

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

2021

Examining entrepreneurship opportunities among Library and Information Science professionals in Tanzania

Evans Wema
wemafr@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

Wema, Evans, "Examining entrepreneurship opportunities among Library and Information Science professionals in Tanzania" (2021). *Library Philosophy and Practice (e-journal)*. 4962.
<https://digitalcommons.unl.edu/libphilprac/4962>

Examining entrepreneurship opportunities among Library and Information Science professionals in Tanzania

Abstract

This paper reports on a study conducted to examine various entrepreneurship opportunities that exist among librarians and information science professionals. The study was conducted on the assumption that librarians and information scientists have potential areas in their profession to become entrepreneurs. As such, a survey was carried out among ongoing undergraduate LIS students in their second and third years, Master Degree students in their second year as well as LIS professionals who completed studies between 2012 and 2019, and who were working at various institutions at the time when the study was conducted. Questionnaires were distributed to a total of 20 purposively selected undergraduates and 10 postgraduate students while interviews were conducted among five LIS professionals as well as three heads of departments of LIS schools at the University of Dar es Salaam, Tumaini University Dar es Salaam and Open University of Tanzania. Results of the study revealed that most respondents acquired entrepreneurship skills through formal education during their LIS education and the fact that the most important skills that were potential to make librarians and information professionals entrepreneurs included information literacy training skills, information search, reference services and research methods. Others included creative writing, cataloguing and classification of resources, marketing of goods and services, web design, editing and proofreading. However, challenges that would limit librarians and information professionals in exercising their entrepreneurship skills included lack of innovative skills, insufficient financial resources to start up business, inadequate ICT facilities and training as well as lack of confidence and encouragement. It was therefore suggested that LIS curricular should be improved to accommodate more relevant entrepreneurship skills, LIS institutions should prepare candidates to become entrepreneurs as well as provision of free entrepreneurship training during and after studies.

Keywords: LIS education; entrepreneurship skills; LIS institutions; Information services; free library culture; information environment

Introduction

For many years the LIS profession has been involved in providing services to users in widest ranges of forms including readers, advisory and referral services, loaning of library resources, provision of access to Internet and many others. Traditionally many LIS professionals have considered themselves as gatekeepers of information and knowledge. They have felt typically fit for desk-bound, back-end activities where

the most expected tasks to be performed include cataloguing, indexing and abstracting, reader services; and several of them have embarked into teaching in LIS educational institutions. They are accustomed to be working in a “free library culture” where libraries have been considered to be not-for-profit institutions, dedicated to service provision rather than financial benefits (Scanlon & Crumpton, 2011). However, as changes occur in the working environment, their role as gatekeepers of information is being ignored and not much use is made on their expertise (Spangler et al, 2020). As such, LIS professionals need to revisit their role and adjust their working style so as to be able to practice their profession outside their normal working environments. This is due to social-economic changes in societies that have resulted into massive turnovers in terms of unemployment, changes information needs, emerging technologies, policies as well as lifestyles (CIn, 2015). Such dynamic changes have a great impact on the way LIS professionals operate, since traditional working styles are very likely to be affected by a higher wave of new categories of professionals with high competencies in emerging technologies (Shahbazi et al, 2016).

In such changed environments, librarians need to cope up with new working demands and benefit challenges that occur due to the integration of modern technologies at workplaces that result into varying degrees of professionals. Librarians with the traditional working knowledge of, say, cataloguing and classification would need to adjust their income levels by working towards more demand-driven skills such as web design, metadata creation and digital curators, as well as others which are considered more traditional such as printing and binding (Aghauche & Obiamalu, 2018). In a situation such as this, entrepreneurship skills in LIS are considered inevitable in a bid to prepare a professional who is capable of working in the ever changing information environment. A study was therefore conducted among students and librarians already working in the field to evaluate areas in LIS profession that have potential for entrepreneurship skills which can make them as potential entrepreneurs.

Study objectives

This study aimed to:

- Identify skills possessed by LIS professionals which are necessary for promoting entrepreneurship
- Analyze areas in LIS profession in which entrepreneurship skills can be applied
- Examine challenges associated with utilization of entrepreneurship skills in LIS
- Solicit strategies for enhancing entrepreneurship skills among LIS professionals

Entrepreneurship in LIS: a brief related literature

The literature about entrepreneurship skills in LIS is not new. It dates back to the days when LIS professionals realized the need to transform librarians role from working as custodians of knowledge and information to a more dynamic and changed society that is influenced by the epoch of new technologies, skills, user new needs and ever increased number of unemployed graduates (St. Clair, 1996). The subject of entrepreneurship has been popular among people in the business and economics profession, who, according to the early economic theories, define the concept simply as “a self-employment of any sort. Entrepreneurs buy at a certain price in the present and sell at uncertain prices in the future. The entrepreneur is a bearer of uncertainty” (Drescher, 2007: 5). Westhead & Wright (2013: 5) argue further that entrepreneurship “focuses on profit and social enterprises seeking to generate broader social and environmental benefits in the formal and informal economy, in legal and illegal activities, in innovative and more conventional concerns, and in all regions and economic sub-sectors”. Indeed, from both definitions and interpretations of what entrepreneurship is, it can be noted that the most striking aspects that foresee any entrepreneur are innovation and creativity. The two are the most important catalysts of this aspect.

Having the concept in mind, as well as its major traits, one may argue that for many years in the past, LIS education has been imparted to its learners with very little focus on entrepreneurship skills. This has been noted by various scholars in the field including Attebury & Finnell (2009) who observed that librarians lack prior training in liaison skills, which are very important for entrepreneurs. This is further supported by Edewor (2012) who argue that due to a lack of entrepreneurship content in LIS curriculum, librarians are forced to opt for other courses having the content so as to acquaint themselves with such skills. Still this applies to individual librarians with such drive, otherwise the traditional trend of providing services with the not-for-profit and non-commercial mindset continues indefinitely.

However, evidence shows that still a number of librarians have realized the need to utilize entrepreneurship skills in providing more dynamic services to the society due to their social responsibilities in doing so. For example, a study by Ashoka et al. (2013) aimed to evaluate the entrepreneurship awareness and skills possessed by LIS students in Nigeria so as to encourage them to acquire such skills so as to work in modern libraries of the 21st Century as well as making them self-employed. This study discovered that much as students realized the need to acquire such skills, there was a general weakness on the type of such courses being offered as part of what they learned at universities. As such students seem not to be ready to make use of the acquired skills for entrepreneurship purposes due to their inability to cope with the available entrepreneurship opportunities in LIS profession. There could be a number of factors for the above; one being that the skills taught to students lack the required aspects of innovation, creativity and motivation, which are important catalysts for any entrepreneur. This could be attributed by the teacher-centered approach employed by educators in higher education institutions that lack such skills, as revealed by other studies on entrepreneurship education in the African context. For example, a study by Jesselyn Co and Mitchell (2006) observe that academics in South African universities acknowledge the need to teach such skills but fail to do so effectively due to their persistence in passive learning and assessment teaching methods as opposed to interactive and participatory teaching methodologies which encourage innovation and creativity. However there have been remarkable improvements in the above problem since some higher learning institutions have put emphasis on teaching such skills to students based on the current educational needs that delve on entrepreneurship as a way to overcome serious unemployment problems affecting many African countries (Daneshjoovash & Hosseini, 2019). Currently, entrepreneurship education has demonstrated big success in promoting SMEs among South African youth who face serious unemployment threat. As such, entrepreneurship education is viewed as responsible for encouraging and spearheading the establishment and development of self-employment schemes including SMEs and in other similar activities (Chimucheka, 2014).

