INFORMATION INDUSTRY AND SOME PROBLEMS ON READING IN MALAYSIA

by

DR. DING CHOO MING*

ABSTRAK
Artikel ini membicarakan bagaimana industri dan teknologi maklumat mempengaruhi pembacaan. Ia juga membincangkan tentang tingkahlaku pencari maklumat, sumber-sumber maklumat, keperluan pembacaan kritis dan pengurusan maklumat.

INTRODUCTION

Just as Malaysia's impressive economic growth makes front page news, the information industry has also attracted tremendous interest from all sectors. Various reasons may be cited for the interest attached to this industry. Among them is the fact that it is the fastest growing economic sector in the world. The Malaysian government and its private sector have been investing large sums of money in it so as not to lose their share in the world market. The other often quoted reason is that we must adopt the latest technology to ensure that we remain competitive in all fields. After all, information handling has been essential to man's survival and competitiveness since the dawn of civilization. The other key factors in the growth of information activities have been the rapid growth in the publication of documents, the increase in the capability of more educated communities in utilizing knowledge as well as the dramatic developments in telecommunications, computers, optical fibres and satellites. As more information is generated by industries, universities, research organizations, government agencies and other scientific societies, the demand for and expectation of information will rise in proportion to the importance of information.

With the growing public demand for improved access to information, consequences of informatization process, is the increased acceptance of the concept of information society (Williams, 1985). In our information-based society, much of our work and time are involved in moving information. In banking, for example, the majority of the activities revolve around moving not money, but information. We can withdraw and deposit money after banking hours and during long holidays, through ATM services. Behind these transactions is an enormous amount of information handled by the computer system. Similarly, our position in the society, organization or office not only tend to

* Lecturer, Faculty of Information Science & Technology, Universiti Kebangsaan Malaysia
influence our information need but also the characteristics of information produced: quantity, format, turn-around time and the quality of information. The concern of this paper is not just how information industry and technology brings along democratization of information, but also how it influences reading, both positively and negatively. These issues are both the causes and effects of information explosion, which Bradley (1988) explains as mainly caused by researchers’ and academics under constant pressure by granting agencies and university administration to publish or to perish. Many of them do so prematurely by breaking up the results of a project into several papers and playing the number game by publishing the same work more than once with slight variations. As a result, there is so much information that they literally sink under their own weight. This explosion will definitely increase the importance of the selection functions of readers. It involves information management and critical reading. But, without organization, we cannot expect to get any relevant information from these miscellaneous piles of books, papers, documents and records. No matter what it is, we have to look at the information industry, information management and reading as communication processes and social institutions together, not in isolation. No information transfer can take place or can be fully understood without connecting it to their sociocultural context because the information that we seek should be closely interwoven with our various daily activities, regardless of whether they are of social, cultural, religious, commercial or academic nature.

INFORMATION SEEKING BEHAVIOUR AND READING

Information encompasses all findings from human knowledge and research. It represents, as Jones (1991) explains, human intelligent products which form the basis for future research and development. Information is ideas which the human mind thinks with and with ideas, comes information which may help in decision-making. Living in a very competitive world, we need information to generate products and services, to start a new project or to complete on-going projects. To excel and to survive the competition, we have to be well informed. Information, in short, is the life-blood of our survival and existence. Lack of information, including ignorance of facts, laws, rules and regulations can often lead us to disadvantages and deep troubles. The irony is the more the information, the more ill-informed we are, especially when an issue is controversial. This is partly because not everyone is critical, or is prepared to spend significant resources in reading and analysing the relevant and important information especially when we do not have good supporting information management as what is available to top managers in big organisations (Davies et al., 1991). But to know our stand, we should not only demand information but also be selective and critical as there is more accountability when there is more information and understanding (Harnadek, 1978). This latter comes mainly through reading, especially critical reading which is not reading for pleasure, but to gain information, to inform action, or to reprocess information into new documents, thereby completing the information transfer cycle in our own way.

As we cannot fully understand anything if the essential information is kept secret or missing, a large quantity of information is therefore essential to keep uncertainty relating to the outcome of these decisions under control. But, the quantity of information does not make us more informed if we do not read critically to understand it. Becoming more informed means knowing what has been done before and what mistakes to avoid. only then are we able to make efficient use of our limited resources: time, money and effort. Morgan (1986) argues that armed with the relevant, accurate, significant and up-to-date information in an appropriate format and at a reasonable cost, we are able to make the imaginative leap from observation to execution. otherwise, we will be in a very awkward situation or become very incapable, or may be even replaced like so many older leaders being replaced by men junior in age. Such replacement is mainly because the former are not innovative, lack
flexibility, thus resist changes in the fast changing world.

