommendations that lead to develop and enhance quality of the program for future patches of trainees.

Methodology

This study utilized a triangulation of survey, interviews, and observation to evaluate the four levels of the Kirkpatrick Model. Zahng (2014) indicated that a multi-method approach is applicable to behavioral studies: quantitative data may lead to generalized results, while qualitative data may contribute to a comprehensive analysis of the subject. The use of different qualitative and

quantitative tools to collect data for this research was intended to achieve robust outcomes and cover all aspects of the training program. A questionnaire was used for collecting data on trainees' satisfaction regarding the first two levels of the Model: reaction and learning. The aim of the observations, meanwhile, was to evaluate behavioral responses of trainees after finishing the program, and it was administered three months after trainees' admission to the program through a specially designed form that was distributed to the trainees' supervisors. The third method, interview, was used to assess the impact of trainees' behavior and application on the outcomes in their LRCs after training. A set of interview questions covering the seven parts of the training program was designed to collect data from supervisors and trainees that have provided information about their activities for the third level.

Population of the Study

The study population consisted of 96 LRCS who attended the first four groups of the first stage of the training program (Table 3).

Table 3. *Population of the study*

Group Region	Muscat	North Sharkia	South Sharkia	Dakhlia	North Batna	South Batina	Dhahira	Dhofar	Burami	Mosandem	Total	%
1	3	1	4	4	4	3	1	3	0	0	23	23.9%
2	5	1	4	3	3	4	3	1	0	0	24	25%
3	4	2	2	4	4	2	3	2	1	0	24	25%
4	3	1	2	4	3	3	3	3	1	2	25	26.1%
Total	15	5	12	15	14	12	10	9	2	2	96	100%

The reason for their selection is that enough time had passed after these four groups finished the program to allow evaluation of all four parts of the Kirkpatrick Model.

Findings

This part of the article presents findings of the study according to the four levels of the Kirkpatrick Model: Reaction; Learning; Behavior; and Results.

Reaction

The reactions of the trainees were measured through a survey to assess their satisfaction with the various aspects of the training. A questionnaire was

sent to all 96 trainees who attended the program and approximately 78% of respondents returned them fully answered. In determining reaction levels, the researchers of the study were concerned with assessing participants' satisfaction regarding two aspects of the training program: Components and Facilities of the program; and Trainers. The first category includes:

Table 4. *Components and Facilities of the Program*

Issue	excellent		v.good		good		fair		low		total	
	No	%	No	%	No	%	No	%	No	%	No	%
Date and time	30	40	27	36	14	18.7	3	4	1	1.3	75	100
Training hall	30	40	28	37.3	14	18.7	2	2.7	1	1.3	75	100
Logistic support	25	33.3	31	41.3	14	18.7	4	5.3	1	1.3	75	100
Contribution to developing trainees' career	31	41.3	29	38.7	11	14.7	3	4	1	1.3	75	100
Fulfillment of trainees' expectations	20	26.7	31	41.3	19	25.3	4	5.3	1	1.3	75	100
Consistency of training with trainees' needs	27	36	30	40	14	18.7	4	5.3	0	0	75	100
Sufficient practical activities	19	25.3	24	32	24	32	6	8	2	2.7	75	100
Average	26	34.7	28	37.3	16	21.3	4	5.3	1	1.3	75	100

Duration of the Program (date and time); Training Hall; Logistic Support; and the consistency of the program themes with trainees' needs (table 4). The table indicates that trainees are highly satisfied with various aspects and components of the program. The averages show that 70 (representing 93.3%) of the 75 trainees who filled in the questionnaire rated these aspects between excellent and good. Of these, 26 participants (34.7%) were extremely satisfied, as indicated by the "excellent" answer, followed by 28 (37.3%) who rated them "very good", and 16 trainees (21.3%) who indicated feeling somewhat satisfied by answering "good". Among the 75 participants, just one participant appeared unhappy with the program, describing his satisfaction as "low". This result shows that the program is successful and has achieved its objectives. All aspects related to training themes and trainers recorded similar results with positive answers ranging from 89.3% for "sufficient practical activities" to 96% for the "training hall". Meanwhile, 95.6% of respondents reported satisfaction with the following three aspects: the "period of the training program"; "contribution of the program in developing trainees' career"; and "training's consistency with trainees' needs". Finally, 93.3% of respondents indicated satisfaction with "fulfillment of the program to the trainees' expectations"; and "logistic support".

