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**A NATIONAL LIBRARY FOR AUSTRALIAN
EDUCATIONAL RESEARCH**

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ABSTRACT

The Australian Council for Educational Research – www.acer.edu.au – is Australia’s national educational research organisation. Its mission is to “create and promote research-based knowledge, products and services that can be used to improve learning”.

The ultimate goal of ACER’s work is to improve outcomes for learners. We do this through reliable, scientific research and through the development of products and services grounded in dependable research. We create and disseminate research-based knowledge and develop and offer a variety of research-based professional resources and services.

The Cunningham Library serves the ACER and as such is Australia’s national library for educational research. It is a unique, comprehensive collection of Australian educational research material dating from the early 1900s to the present day. The vast resources of Cunningham Library offer the researcher an up to date collection to support educational research.

ACER is a national research organisation which has a corporate structure – a non-profit company – and is not financially supported by government. The Cunningham Library is not only a national research library, but is funded directly by research activity.

A major research library both supports research and disseminates it. This paper demonstrates the role of the Cunningham Library – see www.acer.edu.au/library - in both providing access to information to support research, and playing a major role in disseminating research. The Library is embedded in the learning and

research process by having a close alignment of corporate and library goals, and through its development and dissemination of knowledge-based products and services. Examples include databases such as the *Library Catalogue*, the *Australian Thesaurus of Educational Descriptors (ATED)* and the *Database of International Education (DRIE)* which are available for searching free of charge from the Library website; others, such as the *Australian Education Index* are available through subscription or included in the *Library Membership*.

This paper describes these resources and services, and outlines new approaches being developed, such as online publishing initiatives: for example, the *Australasian Education Directory (AED)*; and online content of international interest: for example, *EdResearch Online*, the Australian research repository of resources in Australian education, and others.

KEYWORDS

Education, Research, Australia

**1 STRATEGIC CONTEXT &
BACKGROUND**

Researchers require access to research carried out by colleagues worldwide – in articles published in refereed scholarly journals, in books, or in unpublished sources such as doctoral dissertations or research reports. ACER is strategically placed to provide access to Australian educational resources and build a digital library to fulfill this important role at the national and international level. The challenge is

to think beyond academic libraries to professional and research organizations and to respond to changes in the strategic environment for scholarly research in education.

This paper will explore some issues relating to the provision of library and information services including some traditional roles and services and some new digital, virtual, remote, and collaborative services.

In recent times the strategic environment has changed, and in Australia most universities are moving to make their theses and research information available in full text online – open access. Statements such as the *IFLA Statement on Open Access to Scholarly Literature and Research Documentation* [1] and the *Glasgow Declaration on Libraries, Information Services and Intellectual Freedom* [2] enunciate fundamental access principles in order to ensure the widest possible availability of scholarly literature and research. Also Federal Government initiatives such as the Backing Australia's Ability Plan, [3] was a set of measures put in place to provide funding to support new ideas in support of science and innovation.

The Cunningham Library, provides access to information to support research, and plays a major role in disseminating research. However, how does systematically organized information fit with the new collaborative web spaces such as users as providers of information in wikis & blogs? According to Alexander Bryan [4], social software has emerged as a major component of the Web 2.0 movement. These are profoundly social like the Internet technologies of the subsequent generation, such as listserv, discussion software and web based communities. "Social software does not indicate a sharp break with the old but, rather, the gradual emergence of a new type of practice" [4]. "The Web 2.0 movement (or movements) may not supplant Web 1.0, but it clearly transformed a significant swath of our networked information ecology." [4]

2 AUSTRALIAN COUNCIL FOR EDUCATIONAL RESEARCH (ACER)

The Australian Council for Educational Research (ACER) is Australia's premier educational research and development organisation. It is an independent, not-for-profit organisation established in 1930.

The ACER **vision** is of a vibrant research organisation deeply committed to creating and disseminating knowledge and tools to improve learning; a company that pursues the highest standards of scholarship and quality in all that it undertakes, and that is continually building its reputation as one of the world's leading education research centres with an increasingly international orientation to its work.

