Back to basics: the role of reading in preparing young people for the information society

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Abstract

Living in the information age, with its emphasis on information and communications technologies, poses special challenges. This paper raises discussion about the important role of reading in society, and examines its place in the acquisition of information capabilities among young people.

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Introduction

The aim of this paper is to raise discussion about the role of reading in a society that places great emphasis on information and communications technologies (ICTs), and to examine the place of reading in the acquisition of information capabilities among young people.

It is said that we are now living in the "information age". This new age is largely characterised by the developments that have taken place in technology and, in particular, information and communication technologies (ICT). The convergence of telecommunications, broadcasting and computers has had a significant impact on society, comparable with previous major societal changes such as the industrial revolution or the advent of the printing press. The result of the latest revolution is unprecedented globalisation in which instantaneous contact can be made between people anywhere in the world, with all the legal and social issues that this raises. The impact is so great that sociologists and anthropologists are now redefining our notions of community, as the geographical definition becomes decreasingly relevant. The net result parallels, as with societal changes wrought by former major impacts, in that inequalities in society are growing, among nations and among individuals.

As with the advent of the printing press, the technological age requires the development of higher levels of skills among all echelons of society. The ability to function effectively in the information society requires a high degree of literacy and a complexity of skills which is leaving some people behind. An Organization for Economic Cooperation and Development adult literacy survey (OECD, 2000) reported that across 20 countries, one in four adults who participated in the study do not possess the necessary literacy skills to manage in today's world. It is a reasonable assumption that the study took place in poorer or less developed countries, but this is not so. The sample included the USA, Canada, four Scandinavian countries, Germany, the UK, Ireland, Australia and New Zealand. In confirmation of this statistic Hartman et al. (1991, cited in Fisher,

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1999 p. 56) reported that at least 20 per cent of US adults were functionally illiterate. Between 40 and 45 million people in the USA are unable to understand written materials requiring the most basic reading skills (Fisher, 1999, p. 57).

Lack of literacy skills on this scale causes problems for living, working and survival in general. Smith (2000, p. 378) identifies that there is already a gap between the skills of workers and the literacy demands of the workplace today. Others maintain that this gap will grow wider over the next two decades. Mikulecky (2000, p. 380) predicts that an expansion of multiple literacies will be required to navigate higher levels of information presented in a mix of three dimensional and print visuals. The worker of the future will need to acquire ever-growing literacy skills to communicate simultaneously across several different work communities. Throughout the literature there are examples of the need for these skills. Hull (1999) cites a case study in the USA where workers in an electronics factory nearly caused a major and costly mistake because they failed to understand written instructions.

It is not only the workplace which demands such skills but virtually every area of life. Healthcare is one example. Fisher (1999) argues that the pressures on the medical profession mean shorter stays in hospital and patients being discharged earlier. This requires that patients assume more responsibility for increasingly complex procedures and treatments. Increasingly this information is available through electronic means. In order to make informed decisions patients must have the skills to understand demanding information.

Achieving information literacy

If a person is to survive in the information age they need to be information literate. The examples already discussed demonstrate why this is important, but what exactly does achieving information literacy mean? Definitions are still elusive and avidly debated, but it is generally agreed that it is something to do with combining the old information skills with the ability to manipulate the new technologies. In fact there is a discernible

progression from library skills through information skills to information literacy. We will return to some of these issues later in the paper.

There are many definitions of information literacy. Many stem from that coined by the American Library Association Presidential Committee on Information Literacy in 1989:

To be information literate, a person must be able to recognise when information is needed and have the ability to locate, evaluate and use effectively the needed information (ALA, 1989 p. 1).

The most commonly cited and concise definition is:

The ability to access, evaluate and use information from a variety of sources (Doyle, 1994, cited in Brown, 1999, p. 58).

The importance of information literacy has developed in response to technological developments and it is widely accepted that ICT skills are an important component of information literacy skills. However, while information literacy does encompass ICT skills, achieving information capability goes beyond this in terms of recognising the need for students to evaluate, analyse and appropriately use the information found.

Information literacy is now established, quite rightly, as a concept in the information world, and its contribution to lifelong learning is well established. A recent report from The Chartered Institute of Library and Information Professionals (CILIP), the UK's leading professional body for librarians and information managers, states:

Participation in the information society requires the citizen to be information literate. Failure to appraise information will result in exclusion (CILIP, 2002, p. 39)

It has also been argued that:

Information literate students are competent, independent learners. They know their information needs and actively engage in the world of ideas. They display confidence in their ability to solve problems and know what is relevant information. They operate comfortably in situations where there are multiple answers, as well as those with no answers. They hold high standards for their work and create quality products (Pennell, 1999).

