Information professionals' perspectives towards the competencies acquired from education and work

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Abstracts. As information and knowledge become the central capital and the most extensive source for development, information professionals and knowledge workers become valuable assets of organizations. They are, by virtue of their association with information, concerned about managing and applying required information and knowledge in their work. They are connected to the competencies they use to accomplish their work. This generally applies to all professional disciplines such as medicine, nursing and law. Professional associations took the responsibility of building sets of competencies to measure the attributes and quality of graduates and to match that with job markets. The purpose of the study is to measure the contribution of education and job practices at work in the professional development from the professionals' perspectives. The results indicated that generally there is a significant correlation between education and work in developing the required competencies. However, the individual tests of several competencies did not show any significant correlation, including organizing Knowledge and Information, knowledge and information management, and using and exploiting knowledge. The result reflected the centralization practices by the Ministry of Education in Oman in regards to collection development and organization and the unclear image of the profession.

Keywords. Professional competencies, graduates' attributes, Information professionals' competencies.

1. Introduction

It is very common in our time to consider the advanced technology as a key pillar for change. Its role is very dynamic in shifting individuals and institutions behavior in communicating and dealing with information. This assumption introduces a range of key attributes that are seen as required skills and competencies to face the change. This is true for each individual to endeavor for better job in the current job market. However, although it is the individual's responsibility to build a reflective career, it remains the goal of the higher education to achieve distinctive attributes for their graduates. That is to award them competitive skills and competencies to strive in the job market. Jaarsveldt, & Wessels (2015) suggested three key concepts that higher education seek to

achieve in graduates. These are graduateness, employability and digital literacy. Graduateness generally means generic attributes that are expected from a graduate to attain.(Chetty, 2012: 9) It "addresses the specification of an individual who has been awarded the title graduate." (Rahmana,.& Shuib, 2011). The concept employability comes in conjunction with quality. It is measured by the degree of competencies to meet work expectations. Within this concern, professionals with low quality reflects inadequacy of their degree in terms of the professional competencies. Hillage and Pollard (1999) merely refer to employability, as "skills required for acquiring and retaining a job." They underlined that these skills are not just to gain a job, but also to make moves from jobs to roles. Hager and Butler (1996) argued that the concept 'competence' is utilized to denote a person's capability to fulfil a role effectively. In accordance, Jaarsveldt & Wessels stressed that competencies consist of sets of "knowledge, skills, behavior and aptitude" that blend to indicate the graduate abilities to achieve the job requirement. (Jaarsveldt & Wessels, 2015).

In the area of information sciences, as information and knowledge become the central capital and the most extensive source for development, information professionals and knowledge workers become valuable assets of organizations. Drucker assured this value in his book "Landmarks of Tomorrow" (1959). Information professionals, by virtue of their association with information, are concerned about managing and applying required information and knowledge in their work. They are connected to the competencies they use to accomplish their work. They realized that the users, as with patients in medicine, are not influenced by their professional graduation as much about their professional behavior (competencies).

The Australian Library and Information Association (ALIA) (2014) in their project about the library and information science profession consulted many librarians about their future. The ALIA concluded, based on the professionals' perspectives, that as the future is not fixed, they are concerned about writing it by themselves "rather having it written for" them. All what they need is to be prepared as "architects of their [own] destiny, anticipating change and adapting their library and information services to be part of the flow." Preparation, as the project suggested, means providing professionals with the indispensable competencies to keep them pace with change. It is also suggested that for professionals to be able to respond to users' needs of quality information, they need to come from different educational backgrounds. This suggestions ensures the interdisciplinary characteristics of the profession.. The vital purpose behind that is to graduate professionals with measurable competencies that add value to the profession itself. This purpose resulted in presenting a professional career that responds to change and assumes its unending importance. A profession that is ready to play a major role in the overall development of a country.
Professional associations are, then, the first to adopt the role. They act as initiatives in the formulation of a range of competencies that include standard

skills to be reflected in the professional preparation of graduates. These skills have been used to assess the quality of academic programs, prompting information departments and schools to adopt them in reviewing and updating their programs. Table (1) illustrates the concerns of the most familiar specialized associations in the development of competencies that need to be met and the skills that should be acquired.

