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# Library Education (Theory V.S. Practice)

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## **Introduction :**

Although there are numerous studies, conferences, and journal issues devoted to the topic of library education, extensive debate remain regarding both the purpose and effectiveness of library education as a tool in helping prepare entry-level professional librarians. A major part of the debate is the question of whether, in general, library schools are meeting the demands of the job market for librarians and information specialists. The essence of the debate consists of the following elements : (a) the issue of theory versus practice in library education, (b) the expected output of the library schools, and (c) the emerging diversified employment market for library school graduates. This paper discusses this debate, the nature of library and information science as a profession, and

the concept of competency-based education.

## **Roots of the debate :**

The debate between educators and practitioners regarding theory versus practice goes back to the creation of the first program of library education in 1876 by Melvil Dewey at Columbia University. During the first part of the last century, Williamson (1923) represented the importance of this issue in his report, in which he called for more university-level education for librarians. In addition, many research reports examined this issue during the 1930s and 1940s, noting an overemphasis on techniques and methods in library school curricula and calling for the teaching of more theory (i.e. Munn, 1936; Danton, 1946 as cited in Woodworth, Packard, Robinson, & Sabia, 1994).

The main cause of the debate is that, for the most part, educators and practitioners have different views and values regarding the knowledge, skills, and attitudes appropriately acquired during the professional education period. The difference between the goals of educators and the goals of practitioners reflect this disparity. The main goal of educators is to produce graduates able to understand the fundamental issues, concepts, and theories that guide the different operations within libraries and information institutions. On the other hand, practitioners are looking at the educational system within library schools as a sort of factory whose output is to do a certain type of work and handle specific responsibilities.

It is worth noting that such a debate is not limited to the LIS field, but also occurs in many other disciplines in which students are taught to work in a service-based profession, such as law. Moreover, the rapid changes in the information environment of different types of libraries, such as the academic library, are acting as another stimulus to the debate. Changes in how people perceive the value of information and how they access, evaluate, and use it have led to changes in the skills required of information professionals in different

information environments. These changes include not only adding new skills but also replacing the traditional core skills with other essential skills such as those needed to deal with intellectual property, economics, and privacy of information (Myers, 1995). In other words, changes in users' needs and their information seeking behaviors have influenced employers' needs and expectations for new graduates. These expectations underestimates, most of the time, the importance of teaching theory at library schools. Such expectations are concerned with communication skills, technical skills, and business skills intended to fulfill user's needs.

To avoid the negative consequences of accepting employers' views unquestioningly, Stuart (1998) emphasized the importance of structuring curriculum so that it has "intellectual orientation to skills and methods, both technical and behavioral, before there can be an effective application of those skills; without that a person is simply performing a set of routines, not truly professional practitioners" (p. 245). This might mean that library schools have the responsibility for education and not for training, which is the opposite of what practitioners are requesting. In other words, library schools should emphasize

the “process” rather than the “procedures”, which employers are expecting from the new graduates (Smith & Warner, 1990). However, as shown in Figure 1, there are some practitioners as well as some educators who understand the importance of providing both theory and skills-based curricula and how they are both essential for entry-level librarians.

White (1983) attributed this debate to the difference between education and training : “You practitioners don't necessarily want us educators to educate your new hires, you want us to train them” (p. 520). According to Shera (1972), “The professional schools must possess a program of study that has intellectual content, that presents a definite theoretical structure from which emerges a corpus of scholarship, and is organized in a systematic way” (p. 347).

In this context, Woodsworth and Westerman (1995) argued that education is associated with preparing students for careers, while training is adequate to obtaining a job. At this point, the

question that underlines this debate becomes, do library schools prepare students for a career or for a job ? Also, are the students enrolled in library and information studies schools looking for careers or are they looking for jobs ? Furthermore, Moran (2001) attributed the genesis of this debate to the moving of the MLIS degree from libraries to universities after the Williamson report in 1923. Other authors attributed the source of the debate to the disagreements among the directors of libraries and information organizations on the appropriate skills, educational background, and knowledge these students should have in order to meet employers' expectations (Moore, 1987; White & Paris, 1985). It is worth noting that the location of library schools in universities, with universities placing high value on theory, required LIS schools to concentrate on teaching theory and made it more difficult to achieve a balance with practice.