It is important for LIS education to embed entrepreneurship education into its curriculum in order to prepare future learners who will be ready to work on self-

employment basis and be enterprising persons. They are expected to take responsibilities, take risks (Astrini et al., 2020), manage their own business enterprises and learn from real life experiences (Chimucheka, 2014). While this goal is being given more attention in various context in Africa, there is little evidence that such efforts have been given similar weight in Tanzania where there is a big boom of LIS schools that produce huge number of graduates most of whom seek corporate or public sector employment. Current literature in Tanzania shows that efforts have been made by various higher learning institutions to introduce entrepreneurship education to students at various levels. Still, outcomes from a number of studies conducted show that there is a gap between what is being taught by business schools on the subject against the actual needs of entrepreneurs based on real economic and social contexts (Kaijage & Wheeler, 2013; Mwantimwa, 2019). Since several LIS higher education institutions in Tanzania have introduced entrepreneurship as a subject at various levels, there has been a need to solicit from the learners and graduates from the same, their views on the potential of applying such skills into what they learned. As such, this study sought to find out the readiness of students and graduates to work as entrepreneurs based on the acquired skills from various LIS higher learning institutions.

Research methods

This was a descriptive research design which used both open and close-ended questionnaire surveys and interviews to gather information from a purposively selected sample of ongoing undergraduate LIS students in their second and third years as well as Master Degree students in their second year. It also purposively surveyed LIS professionals who completed studies between 2012 and 2019, who were working at various institutions at the time when the study was conducted. While questionnaires were distributed mainly to students who were still ongoing with LIS courses (and some professionals who were already working in the field), interviews were carried out among three LIS educators (contacted at TUDARCO, UDSM and Open University of Tanzania - OUT) as well as five LIS professionals who were already working in the field (hereby codenamed as LIS professionals with their respective numbers as LIS professional 1, etc.). Students were drawn from University of Dar es Salaam, Information Studies Program and Tumaini University, Dar es Salaam Campus (TUDARCo) both being public and private universities

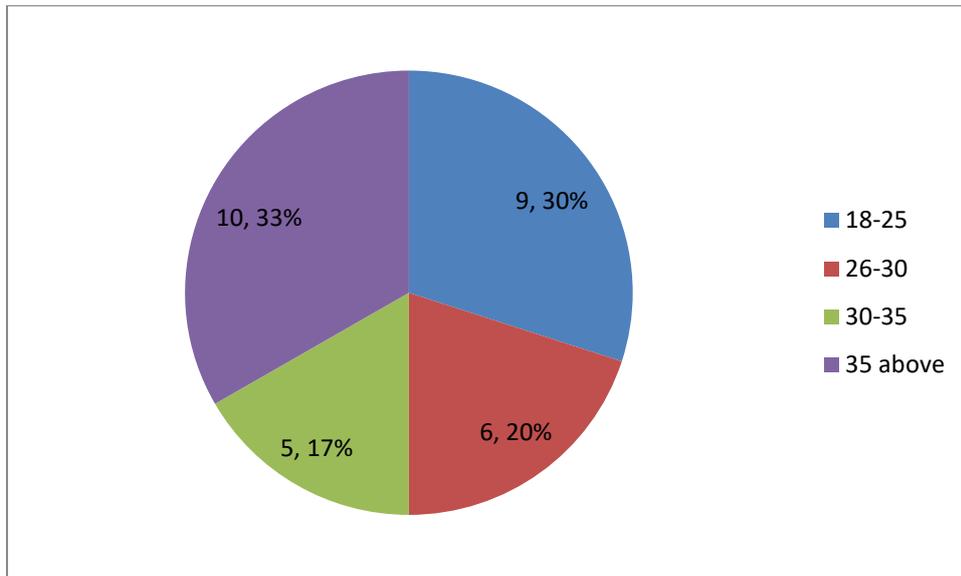
respectively. TUDARCo has been offering a degree of Bachelor of Arts in Information Studies since 2004 while University of Dar es Salaam established LIS courses later in 2012, offering a Bachelor of Library in Information Studies. One LIS educator was contacted from OUT that offered a Bachelor of Library and Information Management. Since there was only one institution in Tanzania (University of Dar es Salaam) offering Master degree in Information Studies, the sample of Postgraduate students was drawn only from this institution. A total of 40 respondents were contacted and issued with questionnaires; however, 30 of them responded, filled in and returned the questionnaires. The respondents selected were those who were willing to participate in the study since it was not easy to include as many as they were available due to their availability.

Data Presentation and Analysis

Demographic characteristic of respondents

As pointed out above, a total of 30 respondents returned the questionnaires, five LIS professionals were interviewed as well as three LIS educators. There were a total of 25(83.3%) males and 5(16.7%) female respondents, out of 30, with varied age ranges in which 9(30%) were between 18 and 25, 6 (20%) were 26 -30, 5 (16.7%) were 30 - 35 and 10 (33.3%) were above 35 years of age.

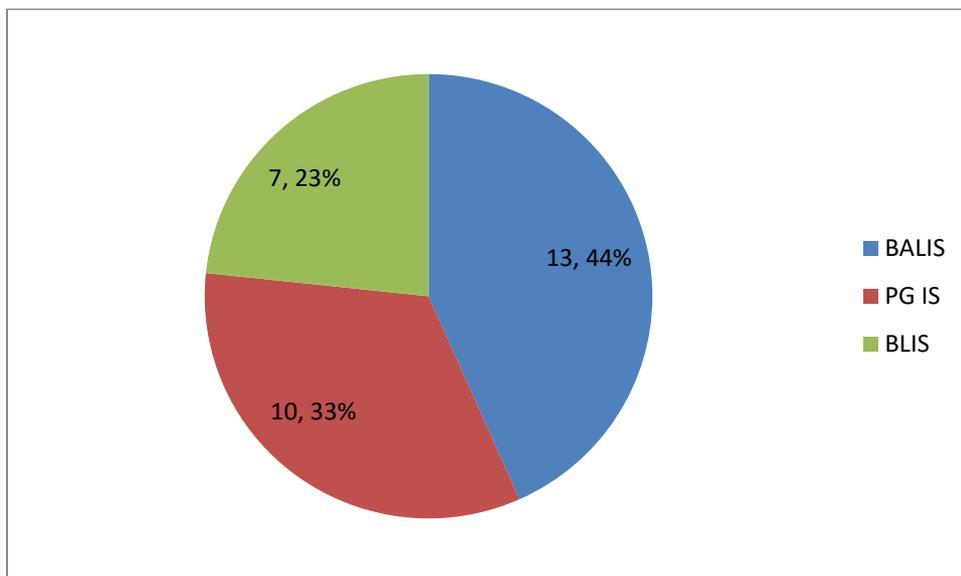
Figure 1: Age ranges of respondents



Source: Field data, 2017

As stated above, respondents were drawn from University of Dar es Salaam and studied various degree courses including 13(43.3%) for Bachelor of Arts in Library & Information Science (TUDARCo); 10(33.3%) Postgraduate Studies in IS and 7 (23.3%) who studied Bachelor of Library & Information Science (UDSM) respectively.

