Information Literacy for the Knowledge-Based Society Thailand

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ABSTRACT

This paper addresses the concept of Information Literacy in the context of the evolving Thai society according to the government's development plan "Knowledge-Based Society Thailand 2001-2010" (KBS). We work out the Information Literacy concept in a twofold way: the first is what we call the "passive information literate", who is able to gather, use, and evaluate information according to a given problem; the other is the "active information literate", who transforms information into something new and makes it accessible to others by disseminating information and sharing knowledge. The latter is seen as a prerequisite for the KBS program. We derive some consequences of lifelong and independent learning on the teaching processes and present issues for further study.

INTRODUCTION

Information Literacy is a term which many definitions are used for (Bawden 2001). The most general one would be: "To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information" (American Library Association 1989). In this paper we adopt a more practical approach in order to clarify the basic concepts along with developments in the society of Thailand. This practical approach comprises six steps, in which students apply skills and practices to cope with information related problem solving. These steps are relevant for every such problem, though the relative importance of the steps may differ.

A major motivation to study Information Literacy in Thailand is the establishment of an ambitious program to lead the country's society into the 21st century: the Knowledge-Based Society. To make this program a success there are numerous prerequisites which must be met in order to fulfill all or parts of the objectives. One such basic prerequisite is Information Literacy at a high level; more specific we should say "Internet Information Literacy"[1].

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[1] For a lesson plan related to Internet Information Literacy see Loretta Klamik: Internet Information Literacy Lesson Plan (December 2002). URL:
http://www.bhm.k12.al.us/departments/instructional_technology/files/gr%209-12/obj%2017%20internet%20information%20literacy.pdf

As for the practical side of Information Literacy we can define the following steps that a student has to master[2]: (1) asking appropriate questions and recognizing the need for information solving problems, (2) identifying potential sources of information, (3) establishing and applying appropriate strategies for the search of information, (4) accessing information sources and extracting useful information, (5) using, aggregating, and evaluating information for incorporating them into the existing body of knowledge, (6) presenting and disseminating information and knowledge in a way that addresses the different needs of the target groups.

The main objectives of Information Literacy are
- stimulating independent learning skills, which is a basic prerequisite, for example in distance learning courses,
- leading people to come to appropriate and suitable decisions through a professional information searching and evaluation process,
- initiating lifelong learning abilities and habits, which makes students and working people independent of external stimuli to adapt to new environments and situations in their working fields.
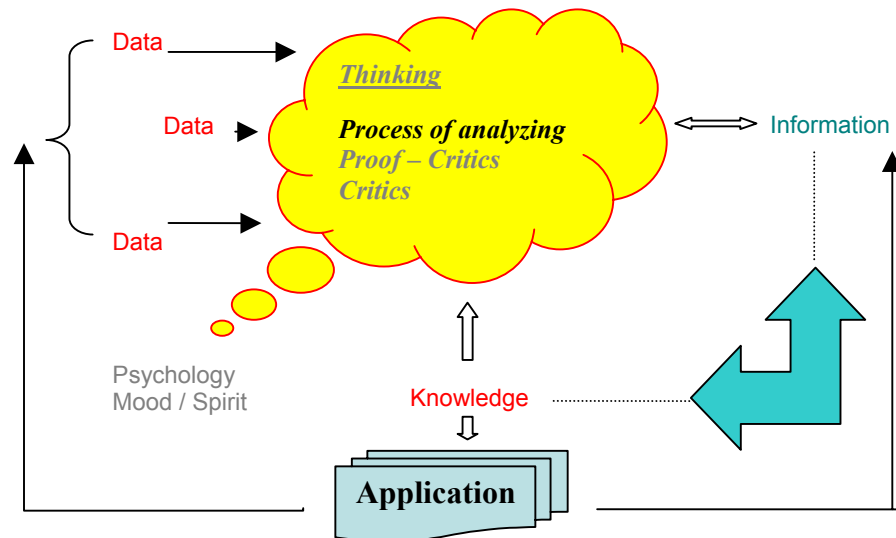

Figure 1: The information process and knowledge acquisition

As the six steps are some kind of a roadmap for studying subject areas they should be taught in the first year in every Faculty. Usually there are already specialists for this topic in every educational institution: the librarians. Librarians could present introductory materials to first year students, helping them to overcome

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[2] These six steps are somewhat related to the Big6 model of Information Literacy, see URL: http://www.big6.com/ for further details on this Information Literacy model. Here we emphasize the active dissemination step.

searching problems in both the Libraries and the Internet. They should also be involved in subject specific courses, such as "Information Literacy for Physicists", where the main problems of subject specific information sources are evolved for each subject area.

Information workers in the broadest sense must be capable of lifelong learning. Not only will there be a changing knowledge basis in their working fields but also they will have to deal with changing environments, such as computer equipment, software concepts, programming languages, user interfaces and so on.

Knowledge-Based Society Thailand

As Thailand will have reached its goal to get 100% in basic literacy skills in the population[3] (i.e. reading and writing basic Thai) there are more issues to meet in the future, if we take into account the competition between countries in transition and the more developed industries. Therefore, it is a main goal of the Government of Thailand to establish a Knowledge-Based Society until year 2010 which can deal with the problems of the post-industrial era and globalization (Thai Government 2001). Such a society needs knowledge workers and active information literate people. Furthermore it must be based on a culture of lifelong and independent learning.