All of us are consumers of information in one way or another; but, not all of us collect the required information and review it for options. The word ‘review’ includes reading, analysing and synthesing. Researchers and managers represent the group of information consumers who require information consultancy and management in conducting research and making decisions in universities and other business institutions. On the other hand, the illiterates, and rural folk represent the other group of people who make decisions based on instinct, intuition, experience, emotions or even blind prejudice. The above examples illustrate very clearly the point that information and reading vary in importance with people, time and environment. Their importance is relative in terms of the magnitude of the benefits to be derived by the respective people. Their unique requirements for information and reading are again dependent on their respective management style which affects the quantity and quality of the information, turn-around time, speed of retrieval, currency and accuracy.

Certainly, the amount, type and direction of incoming information changes as one goes from being a generalist to a specialist, from being a school teacher to a university professor, from being an administrator to a researcher and vice versa. Related to the foregoing discussion, we need to stress that information alone is never a sufficient pre-condition for any desired action. Its necessity and usefulness in decision-making is related to our social and cultural background which also plays a dominant role in shaping our choice for information. In other words, there are many different ways people articulate their needs for and use of information. This means the same information may be received differently by two different people. The illiterates may view it as public property on one hand, but not so for the economist or businessman on the other hand. The latter may view it as an economic asset to be dealt with in economic terms, while the former may treat it as a societal good to be dealt with in social terms (Deruchie, 1992). Differences in attitude among different people towards information can be due to different intrinsic interests, different levels of expertise and knowledge, other than different purposes and needs, different levels of psychological determinants of information needs and the unequal resources necessary to handle the information. This unequal access to the flow of information has created an information elite among the more affluent groups, which includes the academics in universities, top managers in big organisations and researchers in research institutions. They are also the ones with a higher level of reading capacity (Davis et al., 1991) and have large information resources, including an extensive network of personal contact. It is also they who are able to attend big conventions, workshops and have the physical access to various databases, books, journals, reports and so on.

Interesting and informative programmes introduced in radio, television, books and journals also tend to increase their knowledge and competitiveness hence giving the information elites an added advantage over the others. The same programmes may stimulate the general audience to the threshold and forefront of information theoretically; but they would probably be left stagnant there because of their lack of ability to gain access to the documents. This may also be due to the weakness of their support system, including their ability to read. Without the necessary support, they have no say on what is given and decided for them. Neither are they in the position to reject what is not in their favour. As such it is not surprising that much of the information provided is not understood, thus giving them no competitive advantage. In between the serious readers and the non-readers are those readers who depend on local libraries and bookshops for documents. They often become exasperated when trying to locate relevant reading materials that are not available on site. With time, much valuable information would just pass by them without making any psychological impact. In the universities, students and researchers, novices and specialists conceptualize their problems and needs
differently. Even their information seeking behaviors differ. We should ask ourselves where do we fit into the picture since we are also the beneficiaries of information. Without knowing ourselves and without taking the initiative to fully utilize the information accessible to become more integrated and informed individuals, it is certain that the flow of information will be restricted. It is sad to note that many Malaysians have stopped reading once they have access to information electronically.

Meanwhile, let us have a closer look at the information seeking behaviour amongst the academics and students in universities and managers in business organizations. The former tend to rely heavily on various computerised information packages and brought-in information available in the university library apart from those they detain from their extensive network of correspondences and colleagues. Being experts in their fields, they continue to develop their expertise in the well-defined disciplines though some may change their profile of interest as dictated by the curriculum change as and when the university or the granting agencies want them to do so. They are basically very critical with strong view points on things they know. On the other hand, most students, like the general public, are ever willing to accept whatever as is given by their lecturers. To induce them to read more, materials will have to be closely linked to the textbooks as they are textbook bound and very examination-oriented. Such a phenomenon is understandable as they have so much to read and memorize. They hardly have the time or attempt to think, resulting in most students being unable to think critically. They use the library as an extension of their lectures, to clarify and expand on what their lecturers have told them. Their attitude in accepting whole heartedly what the latter said as relevant, useful and valuable, is similar to what has developed amongst the poor and illiterate simple country folks with a strong oral tradition living in self-contained communities. The information amongst the latter is always a one-way flow, whether through electronic media or by word of mouth. Sweeney (1987) argues that oral communication is the predominant channel for information transfer in such a community. Although oral communication is also common among top managers, the nature of information flow here is quite different from that in an oral community in many aspects. Being always busy, top managers rely heavily on the network of ‘trusted sources of information’ amongst their subordinate staff who have selected, interpreted and classified the information. This means that the fast and direct information required by top manager has been subjected to the established procedures in information gathering and processing. The above discussion points to one thing in this information age: people with the capability to exploit information effectively will be the winners. This effectiveness involves not only reading and understanding the information, but also the speed involved in the whole process. This is part and parcel of information management. With access to on-line facilities, the problem is not only whether we know of what is available, regardless of whether it is published or not, but also how to access them.