The Second Level: "Learning"

According to Kirkpatrick (1979), learning is defined as the principles, facts, and techniques that are understood and absorbed by the learners. By measuring the learning, we can assess the extent to which the skills, knowledge, or attitudes of the trainees have changed. Our study relied, in measuring this level, on the second part of the questionnaire, the first part having been directed towards measurement of the first level, Reaction. The questions were designed to assess the trainees' knowledge, skills, and confidence and ability in application before and after the program. For this reason results of this level are summarized in two tables: the first reflecting the trainees' levels before the program (Table, 5), while the latter shows their levels afterwards (Table, 6). Each table is divided into 7 parts covering all areas of training.

Table 5. *Knowledge and Skills of Trainees before the Training Program*

		Knowledge						Skills						Ability in application					
#	Topic	High		Medium		Low		High		Medium		Low		High		Medium		Low	
		NO	%	NO	%	NO	%	NO	%	NO	%	NO	%	NO	%	NO	%	NO	%
1	Educational Technology	9	12	59	78.7	7	9.3	9	12	57	76	9	12	17	22.7	44	58.7	14	18.6
2	Management principles and practice	13	17.3	56	74.7	6	8	6	8	62	82.7	7	9.3	16	21.3	47	62.7	12	16
3	Search strategies for E- resources	9	12	58	77.3	8	10.7	5	6.7	62	82.7	8	10.6	13	17.3	50	66.7	12	16
4	Electronic publishing	9	12	37	49.3	29	38.7	6	8	39	52	30	40	17	22.7	30	40	28	37.3
5	Social media for LRCs	9	12	48	64	18	24	9	12	47	62.7	19	25.3	16	21.3	35	46.7	24	32
6	Collaboration between LRCs.	10	13.3	56	74.7	9	12	7	9.3	56	74.7	12	16	12	16	52	69.3	11	14.7
7	Information Library	9	12	56	74.7	10	13.3	6	8	56	74.7	13	17.3	13	17.3	49	65.3	13	17.3

Skills

Examination of the two tables clearly shows that the trainees have gained much in terms of knowledge and skills from the training program, which helped them to develop their career. Regarding use of technology, the percentage of trainees with high skills levels increased dramatically from 12% (as seen in table 5) to 72% (as indicated in table 6), while the number of trainees who indicated that their skills level was low decreased from 9 in table 5 to zero in table 6, reflecting the progress in their skills acquisition. Simultaneously, trainees developed high and medium skills in other topics of the training program. Regarding the second topic, management principles and practice, the percentage of trainees with high level skills increased from 17.3% to 66.3%, in

addition to 32% indicating medium level, while only 1 person indicated that no progress had been achieved. Regarding the topic of search strategies for electronic resources a total of 56 participants of the 75 who answered the survey questions (74.7%) indicated that their skills had increased to a high level after the program, compared to 9 participants (12%) before the program. Similarly, the majority of trainees indicated that their skills had improved to high from medium and low levels in the following topics: methods of collaboration (69.3%), use of social networks for LRC processes (64%), electronic publishing (56%), and information literacy (54.7%).