The Knowledge-Based Society program focuses on e-Government, e-Society, e-Commerce, e-Industry and e-Education, where the "e-" stands for electronic. It aims at enhancing the competitiveness of Thai entrepreneurs and the Thai industrial sector. This should make the country more independent form foreign technology both in hardware and in software.

As the "e-" stands for and leads to the computerization of every field where information is needed, exchanged, transformed and disseminated there is an urgent need for skilled and well-educated information workers. They have to establish software, e.g. information systems, databases, Internet applications, front-ends, drivers, which are needed in Thai language. This must lead to an enhanced IT industry in Thailand.

Dealing with globalization one has to keep in mind that there must be an international sector too, which is able to implement and maintain international business-to-business (B2B) applications of the Internet and in other sectors such as extranets.

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[3] Compare URL: http://www.accu.or.jp/litdbase/policy/tha/ for the definitions of a literate person. The number for 2000 was 95,5% with 2.1 Million illiterate persons.

Information Literacy and Information Management

Information Management has different working levels. On the operational level
Information Management comprises
- collecting data and information for a given problem or environment
- providing access to data and information you already have
- making data and information you access usable
- providing an ("informational") understanding of data and information you use
- publishing or disseminating information

     If we compare these "everyday jobs" of Information Managers/Workers
with the six steps we recognize a broad similarity (see Table 1).

Table 1: Information Management and Information Literacy

Information Management	Information Literacy
Is per se aware of information needs	Leads to awareness of information needs
Offers problem analysis methods	Problem analysis is a necessary part
Presents information searching strategies	Uses searching strategies
Defines good practices for gathering and organizing information	Needs the gathering/organization of information
Shows how to present information to target groups	Leads to information presentation

     Therefore it is easy to understand that most of the "higher" information
literacy skills are taught at University level or in tertiary education.

Information Literacy at University Level

     Students at University level must be able to study independently. The most
important skill in the first years is the "passive information literacy", i.e. searching
for and using information for problem solving. Later in their studies and of course at
the work places there is the need for "active information skills", transforming
information and knowledge into expertise and disseminating information to target
groups. That can be recognized as the development from consumers of information
to contributors.

Active information workers capable of contributing in Thai language are one of the most important factors with regard to the Knowledge-Based Society Thailand. The other important factor is literacy in foreign languages, especially in English language. Both factors contribute to a rising amount of studying and teaching materials suitable for local people, which have to be translated or which have to be created.

Both ways of generating teaching materials need knowledge beyond Information Literacy and Information Management, so there must be some cooperation between information professionals and Faculty teachers. The outcome will be a broader body of knowledge at stack, the increased stimulation of people (students and teachers) and organizations. In the end it will lead to more information literate people.

These factors and the transition from passive to active Information Literacy demands some adaptation of teaching methods and practices. Teachers and instructors have to prepare students for critical thinking and to activate creative processes. Presentations, writing of papers, creating websites and working in teams are typical practices students should be able to perform as early as possible during their study. This is done through activity-based experiences, such as talking, writing, acting, role-playing, interviewing, creating, and so on.

Skill building strategies should be applied whenever possible. This refers to passive and to active Information Literacy skills as well. As there are well-accepted approaches to adult learning, such as the constructivism (Murphy 1997), we can apply the following principles:

- Encouragement of participation
- Organization of team work and discussions
- Introduction of new concepts in a user oriented context
- Share experiences among the teachers

An example of a collaborative dissemination of knowledge can be seen under th.wikipedia.org, a free online encyclopedia in Thai language, which is continuously extended and updated[4].

Table 2: Part of a curriculum on Information Literacy
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2.12 Note taking
2.12.1 Text oriented
2.12.2 Graphics oriented
2.12.3 Table approach
2.12.4 Follow-up/Fair copy
2.13 Asking questions
2.13.1 When to ask
2.13.2 How to ask
2.13.3 How to react
2.13.3.1 Own summary
2.13.3.2 Asking for further explanation
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[4] The Wikipedia is a multinational project to deliver free online encyclopedias in every language of the world. The project started in 2001 and is updated by contributors all over the world. In addition to the Thai version there are Wikipedias in English (currently more than 310,000 articles), in German (132,000), Japanese, French, Chinese and more than 60 other

Future Research

For future research we would like to derive a proportion of the active Internet Information Literacy people (or users) for given language groups on selected web sites. Therefore it is necessary to find a method of measuring active Internet information literate users for the major languages English, French, German and Spanish and compare them with Thai.

Another subject of study will be an assessment of Thai students' attitude towards Internet usage. Doing this we want to find out which factors lead to an active participation in the information community.

Final Remark

This paper summarizes the main contents of a workshop on "Information Literacy for Library Professionals" conducted by the authors at Srinakharinwirot University, Bangkok, in summer 2004.

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languages. These different versions are linked to each other on the basis of articles. So you can see for every article in which other languages it is available.