Although the debate regarding theory and practice still exists, there are not many research reports that discuss the

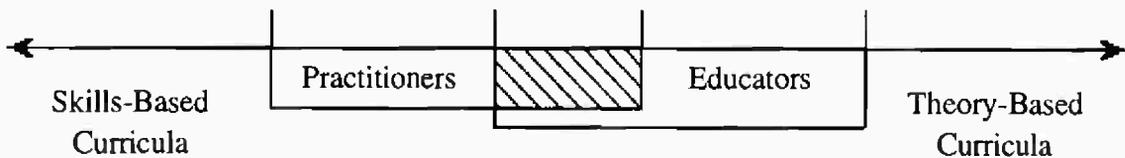


Figure 1 : Educators and Practitioners Views of Library Curricula.

perceptions of new graduates and employers regarding this point. Most of the literature in this area is based on personal opinions.

Ryans (1980) surveyed 60 heads of cataloging departments at university libraries to obtain their perceptions regarding teaching theory in cataloging courses. Respondents believed in the importance of theory as an element for teaching cataloging. However, they believed that theory should be combined with practical aspects of cataloging to prepare a qualified cataloger. In addition, if a school has only one course in cataloging, which is the case in some schools, practitioners recommended that such a course should have more practical than theoretical content.

This debate is not limited to North America. Traill in 1990 (as cited in Clayden, 1995) reported similar debate in Australia. As in the US, employers in Australia were concerned with practical skills rather than theoretical foundations. On the other hand, Clayden's study (1995) showed different results. The study used a nominal group technique to compare the opinions of Australia's cataloguers, educators, and graduate students regarding theory vs. practice in teaching cataloging. Surprisingly, the study revealed a consensus among the

educators and practitioners concerning the priority of teaching the philosophies and theories that underline cataloging and classification.

Unlike practitioners, library educators do believe in the priority of theory in library education programs and its significance in producing graduates who can successfully work in different settings. Currently, some library schools prepare students to be dynamic librarians who can cope with and perform required assignments at different types of libraries. Moreover, many educators believe that library education should focus on equipping students with the appropriate theoretical foundations and leave the details of practice to be obtained through on-the-job training (Intner, 1989; Moran, 2001).

The appropriate way to do this is by integrating theory and practice within a library curriculum — in other words, to focus on theory that can help graduates in their careers.

In this context, Derr (1983) argued that applied theory helps students to become competent practitioners. He identified three types of integration (pp. 197-198):

1. Teaching of applied theory. In this vein, applied theory "provides practitioners with procedures for

performing professional tasks in such a way that the goal of the profession can be achieved”.

2. Application of applied theory to analysis of specific settings. In this type, hypothesized procedures relating to the performance of particular tasks are developed.
3. Use of applied theory in special settings. In this level the hypothesized procedures can be used to “develop skills in the performance of certain tasks”.

Although there is great debate regarding the issue of theory and practice in library education, there are few attempts to perform integration of both in library programs. This lack can be attributed to the following reasons :

1. Lack of a reward system that encourages faculties to focus on teaching both theory and practice and to supervise students' field practice.
2. Such integration will require significant changes in library curricula, which faculties do not advocate (Morehead, 1980).

The debate over theory vs. practice is endless and will increase in the future for various reasons. A main factor is the rapid change in technology, which influences employers' needs and

expectations for new graduates. In addition, changes in users' information needs and seeking behaviors, as a response to changes in the information environment, force practitioners to call for more practical than theoretical qualifications.

The nature of education in the university forces the emphasis on teaching broad principles and builds on a theoretical basis. On the contrary, employer expectations for new graduates in different professional fields, such as law and librarianship, forces educators in these fields to emphasize the practical aspects of the curricula. The issue of theory vs. practice led to the discussion of what is a profession and the status of librarianship as a profession.

