IMPACT OF TRAINING WORKSHOPS ON CREATION AND ADOPTION OF NEW ELECTRONIC SCIENTIFIC JOURNALS

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ABSTRACT

A series of eleven workshops were organized by the Scientific Publishing Center (SPC) to faculty members each of which to a specific college associated with University of Bahrain (UoB). The total number of participants was 238. A structured questionnaire was distributed at the end of each workshop, and interviews with some of the participants were conducted. Data analysis indicated high levels of rating to these workshops on the seven aspects under concern. Workshop organization came at the top with a percentage of 94.4% of respondents giving it either very good or good. Topics covered was second with a rating of 93.5%. Time assigned to the workshop was third (92.6%).The fourth was method of presentation (92.0%), followed by used examples (91.7%). Profit gained from these workshops got a rating of (81.5%). Motivation for initiating electronic journals came at the end with a rating of (75.9%).The interviews showed a complete agreement on satisfaction of participants with such kind of workshops. Fifteen projects for initiating electronic journals were received from some of the participants.

Keywords: *Training Workshops, New Electronic, Scientific, Journals*

INTRODUCTION

It is evident that the world is witnessing a dramatic move towards electronic publishing (Al-Khalili, 2012; Mahmoud, 2011; Shapiro, 2005; Aretimi, 2012; Heider, Laverick, &Bennett, 2009; Nelson, 2008; Byrne, 2000). Nelson (2008) indicated to this move by saying that "Each year one of the biggest debates in higher education seems to be: Is this the year that electronic textbooks take off? E-reader devices are getting better. The inventory of digital content is expanding. Business models are emerging to support the needs of students, faculty members, and publishers. People are getting comfortable with new modes of information delivery and pervasiveness of technology in their lives." (PA29).

Recent electronic books afford interactive facilities between the readers and the text, being loaded as hypertext not as PDF. Such a form of electronic books facility is termed as open access, in which readers can get access to related sources or subjects through highlighted links.

College instructors have began to abandon traditional approaches to instruction, shifting towards digital textbooks (Heider, Laverick, &Bennett, 2009; Nelson, 2008; Byrne, 2000). Moreover, most hard copy journals began to produce an electronic version of them; whilst keeping on producing the paper text version. This means that the electronic version did not replace the paper version. However, still so many online journals are emerging drastically.

Along with this shift towards electronic publishing, a new kind of economy began to evolve, which is known as knowledge economy. Wikipedia (2012) indicated that: "Various observers describe today's global economy as one in transition to a knowledge economy, as an extension of an information society. The transition requires that the rules and practices that determined success in the industrial economy need rewriting in an interconnected, globalized economy where knowledge resources such as know-how and expertise are as critical as other economic resources.

According to analysts of the knowledge economy, these rules need to be rewritten at the levels of firms and industries in terms of knowledge management and at the level of public policy as knowledge policy or knowledge-related policy".

Traditional book publishers began to invest in such an economy. However, scientists, producers of knowledge are not in the focal concern in this economy. Their scientific production, including books, research articles, and any other innovations are the material of this economy. Even though, they usually do not get involved directly in this economy. Their scientific production goes to publishers who mostly dictate tough conditions on them. Electronic publishing might solve such a problem to scientists, and began to take over traditional publishing.

University faculty members need to be encouraged for having a major role in electronic publishing through research journals and textbooks. In this regards, workshops in which they can get training, and share ideas about recent trends in such type of publishing seems to present a high demand. However, workshops should not be left without objective evaluation. The main aim of this article is to present an objective evaluation to a series of workshops organized by the Scientific Publishing Center SPC to all faculty members at University of Bahrain UoB.

Research Questions

This study aimed at getting answers to the following questions:

1.   Was the workshop satisfying to participants in terms of length of time assigned, organization, topics covered, examples, presentation, profit gained, engagement and encouragement?

2.   What are the main benefits participants got through these workshops?

3.   What are the major drawbacks of the workshops?

4.   Were the workshops encouraging to participants to get involved in electronic publishing process?

METHODOLOGY

The experimental approach in research was followed in this study . The one shot pre-experimental design was used. A mixed approach research model combining qualitative and quantitative methods was followed for data collection and analysis. Direct observation, interviews and open ended questions were used as part of qualitative method. A structured questionnaire was used for quantitative data collection and analysis.