Figure 2: Courses undertaken



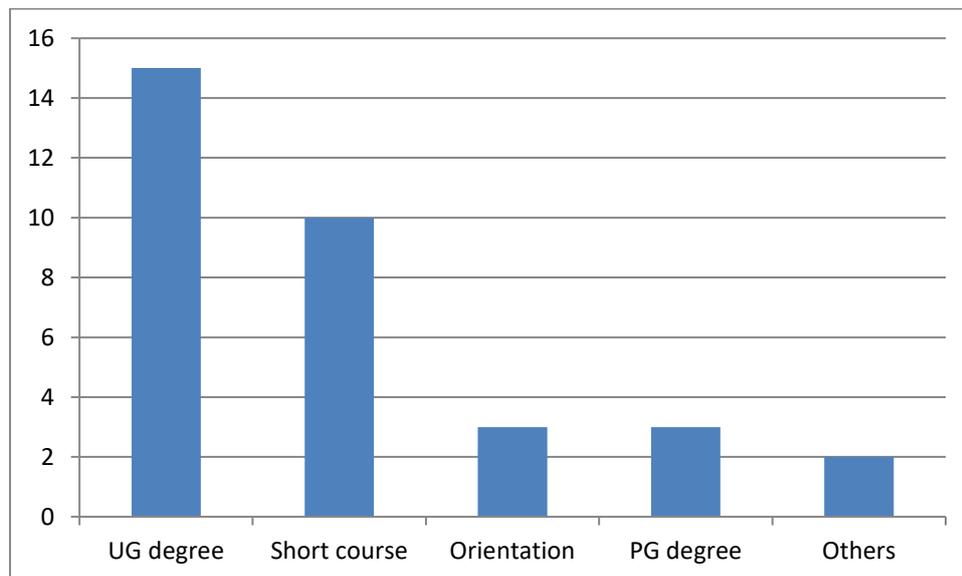
Source: field data, 2017

Among them, 11(36.7%) were in second year, 8(26.7%) third year and 11(36.7%) had already graduated. In addition, 15(50%) were employed while 15(50%) were not.

Skills possessed by LIS professionals responsible for promoting entrepreneurship

Respondents were asked to indicate whether they had attended any entrepreneurship skills courses during or after their degree studies. Results revealed that a total of 25(86.7%) respondents indicated that they attended such courses while 4(13.3%) did not. However when asked at what levels they attended such courses, a total of 15(50%) indicated that they attended entrepreneurship courses during their undergraduate degree programs in LIS, 10(33.3%) attended short courses, 3(10.7%) as orientation programs at work places and during field attachments, 3(10%) during their Postgraduate degree courses in LIS while one attended a seminar and another one did entrepreneurship course in a Bachelor of Business Administration degree course.

Figure 3: Attendance levels for Entrepreneurship training courses



Source: field data, 2017

When they were asked to rate various skills acquired in LIS education that they considered relevant for working as entrepreneurs (by the scales of 1= Poor; 2= Satisfactory; 3 = Good; 4 = Very good; 5 = Excellent), respondents came up with different types of responses. Table 1 below summarizes their results:

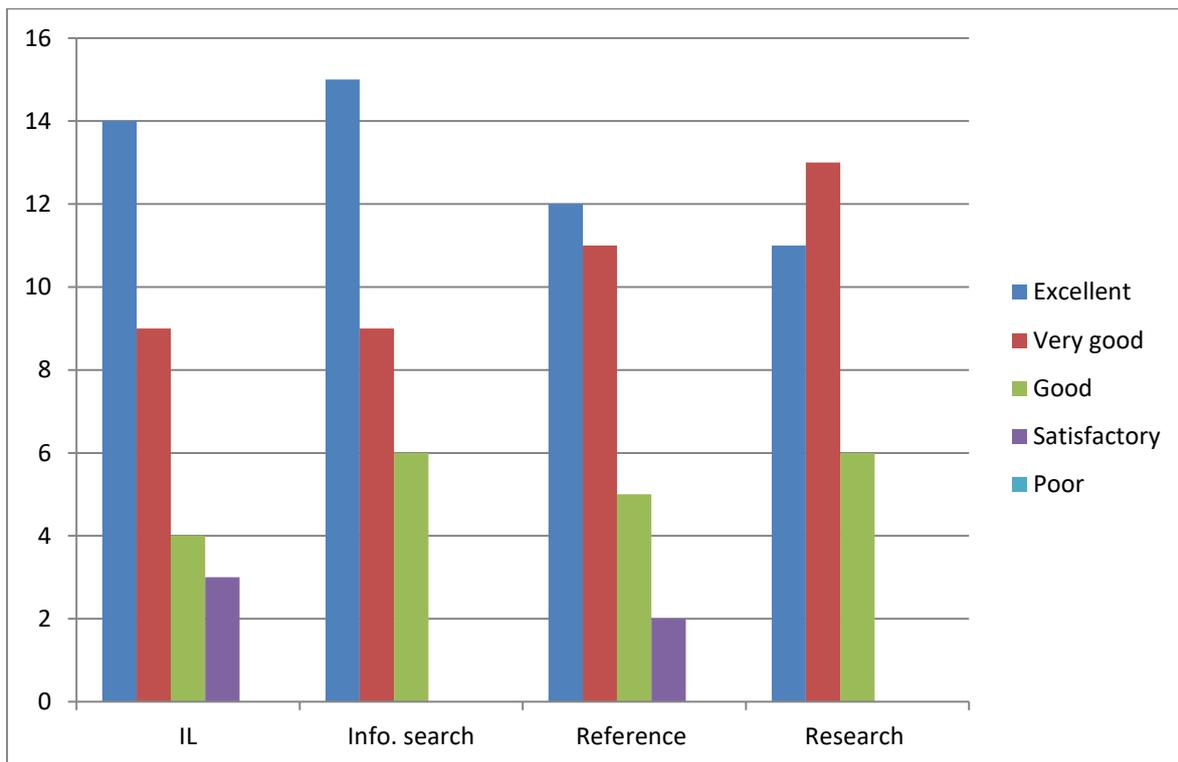
Table 1: skills acquired in LIS education consider relevant for working as an entrepreneur

Skill	Rank				
	Excellent	Very good	Good	Satisfactory	Poor
Information literacy skills	14(47%)	9(30%)	4(13%)	3(10)	
Information search	15(50%)	9(30%)	6(20%)		
Reference services	12(40%)	11(36%)	5(17%)	2(7%)	
Research skills	11(37%)	13(43%)	6(20%)		
Internet services	11(36%)	8(27%)	8(27%)	2(7%)	1(3%)
Quantitative research skills	10(34%)	13(43%)	4(13%)	3(10%)	
Qualitative research skills	10(33%)	11(37%)	6(20%)	3(10%)	
Cataloguing & classification	10(33%)	11(37%)	5(17%)	4(13%)	
Computer networking	10(34%)	5(17%)	10(33%)	4(13%)	1(3.3%)
Library skills	10(33%)	14(47%)	4(13%)	2(7%)	
Apps building	3(10%)	5(16.6%)	8(27%)	6(20%)	8(27%)
Graphic design	3(10%)	7(23%)	9(30%)	4(14%)	7(23%)
Web design	4(13%)	8(27%)	9(30%)	3(10%)	6(20%)

Overall, the most relevant skills included information literacy skills in which 14(47%) respondents indicated excellent, 9(30%) very good, 4(13%) good and 3(10) satisfactory; information search in which 15(50%) respondents indicated excellent, 9(30%) very good and 6(20%) good, reference services in which 12(40%) indicated excellent; 11(36%) very good; 5(17%) good and 2(7%) satisfactory. In addition research skills were considered as excellent by 11(37%) respondents, 13(43%) very good and 6(20%) good; internet services had 11(36%) respondents who indicated it as excellent, 8(27%) as Very good and good respectively, 2(7%) satisfactory and one indicated the skill as poor. Others included quantitative research skills whose results were 10(34%) for excellent, 13(43%) very good, 4(13%) good and 3(10%) satisfactory; qualitative research skills had 10(33%) respondents who indicated it as excellent, 11(37%) very good, 6(20%) good and 3(10%) satisfactory; cataloguing and classification had 10(33%) respondents who indicated it as excellent, 11(37%)

very good, 5(17%) good and 4(13%) satisfactory; computer networking had 10(34%) with excellent, 5(17%) very good, 10(33%) good, 4(13%) satisfactory and one indicated poor; skills of establishing and organizing library collections had 10(33%) respondents who indicated that these skills were excellent, 14(47%) as very good, 4(13%) good and 2(7%) indicated satisfactory. Figure 4 below summarizes their results