**SOURCES OF INFORMATION AND READING**

The invention of printing by Gutenberg 500 years ago (Eisenstein, 1979) has revolutionized information transfer. Following the increased availability of printed materials literacy increases, hence the widespread development of the reading habit. Though information sources are no longer confined to printed media, due to the rather elaborate system of information technology, there are basically three main channels through which information is disseminated: oral communication, writing and electronic image telecommunications. All these channels of information dissemination have their respective advantages and disadvantages. Comparatively, the general public tends to rely more on newspapers, magazines, television and radio than books for information and entertainment. Through dramatic technological innovation, television via the international network has been the first source to bring news, information,
entertainment and other educational programmes to millions of people. The popularity of television over books is that the former emphasises audiovisual effects, while the latter visual alone.

As in many other countries, the electronic information industry is the fastest growing industry in Malaysia. This is mainly attributed to the general public that is actively exploring the electronic media for information and entertainment on the one hand, and the media companies working relentlessly to satisfy their needs on the other hand. Consequently, the present generation of Malaysians are better informed and more knowledgeable than their predecessors. They are also better equipped to handle information electronically than the printed form. Though the book publishing industry is fighting a loosing battle with the electronic industry in Malaysia, books in their natural state are interesting. For centuries, books have been published not only because of their literary, historical, artistic and other merits, but also that they tend to strike more effectively the intellectual and emotional responses among elite readers (Eisenstein, 1979). Doing the books justice is difficult unless we turn the pages to read them, with the beautiful illustrations compared and evaluated. They are certainly a great source of escape from the anxieties in this fast moving age. It is, however, always good to be reminded that the history and popularity of books does not end with their being written and published, but rather being circulated and read. This is rather a story of readership (Gray et al., 1984). It is here that the problem of readership starts. But as new technology expands our opportunities to maximise all possible communication links to information, our concern should be directed to ensuring the ‘freedom’ to information, regardless of whether it is through reading or other audio-visual devices. Nevertheless, reading offers us added avenue to information. This is because the elite group with financial and other resources not only benefit the most from the information flow, but are also able to control and regulate information transfer. This arises mainly because they can read, more so critically. It is also, that they, in the best possible situation, seek information from the best, most reliable and most friendly sources whether in printed form or through electronic media, like satellite, cable, correspondence, fax and electronic-mail many of which may be beyond the reach of the just non-elite group. This unequal capability resulting in unequal access to information has given rise to some individuals enjoying information advantage over the others.

By all accounts, without the supporting system, including reading, the transfer of information will be confined to patchwork information dissemination available in television. This is understandable as radio and television have to cover a wide spectrum of news and reports to meet the national information needs. It is impossible for television programme producers to adequately satisfy the continuing and endless variety of requests. Also, in most countries, television programmes are controlled by the central government. What is broadcasted is mainly what the President, King, Prime Minister and other ministers say in public, about national issues and government policies besides some entertaining programmes. The former determine what the senior civil servants do; while the latter is always taken for granted. In spite of that, we notice that television and other popular information media, including radio and newspapers with entertainment, educational and documentary programmes are exercising tremendous influence, differently though, on the various groups of audience. To be fair we note too that the government information industry in Malaysia does serve as information ombudsman to a certain degree in informing, educating and entertaining and forging national unity in our multicultural and multi-religious society. Playing these important societal functions from various political, economic and social view points strongly affects the free flow of information in Malaysia, thus making it different from other western countries.