A series of workshops on how to establish and run electronic scientific journals were organized by SPC to welling faculty members in each of the ten colleges associated with UoB alone. This center is an official one established recently at the UoB for the purpose of publishing scientific production through all available tools. The center chose electronic publishing as a starting step for assisting scholars on publishing their production. Each workshop took about two hours. Focus was on distinguishing aspects of respectable scientific journals, especially on adherence to scientific standards of quality, regularity, variation of scholars in the editorial board, having Impact Factor IF, recentness of topics tackled and type of scholars whom work has been published in the journal like those who have high h-index.

Impact factor and h-index were clarified in each of the workshops with many examples . In short, Impact Factor was defined (Amin & Mabe, 2000) as being an index that shows how much the published articles in a journal are significant and affecting others to cite in their following research .It is based on a three year basis. Thus it couldn't be found to any journal before three years of lunching. Moreover, the journal must be indexed in a universal data bases like Ulrich which produces 300,000 periodicals or Elsevier which produces 18,000 periodicals.

The impact factor is found through Journal Citation Report JCR which is a product of Institute for Scientific Information ISI. It   is the average number of times a journal published papers are cited up to two years after publication.. JCR provides quantitative tools for evaluating journals. The impact factor is one of these., and can be considered to be the average number of times published papers are cited up to two years after publication. It is calculated automatically and electronically according to the following formula:

Impact factor = A/B

A = number of times articles published by the journal

in the past two years were cited in indexed journals.

B = Number of articles, reviews, proceedings and notes

published by the journal during the same period.

Regarding the h- index, it was shown that (Bar-Ilan,2008) it is an indicator suggested by Jorge E. Hirsch index in an   attempt to measure both the productivity and impact of the published work of a scientist or a scholar. It is obtained automatically and electronically   through a very simple counting procedure based on finding how number of times the published papers of a scholar has been cited by others. It is perceived that if a scholar has an index of h it means that he has published h papers each of which has been cited in other papers at least h times. As an example of that if Professor Mahmoud has an h index of 15, it means that 15 of his published papers each of which has been cited in other papers at least 15 times.

Participants were practically trained on how to find out their own h-index. An already validated questionnaire (see appendix) was distributed at the end of the workshop. Some of the participants were also interviewed regarding their opinion about the workshop they were engaged.

Instruments

Two types of instruments were used in this study: a questionnaire and an open interview. The questionnaire consists of three parts. Part one asks about factual data including name, affiliated college and department, total number of publications, and his h-index. Part two asks about the type of experience the faculty has with electronic journal. Part three asks about the participant's opinion at a four rating scale about the workshop on seven aspects. These aspects include time assigned to the workshop, workshop organization, topics covered in the workshop, used examples, method of presentation, profit gained, and motivation acquired (engagement, and encouragement). The last two questions were open response questions about useful aspects of the workshop and suggestions for improvement.

The validity of this instrument was assured though the process of construction.

This instrument was originally a modified version of an official one used by the Continuing Learning and Community Services Center at UoB. Moreover, a panel of judges consisting of four faculty members at UoB were asked for confirmation of valid covering of the instrument.

The reliability of the instrument was assured through applying it on a subsample of this study consisting of 27 faculty members. Chronbach alpha as a measure of reliability was found to be 0.86 which is a very good indicator of trust in the results of this instrument.

Population And Sample

Faculty members from ten colleges associated with the university were invited to participate in a scheduled time assigned to their colleges. Two hundred thirty eight showed up who make the sample of this study. Two hundred sixteen of them filled up the questionnaire. Table 1 shows the distribution of both the sample and population of this study. This sample is almost one third of the population, which is good enough as a representative sample.

Table 1: Distribution of population and sample of the study

College Name	Population	Sample
College of Science	100	37
College of Engineering	35	23
College of Information Technology	78	31
Bahrain Teachers College	50	17
College of Business Administration	85	11
College of Arts	150	51
College of Physical Education and Physiotherapy	20	12
College of Law	32	15
College of Health Sciences	77	24
College of Applied Sciences	48	7
Overall	675	228

Statistical Analysis

The Statistical Package for Social Sciences was used for data analysis. Descriptive as well as analytical test were used. The second section presents the obtained results.

Findings of the Study

Respondents were asked to rate the workshop on seven aspects on a four rating scale very good, good satisfactory, weak). These aspects were: Time assigned to the workshop; workshop organization; topics offered in the workshop; used examples; profit gained: and motivation acquired. Table 2 the results of chi square tests regarding differences due to college affiliation of the responses it indicated non-statistically significant differences among faculty members due to college affiliation on rating six of the seven aspects of evaluation. Differences on only one aspect (workshop organization) were statistically significant (χ^2 = 43.818, df = 27, α = 0.05). Thus, only overall percentages were percentages of faculty members combined from different colleges were presented in table 2 without going into the details of how respondents in each of the 10 colleges rated the workshop on each of the seven aspects.