Figure 4: Skills acquired in LIS education consider relevant for working as an entrepreneur (ranked as high)

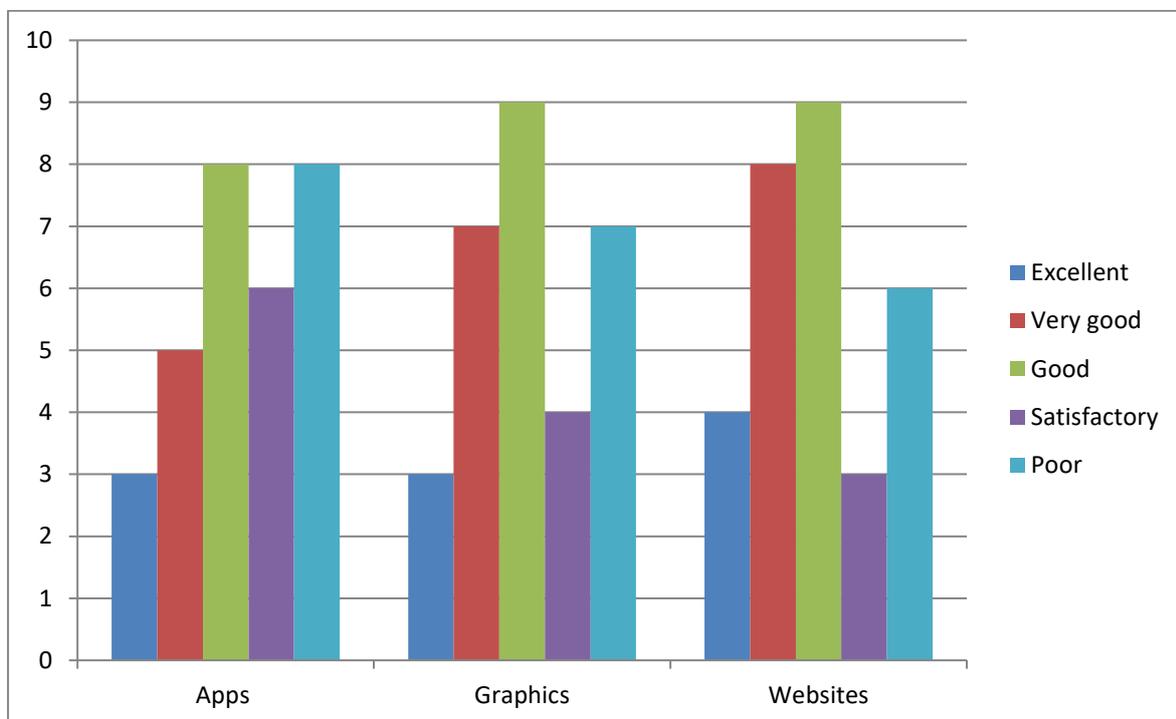


Source: field data, 2017

In addition to the above, others skills that respondents considered as important in LIS profession (additional to what they were asked in a questionnaire) included creative writing(for novels, short stories, poems), writing non-fiction books, inspiring stories and newspaper articles, marketing, promotion, advertising and business planning. Other skills which were highly ranked as generally satisfactory included book industry and trade, editing and proofreading, abstracting and indexing, bibliographic services, reprographics, knowledge management, hardware and software, book binding and multimedia librarianship.

On the other hand, respondents indicated that certain skills were not considered to be ideal for working as entrepreneurs. These included apps design in which results indicated that 3(10%) respondents considered such skills as excellent, 5(16.6%) very good, 8(27%) good, 6(20%) satisfactory and 8(27%) poor; graphic design with 3(10%) respondents as excellent, 7(23%) very good, 9(30%) good, 4(14%) satisfactory and 7(23%) as poor, web design skills had 4(13%) respondents who considered such skills as excellent, 8(27%) very good, 9(30%) good, 3(10%) satisfactory and 6(20%) as poor. Figure 5 below summarizes their results:

Figure 5: Skills acquired in LIS education consider relevant for working as an entrepreneur (ranked as moderate and poor)



Source: field data, 2017

Results from interviews, which focused on reasons for the choice of specific skills as important as well as those that were not considered important for entrepreneurship in LIS, revealed a number of issues. For example, when asked to state reasons why they considered certain skills to be suitable for entrepreneurship in LIS, they stated the fact that it was very likely for someone to apply such skills for self-employment, as some of their comments reveal:

“One may decide to apply skills such as internet search to search information for someone using a personal computer at home or

somewhere else then this person may pay for such a service” (LIS Professional 2)

“You may utilize reference services skills such as quick reference services or referral to direct someone to a place he/she does not know with some fee. This can be done anywhere even where there is no physical building such as office” (LIS Professional 4).

One LIS educator had this comment on the same:

“A number of skills such as the ones acquired in organization of knowledge, i.e. cataloguing and classification, indexing and abstracting can be worked out in establishing a new library collection or contracted to work on part-time basis as a source of income.” (LIS educator TUDARCo).

The above quotes, to some extent, help to describe the assumptions that respondents had on the relevance of various skills acquired in the named subjects offered by LIS institutions. However, responses from interviews revealed that not all the skills that were acquired in school could apply as entrepreneurial due to their theoretical nature and the fact that certain levels of applications of such skills were missing. For example, one respondent commented as follows:

“Certain skills such as web design were taught in a purely theoretical environment, with fewer hands-on sessions. Working as an entrepreneur in such an area would therefore need extra training efforts before mastering it.”

The above comment differed from the one given by a LIS educator who argued that one would need more individualized efforts to apply certain skills to entrepreneurship level since learning it in class alone may not be sufficient.

“In order to apply certain skills as a means of earning extra income would need someone to develop interest and extra efforts outside the learning environment, not only by learning it from the classroom due to limited time and sometimes resources may as well pose hindrance to it” (LIS educator: OUT)

As such, one would need time and devotion to apply certain skills for the entrepreneurship purpose.