The important point here is the remarkable success of electronic publishing and its distribution in disseminating information to reach audiences where the printed services had little penetration.
before. This success is partly due to the strong oral tradition prevailing in our society, besides the point that the general public lacks inclination and psychological preparation to read. The combination of these factors explain the persistent poor sale of books, both foreign and local, despite various vigorous campaigns urging Malaysians to read. The glamorous book launching ceremonies highlighted in the radio, television and newspapers from time to time is designed to serve as a constant reminder to Malaysians to do so, but has achieved very little. Judging from what we see, it appears that the new information technology is drawing more people away from books. To those who do not have the inclination to read, turning the pages of books for information is not as easy as using the advanced electronic devices, such as the 'intelligent' personal computers, videotdisks, CD-ROM and others equipped with facilities which enable one to select the needed information at finger tips. The main reason for such a dominant dependence on electronic devices for information is not only because of the audio-visual effects, but also the speed with which information is accessed. In this context, we have to look at the reality around us. We notice that though accessibility to remotely held information is already a reality in well-endowed libraries, such advantages are not available to the general public who are not registered members and those in the rural areas. Avid readers in rural areas are often very disappointed as they are unable to obtain books they require through conventional library services or bookshops. To make matters worse, most of the books in stock are out-of-date, thus not only lacking the pull factor in attracting new readers but also shunning the keen readers interest in reading. For these reasons, television, newspapers and video programmes are in a relatively better position as the alternative source of information. Seizing this opportunity, media publishers and their agencies are actively exploring, developing and upgrading their wares and services to fulfill the existing needs of the general public.

How do we explain the phenomenon of lack of reading among people who are in the best possible position to read? Generally most top managers in multi-national corporations do not read as much as they would like to. As they are busy, they would unlikely add additional reading to their tight time schedule and heavy workload. Moore (1988) in a study finds that they get up-to-date information to keep them well-informed and competitive by employing research assistants and secretaries to specifically gather and process the information. He explains further that long reports, for example, are shortened to brief executive summaries, highlighting the major ideas and main conclusions. Information thus provided is concise and easy to assimilate. Similarly, busy specialists and scholars too do not have much time to read, even though their offices and rooms are full of books, reports and journals. These materials have been accumulated through years of extensive contacts and from various information channels, including the exchange of reprints, correspondences, personal visits and presentations at meetings. Due to time constraints, they regularly read for information pertaining to their fields and scan occasionally books, journals and electronic databases for related topics. An equally important and popular source of information to them is newsletters. They support communication in specialist areas with great enthusiasm. They are also remarkable in reporting new findings and discoveries months or even years before the same information appears formally in books or journals. These characteristics qualify them to be the alternative source of information to keep scholars and specialists in touch with the latest developments in their well-defined and narrow disciplines. On the other hand, information always appears years later in books because of the various editorial processes they are subjected to even if the camera-ready manuscripts are provided.

Books, newspapers, journals, radio and television, to mention a few, are indeed the principal channels through which information is disseminated, although the authors, composers, editors and adaptors are the original sources of information in various fields and disciplines. At this juncture, it is interesting to note that researchers do not regard themselves as the information end-user, but
someone in the process of generating new contributions or even breakthroughs, thus also producers of new information in one way or another. Their attitudes are different from TV programme producers. Many programmes on TV are simply compilation or reorganization of existing information whereas the information from researchers is the outcome of their intensive research. Based on this vast array of information sources, it is obvious that information is no longer the province of book publishing companies, on the other hand, many non-printed media and technology have contributed far more in increasing our capabilities and opportunities to maximise all the possible skills to access information, far and near.

We are very much better off than those people in the past when human beings relied heavily on oral communication. The weakness of such tradition is the twisting and leakage of information in the process of being transferred from one end to the other. This problem, Sweeney (1987) explains, arises partly because of the filtering and interpretation functions involved. In such an environment, the information given by the trusted sources, including village headmen, authoritative officers, the respected story tellers and authors suffers varying degrees of distortion. This is inevitable as the information carriers tend to skip or add at various levels of communication. Unlike the information carriers in oral tradition, the nature of work involving professionally trained information research assistants in information management is different. The latter do not alter the information, yet are able to offer considerable added value to it besides making it more convenient to use. What they do is to condense the information as only a tiny portion of the information disseminated, either in print or electronically, is relevant, on the other hand, the skipping and adding processes dependent on the filtering and interpreting functions, lead to serious leakage and twisting and often communication problems in an oral community. Based on the above arguments, it is obvious that the traditional information network of oral communication may not fit into modern management. Contrary to that, modern information management is very complicated and formal in nature in the sense that all the established procedures in information management are adhered to in searching for the information. Another important point is that all those involved, especially the top managers, are critical. They are fully conscious of themselves, their ability and their resources. They too want to have control over what is presented and do not swallow the views of others en bloc. This is vital in ensuring that they (top managers) are not blown about like a ship without a rudder in the open seas of information.