Table 6. *Knowledge and Skills of Trainees after the Training Program*

		Knowledge						Skills						Ability in application					
#	Topic	High		Medium		Low		High		Medium		Low		High		Medium		Low	
		NO	%	NO	%	NO	%	NO	%	NO	%	NO	%	NO	%	NO	%	NO	%
1	Educational Technology	54	72	21	28	0	0	44	58.7	31	41.3	0	0	44	58.7	29	38.7	2	2.6
2	Management principles and practice	50	66.7	24	32	1	1.3	40	53.3	35	46.7	0	0	39	52	36	48	0	0
3	Search strategies for E- resources	56	74.7	16	21.3	3	4	44	58.7	30	40	1	1.3	51	68	22	29.3	2	2.7
4	Electronic publishing	42	56	30	40	3	4	40	53.3	32	42.7	3	4	36	48	34	45.3	5	6.7
5	Social media for LRCs	48	64	25	33.3	2	2.7	39	52	32	42.7	4	5.3	37	49.3	33	44	5	6.7
6	Collaboration between LRCs.	52	69.3	21	28	2	2.7	38	50.7	35	46.7	2	2.6	41	54.7	30	40	4	5.3
7	Information Library	41	54.7	33	44	1	1.3	34	45.3	40	53.3	1	1.3	39	52	35	46.7	1	1.3

Knowledge

The two tables (5 and 6) also show an increase in trainees' knowledge in various aspects and topics of the program. At the forefront of these increases is the search strategies for electronic resources, where around 58% of trainees had high level knowledge after the training program compared to 6.7% before it. Second to this, 53.3% of trainees indicated that they had developed high level knowledge in both management process and electronic publishing through completing the program, compared to only 6% before the program. Meanwhile, the proportion of participants who rated their knowledge of educational technology as high increased from 12% before the program to 58.7% after the program. Moreover, all participants who rated their knowledge on this topic and "management principles and practice" as low felt that they had made good progress during the program and that their knowledge in these two areas had consequently improved. Knowledge of social networks and their importance in LRCs had also increased (52% with high and almost 43% with medium level

knowledge). Furthermore, more than 97% indicated that their knowledge had increased to high (50.7%) or medium (46.7%) level in ways and methods of collaboration between their LRCs. Finally, 45.3% of respondents indicated that their awareness of information literacy increased to high on completion of the program.

Application

The main objective of training activities is to make trainees more familiar with the training program theme and enhance their ability to implement in their institutions the new skills and knowledge gained. For this reason, this study was concerned with assessing trainees' levels of applying in their LRCs what they had gained from the program. These findings also show improvements among the trainees across all aspects of the program. Examination of the two tables (5 and 6) clearly illustrates that almost 100% of trainees were able to apply "Management principles and processes", and the figure was 98.7% for "Information Literacy". Meanwhile, 93-97% of respondents were able to apply all other topics to some extent.

The Third Level: "Behavior"

"Level three behavior outcomes address either the extent to which knowledge and skills gained in training are applied on the job or result in exceptional job-related performance" (Bates, 2004). For this study an observation form was designed for evaluating the LRC specialists' behavior after the training program. This form was sent to supervisors of LRCs around the country, and they were asked to monitor trainees' application of the training they had received in the training program. However, evaluation of this level faced obstacles including the unavailability of some supervisors to participate in the observations and the long distances between the location of other supervisors at General Directorates of Education and schools where trainees are employed. Therefore, the total number of trainees observed for this level was reduced to 32, of whom 22 were females and 10 were males.

Findings of this level indicate that respondents' application of what they had learnt varied from around 6% in some aspects of the program to more than 80% in others. In the case of use of technology, 40.6% were able to use Edraw software efficiently, and 18% of them conducted workshops on its use. Moreover, 25% presented workshops in Presentation Tube software. Regarding the second topic, management principles and process, participants have learned how to formulate and implement strategies for their LRCs. Findings here indicate that 68.8% of participants have adopted new strategies taking into account the vision, mission, and objectives of their LRCs. Meanwhile, 59.5% of respondents have surveyed the environment of their LRCs and managed to recognize their Strengths, Weaknesses, Threats, and Opportunities, with 43.8% of these developing alternative solutions for these issues, and 43.7% implementing their strategies. Regarding the third topic of the training program, Search