There is now a large body of literature on the subject of information literacy. In the USA,

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Australia and Canada, it has been seen to be of such importance that information literacy standards have now been published. Examples of these include the Council for Australian University Library Standards (2001) and in the USA, those published by the Association of College and Research Libraries (2000), and the American Association for School Libraries (1998).

In areas of information wealth, educational institutions are emphasising the need for information literacy, and programs evolving along with digitisation are embracing computer and Internet skills. There is no doubt that there is a need for such strategies to empower individuals to survive and flourish in the information age, but information power for individuals becomes a reality through the development of information capability to the required level. Brown (1997) argues that information literacy actually subsumes a wide variety of skills and abilities including: critical thinking, problem solving, personal, social and communication skills, library and computer literacy (Brown, 1999, p. 58). Information capability therefore presupposes a range of skills which, in addition to technological skills and the knowledge to use information sources, includes general literacy.

The need for reading skills in achieving information literacy

Many discourses on information literacy tend to emphasise technological requirements. The CILIP report (2002, p.40) recognises that "there is a danger that ... information literacy ... will be overshadowed by the mechanics of ICT skills". This commitment to "digital literacy" ignores some of the more basic skills required. The relevance and importance of computer and technical skills are not disputed here, quite the contrary. Storage retrieval and dissemination and the availability of information has never been quicker nor easier. In fact, the preparation of this paper owes much to the ability to locate and obtain material in electronic format by technical means. Technical skills are a necessity in order to survive, but this is just part of the picture - what happens if you cannot decipher what you see on your screen? A world of information may be physically and politically available but this is of no value if it cannot be accessed because an individual lacks the ability to read (Wresch, 1996, p. 14). While it is acknowledged, therefore, that success in information literacy is dependent on information handling and technical skills reading skills, are fundamental (Royce, 1999, p. 145).

We tend to assume that all 12 to 16 year-olds have embraced the new technologies eagerly, but this is not always the case. One of my PhD students teaches in the further education sector. She reports a very sad case of one 16 year-old who, after taking computer classes for several months, committed suicide. His problem was that he could not keep up, and the reason was that he did not have adequate reading skills. When he could no longer hide the fact that he was lagging behind, he took the only way out the he could see. This is, thankfully, a very extreme case but reading skills are essential to functional literacy.

At one time a person was considered literate if they could sign their own name. Literacy, though, developed way beyond the confines of the religious and the scholarly (Breivik and Gee, 1989, p. 22) and we all know about the various movements around the world to help the general populace to attain literacy skills, many of us owe our jobs to those movements! Later, literacy came to mean skills in reading, writing and comprehension and in the 1950s, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) expanded the definition to the ability to use print in order to be able to function in every day life (Harris and Hodges, 1995, p. 142). But, literacy is a dynamic concept and gradually, as the needs of society have evolved, the requisites of being able to function within that society have expanded and the concept of literacy has also changed to fit the bill.

In a study designed to reach a deeper understanding of technological literacy, Gagel (1997) found that there was a bi-polar debate with technological skills at one end and literacy skills at the other (Gagel, 1997, p. 4). Six essential themes emerged from the literacy discussion: cognitive performance, cultural identity, knowledgeability, language,

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communication, utility and reading and writing (Gagel, 1997, p. 3). Gagel (1997) states:

Without question, the most common characteristic of literacy, that qualifies as an essential theme was reading and writing (Gagel, 1997, p. 4).

Kniffel (1999, p. 36) argues that many devotees of the new technologies scoff at the idea of reading, but that the word should be at the heart of every library. In fact, the imperative to utilize the technologies effectively creates a greater necessity than ever to be a proficient reader.

Royce (1999, p. 160) summarizes the importance of reading:

It [information literacy] all comes back to reading and the twin thrusts of getting readers hooked early in life and providing plenty of practice ... you can survive in today's world if you can type with only one or two fingers. You can survive without ever using keyboard shortcuts or realising the full potential of your software. But, ... you are going to find survival both difficult and expensive if your reading skills are poorly developed. In this Information Age, reading and reading skills ... will enable users not just to survive, but to thrive.

The importance of imaginative literature in a child's development

It has long been recognised that imaginative literature plays an important role in the acquisition of reading skills, not to mention aiding in the development of imagination, appreciation of narrative and providing enjoyment of story. Spink (1989), in his seminal work Children as Readers, identifies eight areas of development in which reading plays a part: physical, intellectual, language, emotional, personality; social; moral; and spiritual (Spink, 1988, pp. 29-42). Imaginative literature helps to develop the heart and mind of the individual. Human beings learn and develop through story. Yet approaches to learning and life seem to be becoming increasingly based on factual information.

