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# INTEGRATED INFORMATION

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## Preface: Proceedings of the International Conference on Integrated Information (IC-ININFO 2011)

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## Aims and Scope of the Conference

The International Conference on Integrated Information 2011 took place in Kos Island, Greece, between September, 29 and October, 3, 2011. IC-ININFO is an international interdisciplinary conference covering research and development in the field of information management and integration.

The conference aims at creating a forum for further discussion for an Integrated Information Field incorporating a series of issues and/or related organizations that manage information in their everyday operations. Therefore, the call for papers is addressed to scholars and/ or professionals of the fields of Library and Archives Science (including digital libraries and electronic archives), Museum and Gallery Studies, Information Science, Documentation, Information Management, Records Management, Knowledge Management, Data management and Copyright experts the latter with an emphasis on Electronic Publications. Furthermore, papers focusing on issues of Cultural Heritage Management and Conservation Management are also be welcomed along with papers regarding the Management of Nonprofit Organizations such as libraries, archives and museums.

One of the primary objectives of the IC-ININFO will be the investigation of information-based managerial change in organizations. Driven by the fast-paced advances in the Information field, this change is characterized in terms of its impact on organizations that manage information in their everyday operations.

Grouping emerging technologies in the Information field together in a close examination of practices, problems and trends, IC-ININFO and its emphases on integration and management will present the state of the art in the field. Addressed jointly to the academic and practitioner, it will provide a forum for a number of perspectives based on either theoretical analyses or empirical case studies that will foster dialogue and exchange of ideas.

## **Topics of general Interest**

Library Science, Archives Science, Museum and Gallery Studies, Information Science, Documentation, Digital Libraries, Electronic Archives, Information Management, Records / Document Management, Knowledge Management, Data Management, Copyright, Electronic Publications, Cultural Heritage Management, Conservation Management, Management of Nonprofit Organizations, History of Information, History of Collections, Health Information

### **Symposia**

The Conference offered a number of sessions under its patronage, providing a concise overview of the most current issues and hands-on experience in information-related fields.

- Symposium on Integrated information: Theory, Policies, Tools
- 4th Symposium on Business and Management and Dynamic Simulation Models supporting management strategies

- Session on Open Access Rrepositories: Self-archiving, Metadata, Content policies, Usage
- Session on Evidence-Based Information in Clinical Practice
- Session on Business Management and Communication Strategies supporting Decision Making Process in Tourism Sector
- Session on Electronic Publishing: A Developing Landscape
- Session on Information and Knowledge Management
- Session on Information Content Preservation as Outcome of Conservation of Cultural Heritage: Ethics, Methodology and Tools
- Session on Advances Information for Strategic Management
- Session on Information History: Perspectives, Methods and Current Topics
- Session on Divergence and Convergence: Information Work in Digital Cultural Memory Institutions
- Session on Contemporary issues in Management: Organisational Behaviour, Information Technology, Education & Hospital leadership.

The wide range of aspects that the sessions covered, highlighted future trends in the Information Science.

## **Paper Peer Review**

More than 300 papers had been submitted for consideration in IC-ININFO 2011. From them, 91 were selected for presentation, after peer review in a double blind review process. The accepted papers were presented at IC-ININFO 2011.

## Thanks

We would like to thank all members that participated in any way in the IC-ININFO 2011 Conference and especially:

- The famous publishing house Emerald for its communication sponsorship.
- The co-organizing Universities and Institutes for their support and development of a high-quality Conference scientific level and profile.
- The members of the Scientific Committee that honored the Conference with their presence and provided a significant contribution to the review of papers as well as for their indications for the improvement of the Conference.
- All members of the Organizing Committee for their help, support and spirit participation before, during and after the Conference.
- The Session Organizers for their willing to organize sessions of high importance and for their editorial work, contributing in the development of valued services to the Conference.
- PhDc Marina Terzi for her excellent editorial work, contributing in the production of the Conference proceedings.

