Internet Technology for Schools
(Book review)

Reviewer:
Lyn Henderson, PhD
Coordinator Flexible Learning
School of Education
James Cook University
Townsville, Queensland. AUSTRALIA. 4811
lynette.henderson@jcu.edu.au

Textbook details:
Internet Technology for Schools
Catherine Mambretti
Order line: 1-800-253-2187 www.mcfarlandpub.com
ISBN 0-7864-0501-5. 310pp. including tables, appendices, resource directory, index

Overview
This book fills a much needed niche in the market. It is timely. There are many horror stories of schools jumping too quickly onto the technology bandwagon. These schools do so after superficial examination of the complex interconnected issues involved when implementing network technology, and then suffer the economic, pedagogic, and systemic consequences. Internet Technology for Schools admirably addresses this problem. The book fulfils its promise to be a comprehensive guide for establishing policies, goals, standards, step-by-step implementation, technical specifications, sustainable enhancement, community partnerships, and leadership within a context applicable to the reader’s school or cluster of schools.

Although the book increasingly includes technical content and jargon, the emphasis is educational rather than technical. As the author admonishes, network technology is not an end in itself; “connectivity must add educational value for students” (p. 6) and the wider school community. The writing style generally succeeds in its aim to be as non-technical as possible because the author assumes that her target audience will mostly be non-technical educators and administrators.

Even though the book only considers USA audiences, its content and suggestions are either generic or readily adaptable by educators in other countries.

Structure
The book is divided into three sections, each targeting a specific audience. Part I, Educator’s Planning Guide, addresses educators who have, or elect to be involved in, an administrative and decision-making role, especially with respect to the school’s Internet technology plan. Part II, Educator’s Guide to Good Internet Practices, targets classroom teachers. Part III, Technical Guidelines, is particularly for those educators who assume responsibility for technical support.

Each chapter ends with Notes, many of which are relevant WWW sites. The Glossary is comprehensive in terms of what is discussed in the text; there are no glaring omissions, which is also the case for the Index. The short recommended reading list contains only USA references.

Part I, Educator’s Planning Guide, serves as a mini-manual for planning how to manage the process of implementing the Internet in schools. It is divided into five chapters.

- Chapter 1 provides a conceptual overview of, and a brief historical background to, the Internet, particularly its collaborative aspects. It includes some practical points concerning student-teacher-computer ratios.
- Chapter 2 critiques favoured policies developed to address technical, behavioural, and administrative issues in school Internet systems.
Chapter 3 takes up the reiterated warning that there is no single best educational approach as the needs of each school or cluster of schools should be considered. A phased approach to ensure effective Internet implementation is advocated.

Chapter 4 describes the roles and responsibilities of the various school and wider community members allocated to the various phases of the implementation plan. Importantly, consideration of teacher input into the design or redesign of classrooms, library, and computer laboratories is strongly recommended. However, although there are numerous suggestions for what must be considered, some specific practicalities that affect efficiency and effectiveness of learning outcomes would have enhanced the message to consider nuts and bolts issues, such as whether there is enough desk space to spread text and writing materials because this is often a design flaw with the corral or hub system and how to design for maximum tamper-free mice, monitors, cables, and disk drives.

Chapter 5 describes a model K-12 school network and some of the available options. Some may be surprised when Ms Mambrini highlights the high financial costs of legacy issues associated with false economic practices of accepting or buying discarded computers from businesses.

Part II, Educator’s Guide to Good Internet Practices, addresses what Ms Mambrini perceives to be the “most challenging aspect of integrating the Internet”: the enhancement and transformation of educational experiences, not the computerization of education (p. 109).

Chapter 6 provides seven major steps for an educational training program: needs assessment, task and skills analysis, design (which emphasizes authentic tasks), program development, assessment, implementation, and follow-up. The emphasis on training follow-up could have been sharper as it is one that is often ignored as a major catalyst for implementation success or failure. Teachers learning how to troubleshoot technical hiccups is advocated — again, something that is often not counseled for fear of a backlash. A section considers how the school will support and service the students’ families. Overall, this is a stimulating chapter.