Year	Association	Competencies
2009	American Library Association (ALA)	"Defines the basic knowledge to be possessed by all persons graduating from an ALA-accredited master's program in library and information studies." Covers: Information Resources Organization of Recorded Knowledge and Information Technological Knowledge and Skills Reference and User Services Research Continuing Education and Lifelong Learning Administration and Management https://goo.gl/FuCBfz
2009. Reviewed 2012	Australian Library and Information Association (ALIA)	Ensures "a high standard of library and information practice through education and training, while continuing to evolve and develop with the overall framework of core knowledge, skills, attributes and encompassing the changing nature of the discipline to ensure a flexible, adaptable and innovative profession." Covers: Information seeking Information architecture Information organization and access Information services, sources and products Information Management Generation of knowledge Employability skills and attributes https://goo.gl/LD1Kqq
2010	Canadian Association of Research Libraries (CARL)	Intendes to act "as a guide to help librarians working in CARL libraries manage their careers, set meaningful professional development goals and align those goals with the missions of their respective organizations." Covers: Foundational Knowledge Interpersonal skills Leadership and Management Collections Development Information Literacy Research & Contributions to the Profession Information Technology Skills http://www.carl-abrc.ca/doc/core_comp_profile-e.pdf

2013	Chartered Institute of Library and Information Professionals (CILIP)	"Brings the areas of professional and technical expertise together with the generic skills and capabilities required by those in the library, information and knowledge management community. It also encompasses our ethics and values while placing value on the wider context both within the community and beyond." Overs: Organizing knowledge and information. Knowledge and information management. Using and exploiting knowledge and information. Research skills. Information governance and compliance. Records management and archiving. Collection management and development. Literacies and learning. Leadership and advocacy. Strategy, planning and management. Customer focus, service design and marketing. IT and communication. https://goo.gl/jbVKJG
2003 revised 2016	Special Libraries Association (SLA)	A set of tools outlines "professional growth, recruitment, and assessment… to create roadmaps of growth and development for yourself, your colleagues and your organizations." Covers: Managing Information Organizations Managing Information Resources Managing Information Services Applying Information Tools and Technologies https://www.sla.org/wp-content/uploads/2013/01/0_LRNCompetencies2003_revised.pdf

Table -1- lists of competencies defined by professional associations

Most of the above competencies focus on information and knowledge management and organization of services, resources and products and IT skills and research. SLA pays much attention to the tools required for management activities.

In terms of attributes, there is no stability on what attributes (The academic abilities, personal qualities and transferable skills) universities specified for their graduates, however there is some kind of agreement on the general attributes (for example: University of Glasgow, Sultan Qaboos University, University of Adelaide Graduate, University of Aberdeen), to include:

Deep subject knowledge. ...

Independency & Critical thinking. ...

Teamwork and effective communication

Career and leadership readiness. ...

Intercultural and ethical competency. ...

Self-awareness and emotional intelligence

Active Citizenship

2. Statement of the Problem

In previous study, jabur (2017) analyzed the content of the Ministry of Education publications relevant to Resource Learning Specialists (RLS) in Oman. She concluded that job descriptions of the RLS are "mostly focused on what to do and not on how to share in the learning process." Moreover, it was found that professional roles are mostly distributed according to the Ministry's regulations rather than job description. The situation ended with *imprecise image of the professionals' roles and competencies by job market and decision maker.* With clear image, it is assumed that matching between graduatness and employment (education and practices) will ensure the professionals survival in the job market success. In accordance, professionals will confidently launch their skills and practices to handle their job, and, positively contribute to the success of the learning process.

To do so, an alignment between education and job practices at work becomes the urgent paths of professional development. This alignment will encompass both attributes and competencies (graduatness and employability). As attributes are considered to be the overall university endeavor for shaping their graduates, The current study will focus on the competencies the professional acquired from both education and job practices. Figure 1 illustrates the leading results of alignment.

Figure 1- alignment between education and job practices
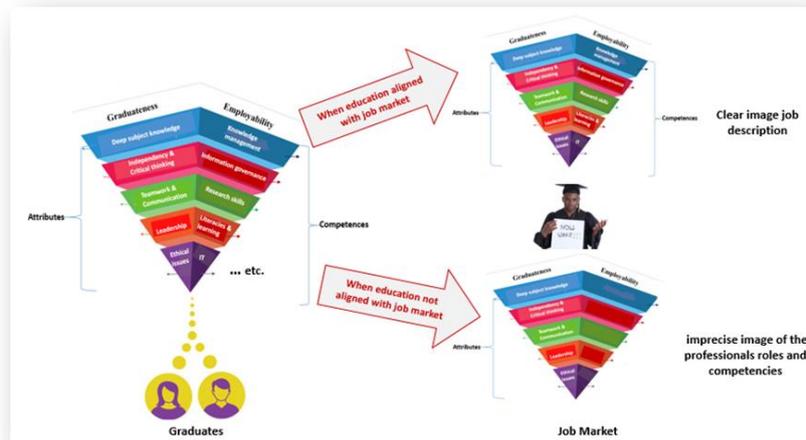
In the Sultanate of Oman much concern been given to emphasize on service value rather than book value. This concern enriched by moving toward resources learning centers as alternatives to school libraries, and resource learning specialists job title instead of school librarians. The transformation process implied new roles for the professionals rather than new jobs. The question that arises constantly is whether education and job practices at work provide an integration of the competencies required to perform those new roles.