Table2: Rating given to major aspects of the workshops by all respondents combined[a].

Aspect being valued	Very good	Good	Satisfactory	Weak	Total	Chi Square
Time Assigned to the Workshop	8 3.7%	192 88.9%	14 6.55	2 0.9%	216 100.0%	24.341
Workshop organization	126 58.3%	78 36.1%	11 5.1%	1 0.5%	216 100%	43.818*
Topics offered in the workshop	125 57.9%	77 35.6%	12 5.6%	2 0.9%	216 100%	28.233
Used examples	120 55.6%	78 36.1%	16 7.4%	2 0.9%	216 100%	24.246
Method of presentation	134 62.0%	66 30.0%	15 6.9%	1 0.5%	216 100%	39.251
Profit gained	59 27.3%	117 54.2%	38 17.6%	2 0.9%	216 100%	29.316
Motivation acquired	78 36.1%	86 39.8%	46 21.3%	6 2.8%	216 100%	32.447

a number on top is count; number on bottom is percentage.

* significant at α=0.05 df=27

If we look at table two on how respondents rated the workshop on each of the seven aspects of evaluation, we find that regarding time assigned to the workshop, a relatively high percent (92.6%) rated the workshops either good (88.9%) or very good (3.7%). Regarding topics offered in the workshops, the majority (93.5%) of the respondents rated it either good (57.9%) or very good (35.6%). Used examples was not different from time assigned in rating. Almost same high percent (91.7%) rated the workshops either very good (55.6%) or good (36.1%). Method of presentation was also rated the same (92.0 %) rated it either very good (62.0%) or good (30.0%). Profit gained was also rated slightly high since (81.5%) rated it either very good (27.3%) or good (54.2%). Motivation acquired seems to be distributed among very good (36.1%), good (39.8%) and satisfactory (21.3%).

Regarding workshop organization, even though the majority (94.4%) rated the workshops either very good (58.3%) or good (36.1), detailed results need to be presented since differences due to college affiliation were statistically significant. Table 3 shows how faculty members from the ten colleges rated the workshops on this aspect. It is evident that these differences appeared as a result of that, whereas the majority of respondents from Bahrain Teachers College BTC (88.2%) and College of Physical Education and Physiotherapy CPEP (83.3%) rated the workshops very good, only a very low percentage (19.0%) of respondent from College of Engineering gave it the same rating. Other colleges did not go far from BTC and CPEP. College of Health Sciences rated the workshops at very good of (79.2), and College of Law at (73.3%). A rating around more than fifty percent came from the rest of the colleges.

Participants were also asked if the workshop encouraged them to attend more workshops of the same but tackling different issues. The absolute majority (94.4%) of them indicated that they are willing to attend such workshops. Non-statistically significant differences (χ^2 = 6.348, df = 9, not significant) due college affiliation in this respect.

The open responses of the respondents in the questionnaire showed that the main benefits they got from the workshop were how to start an electronic journal, how to find h-index and how the impact factor of the journals is calculated. As for the drawbacks of the workshops, they indicated that they need more practical examples, limit the number of participants in each workshop and conducting more workshops especially for Arabic speakers.

The interviews held at the end of each workshop with some of the participant (2 to 3) revealed an almost complete agreement

About the importance of arranging these workshops to faculty members especial on current issues like electronic publishing. Some said: Where are you from us? Why didn't you arrange such a badly needed workshop?

Another indicator of success of these workshops was that in one month following the completion of these workshops we received 15 proposals for initiating new electronic scientific journals.

Table3: Rating given to workshops organization split according to respondents' college affiliation

College			Organization				Total
			Very Good	Good	Satisfactory	Weak	
College of Science	Count		17	13	2	0	32
	% within College		53.1%	40.6%	6.3%	.0%	100.0%
Bahrain Teachers College	Count		15	2	0	0	17
	% within College		88.2%	11.8%	.0%	.0%	100.0%
College of Engineering	Count		4	13	4	0	21
	% within College		19.0%	61.9%	19.0%	.0%	100.0%
College of Health Sciences	Count		19	5	0	0	24
	% within College		79.2%	20.8%	.0%	.0%	100.0%
College of Information Technology	Count		15	14	0	0	29
	% within		51.7%	48.3%	.0%	.0%	100.0%