ACER's **mission** is to create and disseminate research-based knowledge and tools that can be used to improve learning. In pursuing this mission, ACER undertakes a wide range of research and development and provides services and materials in support of educational policy-making and improved professional practice.

ACER is committed to the use of systematic investigation, evaluation and critical reflection in the search for ways to improve learning. As an independent, not-for-profit organisation, ACER is able to bring a high level of expertise and objectivity to its work.

There are seven research programs:

- 1 Assessment and Reporting
- 2 Early Childhood Education
- 3 Learning Processes and Contexts
- 4 National and International Surveys
- 5 Systems and Schools Testing
- 6 Teaching and Learning
- 7 Transitions and Economics of Education

ACER Organisational Capabilities

With offices in Melbourne, Sydney, Dubai, London and New Delhi, ACER is able to provide comprehensive services to the education community nationally and internationally. ACER also enjoys close relations with sister organisations with similar goals, in Canada, the UK and New Zealand. Examples include New Zealand Council for Educational Research (NZCER) and National Foundation for Educational Research, London (NFER). There are also many examples of international partnerships.

For example, *TIMMS (Trends in International Mathematics and Science Study)* is designed to help countries all over the world improve student learning in evaluating performance in years 4-8. It is a project of the International Association for the Evaluation of Educational Achievement (IEA) and is directed by the TIMMS International Study Centre at Boston College in collaboration with a worldwide network of organisations and representatives from the 58 participating countries. ACER is responsible for undertaking the data collection in Australian schools.

Also *PISA (Programme for International Student Assessment)* is a survey of knowledge and skills of 15-year-olds, mainly in industrial countries. PISA is implemented for the Organisation for Economic Co-operation and Development (OECD) by an international consortium led by the Australian Council for Educational Research (ACER). Other members of the consortium are the Netherlands National Institute for Educational Measurement (CITO), the Educational Testing Service (ETS) and Westat Inc. of the United States, and the National Institute for Educational Research (NIER) in Japan. ACER is also partnering with University of Cambridge Local Examinations Syndicate (UCLES) to develop a new test of academic reasoning for students applying to UK universities. An agreement was signed between ACER and UCLES to develop the test, to be known as UniTest, in Melbourne in March.

Specific capabilities and facilities of ACER include:

- expert knowledge, understanding and experience of the issues related to teacher education, professional development and program evaluation
- demonstrated ability to produce curriculum and assessment resources
- demonstrated expertise in gathering an analysing education data, including case study methodology
- proven capacity to undertake complex large-scale analysis
- demonstrated commitment to and expertise in providing professional development for educators
- proven capacity to establish effective links with stakeholders

- demonstrated communication, negotiation, and liaison skills
- demonstrated expertise in preparing, publishing, and disseminating reports
- experience working under contract to international organisations, Australian government departments and non-government organisations
- demonstrated experience and knowledge of education and training systems and sectors within these systems
- demonstrated capacity to undertake high quality research within budget and on time

3 LIBRARIES AND RESEARCH AT ACER

The Australian Council for Educational Research is an Australian Institution funded by American philanthropy, with initial funding from the Carnegie Corporation of New York and supported by leading educationalist at the time. The first Executive Officer was K.S. Cunningham, in 1930. The creation of ACER arose from an acknowledged need for an independent body to conduct research in education in Australia. [5]

During this period, there was also an associated movement from a leading Australian educationalist, Frank Tate, who in 1902 became Victoria's first Director of Education. He was a leading reformer of Australian education also became a president of the Library Association of Victoria. Believing that Australian libraries were in a deplorable state, he was instrumental in a study funded by the Carnegie Corporation. The study was carried out by Ralph Munn, the Director of the Carnegie Library in Pittsburgh and Ernest Pitt, from the Melbourne Public Library. The Munn-Pitt Survey was published by ACER in 1935. This publication, *Australian Libraries: A survey of Conditions and Suggestions for Their Improvement* was an educational and cultural milestone. The history of librarianship in Australia is often divided between AM and PM, the 'M' representing

Munn. [6] It is probably the most influential report ever presented in the history of Australian librarianship.