Over a 100 years ago, Charles Dickens (1854) wrote his book, *Hard Times*, set in that other technological revolution. The reader is warned here of the dangers of suppressing imagination and concentrating on the facts. His message perhaps still holds true today, when fascination

with the latest gadget or software can obscure the need for other kinds of development.

There are encouraging signs that the power of and need for imaginative literature has been recognised. Kibby (2000, p. 381) argues that literacy has actually increased more in the twentieth century than any other time in history and that in the USA, 18 year-olds are better readers than ever before. The publishing industry is thriving according to Royce (1999, p. 145) who cites recent surveys which indicate that more bookstores are opening, book sales are rising and people are generally reading more, despite the emphasis on technology.

Perhaps this viewpoint is endorsed by the *Harry Potter* phenomenon. One 12 year-old describing why he was such a fan of Harry Potter wrote:

I found the Harry Potter books enjoyable to read ... I think to enjoy them you have to still have some imagination and sense of fantasy left to explore. The Harry Potter books take you to a part of yourself where you believe in magic ... [and] unlock your imagination and let it run free through the many pages of magic and wizardry ... (Cawkwell, 2001, p. 669).

William Cawkwell is a year twelve student teenage boy in New Zealand, a group not traditionally renowned for reading fantasy and works of the imagination.

If you are an experienced children's librarian of a certain age, the need for an early start and the benefits of young children being surrounded by imaginative works will be a mantra embedded in your psyche. This is endorsed by the American Library Association, which reports on national studies in the USA. These show that "there is a direct correlation between the number and variety of reading materials in a child's home and standardized test scores", and that those children exposed to reading before entering school have a better chance of learning success (ALA, 2002). For over three decades there have been studies, projects and a string of gurus providing evidence of such benefits, yet there has been a new awakening in terms of research in this area. There are many studies which confirm that habits developed in preschool years contribute to literacy in later life (Jordan et al., 2000). A study of the Birmingham Bookstart project, in the UK, shows that children who read surge ahead,

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educationally, of those children who do not (Ghouri, 1997). This study revealed that giving books to babies improved their performance in school, seven years on. Similarly, research on the Kirklees Babies into Books initiative also showed that early intervention is important in later development (Hardman and Jones, 1999).

The British Government has taken the need for reading on board, as evidenced by the introduction of the Literacy Hour in 1999 (DfEE, 1998). Since then there have been a number of initiatives, such as the National Reading Campaign, designed to foster reading.

The focus of this campaign, begun in May 2001, is on promoting children's reading to adults. It is widely recognised that creating a conducive environment at home reinforces the development of literacy skills. This fact seems to have spawned a large number of Family Literacy projects which are springing up all over the world. Research at the University of Sheffield by Hannon and Nutbrown resulted in the REAL model, which set out steps for booksharing (Hannon, 1996). This has given rise to a number of further initiatives such as the PRINTS project in Newfoundland, Canada. This project advocates that parents should build in a literacy activity with their children each day (Fagan, 2000).

Family literacy is obviously seen as an important concept in the USA, with comprehensive schemes supported at the federal, state and local levels. The American Library Association (ALA) wholeheartedly supports family literacy projects:

Through family literacy programs, the home becomes an environment where young minds can grow to their fullest potential, and where parents can play active roles in their children's intellectual development (ALA, 2002)

The ALA also co-ordinates two family literacy programs, the Bell Atlantic – American Library Association Family Literacy Projects and the Cargill Cares program. The Bell Atlantic Foundation has provided more than \$1 million since 1989 to sponsor a variety of projects, including those at Baltimore Pratt Free Library, the District of Columbia Public Library, and the Marion County Library, Fairmont. Cargill, a Minneapolis based agricultural company, have also joined forces with the ALA to sponsor activities in Hutchinson, Kansas and Molokai

in Hawaii. The Center for the Book at the Library of Congress also boasts involvement in and support for family literacy. One example of their interest is the Vibernum Family Literacy Project which promotes the "planning, training and prpomotion of family literacy projects" among libraries and their community partners.

Individual initiatives throughout the USA are too numerous to mention in an article of this length, but some large-scale ventures cannot be left unnoticed. One of the largest and most wide ranging is the Even Start Family Literacy Program, which emerged from the 1988 amendments to the Elementary and Secondary Education Act, 1965, and amended in 1991 in the National Literacy Act. It was initially administered as a federal project in 1989, but since 1992 has been administered at the state level. As part of the National Evaluation (1998) of this project, a longitudinal study, looking at the development of participating children, provided data which indicated that participation had aided "accelerated learning" when the children were compared to a control group.