Chapter 7 surveys a wide variety of Internet tools such as email, online journalism, file transfer, logging in from remote locations, listservs, and newsgroups as well as how to integrate these meaningfully into the classroom and school.

Chapter 8 is quite a triumph in succinctness and choice. It provides a global overview of discipline-specific WWW resources and strategies to identify appropriate resources. The selected variety of key sites highlights the range available while avoiding the temptation to include a bewildering overstocked lolly shop. The 157 Web addresses are included in the Notes section; a strategy that promotes text readability.

Chapter 9 focuses on Web tools for educators. It provides some definitional background and a few “how to” Internet literacy tips. This chapter also highlights Ms Mambrini’s ability to choose the essential from the plethora of information and write this concisely and with clarity.

Chapter 10 discusses an area that can be used as a scapegoat for avoiding Internet technology implementation: issues of network security, policies, pornography, and safeguards.

Part III, Technical Guidelines, supports the previous chapters which directed the reader to specific chapters in Part III for technical detail. The opposite happens, too, as readers are directed back to previous chapters for more indepth understanding of associated educational implications. The rationale for this section is to lessen technophobia concerning the wires and cables part of Internet technology.

Chapter 11, besides a survey of the most popular services for K-12, examines unconventional options for particular school contexts. Server and client options, technical design of IT services, and firewalls are discussed in some detail. A departure from the structure of most other chapters, there is a recommendations section to conclude the chapter.

Chapter 12 provides readers with a clearer understanding of network topologies within the school environment, that is, the local area network.

Chapter 13 suggests possible future Internet directions for the school’s Internet technology team to help with forward planning. Again, long term savings and efficiencies are highlighted vis-à-vis short term cost decisions in order to benefit from the rapid improvements in Internet technologies.

Strengths and Weaknesses

The book has three major strengths. First, it is cleverly crafted with a readable style that supports those new to the technical areas of implementing Internet technology in schools. The headings and sub-headings work particularly well. Second, the author cogently argues that the reason for implementing Internet technology in a school is to enhance student and teacher outcomes. It is not an end in itself or a competition to win media kudos. This rationale is repeated throughout the book; a necessary strategy because some readers will only read the
chapters they think pertinent to them. Third, the author remained faithful to the rationale provided in the introduction. She could so very easily have attempted to provide a duplication of appropriate content found in the increasing number of excellent books devoted to school Internet projects, Internet information literacy, and technical “how to” guides.

Nevertheless, it is sometimes “heavy going”. Firstly, it is so concisely written that there is much to digest in the small sub-sections of each chapter. Second, it is liberally dotted with acronyms - for instance, as early as pp. 20 and 21, there are 19 different acronyms - advice to go to the glossary if the reader has forgotten what the acronym stands for or wishes a brief description of a term, and technical definitions. This necessitates numerous reading breaks, particularly for readers who are exploring new territory.

**Concluding Impressions and Recommendations**

Ms Mambrini admirably achieved the book’s stated aims.

The book has a wide audience. It is suitable as a text for pre-service and graduate teachers who can no longer avoid the issues raised in *Internet Technology for Schools*. It is particularly relevant for those whose major involves computer and Internet information and processing technologies. Indeed, I have recommended this as a text for such students in my institution. It is also a must for the technology teams in schools and school districts, that Ms Mambrini recommends be established. Although all should read the whole book, relevant chapters could be allocated to those on the school’s various Internet Technology Sub-committees depending on the committee’s focus, in order that some will be more expert in that area during discussion, planning, and implementation.

A second edition is recommended. Less emphasis on acronyms is pleaded as those that are no longer commonly used could be placed in an appendix if still thought necessary. Distance education-open learning contexts warrant in-depth exploration and would find a hungry audience. A chapter on world issues and more non-USA examples would also enhance the second edition.

This book is a worthy addition to your bookshelf and is a recommended inclusion on the textbook list for tertiary students.