3. Purposes of the study

The study aimed at fulfilling the following purposes:
-To explore the professionals' perspectives towards the
contributions of both education and job practices at work in building
- their competencies
To find out if there is an association between the two paths to constitute
successful alignment (clear image)

3.1. Research questions

In response to the above purposes, the study designed to response to the following research questions:

1. How do professional assess the competencies they acquired from both education and job practices at work?
2. Is there a correlation between their perspectives towards the contributions of education and job practices in building their competencies?

3.2. Methodology

It is a descriptive study designed to identify the competencies gained from education and job practices at work from the professionals' perspectives themselves. The Chartered Institute of Library and Information Professionals (CILIP) list of competencies was selected for measuring the level of the accomplished competencies. The judgment for such selection is that the Department of Information Studies, the major professional department in Oman, obtained the academic accreditation for its programs from CILIP in 2015.

3.3. Data Analysis and Results

To implement the study, a sample of (29) Resource Learning Specialists (their job title), who participated in the Specialized Certificate program held in October 2017, was identified as a focus group. CILIP list of competencies was translated to Arabic, and participants were asked to assess the level of skills they received from education and job practices at work. A scale ranging from 1-3 applied, where 1 represents the lowest level while the 3 corresponds to the highest level of acquired skills. Data analysis will respond to the research questions as following:

3.4. **Research Question 1**: How do professionals assess the competencies they acquired from both education and job practices at work?

To respond to this question, the overall average of the professionals' assessment of the obtained competencies from education and work has been calculated. The average result was compared against every individual competency. The resulted data showed that the overall average of the acquired competencies from education is 1.8 and 1.7 from work out of maximum level 3. 7 out of 12 competencies counted above the average from education and only two from work. Research skill was considered to be the most acquired skill from education while customer focus and IT and communication are measured to be the highest skills acquired from work. Table (2) and Figure (2) for more details.

Competences	General Average from learning	General Average from work	Below the Average (Learning)		Above the Average (Learning)		Below the Average (Working)		Above the Average (Working)	
			#	%	#	%	#	%		
Organizing Knowledge and Information	2.1	1.4	10	34.5	19	65.5	14	48.3	15	51.7
Knowledge	2	1.5	1	48.	1	51.	1	41.	1	58.

and Information Management			4	3	5	7	2	4	7	6
Using and exploiting knowledge and information	2.2	1.5	1 2	41. 4	1 7	58. 6	1 3	44. 8	1 4	55. 2
Research Skills	2.3	1.3	1 6	55. 2	1 3	44. 8	1 4	48. 3	1 5	51. 7
Information Governance and Compliance	2	1.4	1 3	44. 8	1 6	55. 2	1 2	41. 4	1 7	58. 6
Records Management and Archiving	1.9	1.9	1 5	51. 7	1 4	48. 3	1 3	44. 8	1 6	55. 2
Collection Management and Development	2.1	1.5	1 5	51. 7	1 4	48. 3	1 2	41. 4	1 7	58. 6
Literacies and Learning	1.8	2	1 5	51. 7	1 4	48. 3	1 2	41. 4	1 7	58. 6
Leadership and Advocacy	1.3	2	1 6	55. 2	1 3	44. 8	1 1	37. 9	1 8	62. 1
Strategy, Planning and Management	1.3	1.5	1 2	44. 8	1 7	55. 2	1 4	48. 3	1 5	51, 7
Customer Focus, Service Design and Marketing	1.4	2.1	1 5	51. 7	1 4	48. 3	1 4	48. 3	1 5	51, 7
IT and Communication	1.8	2.1	1 3	44. 8	1 6	55. 2	1 3	44. 8	1 6	55. 2
Overall	1.8	1.7								