Respondents were asked whether they considered themselves skilled enough to work as entrepreneurs in various LIS professional activities (by the scales of: 1= unskilled; 2= low skilled; 3 = moderately skilled; 4 = Skilled; 5 = highly skilled). This question considered the fact that most of them had either got exposure to LIS

activities during field practice (and had learned about entrepreneurship in the course) or were already working as practicing LIS professionals. Respondents came up with answers that slightly differed from their reflections on type of skills they considered to be important, acquired during the course, for someone to work as entrepreneur in the LIS profession. Table 2 below summarizes their responses:

Table 2: Skilled to work as entrepreneurs in LIS professional activities

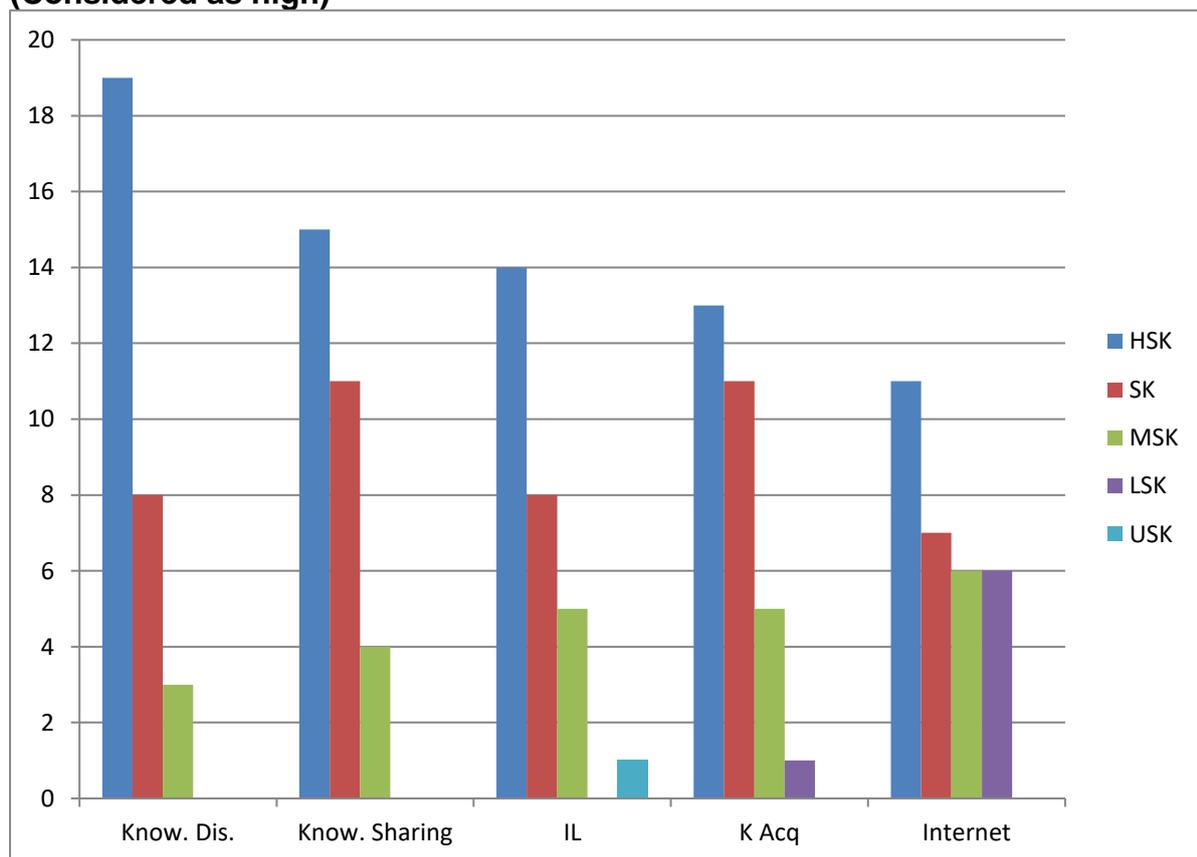
Activity	Rank				
	Highly	Skilled	Moderate	Low	Unskilled
Disseminating information and knowledge	19(63.3%)	8(26.7%)	3(10%)		
Information and knowledge sharing	15(50%)	11(37%)	4(13%)		
IL training	14(50%)	8(29%)	5(18%)		1(3%)
information and knowledge acquisition	13(43%)	11(37%)	5(17%)		1(3%)
Internet searching	11(37%)	7(23%)	6(20%)	6(20%)	
Reference services	11(37%)	10(33%)	6(20%)	3(10%)	
software installation	10(34%)	10(34%)	5(17%)	4(13%)	1(3%)
Multimedia librarianship	9(30%)	8(27%)	7(23%)	3(10%)	3(10%)
Apps building	2((7%)	6(20%)	5(17%)	10(33%)	7(23%)
Running a bookshop	7(23%)	7(23%)		11(37%)	5(17%)
Graphic design	1(3%)	7(23%)	9(30%)	8(27%)	5(17%)
Website design	3(10%)	8(26%)	8(26%)	5(17%)	6(20%)

Source: field data, 2017

Results from Table 2 above reveal that respondents considered themselves highly skilled to work as entrepreneurs in disseminating information and knowledge to people in various ways and formats in which 19(63.3%) out of 30 indicated to be highly skilled, 8(26.7%) skilled and 3(10%). Other activities included facilitating information and knowledge sharing with 15(50%) highly skilled respondents, 11(37%) skilled and 4(13%) moderately skilled respondents; information literacy training having 14(50%) highly skilled respondents, 8(29%) skilled, 5(18%) moderately skilled and one (3%) with no such skills. Included were also 13(43%) who indicated to be highly skilled in facilitating information and knowledge

acquisition, 11(37%) skilled, 5(17%) moderately skilled and one (3%) with no skills; facilitating internet searching had 11(37%) respondents who considered themselves highly skilled, 7(23%) skilled, 6(20%) moderately skilled and low skilled respectively. Others included 11(37%) who considered themselves skilled in provision of reference services (such as CAS, SDI, directional and referral services), 10(33%) were skilled, 6(20%) moderately skilled and 3(10%) low skilled; 10(34%) were highly skilled and skilled respectively in software installation, 5(17%) were moderately skilled, 4(13%) low skilled and one (3%) with no such skills; and 9(30%) were highly skilled in running multimedia library collections, 8(27%) skilled, 7(23%) moderately skilled, 3(10%) respectively considered themselves with low and having such skills at all. Figure 6 below summarizes their results:

Figure 6: Skilled to work as entrepreneurs in LIS professional activities (Considered as high)



Source: field data, 2017

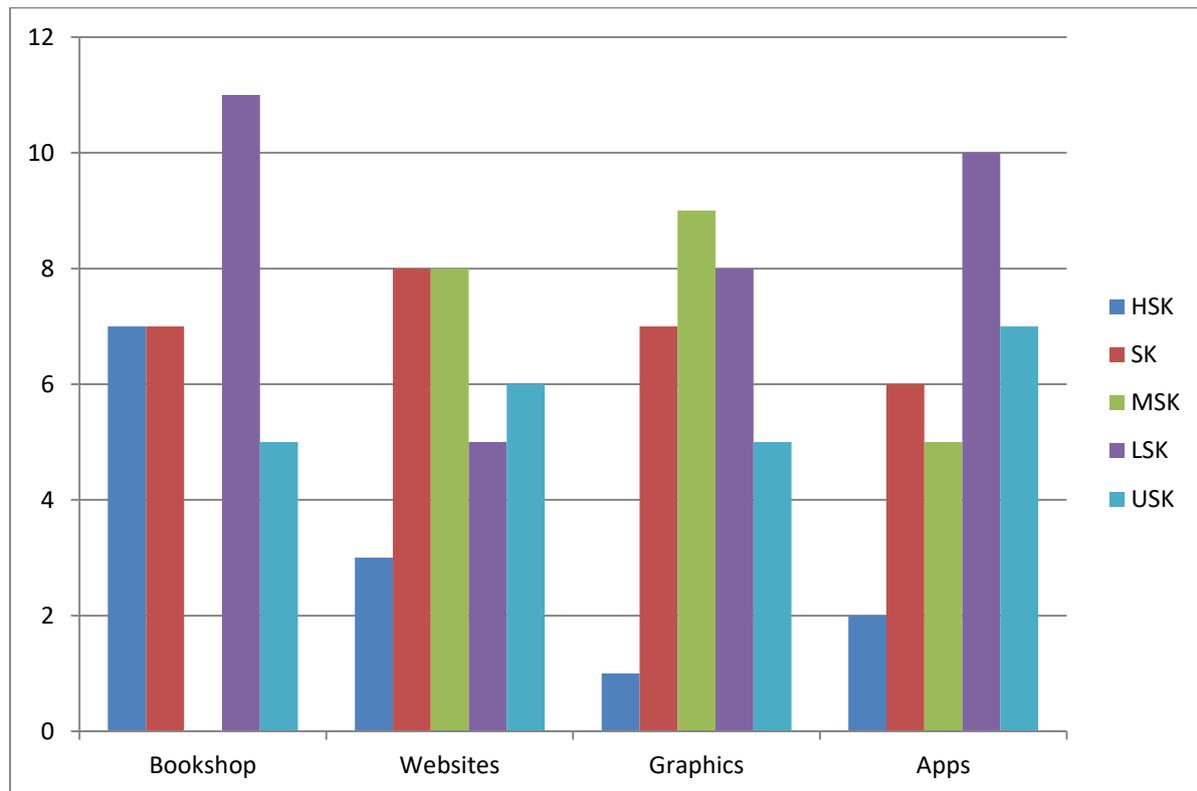
[Key: HSK = Highly Skilled; SK = Skilled; MSK = Moderately Skilled; LSK = Low Skilled; USK = Un-skilled]