Strategies for Electronic Resources, 100% of trainees said they had mastered this issue to varying extent; 34.3% ranked their knowledge and skills as medium, 6.3% more than medium, and the rest reported handling it perfectly. On the application side, 78.1% have conducted training workshops for users in search skills, and 34.4% have adopted programs for using electronic databases. Furthermore, 59.4% of respondents have used InDesign for Electronic Publishing software for designing pamphlets and posters, and 18.7% have presented workshops in Adobe InDesign software. The 40.6% of the trainees who have not adopted such software attributed that to unavailability of the software at their LRCs. In relation to the training theme of use of Social Networks in marketing LRCs, these LRC specialists use social networks for marketing their services and for sharing knowledge with their colleagues. Participants indicated that they use Blogs (46.8%), Facebook (40.6%), WhatsApp (31.2%), Instagram (25%), Twitter (9.3%), and YouTube (6.2%). However, in this regard results indicate the need for more workshops and marketing activities relating to the role of LRC specialists, for teachers and students as well. Only 37.5% respondents have conducted such workshops for teachers, and 15.6% have presented them to students. The sixth topic of the training program was Collaboration between LRCs. In this regard, LRC specialists use different ways of knowledge sharing such as periodical meetings and conferences, where research papers and posters for new services are presented, with email, social networks, and other communication methods also used for collaboration. However, after the training program was completed many obstacles emerged to challenge LRC specialists activate cooperation and collaboration among their colleagues, the main issues being: insufficient funds (37.7%), desire for independence (25.5%), and lack of supporting policies and procedures (17%). The last theme of the training program was Information Literacy, and this was aimed at preparing trainees for confronting the flow of information and guiding students and teachers on the most sufficient methods for tracking and using the most sufficient information. In this regard, more than 96% of the trainees observed have conducted workshops on search strategies and identification of different kinds of information resources. Therefore, the results indicate that most LRCS are versed in different aspects of Information Literacy including: identifying the need for information (56.3); selecting suitable information resources (56.2); tracking these resources (59.4%); evaluating information obtained (40.6%); analysis and use of information (43.8%). Moreover, more than 87% of respondents indicated that they have become more efficient in guiding users to use information, taking into account legal and ethical issues.

The Fourth Level: "Results"

The fourth level measures to what degree the targeted outcomes of the organization occur as a result of the training. *Did the training have an impact on the larger organization outcomes?*

In order to assess the impact trainees' behavior and application had on the outcomes of their LRCs after training, interview method was used. A set of

questions covering the seven parts of the training program was designed for collecting data from the 32 respondents at the third level. However, only 17 of those participants agreed to participate.

In terms of the first part of the training program, use of educational technology, three of the LRC specialists utilized the Presentation Tube software, for three courses of the school curriculum: Islamic education; Science; and Information Technology. In addition, it was reported that EDrew software has been widely and efficiently applied in designing mind maps for Social Studies, Science, and Informational Technology courses.

Regarding the second topic, Management principles and process, 80% of participants at this level indicated that they have put into practice the knowledge and skills gained from the training in formulating better organized plans. Moreover, trainees have revisited their previous strategies to amend them according to the new principles and processes that they have learned. Furthermore, participants have become more familiar with identifying their LRC's vision, mission, goals, and objectives, and adopting relevant techniques of environmental analysis. As a result of these factors, LRC specialists have become more committed to their strategies, and able to follow their implementation time frame accurately.

In the case of search strategies for electronic resources, LRC specialists have become more skilled in retrieving information resources from various databases and E-resources. This is reflected in the improvement of satisfaction among teachers and students.

In terms of electronic publishing, trainees have learned how to use InDesign for designing procures and pamphlets. In this regard, results indicate a weakness in the application of the software that has consequently limited further progress. This lack of utilization is basically attributed to unavailability of an original copy of the software. Some respondents utilized the free 15-day trial that is usually offered by the software's publisher.