### **Library and Information Science as a Profession :**

Although there is no consensus on the definition of the term profession, there is some agreement regarding its constraints. Abbott (1989) defined a profession as “exclusive occupational groups applying somewhat abstracted knowledge to particular cases” (p. 8). This definition identifies the application of abstracted knowledge as a basis for having a profession. In addition to that, there are other characteristics that differentiate a

profession from a semi-profession. Examples of these characteristics include high income, high educational requirements and licensure (Goode, 1969). Goode argued that people in semi-professions are forced to accept less than what they want. In order to reach a professional level, such occupations try to obtain higher prestige, power and income. However, he argued that occupations such as nursing and librarianship would never reach professional status because of deficiencies of professional traits such as homogeneity of membership of occupation and lack of abstracted knowledge.

Although individuals in some occupations such as librarianship have commitments to the knowledge and services they provide, society still views it as a clerical or administrative occupation rather than a profession. Reasons for this might include the perceived value of librarians in the society, their income, their educational requirements, and the ignorance of people regarding the actual work that librarians are performing inside libraries (Nilsen & McKechnie, 2002). Furthermore, the organizations in which librarians and information specialists are working are considered by some people as semi-professional organization.

Etzioni (1969) differentiated between two main types of organization : full-fledged professional organizations, such as universities and research centers, and semi-professional organizations, such as libraries. A main difference relates to the type of authority that has been implemented in the organization.

The implementation of professional authority in the professional organization differentiates it from a semi-professional organization, which is concerned with administrative matters. Professional authority is based on professional knowledge and it is not controlled by external supervision. On the other hand, administrative authority is based on the level of power associated with higher or lower rank in the organization's hierarchy. In addition to the type of authority, professional organizations are concerned with the production and the application of knowledge rather than the individual communication skills required by semi-professional organizations.

In general, Abbot (1989) argued that there are both internal and external sources that affect the system of a profession. In terms of external forces, technology and organizations affect the reform of the system more than other sources. Technology can help in creating and expanding the professional authority

'jurisdiction' rapidly. For example, librarianship was affected by the invention of microfilm in the late 1920's. Microfilm improved, in a positive way, the organization of and access to knowledge at libraries. However, microfilm required more advanced technical knowledge and skills for cataloguers and reference librarians. Also, the use of computers during the 1950's and 1960's has affected information access and the librarians' required knowledge and skills. At the same time, technology can be considered as destroying professional authority, especially for a heavily technology based profession such as librarianship.

In addition to the external sources, the internal development of knowledge is another factor in reshaping the system of a profession. In terms of librarianship, the Library of Congress set cataloging rules early in the twentieth century in an attempt to simplify and standardize work at different types of libraries. However, these rules were not appropriate to some work environments such as public libraries that used the Dewey Decimal Classification or developed their own schemes. Meanwhile, private corporations, such as H.W. Wilson and R.R. Bowker, were founded in the late nineteenth century to help libraries in

organizing and providing access to the growing body of knowledge.

The differences among types of libraries, the development of professional organizations such as the American Library Association (ALA), with different types of library and function divisions, and the changing of user needs have affected librarians' required knowledge and skills. These changes are the result of rapid technological change and the shift of the central theme of the profession from organization-based to user-based, as well as the internal changes of work in specific type of libraries.

For these reason there is a trend to apply the competency-based education at library and information schools. The following part discusses the concept of competency-based education and it implementation, and the methods of identifying competencies.

### **Competency-Based Education (CBE) : A Conceptual Framework**

The development of competency-based education (CBE) can be tracked to the late eighteenth century. It was associated with the debate over high school education in America at that time. This debate centered on expanding student enrollment and

ensuring the provision of a high quality education.

The emergence of technological complexities in work environments and increasing international competition as a result of the industrial revolution can be considered factors in developing universities in the U.S. in the nineteenth century. The curricula of these universities focus on imparting practical skills in the workplace (Harris, Guthrie, Hobart, & Lundberg, 1995).

By the 1950s, however, the societal need for competency-based education in the American higher education system increased, especially after the Second World War. This movement developed in response to the need for proficient citizens who could do something based on the outcome of their higher education.

Competency-based education emphasizes equality in student admissions as well as equality in the results of the educational system. Societal movements in the 1960s and 1970s, such as the civil rights and women's liberation movements, have played an important role in the movement toward thinking and applying this approach within the American higher education system (Grant, et al., 1979).