In addition to the above, respondents pointed at other areas they considered themselves to be highly skilled (additional to what they were asked in a

questionnaire) included repackaging information, provision of outreach services to users, managing business, books writing, marketing of products and services. Other areas in which respondents considered themselves moderately skilled to work as entrepreneurs included abstracting & indexing, bibliographic services, language translation skills, compiling bibliographies, photocopying, scanning, printing, contractual cataloguing & classification of information resources, desktop publishing, setting up computer networks, establishing, organizing and maintaining libraries, archives & documentation centers, carrying out research, analyzing quantitative and qualitative data.

However, respondents indicated that they had low skills in working as entrepreneurs in a number of LIS activities. These included apps building which had only 2((7%) respondents who were highly skilled, 6(20%) skilled, 5(17%) moderately, 10(33%) lowly skilled and 7(23%) with no such skills. Others included running a bookshop which had 7(23%) respondents who were highly skilled and skilled respectively while 11(37%) were low skilled and 5(17%) unskilled; graphic design had one (3%) highly skilled respondent, 7(23%) skilled, 9(30%) moderately skilled, 8(27%) low skilled and 5(17%) had no such skills. Included was also website design which had 3(10%) highly skilled respondents, 8(26%) skilled and moderately skilled respectively, 5(17%) low skilled and 6(20%) with no such skills. Figure 7 below summarizes their results:

Figure 6: Skilled to work as entrepreneurs in LIS professional activities (Considered as low)



Source: field data, 2017

[Key: HSK = Highly Skilled; SK = Skilled; MSK = Moderately Skilled; LSK = Low Skilled; USK = Un-skilled]

Results from interviews revealed that a number of respondents were highly skilled in several LIS activities as a result of skills acquired from previous courses:

I have been teaching information literacy to students in a certain college on part-time basis as a result of good training that I got while undertaking my undergraduate degree studies (LIS Professional 3).

“For quite some time now me and other colleagues have been working as contracted cataloguers and classifiers to organize a library for an institution” (LIS Professional 5).

“I have noted a number of professionals in LIS working on their own to bind books and newspapers. Obviously, it was a result of the skills they acquired from the subjects that were taught back in the library school” (LIS Professional 1).

However, when asked the reasons that could result into certain professionals less skilled to work in certain LIS activities as a result of the skills acquired, one LIS educator pointed out that failure to put to use skills acquired during the training in a LIS training institution could be a major reason:

“Many of our LIS students do not make efforts to practice what they learn; as such it may not be possible to consider certain LIS areas to be practiced in an entrepreneurial sense” (LIS Educator: UDSM).

To some extent, the above comment help to explain reasons for some respondents to admit being less skilled in certain areas that would make them entrepreneurs.

Challenges associated with utilization of entrepreneurship skills in LIS

Respondents were asked to identify challenges they would anticipate if they were to work as an entrepreneur in the LIS profession. This question was asked on the assumption that several of them had already practiced working in the profession for some time after finishing their courses as well as working as interns during practical training sessions while being students. A number of responses came out of it, as summarized on Table 7 below:

Table 3: Challenges on utilization of entrepreneurship skills in LIS

Challenges	Response	Percent
Inappropriate entrepreneurship skills	20	66.7
Inadequate qualified persons to teach entrepreneurship skills in LIS education	16	53.3
Inadequate ICT facilities and training	23	76.7
Lack of entrepreneurship spirit & culture among LIS professionals	21	70
Lack of innovative skills among LIS professionals	22	73.3
Insufficient financial support to start business venture	24	80
Insufficient entrepreneur opportunities in the markets	13	43.3
Inadequate business skills	16	53.3
Inadequate financial management skills	16	53.3
Poor networking and collaboration among LIS professionals for business cooperation	21	70
Fear of competition & taking risks	20	66.7
Lack of self-confidence and encouragement	21	70
Negative perception about LIS profession	1	3.3

Source: field data, 2017

Results from Table 3 above indicate that more than half of respondents (i.e. above 67% percent) pointed at a number of the most serious challenges such as insufficient financial support to start business venture, inadequate ICT facilities and

training, lack of innovative skills among LIS professionals, lack of entrepreneurship spirit & culture among LIS professionals, lack of self-confidence and encouragement and poor networking and collaboration among LIS professionals for business cooperation, fear of competition & taking risks and inadequate entrepreneurship skills. However, about a half of respondents (i.e. 53% and below) highlighted several challenges including inadequate qualified persons to teach entrepreneurship skills in LIS education, inadequate business skills, inadequate financial management skills, insufficient entrepreneur opportunities in the markets and negative perception about LIS profession.

In addition to the above responses, answers from follow-up interview questions revealed that several challenges were considered more serious since they seriously hampered entrepreneurship in in the profession:

“Imagine you have been contracted to organize a library but you discover that the work is so big and you need extra support from colleagues. When you contact them, they fail to give you the required support because people in this profession don’t have a culture of cooperating among each other and our network is so poor. As such you can’t expect to develop as an entrepreneur in a network less environment” (LIS Professional 3).

“LIS courses are taught in such traditional approaches that there are no any serious innovative elements in what is being taught. Very few people take such courses seriously for the purpose of transforming what they learn into being the source of generating income” (LIS Professional 5).

“I think the skills they taught us on entrepreneurship are insufficient, they lacked the application touch and the profession itself is not that much entrepreneurial due to its service nature” (LIS Professional 1).

“Financial backup is so essential in entrepreneurship; For example you got a job of organizing a library in Mwanza, which is about 1000 km from Dar es Salaam, how do you make it there when you know for sure that you will be paid only after the work is done?” (LIS Professional 4).

The above and several other similar comments help to indicate that since this is considered a rather service-oriented profession, with little elements of profit-making, many professionals would find it difficult to work together as entrepreneurs. In addition, innovation skills and entrepreneurship culture, mind-set and financial management skills were a major problem among professionals. When asked on comments raised about inadequacy of LIS educators to teach entrepreneurship skills as well as lack of ICT facilities, a LIS Educator from TUDARCo pointed out that the

learning style among students could be a major reason for such comments as most of them are unable to make sense out of what they learn:

“Students are taught by qualified staff in the business field, entrepreneurship being one of their major areas of specialization. In addition, students learn about various skills that are ICT-oriented with good amount of time for hands on activities. But since many of them learn only to pass exams as well as justifying their class attendance in order not to annoy their parents who pay tuition fees for them, you would never expect them to take on board what we teach for applications purposes. Due to such mentalities, students may never be innovative and creative because their aim is only to pass exams in flying colours and impress potential employers on their academic performance”.