INFORMATION MANAGEMENT

The importance of information cannot be unduly over emphasised because information is not power until it is processed to be knowledge. Nevertheless, the truth lies in that the more information we have, the more raw materials are at our disposal. Unfortunately, despite the advances in computer and telecommunication technology in revolutionizing the way in which information is gathered, stored, processed and disseminated, there is no corresponding increase in our capacity to handle it. In other words, the public can access a massive amount of information held in distant databases, but human resources required to handle it has not improved correspondingly. An increasing number of courses on information science and information management in universities and colleges all over the world reflect our serious concern for our potential use of information on a personal basis or initiative. Our methods in understanding and digesting information has become more intelligent and cost-effective, but unfortunately we lack the necessary skill. This problem is nothing new. In fact, before the advent of computers and telecommunication technology in the 1950s, we were unable to read much more than we could afford, particularly in terms of time; yet we had the ability to deliver thousands of copies of books, journals, documents and other reading materials to libraries, bookshops and individuals world-wide.
The importance of reading in accessing information is well documented, among others, by Davies and others (1991), Gray and Guthrie (1984), Harnadek (1978) and Morgan (1988). Equally well-known are the facts that firstly, information does not come through reading only and secondly, reading habits come from within individuals, dictated by our needs, interests and expectations. Within that social-economic framework, the present low level of reading among Malaysians is likely to change for the better as more become highly educated, participate in research or hold top management posts. Historically, reading flourishes mainly in a highly developed country, supported by metropolitan milieu with a big middle and upper class group. Hence, it is not surprising that reading is not popular in many developing countries until more widespread tertiary education creates the climate for the appreciation of reading. This indirectly means also that reading is not only a manifestation of culture but also a symbol of social status. More importantly, we certainly cannot take information for granted or treat it the way we treat soap operas, singing and other entertainment programmes on television but to manage it effectively.

Activities involved in the mechanism of information management comprise reselecting, reprocessing, repackaging, recombining and reanalysing, with reading especially critical reading as Barnwell and others (1990) discover to be in the final and yet the most important stage. Having said that, the decision as to how wide-ranging the gathering process must be and into what areas of apparently irrelevant information the search must go, is largely intuitive and imaginative. This highlights the point that information gathering is a creative activity, though it may seem to be reactive. Such an activity is comparable in importance to decision-making and many other necessary action in the hands of users. Selection and rejection are necessary too because of time constraints and other limited resources. Besides this, selection and rejection yield a better match of materials with the request. This is a move-that enables us to get the most relevant materials and at the same time to avoid getting too much. This shows that it is not the possession of information that matters, but the ability to process it to our advantage. Our ability to manage information is very dependent on our capabilities, needs and social background. Following the above statement, it is evident that only some people can manipulate certain information very profitably. The question is, do these people have the extra expertise, intelligence and perceptions which others lack? On the merit of being able to manipulate discreet information skilfully, we sometimes tend to assume that they, particularly the successful managers and leading scholars, have the sixth sense which we lack. Putting them in focus, we realize that armed with hard-earned experience and stimulated by the enlightenment derived from new information, they are able to throw light on their problems and anticipate solutions. The success and failure separating the advantaged individuals or groups, usually the affluent and elite from the disadvantaged ones, usually the general public, rural folks and the illiterates lies in their inequality in inability, opportunity and supporting system not only to affect access to information, but also their ability to process it as mentioned earlier.

In information management we filter certain information and reject the others selectively and critically. This mental exercise requires the power of imagination, creativity, intuition and judgement to a certain extent even though it is possible to extract the required information with the help of computers and other information-related technology. However, there are vital differences between computers and the human mind. Computers have been mythologised to possess superhuman abilities in storing, processing, restoring, reprocessing, repackaging, retrieving and displaying information. Incidentally, it is the human mind only that can think, explain and see the relationship between things, categorise things into meaningful patterns and draw analogies to form conclusions and pass value judgements. Again, although it is possible to transmit mathematical formulas, diagrams, tables, illustrations and a whole range of sound and images
via multi-media technology now, to understand them fully, which is the critical link in establishing the meaning and attaching values to the information, only the human brain and mind can do it. As not everybody has developed that capability, it is obvious that relatively few people can fully benefit from the electronic images and sound from a television or computer. Among the reasons for such a failure, is our short memory retention power and our lack of psychological readiness and preparation to deal with information on television screens, even though we are captivated by the manner in which new information is presented. The former problem can be overcome, provided we read up for further information in the alternative printed form, while the latter can be tackled if we do not take television information for granted. These problems highlight the problems of non-reading. In brief, as Morgan (1986) argues, the central human activity in relation to information management is reading, especially critical reading, preceded by the selection of the most relevant and useful information from a host of other information. The process of selection to maximise certain benefits while minimising costs and wastes is exactly what the information managers do in assisting top managers in big organizations.