The movement in the United States toward CBE, particularly in the 1960s, can be attributed to the shift of expectations for college students and increasing demands for accountability in education. In addition, the emergence of federally-funded programmatic educational research and development centers, after the Second World War, have increased the demand for a model such as CBE that focuses on the quality of education (Hall & Jones, 1976). Moreover, factors such as an increase of economic emphasis and increase in the number of low-quality teachers in the USA in the 1960s influenced the progression of the competency-based education during that period of time (Tuxworth, 1989).

The development of certain concepts in the 1970s, such as "mastery learning", "criticism reference testing", and "minimum competency testing" have strengthened the movement of the competency-based approach at different educational levels. Mastery learning puts emphases on the demonstration of knowledge and skills that meet the requirements of entry-level positions in a particular occupation. Criterion reference testing and minimum competency testing are tools used to ensure that an individual's skills and knowledge are

adequate to meet the required standard performance for an entry-level position.

There are differences among researchers regarding a single definition of CBE. These differences reveal the interdisciplinary nature of this approach and how it is related to the context in which it applies.

One of the most-cited definitions of CBE is that was developed by Grant and others (1979), which defines it as “a form of education that derives a curriculum from an analysis of a prospective or actual role in a modern society, and that attempts to clarify progress on the basis of demonstrated performance in some or all aspects of this role” (p. 5). This definition emphasizes the importance of the analysis of the role as an element in developing the curriculum.

On the other hand, other definitions focus on the nature of CBE as an instructional strategy that can take different forms based on the context in which it is applied. Houston and Howsam (1972) identified the central features of this approach by defining it as :

a simple, straightforward concept with the following central characteristics : (a) specification of learner objectives in behavioral terms; (b) specification of the

means for determining whether performance meets the indicated criterion level; (c) provision for one or more modes of instruction pertinent to the objectives, through which the learning objectives may take place; (d) public sharing of the objectives, criteria, means of assessment, and alternative activities; (e) assessment of the learning experience in terms of competency criteria; and (f) placement on the learner of the accountability for meeting the criteria. (pp. 5-6).

In the same vein, Harris et al. (1995) associated the following features with the CBE approach : “(a) a specification of learning outcomes in measurable terms, (b) the prior determination of these outcomes throughout the analysis of the areas and context in which they are to be demonstrated, (c) the measurement of these outcomes as being the criteria of success of the learning process, (d) a learning process that emphasizes the attaining of the specified outcomes to the stated standard rather than the length of the time or mode of learning, and (e) the recognition of prior learning by crediting that learning rather than demanding a repetition of it”. (p. 30).

In order to reform the construction of the educational system, the CBE approach asks two main questions :

1) What should students learn? and,  
2) How can we best serve them? The advocates of this approach believe that by appropriately answering these questions, institutions and the students they serve will become more efficient and effective.

The competency-based approach relies on translating competencies into a curriculum in order to equip future employees with the required knowledge and skills. In their pioneering study of competencies for information professionals, Griffith and King (1986) identified the three main components of competencies as:

1. Knowledge, which refers to being familiar with or acquainted with something.
2. Skills, which refers to the ability to implement or apply the knowledge. Boyatzis (as cited in Evers & Rush, 1998) defined skills as "the ability to demonstrate a system and sequence of behavior that are functionally related to attaining a performance goal" (p. 24), and
3. Attitude, which refers to the emotional approach to something.

However, some authors have argued that not all of these components should be provided to develop a competency and that one or more of them would be

acceptable to provide individual competencies.

The above discussion of CBE definitions and the components of competencies leads to four main issues: 1) the methods of definition of competency and other related terms, 2) identifying required competencies, and 3) the implementation of the competency approach.

### **Definition of Competency :**

A major problem with the CBE is the use of imprecise definitions in referring to competency. To clarify this issue, a recent study by the U.S. Department of Education (1999) developed a conceptual learning model, see Figure 2.

As shown above, traits and characteristics constitute the foundation of the learning process. Because these characteristics vary by individual, student abilities, skills, and knowledge throughout the learning experience are also varied. At the second stage, the interaction of skills, abilities, and knowledge throughout the interactive learning experience results in competencies, which constitutes the third stage of the pyramid. Thereafter, based on the demonstration of the acquired competencies, the CBE approach can be assessed.