In addition to the above comments, other similar ones focused on issues of lack of confidence, fear to take risks and end up losing their jobs, wrong notion that LIS profession is not entrepreneurial enough and the fact that many LIS professionals lack financial planning skills to think about starting businesses.

Strategies for enhancing entrepreneurship skills in LIS

Owing to a number of challenges highlighted, respondents were asked to suggest for ways to enhance entrepreneurship skills among LIS professionals. The question aimed at making respondents able to highlight most important aspects that might need to be addressed by LIS professionals so that entrepreneurship becomes an important aspect in the profession. Their responses are summarized in Table 4 below:

Table 4: Strategies for enhancing entrepreneurship skills in LIS

Suggestions	Response	Percent
Improve the academic curricula or LIS profession to accommodate more relevant entrepreneurship skills	27	90
LIS institutions should encourage and prepare learners to become entrepreneurs	26	86.7
Access to financial support from financial institutions should be more open	22	73.3
Provision of free entrepreneurship training to students during and after finishing studies	24	80%
Extending students' field attachments to institutions that are entrepreneur-oriented	21	70
Government should provide opportunities for entrepreneurs by regulating current laws and legislation regarding business	21	70

Students must avail themselves to training opportunities in the business environment	26	86.7
Students should participate in seminars, workshops, journals & trade books to acquaint themselves with current trends in the job market	26	86.7
Students must recognize changes in the environment & be able to identify business opportunities	24	80
LIS education should instill more innovative skills which encourage entrepreneurship mindsets	23	76.7
LIS academic curricula should be reviewed in pace with the technology changes	1	3.3
LIS professionals need to be self-committed on entrepreneurship	3	10

Source: Survey data, 2017

Results from Table 4 above indicate that almost three quarters of respondents (i.e. above 75%) gave recommendations on issues such as improving the academic curricula or LIS profession so as to accommodate more relevant entrepreneurship skills as well as encouraging and preparing learners to become entrepreneurs, provision of free entrepreneurship training to students during and after finishing studies, students being able to avail themselves to training opportunities in business environments as well as participating in seminars, workshops, journals and trade books in order to acquaint themselves with current trends in the job market. They also recommended that Students should be aware of changes in the environment & be able to identify business opportunities and they also urged LIS education to instill more innovative skills that encourage entrepreneurship mindsets. Other suggestions given by respondents, which made up about a half of the total number of the same (i.e. between 50% to 70% percent) suggested on aspects such as extending students' field attachments to institutions that are entrepreneur-oriented as well as government regulating current laws and legislation regarding business to encourage entrepreneurship, and urging LIS professionals to be self-confident and committed to working as entrepreneurs.

Results from interviews, which were obtained as follow-up to initial interview questions revealed that several challenges faced by entrepreneurs in LIS profession came as a result of them not being able to practice what they learned in class as well as less opportunities to experience entrepreneurship in the real world.

“We urge LIS schools to design curricula that encourages entrepreneurship because most courses taught reflect the ongoing LIS

practice in formal institutions rather than off-the-work environment such as kiosks or cafes where one would transform what was learned into a business-like service provision” (LIS Professional 3).

“There is a need for students, during their school time and even after, to attend entrepreneurship training courses that are more practical-oriented because the ones given in class are too theoretical and may not focus on a particular discipline” (LIS Professional 4).

When asked to comment about certain recommendations (such as the issue of providing extra training on entrepreneurship) as well as allowing students to do field work in institutions that are entrepreneurial, LIS educators commented as follows:

“Our institution organizes out-of-class short courses on entrepreneurship. It is upon individual students to set up their time to attend such courses. They should also take lectures on entrepreneurship seriously since no one will tell them what to do to become an entrepreneur since this depends on individuals themselves”. (LIS Educator, UDSM).

“Students are encouraged to take up field practical anywhere where there is evidence that LIS practice exists and that a student will gain something out of it.” (LIS Educator, OUT).

From the responses above, it was revealed that institutions had a number of short courses on entrepreneurship and that it was upon the students to enroll on those. In addition, students were allowed to work in any institution provided that there was evince of its relevance to what a student was supposed to learn in line with LIS activities.

Discussion and conclusion

From the results above, it can be noted that courses on entrepreneurship already exist for LIS students at various institutions in Tanzania. While a number of students indicated to have attended such courses as workshops, seminars and short courses, several institutions teach some aspects of entrepreneurship as part of LIS courses. For example TUDARCo teaches subjects such as economics of information and marketing which has some modules on entrepreneurship. Similarly, several Postgraduate students attended business-oriented courses during their undergraduate studies such as Business Administration, Economics and Commerce. However, except for business-oriented courses offered specifically to students undertaking business studies, entrepreneurship as a course does not feature well in many institutions that offer LIS education. Despite observations by Ocholla &

Bothma (2007) on availability of fully-fledged courses such as information economics and information entrepreneurship in Eastern and Southern Africa; there is still serious inadequacies in education and training on the same in various institutions in Africa (Ugwu & Ezeani, 2012).

In addition, results reveal that various skills were considered relevant for working as entrepreneurs in LIS profession. Among them were information literacy skills, information search, reference services, research skills, internet services, quantitative and qualitative research skills (Crompton & Bird, 2019). A study by Ugwu & Ezeani (2012) highlights other areas identified as being potential for entrepreneurship in LIS profession including abstracting and indexing, online cataloguing, networking and internet services, web design information technology skills and bibliotherapy. It was surprising to note that in this study, such skills (i.e. abstracting and indexing, web design and bibliotherapy) were considered as either moderate or low. This could be attributed by various factors, one being the way students learn or the fact that students fail to integrate what they learn into real world application towards their fields of expertise (as was pointed out by one LIS Educator during interviews above). Several studies (such as Wise et al, 2011 and Shongwe, 2015) reveal that skills on web management (including web programming with HTML, XML, SQL and web design) and networking are given higher priority by LIS employers around various parts of the world. These could eventually be potential skills for LIS professionals.

Results reveal further that several LIS professionals were skilled enough to work as entrepreneurs in different areas such as organizing library collections, teaching information literacy on part-time basis, book binding and trade. Literature reveals that entrepreneurship is associated with innovation, creative thinking and working in collaboration (Al-Atabi & DeBoer, 2014; Machado & Davim, 2020). The aforementioned abilities are greatly associated with hands-on practices that encourage innovative and creative mindsets as well as positive thinking. Due to their nature, such activities can easily be launched with minimal requirements for enormous working space and massive financial backup. However, their success depends very much on cooperation among key players as well as support among LIS professionals. It was noted further that certain activities that are highly innovative and creative in nature such as apps building, web design, book binding and trade, graphics and organization of knowledge (classification and cataloguing) did not

receive higher scores by respondents. Perhaps this was contributed by the fact that such subjects covered more theoretical aspects with fewer hands-on activities. Much as the issues of limited ICT skills and facilities were considered to be severe, the other aspect contributing to this could be the nature of learners, the content that was taught, teaching methods, learning styles and other related factors (Moyane et al, 2015). It is highly unlikely that such courses would yield better innovative and creative individuals if they were taught in less participatory and learner centered styles.

From the analysis above, it is evident that in order for entrepreneurship to be of value among LIS professionals in Tanzania, a paradigm shift from teaching to pass examinations towards teaching in order to create innovative and creative learners should be emphasized (Wijngaarden et al, 2020). LIS students should be encouraged to learn in order to widen their employability potential by focusing on learning for innovation and creativity, collaborative learning and transforming their mind sets towards making information services more business-oriented. They should also be encouraged to consider entrepreneurship-centered learning as a key to creating new ideas and transform them into practice. As such, further research needs to be carried out to ascertain ways of implementing entrepreneurship-centered teaching and learning in a LIS-specific context.