After receiving good leads from colleagues, television or radio, keen readers who wish to read further may follow up with the references cited in books, examine indexes to journals, read reviews of articles, scan proceedings of pertinent conferences or even check the relevant databases. It is at this stage that most of the frustrations gather. They are generated firstly, by the long time lapse in obtaining the required documents, secondly, the bureaucracy involved, and thirdly the foreign language of the documents. Libraries or bookshops are able to render help in reducing the first two causes of frustrations pertaining to the time, while the third related to the language handicap of the users can only be overcome by the individuals concerned. Most libraries have developed an efficient document delivery network with other partners to facilitate quick and convenient access to documents in other libraries if users are unable to get what they need from their library. Nevertheless, there are technical problems which are beyond the control of the libraries. It is certainly very difficult to help users if the data-bases in the various libraries are not interconnected or if the data are in mutually incompatible formats. This means that the data-bases only run on different configurations under different operating systems. This is partly the outcome of more attention and investment being channelled to develop data-bases and not the application software according to certain international standards. This problem of incompatibility of data-bases which is the cause of much frustration among users, is nothing new. Retrospectively, the traditional classification and indexing systems whereby headings or topics are arranged by scientific disciplines and adopted in most major libraries, are also unspecific and unfriendly. Such a traditional indexing system emphasising on the formal structure in the terminology not only restricts readers’ ability to maximise all the possible combination links but also the flow of information. As such, the chance of matching information under the traditional search strategy, depends largely on luck, especially for documents in multi-disciplinary areas where we have to search through a vast amount of data.

The above-mentioned scheme in organizing library materials is unsatisfactory to most users who are not librarians. To fulfill their needs, all CD-ROMs and on-line data-bases in the 1990s employ keywords in their indexing, thus enabling searching through keywords and their combination in various complex ways. This is meaningful to the individuals in structuring, constructing and formating their own such strategies. Such flexibility is different from the traditional indexing where words, terminologies and concepts used are pre-determined and very rigid. In short, CDROM searches give readers a certain level of control. Now, a literature search through the latest information technology, may yield perhaps 200 references within a few minutes; but to obtain the full text of the documents may take anything from a day to a few weeks. To mitigate users’ frustration, University Microfilms International in USA and
the New Straits Times On-line Reference Service in Malaysia have developed the full text technology. This has overcome the thorniest problem in information work: instant delivery of full text documents. Unfortunately, the documents available in these databases are confined to certain disciplines only. On the same note, we notice that, although some libraries have computerised their collections, the documents are not readily accessible as they are stored in different locations, subject to different rules and regulations. Despite all these problems (both technical and human), our awareness of information has increased partly due to the relentless sales drive of information providers. This awareness has inevitably taken us a few steps forward towards better information management.

**BE CRITICAL ABOUT OURSELVES AND THE OTHERS**

From the foregoing discussion, it is the elite groups, particularly the researchers, who are skilled in information handling. The skill referred to can be learned and developed through education which is acknowledged as a system for developing the best within us or a plan we discover ourselves. The irony is that many of us have not discovered ourselves and our potential; therefore, we do not know how to tap the potential within us. Such knowledge of self, particularly the powers resident within, will go a long way in establishing our self-confidence, necessary for action and decision. It is through the process of knowing ourselves that we become leaders, not followers; original thinkers and not imitators; decision-makers and not advice-seekers. But, most people remain followers because they have not discovered the truth of their self and their potential worth. They live in the shadows of others and depend on them. By leaning on others, we tie ourselves down with self-imposed limitations that eventually would let others think and decide for us. Such an attitude constrains sharply with the noble aim of education: teaching one to be self-reliant and critical. Relying on assistance will never make one strong and competitive. On the other hand, self-reliance is the key that opens the door to strength and power. This is clearly seen in the examples of successful men and women. They gather information, seek the advice of others but at the same time are very independent and critical in weighing the evidences before making the final decision.

On the contrary, being chronic dependents of others for advancement, many promising young men and women deny themselves the chance to succeed. Is something wrong on our education system? Despite numerous constraints and weaknesses, our schools and universities have successfully helped many students in developing their potentials, mind and intelligence. Realizing that, the blame is not totally with our education system, but the individuals concerned. Endowed with wisdom, intelligence, mind and will power, and given equal opportunities, only a few can climb up the ladder of success to great heights and achieve distinctions. This shows that it is our individual duty to develop ourselves, leadership and self control. Having said that, the truth is scientists and psychologists agree generally that the average person uses only 3%-10% of the mind, wisdom and intelligence potential. This is not surprising as most people have not discovered themselves.