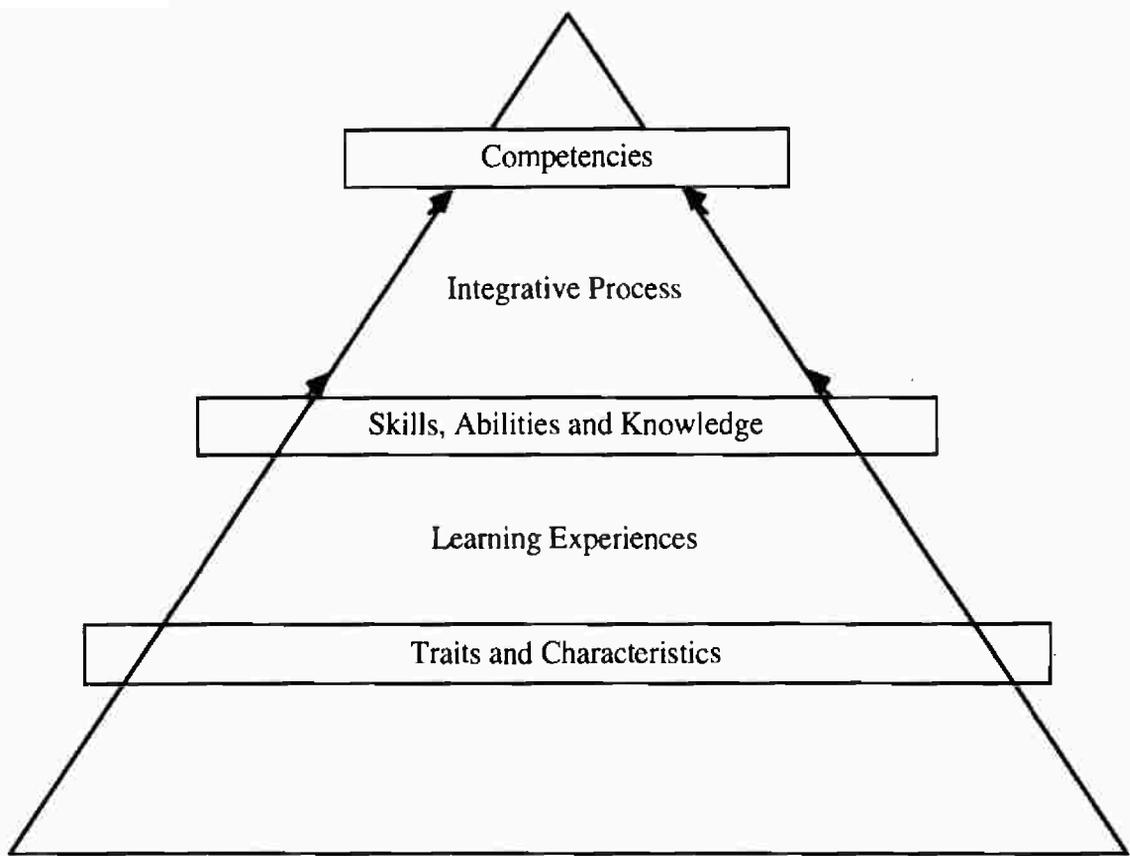


Figure 2 : Conceptual Learning Model.  
Source : U.S. Department of Education, 1999.

In this context, competency is defined as “the result of integrative processes in which skills, abilities, and knowledge interact to form bundles which have currency in relation to the task for which they are assembled” (U.S. Department of Education, 1999).

In the context of a learning continuum, Hall and Janes (1976) identified competency as a “statement that describes

the observational demonstration of a composite of the specific skills” (p. 29). In the context of a learning model, competencies are preceded by the general goals of the educational program and followed by sub competencies that are more specific in order to achieve the specific objectives of the program, see Figure 3.



Figure 3 : Competency Continuum.