Developing the reading habit at an early age also engenders a love of reading in many children. Research by Krashen (1993) shows that Free Voluntary Reading results in better literacy skills, comprehension and writing, while on the reverse side those who do not read voluntarily are poorer at comprehension, reading and other skills. Royce (1999, p. 150) argues that schools have a duty to develop good readers. Good readers are characterised by the ability to choose how and what they read. He argues that reading for enjoyment is the key to developing literacy (Royce, 1999, p. 151). It has long been known that good quality works of imagination play a vital role in encouraging reading for enjoyment.

Marsh outlines further research at the University of Sheffield (Marsh, 2000). In this case the study examined the impact of popular culture on motivating young children to read. A range of resources including characters from television was placed in a "batcave". Children reportedly flocked to the cave and the project proved particularly useful in encouraging boys and some children who had been identified by teachers as having little motivation towards literary activities.

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Education literature is also beginning to acknowledge the need to attend to emotional literacy. Gerry (2000) argues that understanding emotional literacy is essential in helping young people to develop self-esteem, and to become socially and educationally successful. This is not disconnected with being fitted for the information society. He further debates that if you want to get on in life you need to have developed the ability to interact with others and to manage your own emotions and that today's leaders more than adequately demonstrate these skills.

Leu and Kinzer (2000), in predicting the nature of literacy for the new Millennium, stress that social learning strategies will be critical to literacy instruction in the future. And that children need to interact in order to learn from each other. Understandings of others takes on a new meaning in a global forum. In order to achieve this, the authors advocate collaborative learning experiences. The reason given is that:

New technologies for information and communication will allow us to look beyond our classrooms, make new connections and see the World in a new and powerful way (Leu and Kinzer, 2000, p. 1).

Written communication skills are also essential in the work place. Dreher (2000, p. 382) argues that the social context of literacy activity is being determined by the new technologies and that today's workplace includes widely distributed worksites connected by electronic links. Higher education is increasingly taught in distance learning mode. This means increasingly heavy reliance on written communication.

Let us return to Spink's (1989) eight areas of development which may be enhanced by the encouragement of reading imaginative literature: physical; intellectual; language; emotional; personality; social; moral; and spiritual (Spink, 1989, pp. 29-42). These seem to cover adequately the requirements above.

Today, works of the imagination are not just confined to print, there are many excellent Web sites providing works of imagination. Works of imagination in electronic format, and the use of electronic facilities in accessing and discussing works, also make a valuable contribution to achieving information capability. There is evidence in Australia, for example, that such

facilities are encouraging more boys to read. Consequently, developing and reading skills may be aided by use of the Web. A school in Clarkesville, Tennessee, for example, recently won an award for using technology to enhance reading skills (*Reading Today*, 2001, p. 24). There are actually huge numbers of stories online, and a wealth of Web sites that can be accessed by children searching for their favourite authors and characters, including the famous *Harry Potter*. Enos (2000, p. 24) proposes that the Web is a source of stories not available elsewhere. It is certainly a source of classic stories, fairy tales and out of print titles.

The role of the school library

It will come as no surprise to those working in or within the orbit of school libraries that there are many studies which predict that, in school, the nature of literacy will depend on the convergence of literacy instruction with networked information and communication technologies (Leu and Kinzer, 2000). Able users of information rely on three basic skills: reading, information handling, and technical. There is no argument that a school library has a pivotal role in nurturing and encouraging such skills. Rafferty (1999) advocates an all-school policy on learning for the information age, while Langford (1999) places the school library firmly in the centre of that process. However, my own research a number of years ago (Eyre, 1998) showed that with changes in funding arrangements and the subsequent tighter budgets, school library budgets tended to be diverted towards material to support the curriculum and away from imaginative works.

But, there is an important role to play in nurturing reading for its own sake. The best predictor of adult reading ability is education. There is a great deal of evidence that continuous literacy-related practices in terms of reading and interpretive skills are important from an early age (Sheehan-Holt and Smith, 2000), and this means sustained effort at secondary level. Studies show that later attempts to increase literacy at adult level are piecemeal at best, and that there are but limited chances of achieving an adequate level of literacy through adult education. Royce (1999)

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argues that many people do not improve as readers because they do not practice and need to be encouraged to do this if they are to be prepared for the information society. The tightness of national curricula of many nations precludes reading for enjoyment in the classroom and makes the school library the natural place to nurture the reading habits begun in those early years.

Conclusion and the need for research

Despite the obvious link between the use of imaginative literature in developing literacy skills, and the importance of such skills in creating information literate individuals, there is a discernible gap in the acknowledgment and understanding of the role that works of the imagination play. Though recognition is being given to the fundamental nature of literacy skills there are few studies that explore the role of imaginative literature in the development of information literate individuals. Research in the UK and Australia is proposed to look at the issues outlined, and linking this with provision in school, and public libraries. The difference between school library provision in UK and Australia creates potential for further exploration.

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