Results on Social Media networks and their role in LRCs indicate that LRC specialists work with teachers on opening special pages in social networks for different school courses as a channel for knowledge exchange between teachers themselves, as well as between them and their students. Moreover, others utilize these networks for marketing and presenting activities of their LRCs

In regard to collaboration between LRCs, trainees have become more familiar with ways and methods of cooperation. LRC specialists stress that collaboration has provided them with new knowledge and skills in developing their LRCs, and enabled them to offer better services for their patrons. Moreover, specialists utilized collaboration to manage their budgets more efficiently by means of agreements on sharing resources or services.

In relation to information literacy, the training program succeeded in raising LRC specialists' skills and knowledge in methods of searching, finding, and utilizing information. This is reflected in their effort to provide LRCs users with skills in finding suitable, relevant information for their various needs. However, most trainees (75%) indicate that users' ability to identify and find

the needed information varies from one user to another, with some finding what they need easily, while others ultimately rely on the LRC specialist to find information they need. Regarding ethical, and legal aspects of using information, the LRC specialists are much concerned with this issue, and therefore they follow various strategies including workshops and awareness programs to help students and teachers to consider these issues while using information.

Discussion

This study utilized the Kirkpatrick Model for measuring the impact of the training program titled the "Specialized certificate program" on improving the performance of LRC specialists in the Sultanate of Oman. Findings indicate that the program has a positive impact on trainees' knowledge, skills, and application.

In the first level, "Reaction", 70 participants (representing 93.3%) of the 75 in total indicated their high satisfaction with various aspects and components of the program including: duration of the program (date and time); training hall; logistic support; and the relation between the program themes and trainees' needs and expectation. Consistent with this result, Chong (2005) indicates that Level 1 evaluation (reaction) seems to be the most significant training evaluation practice, reporting that the majority of Malaysian manufacturing companies focus on the perceptions of trainees towards their training programs.

In the 'Learning" level our study assessed the trainees' knowledge, skills, and ability in application before and after the program. Results of this level indicate that trainees gained a lot of knowledge and skills from the training program that helped them to improve their career. In the use of technology, the percentage of trainees with high level skills increased dramatically from 12% before admission to the program to 72% after finishing it. Regarding "Management Principles and Practice", the percentage of trainees with high or medium level skills increased from 17.3% to 98.3% (66.3% with high skills, and 32% with medium level). Skills in "Search Strategies for Electronic Resources" also increased, with 74.7% of participants rated as highly skilled after the program, compared to 9 participants (12%) before entering the program. Similarly, the majority of trainees have improved their skills in the remaining topics: "Methods of Collaboration" 69.3%, "Use of Social Networks" 64%, "Electronic Publishing" 56%, and "Information Literacy" 54.7%. Trainees' skills ratings indicate that they have also made knowledge gains in the various aspects of the program. For instance, knowledge of "Search Strategies for Electronic Resources" increased from 6.7% - 58%, "Management Principles and Practice" from 6% - 53.3%, "Educational Technology" from 12%-58.7%. Moreover, more than 50% of trainees have gained high level knowledge in using "Social Networks" for "Collaboration" between their LRCs, and 45.3% of respondents indicated that their awareness of information literacy increased

to a high level as a result of the program. On the "Application" side, the study shows an increase in indicators of trainees' application of what they have learned from the program. Results show that all aspects of the program have become applicable, with almost 100% of trainees able to apply "Management principles and process", and 98.7% in the case of "Information Literacy". Meanwhile, all other topics are reported as applied to some extent by 93-97% of respondents.