The ACER Library has always both acquired information, and published and disseminated the outputs of research. It began early to fulfil the need for ACER to be a clearinghouse of information about educational developments as well as research both in Australia and overseas [6]. The Library was to be the centre for information about Australian education both within Australia and abroad. Initially the Library was run by the research staff and the secretariat until the first Librarian was appointed in 1945. From this period the Library became to function as an important component of ACER by the provision of services that included answering enquiries on educational matters and providing information about research on education. Various schemes for the storage and retrieval of information to assist this process began. This included *A List of Theses in Education and Educational Psychology Held in Australian Libraries 1952* and *Education, Psychology and Related Subjects in Melbourne Libraries 1954*. [6]

In 1956 the Librarian proposed a more substantial reference tool, a quarterly *Australian Education Index*. Initially it was compiled by many librarians in each state but in the early 1970s, the Australian Education Index became an ACER project. In 1979 the Library of Congress subject headings were replaced by ERIC descriptors which were later replaced by the *Australian Thesaurus of Educational Descriptors* in 1985.

The Cunningham Library has always been embedded in the research of ACER by being both a publisher and a disseminator of research. The challenge is to ensure that products and services are relevant in terms of the strategic environment and customer needs.

4 THE CUNNINGHAM LIBRARY TODAY

The Cunningham Library is a unique, comprehensive collection of Australian educational research material dating from the early 1900s to the present day. The vast resources of Cunningham Library offer the researcher a complete and up to date collection

of educational research documents in Australia.

Users can access a wide range of information about services and databases from Cunningham Library's website at www.acer.edu.au/library. The Library is embedded in the learning and research process by having a close alignment of corporate and library goals with the development and maintenance for research and knowledge based products and services.

Cunningham Library at ACER is a specialist library in education and related areas. There is a strong emphasis on Australian material in the collection, which is recognised within Australia as unique because of its age and coverage.

The library aims to fulfil a national role in the provision of Australian education information and to provide information based services and materials to support ACER. Specific goals are

- To build and maintain an information resource which supports policy development, research, practice and debate in the field of education
- To provide information access to the education community on research and practice in the field of Australian education
- To identify, locate, acquire, record and process relevant and authoritative information
- To maintain and preserve the collection for historical research
- To maintain the library systems and collections to facilitate use.
- Compile and maintain the *Australian Education Index* database.

5 EMBEDDING LIBRARIES IN LEARNING & RESEARCH

Cunningham Library integrates the corporate information of the organisation by providing content not just context. It collects and disseminates information by building databases and then re-using and re-packaging educational information in a variety of products. This is illustrated by the following overview of products and services.

5.1 Re-use & Repackaging of Education Information

Databases such as the:

Library Catalogue

<http://cunningham.acer.edu.au/dbtw-wpd/textbase/external/public.htm>

allows searchers to locate research material on Australian and international education.

Australasian Thesaurus of Educational Descriptors (ATED)

<http://www.acer.edu.au/library/catalogues/edthesaurus.html>

This is the definitive reference work on Australian terminology in the field of education.