From a different view, the Mayer report by the Australian Education Counsels and Ministers for Vocational Education (as cited in Harris, Guthrie, Horbart. & Lundberg, 1995) differentiates between the term competency, which focuses on learning outcomes, and employment-related competencies that refer to the required competencies to enter a particular employment successfully. The latter type are those with which this study will be concerned. They can be identified by analysis of the job and employer perceptions regarding the essential competencies that should be acquired by future entry-level employees.

### **Implementation of CBE :**

Although there are many societal and economic reasons for educational institutions to apply the CBE approach, there are also accompanying challenges and concerns about the process. Voorhees (2001) identified four main areas or categories for evaluating the competency approach. These categories entail challenges and concerns for the implementation of CBE. They can be summarized as follows :

1. Faculty preparation; that is, "have faculty been oriented to shift from teacher centered delivery to student centered performance" (p. 91) ?

2. Model preparation. This category deals with the relation between the proposed model and the institution mission, as well as the validity and reliability of the model.
3. Student advisement. In this category, the institution should be questioning the students' orientation toward shifting to the competency-based paradigm. In other words, it should question the ability of students regarding the shift of the institution toward the competency-based approach in the learning process.
4. Administration. This category is concerned with the commitment at the administrative level and the availability of related resources in order to implement the competency model.

### **Methods of Identifying Competencies**

The methods of identifying the required competencies include, but are not limited to, panel review task analysis, literature review, and job analysis. Job analysis is widely used in professional fields such as librarianship to define the required competencies for entry-level librarians.

Task analysis is a method that can be used to identify the required set of

competencies for a person to acquire at a particular job. It helps in describing what competencies are need to be demonstrated by a professional in order to effectively perform his / her work.

Task analysis could be divided into three main types as following :

1. Topic analysis, which concerns the analysis of intellectual tasks that should be performed by a professional.
2. Job analysis, which concerns the analysis of required physical skills.
3. Skill analysis, which includes in-depth analysis of required physical skills and focuses on the way in which a particular job is accomplished. It is differentiated from job analysis, as it is also concerned with how a task is done (Davis, 1973).

The job and skill analyses are mainly based on the description of the work environment. This description includes analysis of the organizational system within which the job is performed. In this case, the analyst breaks down a particular job into many duties, then breaks down duties into tasks, task elements, and finally into acts, which consist of a "basic movement that must be repeated if it is interrupted" (Davis, 1973, p. 39) (see Figure 4).

This process should not be isolated from the factors within the work environment, such as technology, that can affect a particular job. Based on that analysis, the analyst ultimately should be able to :

1. Describe the task that student has to learn.
2. Isolate the required behaviors.
3. Identify the condition under which the behavior occurs.
4. Determine a criterion of acceptable performance. (Davis, 1973, p. 36).

In general, the selection of a particular method is based on social and economic factors that govern the educational institution in which the desired competencies will be applied.

### **Conclusion :**

Librarians and information specialists, especially those who work in a research environments, have faced dramatic changes during the past two decades. These changes are due to the changes in users' behaviors, and the technological revolution that have affected most of the information organizations. On the other hand, Curriculum development is a problem-solving activity that can have more than one correct solution. Conducting a systematic revision based