#### **CONFERENCE DETAILS**

#### Chairs

Georgios A. Giannakopoulos, Technological Educational Institute of Athens, Greece Damianos P. Sakas, University of Peloponnese, Greece

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#### **KEYNOTE SPEAKER**



#### Professor Amanda Spink

Professor Amanda Spink has published over 340 scholarly journal articles, refereed conference papers and book chapters, and 6 books. Many of her journal articles are published in the Journal of the American Society for Information Science and Technology, Information Processing and Management, and the Journal of Documentation. She is Editor of the Emerald journal Aslib Proceedings. Amanda's research has been published at many conferences including ASIST, IEEE ITCC, CAIS, Internet Computing, ACM SIGIR, and ISIC Conferences. Her recent books include Information Behavior: An Evolutionary Instinct and Web Search: Multidisciplinary Perspectives, both published by Springer. Amanda's research focuses on theoretical and empirical studies of information behavior, including the evolutionary and developmental foundations. The National Science Foundation, the American Library Association, Andrew R. Mellon Foundation, Amazon.com, Vivisimo. Com, Infospace.com, NEC, IBM, Excite.com, AlltheWeb.com, AltaVista.com, FAST, and Lockheed Martin have sponsored her research. In 2008 Professor Spink had the second highest H-index citation score in her field from 1998 to 2008 [Norris, M. (2008)]. Ranking Fellow Scholars and their H-Index: Preliminary Survey Results. Loughborough University, Dept of Information Science Report].

## Information Literacy of Library Users: A Case Study of Mazandaran Public Library Users, Iran

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Abstract: This study has investigated: "Information Literacy of Public Library Users in Mazandaran Province and Role of Them in Its Promotion". The research method was descriptive survey. Data was collected by survey questionnaire. The study population was 56 public libraries in Mazandaran province, but we used a cluster sampling of 14 libraries (viewpoints of resources, information technology and library members has higher degree due to other libraries). We selected a total of 17,687 people with university degrees and based on Krejcie and Morgan. Out of these 376 questionnaires, 349 were returned, giving a response rate of 93%. The study was analyzed through Mann-Whitney U test, Kruskal-Wallis test to confirm or reject hypotheses and via single-sample t test and Friedman to answer research questions by SPSS version 17. Hypothesis test using Mann–Whitney U test, Kruskal-Wallis test indicated significant differences in respondents view while the role of public libraries in the province is to develop information literacy clients. According to the results significant differences occur across different gender, age and education groups.

**Keywords:** *Public libraries; Information literacy; Llibrary users; Mazandaran; Iran.* 

#### I. INTRODUCTION

It is over 30 years since the term "information literacy" was coined by Paul Zurkowski and nearly 20 years since the concept came to the forefront of the library and information profession. Libraries of all types have been charged with taking an active role in fostering an information literate society. Public libraries have been proposed as the obvious and well equipped agencies for imparting critical information skills to the wider community (Spitzer *et al.*, 1998).

Information literacy is widely considered to be a survival requirement for life in the information age, a vital underpinning of lifelong learning, and critical for a thriving democracy. The term "information literacy" can be overwhelming for most public librarians. Although the term has been used by the school and academic library world for a number of years, public libraries are just beginning to move into this arena.

Libraries, which provide a significant public access point to such information and usually at no cost, must play a key role in preparing people for the demands of today's information society (ACRL, 1989).

However, in implementing information literacy programmes we need to have more specific objectives and these have been described in several ways.

Information literacy becomes vital to effective organizations in today's world (Brown, 2004). If the concept of information literacy is taken to its fullest extent, the challenge of the public library is to get involved in the knowledge construction process of school children in collaboration with schoolteachers and school librarians (Skov, 2004). The public library provides access to a large number of databases, and a shared IT platform between the library and the gymnasium has been developed<sup>90</sup>.

# Does Information Literacy Matter in Public Libraries?

#### A. What is the big deal with information literacy?

To be considered as information literate you must know "when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner" (ALIA, 2006). Information literacy is crucial to the idea of a participative citizenship that is adaptive to rapid social change and engaged in lifelong learning at the same time (ALIA, 2006). Because of the of information literacy, socially benefits and ALIA issued the Statement of economically, Information Literacy for all Australians in 2006, which urges that "as a matter of priority, and at all levels, library and information services professionals embrace a responsibility to promote and facilitate the development of the information literacy of their clients" (CILIP, 2004). With the importance of the knowledge economy driving pressure from within governments and professional bodies for libraries to facilitate the acquisition of effective information practices (Andretta, 2005) the question is, what should public libraries be doing?