At the **"**Behavior" level of the Model, findings indicate that respondents' application of what they had learnt varied from around 6% in some aspects of the program to more than 80% in others. In the use of technology, 40.6% used Edraw software efficiently, while 18% conducted workshops on its use, and 25% conducted workshops on Presentation Tube software. Regarding "Management principles and process", 68.8% participants have adopted new strategies taking into account their LRC's vision, mission, and objectives, while 59.5% of respondents have surveyed the environment of their LRCs and managed to recognize their Strengths, Weaknesses, Threats, and Opportunities, with 43.8% identifying alternatives, and 43.7% implementing their strategies. In terms of "Search Strategies for Electronic Resources", 78.1% have conducted training workshops for users in search skills, and 34.4% have adopted programs for using electronic databases. Meanwhile, 59.4% of respondents have used InDesign for "Electronic Publishing" software for designing pamphlets and posters, and 18.7% have presented workshops in Adobe InDesign software. After completing the program LRC specialists have become more active in using "Social Networks" for marketing their services and for sharing knowledge with their colleagues. Through "Collaboration between LRCs", participants have adopted different methods for knowledge sharing such as periodic meetings and conferences. Moreover, results indicate that most LRC specialists are versed in different aspects of Information Literacy including: identifying the need for information (56.3); selecting (56.2) and tracking (59.4) suitable information resources; evaluating information obtained (40.6%); analysis and use of information (43.8%). Moreover, more than 87% of respondents indicated that they have become more efficient in guiding users to use information, taking into account legal and ethical issues.

The fourth level of the Model, "Result", measures the impact of training on the organization. In this regard, findings of this study revealed that schools noticed more interaction between LRC specialists, and teachers and students, resulting in more activities for improving learning in schools. For instance, the use of EDrew software for designing mind maps for Social Studies, Science, and Informational Technology courses has been observed. Moreover, regarding "Management Principles and Practice", LRC specialists have amended their previous strategies according to the new skills they have gained, and then they have adopted more accurate steps and time frames for implementation. Furthermore, use of "Social Media" networks and "Search Strategies for Electronic Resources" for marketing and identifying LRCs services has been reflected in improved relationships with users, and a consequent increase in their satisfaction. In addition, LRCs have been able to manage their budgets

more efficiently by sharing and exchanging resources and services through "Collaboration" agreements. By following the steps of Information literacy LRCs users have become more familiar with methods of identifying and finding suitable, relevant information for their various needs. However, application of "Electronic publishing" faced certain obstacles that reduced the utility of the training program, as represented by the unavailability of an original copy of the required software, and therefore the impact of this aspect of the program on organizations was unclear.

Conclusion

The evaluation of the Specialized Certificate Program for school librarians in the Sultanate of Oman revealed that the program has a positive impact on trainees' knowledge, skills, and application, and Kirkpatrick Model was suitable for guiding research design and outputs towards successful evaluation process. Results indicate that employees' learning have increased; their skills have developed, and their knowledge have updated and enhanced. Moreover, they have become confidently able to apply skills and knowledge that they gained from training in their daily duties. Looking at each level individually, we can say that training were effective at all levels. The first level 'Reaction", achieved more than 93% satisfaction of the total participants who indicated their contentment about duration of the program (date and time), training hall, logistic support, and the relationship between the program themes and trainees' needs and expectations. In the 'Learning" level our study indicate that trainees have gained knowledge and skills enabled them to improve various aspects of their career. The third level "Behavior" has also received positive impact assuring that trainees' behavior have changed dramatically from 6% to 80% towards the application of aspects of training program. Regarding the fourth level of the Model "Result", this study revealed that schools noticed more interaction between LRC specialists, and teachers and students, resulting in more activities for improving learning in schools. This study is limited to four groups of trainees that are targeted for the whole program, since it is still running, and therefore further research may focus on other groups. Moreover, other studies could be conducted utilizing other models such as Jack Philips to include the fifth level that he added to KirkPatrick.s one "Returns on Investments". To improve outputs of further training programs, the study has come out with the following recommendations: first; extending the period of the program to provide participants with more training supervised sessions; second, providing the training program with facilities and web applications that are adequate to number of trainees and consistent to new developments in the field.

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