mean of the competencies												

Table -2- average of acquired competencies from education and work

Figure -2- Mean Average of acquired competencies from learning and Work

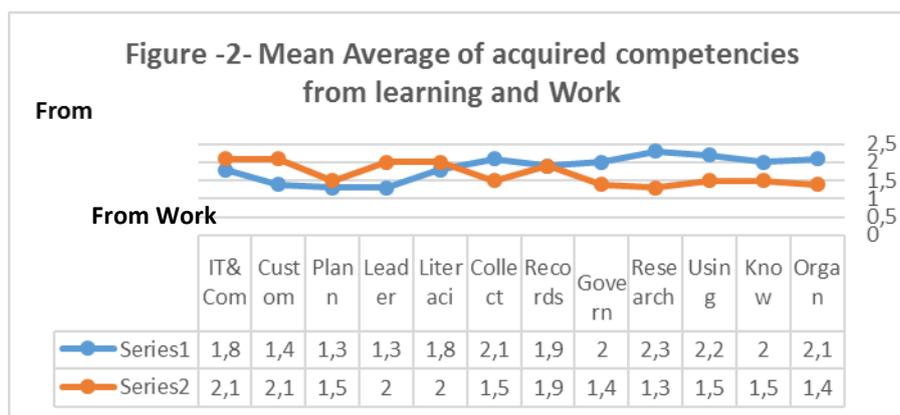|	IT& Com	Cust om	Plan	Lead er	Liter aci	Colle ct	Reco rds	Gove rn	Rese arch	Usin g	Kno w	Orga n
Series1	1,8	1,4	1,3	1,3	1,8	2,1	1,9	2	2,3	2,2	2	2,1
Series2	2,1	2,1	1,5	2	2	1,5	1,9	1,4	1,3	1,5	1,5	1,4

Table (3) presents the list of competencies arranged according to their level of education and work attainments, from the professionals' perspectives.

Ranking Competencies by Learning	Average From Learning	Note	Ranking Competencies By Working	Average from Work	Note
Research Skills	2.3	Above the Average	IT and Communication	2.1	Above the Average
Using and exploiting knowledge and information	2.2		Customer Focus, Service Design and Marketing	2.1	
Organizing Knowledge and Information	2.1		Literacies and Learning	2	
Collection Management and Development	2.1		Leadership and Advocacy	2	
Knowledge	2		Records	1.9	

and Information Management			Management and Archiving		
Information Governance and Compliance	2		Collection Management and Development	1.5	Below the Average
Records Management and Archiving	1.9		Knowledge and Information Management	1.5	
Literacies and Learning	1.8	Within the Average	Strategy, Planning and Management	1.5	
IT and Communication	1.8		Using and exploiting knowledge and information	1.5	
Customer Focus, Service Design and Marketing	1.4	Below the Average	Organizing Knowledge and Information	1.4	
Leadership and Advocacy	1.3		Information Governance and Compliance	1,4	
Strategy, Planning and Management	1.3		Research Skills	1,3	
Overall mean of the acquired competencies from learning 1.8 and from work 1.7					

Table -3- The acquired competencies according to their level of attainment

Research Question 2: Is there a correlation between their perspectives towards the contributions of education and job practices in building their competencies? Bivariate Correlation used to measure the degree of association between the total acquired competencies from education and work. The results in Table (4) indicated that the overall acquired competencies from education is significantly correlated with the competencies acquired from work.(0.006) at the (0.01) level. However, the individual tests of several competencies did not show any significant correlation, including: Organizing Knowledge and Information, Knowledge and Information Management, Using and exploiting knowledge and information, Research Skills, Collection Management and Development, Literacies and Learning, Leadership and Advocacy, Customer Focus, Service Design and Marketing. This result is consistent with the findings of Jabur's

result that "specialized professional roles are mostly distributed within regulations rather than job description … [and that] roles such as being learning partner, research consultant, communication mediator and social networking facilitator are not clearly identified." (Jabur, 2017).

Work **Sig. from correlation test between competencies acquired from education and work**											
education	Work										
	Or g	K no	Us e	Re se	In fo	Re cor	C oll	Litr ec	Le ad	pl an	Cu st	IT
Organizin g Knowled ge and Informati on	.8 25										
Knowled ge and Informati on Managem ent		.1 56									
Using and exploiting knowledg e and informati on			.1 46								
Research Skills				.57 3							
Informati on Governan ce and Complian ce					.0 00						
Records Managem ent and Archiving						.01 8					
Collectio n Managem							. 81 3				

ent and Development											
Literacies and Learning							.056				
Leadership and Advocacy								.394			
Strategy, Planning and Management									.033		
Customer Focus, Service Design and Marketing										.313	
IT and Communication											.0376

Table -4- Results of correlation between competencies acquired from education and work

The results of the analysis showed a weak correlation between educational programs and work practices, especially in tasks requiring specialized skills and competencies. This phenomenon is explained by the Ministry of Education's practice of centralizing the collection building and organization. This practice isolates the professionals from performing their actual role and ignore the diversity of the actual users' needs. It is also evident, from the data in Table 2, that the respondents have achieved an above average rate in the marketing of services to users, information and communication technologies, leadership and advocacy and literacies and Learning. Responded professionals confirmed that most of these activities have been done beyond their professional roles. The result ensures the unclear image of the profession.

Accordingly, the study suggests achieving effective communication between decision-makers and employers and the professional educational institutions. The objective of such meeting is to reach the basic competencies that respond to the requirements of the profession and the needs of the job market. These meetings also will contribute to the characterization and practice of the profession in order to achieve the participation of professionals as partners in the educational process.

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