#### **B.** What is The Role of Public Libraries?

ALIA's Statement on Information Literacy for all Australians makes it clear that all library and Information professionals are responsible, including public library staff. And as Jack Goodman, the CEO of Tutoring Australasia wrote in 2009, public libraries have moved on from being seen only as repositories of

<sup>&</sup>lt;sup>90</sup> <u>*The reflective learning* (2004).</u> [http://www.refleksive.dk]

information, to also being "about sharing information and opening opportunities for learning, community engagement and social capital building" (Goodman, 2009). "Libraries are lifelong learning centers" and identified in ALIA's Statement on libraries and literacies as "part of the solution" for improving national literacies. In 2008 Jane Harding noted that there is little mention of the role of public libraries in the literature on information literacy (Harding, 2008).

The application of Web 2.0 tools to public library's information literacy programs, under the aegis of reader development. Web 2.0 tools can be used to support reader development, including by the provision of information and advice; by encouraging reading with recommendations and reviews; and by facilitating access to library and information resources. The relevance of reader development to information literacy, through the Web 2.0 environment, is enunciated with discussion of fostering lifelong learning, writing and digital citizenship skills; encouraging reflection as part of community; and assisting deep learning, despite the often casual and relaxed environment of social networking technologies. Public libraries aim to form connections with the local community, while facilitating broad access to library services (Pieper, 2010).

"The Public library is acting as an agency for social and personal development and can be a positive agency for change in the community. It contributes to the creation and maintenance of a well- informed and democratic society and helps to empower people in the enrichment and development of their lives and that of the community in which they live" (Gil, 2001). If the information literacy gives us the training to survive then the public library should play the key role (Gil, 2001).

#### **II. METHODS**

The statistical populations of this study comprise 56 public libraries in Mazandaran province. Access to all was not feasible, so, we were forced to compromise the sample and generalize on the results. 14 libraries from resources, information technology and members that have had higher level were selected. A total of 17687 people had university degrees, while the 376 sample size was calculated with the *Krejcie* and *Morgan* table (Powell, 1997).

We used a questionnaire for data collection. This questionnaire was sent to academics, exports in the field, and ultimately 30 items were selected. 349 questionnaires (93%) out of the 376 questionnaires sent out were received completed. Questionnaire questions were encoded and spss17 was used for analyzing the data.

We used descriptive statistics such as preparation frequency tables and calculated the average of the central index. In order to answer our research questions, we used Friedman tests and t-single sample and in order to answer to our hypothesis, inferential nonparametric such as Krushal – Whitney U.

To test our hypothesis we used at first null

hypothesis and opposite hypothesis. Null hypothesis indicated that there is no difference between variables. Opposite hypothesis indicated that there is difference between variables. Then we calculated the amount of P to correct the null hypothesis. If the value of P is equal to or smaller to the different level (a=0.05), the null hypothesis is rejected and the opposite hypothesis is supported by extension. In this case, there is a significant difference, statistically. By contrast, if the P value is greater than a, the null hypothesis is supported and the opposite hypothesis, is rejected.

#### **III. RESULTS**

Library users' access to the library, with an average attendance ranking between 2.32% in the first instance, access through the library website with an average rating in 2.07% in the second, and access through E-mail services with an average rating between 1.61% comprised the third priority placed.

The result of library clients having access to the latest and most recent information from the library with an average rating was 7.85% in the first priority; computer skills allowing access to the inventory had an average rating of 5.96%; using a Library card to access the catalog had an average rating of 5.33% while the skills to use reference materials appeared under a 4.88% in the last priority.

The viewpoint of library client, using of internet and www with an average rate was 10.59% in the first priority, introduction to search engines was 8.83% in the second priority, introduction to Email with an average range was 8.72% in third priority and familiarity with specialized discussion groups with an average range was 4.28% in the last priority.

Library clients meeting their information needs through the World Wide Web appeared as a 10.14% and as the first priority among users' needs; access to databases (index, lists ...) with an average rating of 7/57% emerges as the second priority, while the use of an optical disc gathered a 6/92% in the third priority and lastly familiarity with databases with an average rating of 4/20% ranked at the bottom of users priorities. No developments in information literacy of public libraries of the Mazandaran Province can be noted against the sample. In other words, the null hypothesis is confirmed. Since the P value is zero, significantly smaller than the predetermined 0.05, there isn't sufficient evidence to confirm opposition.