In education, both formal and informal, reading plays an important role. It is not only the major avenue to the acquisition of information and knowledge in the plethora of reports, documents, files and books as one grows, but also in strengthening, refining and ennobling one’s character. The cumulative result at the end is self discovery. Knowing oneself means daring to be oneself, to be different and to be critical. It is very essential for us to be critical in whatever we read because there is no unimpeded flow of information.

Critical reading is much more than mere reading. It is not a process that ends in itself, but has been related to information, learning and comprehension in this article. In other words, critical reading is a vital step leading to many other creative activities (Barnwell et al., 1990; Harnadek, 1978) and it is
surely the most effective way in exploiting and managing information in the context of this discussion. Their inter-relationship involves the application of our minds in combining observation, questioning and reflection to know more of something as well as to understand it better. All these are basically part and parcel of the education process that strives to educate us to make the most effective use of our ability to be self-reliant. This faculty can be improved by reading continuously. But unfortunately, our education system has done very little in upgrading the art of reading beyond the level of primary grade. It is equally sad to note that people in Malaysia have become hostile or indifferent to reading after leaving school or university. As a result, Malaysians were reported to read only half a page of a book per year in the 1970s despite the fact that the level of illiteracy in the country has dropped tremendously since independence in 1957. Dislike towards reading is the main cause for the low level of reading, besides lacking the culture of reading, as our society is still very much oral oriented.

Against such a social background, majority of our students read to memorise and repeat facts from textbooks and teachers for the sake of passing examinations at various levels in their education. Educationists generally agree that reading without understanding and thinking is not learning. It is also different from the system that was popularly practised in drilling students in the past which had produced prominent figures like William Shakespeare, Petrarch, Chaucer, Erasmus and Ben Jonson. Only with deep understanding can there be more meaningful learning resulting in improved intellectual development and power. Similarly, when we think, especially in critical thinking involving critical reading, we reach into our conscious and sub-conscious levels into the dynamic depths of ourselves and call upon our powers of reasoning. In that way, we will tend not to accept everything that we hear or read without some regard for its merits, truth or value. Similarly, before reading a book or an article, a whole range of questions need to be answered. Among the common questions critical readers would consider before they accept or reject any writings are: Who is the author? What is his stand? Is he prejudiced? Does he have all the facts? What are his sources of information? What is the purpose behind his writing? The ability to answer these questions can result in the success or failure of our pursuits. It can also enable us to see opportunity and potential success when others see only difficulties and failures. In other words, there are obvious differences between critical and uncritical readings, as there are between deep and superficial understanding. Critical reading results in our active integration of new information with the concepts we already have. This is different from the attempts to memorize and reproduce information basically in the form it is presented. Harnadek (1978) and Morgan (1986), for example, maintain that to be critical, there is a need to maintain the relative open-mindedness in balancing our views, test our particular prejudices, ideas and preconceptions against those in the books, journals or other sources. In brief, to be critical means the quality use of our ability. Undergoing such a process, new ideas and information will be subjected to thoughtful analysis and synthesis, instead of just cramming them into our head without digesting and understanding them. These benefits can be reaped fruitfully when we have developed our independent character, beliefs and attitudes with a strong commitment to particular view points. According to the two authors mentioned earlier, understanding and synthesising are the two hardest things before ideas are put to test after a long process of information gathering and processing. To that, Moore (1988) added that basically this quality control function is equally vital in information management leading to effective decision-making.