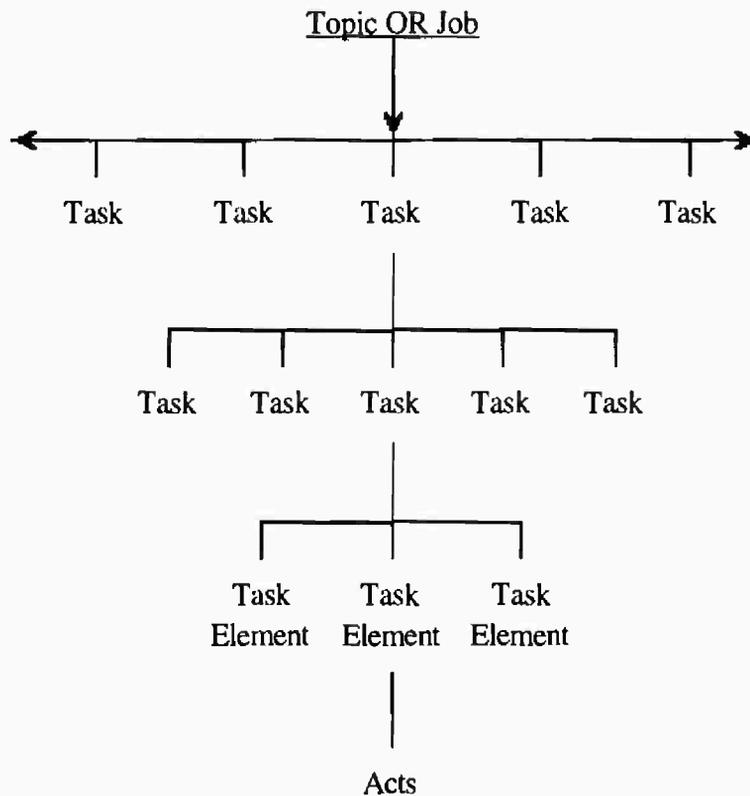


Figure 4 : The Hierarchy of Behavioral Levels in Task Analysis.  
Source : Davis, 1973.

on analyzing market demands for information professionals in different library and information settings is essential for library schools, as a part of the system of the profession of librarianship, to identify the current required knowledge and skills of librarians and how library schools can meet these demands. Revision will aid library schools to close the gap between schools' output and practitioners' needs.

The schools' analyses of the environment of research libraries will

affect the decisions about which knowledge and skills should be added to the curriculum. These analyses focus not only on employer needs and expectations, but should also include the perceptions to entry-level librarians. Because those librarians will judge the value of the library school from which they graduated based on the extent to which it equips them with the required competencies to work as research librarians. The findings of these analyses should be translated into curricular enhancement. Because

competencies are changeable over time, this process must be a continuous one.

Curricular design is a cycle that occurs on a regular basis because of changes in the nature of the needs for research librarians, see Figure 5.

Based on the above figure, the goals of a library school will affect the design of the curriculum and will affect decisions about which areas of knowledge and

skills will be added to that curriculum. This model can be used for preparing potential librarians to work in different types of library and information organizations.

For this reason it is important to have competencies research studies that define the required market demands for different types of librarians and information specialists and transfer these demands to the curricula.

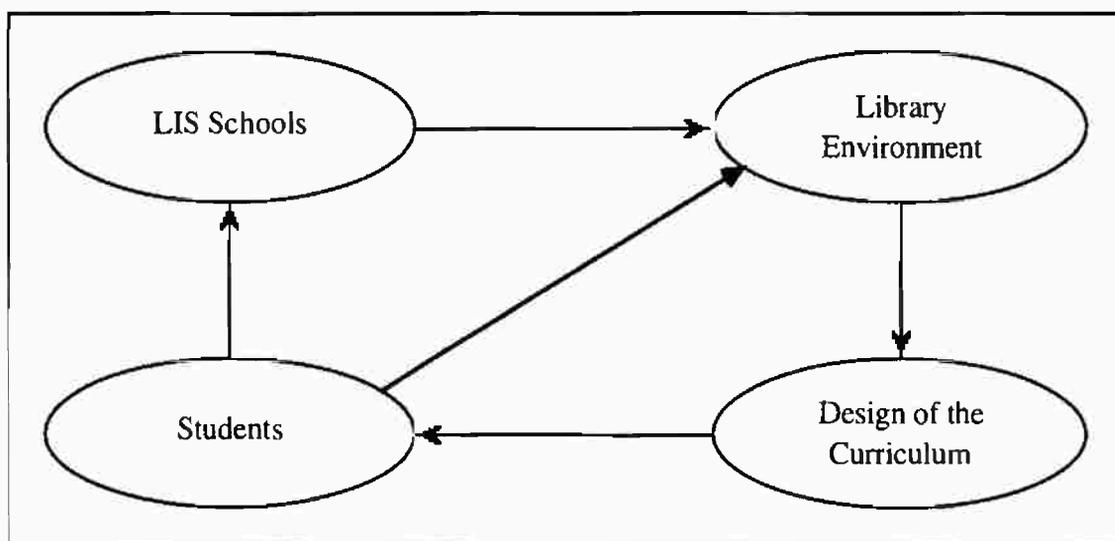


Figure 4 : Revising Librarians' Education.

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