Library users request the increase of electronic resources at an average rating of 2.81% as a first priority, educational brochures and pamphlets with an average rating of 2.60% rate as their second priority, while workshops rate third at 2.33% and scientific seminars last at an average rate of 2.27%.

Lack of resources features first at 9.07%, lack of connection with other scientific centers second at an average rating of 7.39%, lack of access to information

from databases third at 7.15%, and lack of computer skills last at 4.97%.

No significant viewpoints among respondents occurred regarding the development of information literacy as far as differences between educational levels in the sample took place. Thus, the viewpoint of respondents on information literacy development as a problem connected to educational level was not deemed significant. Accordingly, hypothesis 1- that, in other words, there is no significant different among respondent viewpoints regarding gender difference also may be concluded. On the other hand, since p=0.66 and is higher than 0.05, it follows there is no significant difference among respondent viewpoints about information literacy development as a problem linked to gender difference. Hence, the hypothesis 1-b was not supported.

There was no significant difference among respondent viewpoints as far as time is concerned. Since p=0.041 and is smaller than 0.05, on the other hand, there is a significant difference in respondent viewpoints concerning information literacy development due to time. So, the hypothesis 1-c is supported.

There was no significant difference among respondent viewpoints with different age group about information development. On the other hand, since p=0.613 and is higher than 0.05, so, there is no significant different respondent viewpoint about information literacy development due to age. So, hypothesis 1- d is not supported.

There was no significant difference among respondent viewpoints with study course about information development. On the other hand, since p=0.123 and is higher than 0.05, so, there is no significant different respondent viewpoint about information literacy development due to study course. So, hypothesis 1- e is not supported.

#### **III. CONCLUSIONS**

According to data analysis, the study findings and results of the research, we concluded in the following categories that shall be investigated:

1. Methods of access to information and using ratio of library users from public libraries in Mazandaran Province: Considering the results it can be said that more public libraries information resources are required by clients, while most clients don't have always the necessary skills to use libraries and need further training. Because of the lack of sufficient skills in using the library their use of library resources is deemed unsuccessful; public libraries need to develop library skills among users in the following fields:

- Retrieval of most recent information from reference books such as encyclopedias and dictionaries
- Distinction and use of primary and secondary resources.
- Retrieval of information from scientific journals

#### Ability to use card catalogue

2. Assessment of the level of information literacy among clients: Findings indicate that there was a significant link between levels of information literacy among users and their education level. But in most cases the users are having difficulty accessing information, the most important contributing factors to these being unfamiliarity with the correct problems information retrieval methods, such as key words, Boolean operators, and an effective use of the English language itself. Librarians familiar with the methods of data collection may assist effectively clients using the library yet lacking the necessary formation skills seeking, analyzing and evaluating information improving thus levels of information literacy. Training courses, educational classes and preparation of brochures, etc. can increase information literacy skills among users. Public libraries can help clients increase information literacy skills via their website and in providing an educational booklet in basic information literacy skills, by holding educational classes and seminars.

3. Methods in developing information literacy: Public Libraries in province can enhance electronic features, including Internet communications, information Stock (index, lists) and their web site, and plan appropriate training courses, hold training courses familiarize users with the library, develop familiarity with print and electronic forms of documentation, familiarity with methods of retrieval of information and provide as much as information content possible under the Insert Intranet public library patrons to the province to achieve higher access to information.

4. Training programs require clients: Training for all client services and library facilities is necessary so as to be able to retrieve accurate and comprehensive information quickly. Since libraries and information centers are pioneers in the field of information and communication, Public Libraries may be Pioneers in information dissemination in the whole society providing education at large. More electronic resources are required as well as educational workshops, Congresses, scientific seminars, educational brochures and pamphlets advising on information retrieval are also necessary.

5. Barriers to the development of information literacy comprise the following: necessary equipment, such as computers, lack of links to scientific centers, as well as lack of access to information banks and databases and the lack of networking among libraries. Our results were compared to results from previous studies: thus we may understand that libraries are most effective when information retrieval skills are taught and can be used by visitors. To increase information literacy, further training and familiarity with electronic resources is required while the major barriers to the former concluded here in this paper consist in the lack of adequate connections between public libraries and other scientific centers, banks of information and the lack of access to scholarly databases.

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