Being critical is important too for our social wellbeing. One of the reasons is that there is no ideal world of unimpeded flow of information. Government departments and their agencies, for instance, have their own information policy regarding the access to information on policy issue, to ensure peace, harmony and economic development in multi-racial and religious Malaysia. Similarly, the industrial and commercial
companies also find it imperative to control the flow of information to safeguard their business interests. Foucault (1980) stresses that by commanding the information flow, institutions concerned would be able to maintain and strengthen their control and power. Thus, in fulfilling our responsibility in upbringing the children, we also have to separate the bad from the good stories and events described in books or presented on television and radio. On television and in books, living on forthcoming income, co-habitation outside marriage, excessive individual freedom or killing without remorse are repeated to appear normal or natural. The question is if we cannot accept them, what can we do. It is futile to stop them because the world now is closely knitted together through various means of communication and information superhighways (Winfield, 1984). To separate the good from the bad, a strong sense of moral values in our children needs to be developed. This can only be done in the family, schools and society working cooperatively. But, in our schools more emphasis is placed on examination than moral education. Similarly, the influence of the mass media on our children is much stronger than the parents in most family. The combination of these, together other social-cultural factors open the way to western culture imperialism in many developing countries as studied by Wang and Dissanayake (1982). Throughout the study, they maintain that without a critical attitude, we the audience witness only patterns of domination and dependency whereby we are told what and how to think. Besides that, acting and behaving without being critical of the bombardment of information in any media and form will frequently lead to confusion and more misunderstanding. This may result in the audience having a naive faith in the value of the information instead of benefitting from it. Historically and socially, only certain affluent elites are more critical than the others. They are critical of the treatment of news on television, be it domestic or international. To further improve understanding and knowledge, they find it necessary to read critically the background materials and analysis in books and articles which may appear weeks, months or years later. This is one of the reasons why readership among the affluent elite groups is likely to remain. The role of intellectuals in understanding certain events better is another.

The intellectual role in reading is likely to remain unchanged, though reproduction, repackaging and redistribution of information will change dramatically alongside the development in the electronic industry. No matter how advanced our information technology will become, nothing can replace critical reading in making effective use of information. Computers may help us to search for keywords, identify patterns and establish links between texts, but the process of generating meaning and understanding the text cannot be automated. Similarly, the CD-ROM system, online data-bases and internet can never replace the role of critical reading involved in research, or involved in deciphering meanings embedded in the texts, figures, pictures, diagrams and facts. This is basically the way scholars have been handling information for years and would most likely remain so. Given the continuing expansion of information, they have to be much more selective and critical than before. Scholars all over the world are grateful to the information technology that enables them to access more texts and collections electronically.

**INFORMATION TECHNOLOGY AND THE FUTURE**

Since the launching of the first communication satellite at the end of the 1950s, telecommunications have not only undergone radical improvements, but also have exerted decisive influences in the development of the information industry (Winfield, 1984). Prior to that, there was little international traffic in one way or another. Now, the whole world and almost all human activities are linked to and have become dependent on various communication technology and networks. On a micro level, we witness the widespread use of word-processors, text retrieval softwares, computer workstations, CD-ROM and other expert systems. These developments prompt us to anticipate better and ‘smarter’ things ranging from hyper-text to integrated digital services...
network. Following the trend, the introduction of information technology in schools in Malaysia through various education media services - the Audio-visual Service, the School Radio Service and Educational TV Service in the 1960s and the computer class in the 1980s - has instilled greater awareness on the importance of information technology among our children and youth. The availability of computer technology plus its affordability have also resulted in our society attaching great socioeconomic importance to computer and information, thus encouraging information-related industries to grow by leaps and bounds.

As there is great need by researchers, managers and specialists for effective manipulation of information, scientists have made full use of the advantages of computer with word processing software in documentation, generation and reproduction for sale (White, 1991). Though computer technology is indispensable in solving the perennial nightmare of shifting through a torrent of materials in various formats, it should not be seen in terms of technological revolutions per se, but as information revolution in subordination to our needs. Gillman (1984) explains further that “information revolution is going to be responsible for a fundamental restructuring of society and that this process will not just involve the office, but the factory, the home and every aspect of endeavour, either directly or indirectly” (237). Indeed, the advent of cable television, video and other information technology into the domestic scene has influenced our daily life and well being of the nation in the sense that it is gradually creating a new cultural and social environment. By influencing the environment in which reading is taking place, for example, information technology is directly affecting other subtler aspects of culture and quality of life. Meanwhile, we are wondering what sort of people will there be in the next generation. Obviously, the information industry has supplanted the traditional industry such as agriculture in our society. This clearly demonstrates the point that information as wealth will go on to influence our social advancement and well-being. Thus, we have to be efficient in information management to be effective in decision-making and planning in this post-modernism age when every organization must undergo a constant cycle of changes and reorganization to survive, to be competitive, to be efficient and profitable.

In building a competitive nation, we not only need to have the most advanced information technology, but also a large pool of intellectuals, researchers, specialists, thinkers and philosophers. Even though not much has been done to improve our human reading capacity beyond the formal education, it is nevertheless hoped that more and more people will resort to reading as one of the best avenues for information in line with the rising standard of education and the growing realization of the importance and benefits of reading, particularly critical reading.

REFERENCES