College			Organization				Total
			Very Good	Good	Satisfactory	Weak	
College of Law	College Count		11	4	0	0	15
	% within College		73.3%	26.7%	.0%	.0%	100.0%
College of Arts	Count		25	18	5	1	49
	% within College		51.0%	36.7%	10.2%	2.0%	100.0%
College of Business	Count		6	4	0	0	10
	% within College		60.0%	40.0%	.0%	.0%	100.0%
College of Physical Education and Physiotherapy	Count		10	2	0	0	12
	% within College		83.3%	16.7%	.0%	.0%	100.0%
College of Applied Studies	Count		4	3	0	0	7
	% within College		57.1%	42.9%	.0%	.0%	100.0%
Total	Count		126	78	11	1	216
	% within College		58.3%	36.1%	5.1%	.5%	100.0%

$\chi^2 = 43.818$, df = 27, significant at $\alpha = 0.05$

Discussion and Implications

The study revealed influential impact of training workshops on faculty members. It is shown that the faculty members have a high level of encouragement by expressing this in writing their responses to the open-ended items in the questionnaire, and further through the interviews held with some of them. In addition, they highly rated the workshops on all of the seven aspects under concern; which include time assigned to the workshop, workshop organization, topics offered in the workshop, used examples, method of presentation, profit gained, and motivation acquired for initiating their own electronic journals. Such results mean that these workshops were will organized and presented. Moreover, the impact of these workshops is evident through the received fifteen proposals for establishing new electronic journals within only one month following the completion these workshops. These results are very encouraging to us at SPC for arranging more workshops.

One explanation of the aforementioned results is that part of the success of these workshops is due to the experimental experience workshop leader (Prof. Mahmoud Abdelaty). Besides being a highly productive researcher, he was a real example of successful experience on establishing and managing fifteen electronic journals covering different fields of scientific research each of which has its own editor in-chief of whom he was one. Direct access to these journals through **naturalspublishing.com** website was one of the activities that participants had practiced. Such an experience was encouraging to them. Another source of success came from the unlimited support we got from the university president (Dr. Ibrahim Mohammad Janahi) who was following the implementation of each workshop, and urging each college dean for encouraging faculty members in his/her college to participate in the assigned workshop to them. Such facts about the implementation of the workshops in this study imply that if success is aimed at for any workshop, top administration must be involved.

RECOMMENDATIONS

Based on the results of this study, we could draw the following recommendations:

1. Exemplary scholars who are practicing this technique successfully should run any influential training workshop for faculty members on how to establish and run their electronic journals.
2. Influential workshops should be planned through the top administration of the association.
3. Eventually electronic publishing is taking over paper publishing; this trend should urge us at the universities to prepare our faculty members to become effective participants in this move trough arranging many workshops around this issue.

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APPENDIX

THE QUESTIONNAIRE

UNIVERSITY OFBAHRAIN

Scientific Publishing

جامعة البحرين

Dear Colleague

We would like to thank you for spending few minutes of your time to fill the following short questionnaire. Your participation and opinion along with some biographic information are highly appreciated.

Part I:

Your name: ………………………………………………………

Your college: …………………**Your Department** …………………

Total number of your published articles: …………………………

Your h-index: …………………………………………………

Part II

 Please tick mark the type of experience you have with electronic journals of the following list::

Type of Experience	Yes	No
A member of the editorial board of electronic journal/s		
Published paper/s in electronic journals		
Reviewing articles for electronic journals		
Reading articles in electronic journals		

Part III

Your opinion about the workshop

Please tick mark the suitable box in front of each of the following aspects:

1- Time assigned to the workshop: ☐ Very Good ☐ Good   ☐ Satisfactory ☐Weak

_____

2- Workshop Organization: ☐Very Good ☐ Good   ☐ Satisfactory   ☐Weak

_____

3- Topics covered in the workshop: ☐Very Good ☐ Good   ☐ Satisfactory ☐Weak

_____

4- Used Examples: ☐Very Good ☐ Good   ☐ Satisfactory ☐Weak

_____

5- Method of presentation: ☐Very Good   ☐ Good   ☐ Satisfactory ☐Weak

_____

6- Profit gained: ☐Very Good ☐ Good   ☐ Satisfactory ☐Weak

_____

7- How much does this workshop motivate you to start a new journal?

☐Very Good   ☐ Good   ☐ Satisfactory   ☐Weak

8- Do you like to attend more workshops within the same field? ☐ Yes   ☐ No

_____

8- What are the most useful points in the workshop?

…………………………………………………………………………...

_____

9-   What would you like to suggest for improvement of forthcoming workshops?

…………………………………………………………………………

_____Thank you so much