References

- Aghauche, E., & Obiamalu, A. R. (2018). *Bindery : An Entrepreneurial Service In Prof . Ben Nwabueze Library , Federal College Of Education (Technical) Umunze , Anambra State , Nigeria Bindery : An Entrepreneurial Service In Prof . Ben Nwabueze Library , Federal College Of Education (Technical . (July).*
- Al-Atabi, M., & DeBoer, J. (2014). Teaching entrepreneurship using Massive Open Online Course (MOOC). *Technovation*, 34(4), 261–264.
<https://doi.org/10.1016/j.technovation.2014.01.006>
- Ashoka, Ugwu, F., Marques, C. S., Ferreira, J. J., Gomes, D. N., Rodrigues, R. G., ... Klofsten, M. (2013). Organizing and Staffing. *Journal of European Industrial Training*, 55(3), 10–17. <https://doi.org/10.1108/00400911211274819>
- Astrini, N. J., Rakhmawati, T., Sumaedi, S., Bakti, I. G. M. Y., Yarmen, M., & Damayanti, S. (2020). Innovativeness, Proactiveness, and Risk-taking: Corporate Entrepreneurship of Indonesian SMEs. *IOP Conference Series: Materials Science and Engineering*, 722(1), 012037.
<https://doi.org/10.1088/1757-899X/722/1/012037>
- Attebury, R. I., & Finnell, J. (2009). What do LIS students in the United States know about liaison duties? *New Library World*, 110(7–8), 325–340.
<https://doi.org/http://dx.doi.org/10.1108/03074800910975151>
- Chimucheka, T. (2014). Entrepreneurship Education in South Africa. *Mediterranean Journal of Social Sciences*, 5(2), 403–416.
<https://doi.org/10.5901/mjss.2014.v5n2p403>
- Cln, E. F. E. F. (2015). *Promoting entrepreneurship in library and information science for self- reliance : paradigm shift for lis graduates in NigeriA. (2009).*
- Crompton, M. A., & Bird, N. J. (2019). Educating the entrepreneurial librarian. *Advances in Library Administration and Organization*, 40, 169–182.
<https://doi.org/10.1108/S0732-067120190000040011>
- Daneshjoovash, S. K., & Hosseini, M. H. (2019). Evaluating impact of entrepreneurship education programs. *Education and Training*, 61(7–8), 781–

796. <https://doi.org/10.1108/ET-08-2017-0128>

Drescher, S. (2007). *What is entrepreneurship? - Historical approach and critical discussion*. Retrieved from

<https://books.google.co.uk/books?id=kH2O7Q8bodQC&printsec=frontcover&dq=what+is+entrepreneurship&hl=en&sa=X&ved=0ahUKEwjXxev82ODUAhXrl8AKHQx3Bk8Q6AEIKDAA#v=onepage&q=what is entrepreneurship&f=false>

Edewor, N. (2012). Reflections on prospects of enterpreneurial librarianship in nigeria. *Jourmnal of Information and Knowledge Management*, 3(1&2), 1–10.

Jesselyn Co, M., & Mitchell, B. (2006). Entrepreneurship education in South Africa: a nationwide survey. *Education + Training*, 48(5), 348–359.

<https://doi.org/10.1108/00400910610677054>

Kaijage, E., & Wheeler, D. (2013). Supporting Entrepreneurship Education in East Africa. In *A Report for Presentation to Stakeholders*. Retrieved from https://uonbi.ac.ke/duncanelly/files/entrepreneurship_education_in_east_africa._kaijage_and_wheeler_2013.pdf

Machado, C., & Davim, J. P. (2020). *Entrepreneurship and Organizational Innovation* (C. Machado & J. P. Davim, eds.). <https://doi.org/10.1007/978-3-030-19289-1>

Moyane, S. P., Dube, L., & Hoskins, R. (2015). Evaluating user education programmes for postgraduate students in the School of Management, Information Technology and Governance at the University of KwaZulu-Natal. *South African Journal of Libraries and Information Science*, 81(1), 28–40.

<https://doi.org/10.7553/81-1-175>

Mwantimwa, K. (2019). *Higher institution education and entrepreneurial knowledge acquisition of graduates in Tanzania*. 12, 2–3.

Ocholla, D., & Bothma, T. (2007). Trends, challenges and opportunities for LIS education and training in Eastern and Southern Africa. *New Library World*, 108(1/2), 55–78. <https://doi.org/10.1108/03074800710722180>

Scanlon, M. G., & Crumpton, M. A. (2011). Re-conceiving Entrepreneurship for Libraries: Collaboration and the Anatomy of a Conference. *Collaborative*

Librarianship, 3(1), 16–27.

Shahbazi, R., Fahimnia, F., & Khoshemehr, A. H. (2016). Analyzing the market of newly emerging IT-based jobs in library and information science and identifying IT librarian competencies. *International Journal of Information Science and Management*, 14(2), 59–81.

Shongwe, M. M. (2015). The Information Technology Influence on LIS Job Descriptions in South Africa. *Information Technology for Development*, 21(2), 196–204. <https://doi.org/10.1080/02681102.2013.874315>

Spangler, Scott C.; Casper, Dana; Stanfield, D. (2020). *Online students' perceptions of embedded librarians: a pilot study*. 21(1), 167–176. Retrieved from <http://eds.a.ebscohost.com/abstract?site=eds&scope=site&jrnl=15297314&AN=143545425&h=OjuEBX7z23WJ9ax674QgdDPbkeKAxxpsle%2FuyMNoz0X%2BlzS2uV8HW%2BnAoOKFF0zeDP4zup9qWL3PWHHJ%2FrdR4w%3D%3D&crl=c&resultLocal=ErrCrlNoResults&resultNs=Ehost&crlhashurl=login.asp>

St. Clair, G. (1996). *Entrepreneurial Librarianship : the Key to Effective Information Services Management*. Retrieved from https://books.google.co.uk/books?id=8XRXnYlfumAC&pg=PA177&dq=Entrepreneurship+in+library+and+information+services.&hl=en&sa=X&redir_esc=y#v=onepage&q=Entrepreneurship in library and information services.&f=false

Ugwu, F., & Ezeani, C. N. (2012). *Evaluation of Entrepreneurship Awareness and Skills among LIS Students in Universities in South East Nigeria*. Retrieved from <http://digitalcommons.unl.edu/libphilprac>

Westhead, P., & Wright, M. (2013). *Entrepreneurship : a very short introduction*. Retrieved from <https://books.google.co.uk/books?id=WQdAAQAAQBAJ&printsec=frontcover&dq=what+is+entrepreneurship&hl=en&sa=X&ved=0ahUKEwjXxev82ODUAhXrl8AKHQx3Bk8Q6AEIODAD#v=onepage&q=what is entrepreneurship&f=false>

Wijngaarden, Y., Hitters, E., & Bhansing, P. V. (2020). Cultivating fertile learning grounds: Collegiality, tacit knowledge and innovation in creative co-working spaces. *Geoforum*, 109, 86–94. <https://doi.org/10.1016/j.geoforum.2020.01.005>

Wise, S., Henninger, M., & Kennan, M. A. (2011). Changing Trends In LIS Job Advertisements. *Australian Academic & Research Libraries*, 42(4), 268–295.
<https://doi.org/10.1080/00048623.2011.10722241>