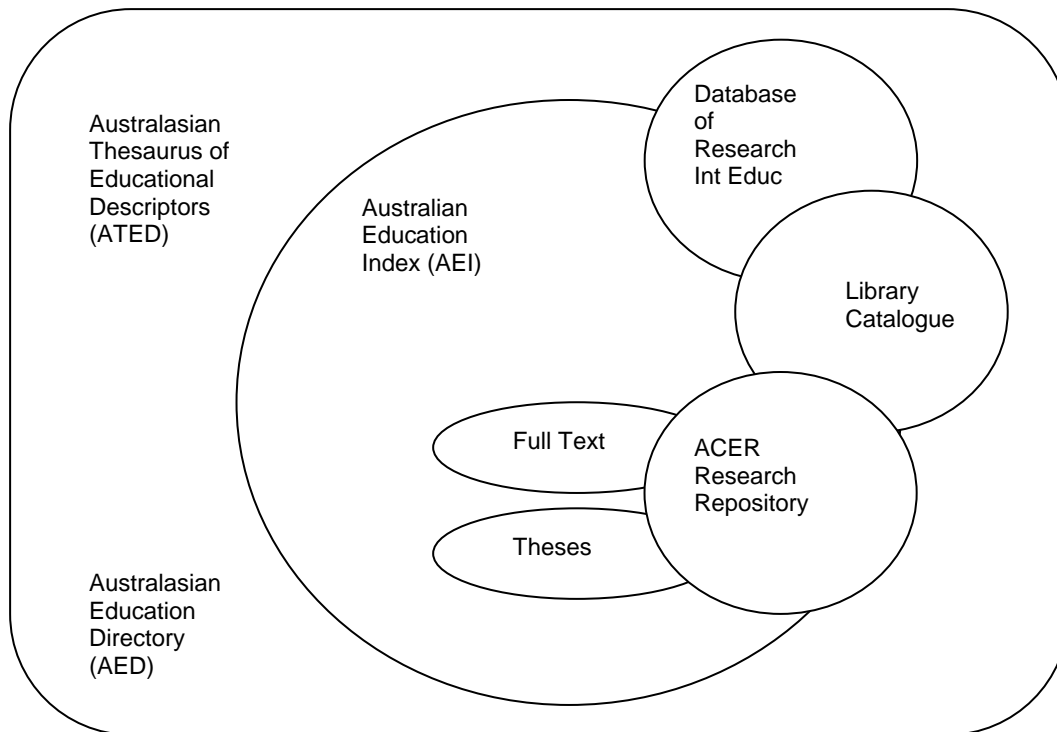
Database of International Education (DRIE)

<http://aei.dest.gov.au/AEI/PublicationsAndResearch/ResearchDatabase/Default>

This is a database of research material in Australian and international education produced for the Australia. Department of Education Science and Training.

These databases are available for searching free of charge from the Library website. Others are available by subscription.

Repackaging and Re-use of information



By-products:

1. Informit AUSTROM
2. Informit, ATSIROM (Aboriginal & Torres Straight Islanders Information)
3. Thompson Dialogue (International Eric)
4. Datastar
5. Taiwan

5.2 Australian Education Index (AEI)

The AEI database

<http://www.acer.edu.au/library/catalogues/aei> consists of over 133,000 bibliographic and some full text entries relating to educational research, policy and practice. It is Australia's largest source of education information with approximately 800 new entries added each month. The content is relevant to a wide range of people interested in education from schools and universities as well as the researcher. It covers the period 1979 to the present; the AEI is available in print for 1954 to 1978.

The *Australian Education Index* identifies, acquires, catalogues and retains documents and serials published in Australia, about Australia or by Australian authors of relevance to Australian education. These documents may be in print or available as web documents.

Authors and institutions are encouraged to submit items to the Cunningham Library at any time for inclusion in the AEI database and many documents are received as published without ordering. In addition to theses, the scope of the database includes

- Research and government reports from all state education departments and authorities, research organisations and professional associations; draft and consultancy reports are not selected or collected.
- Monographs, journals, serials and web documents
- School syllabi, course frameworks, curriculum documents; commercial teaching guides are not selected unless there is a significant research component in the work.
- Educational and psychological tests
- AEI is produced by the Cunningham Library at ACER. The AEI is available online through a number of commercial vendors such as Informit Online and Dialog (as International ERIC) and as one of the Australian social science databases on the CD-ROM called AUSTROM produced by RMIT Publishing

5.3 Online Content Full Text: A+Education

A+Education is a database produced by ACER and it is hosted on RMIT platform and marketed by RMIT's Informit Publishing. It is a subscription service which gives access to indexed bibliographic material and a certain number of full texts. All entries relate to Australian educational matters, and are drawn from journal articles, monographs, research reports, theses, conference papers, legislation, parliamentary debates, newspaper articles, texts and the web. There are over 131,000 indexed records from over 700 journals, with over 200 comprehensively indexed and about one third are copyright cleared. That is, this is a full text database.

Available from Informit, the web address is <http://informit.com.au>

5.4 Online Content Full Text: EdResearch Online

EdResearch Online contains the full text web documents which are a subset of Australian Education Index. As of 6 March 2006 ACER's EdResearch Online, a research repository of online articles from over 130 leading education journals, which contains bibliographical details and links to over 10 000 full text articles published since 2000, has been available through EdNA Online's existing suite of information repositories.

The addition of the ACER EdResearch Online repository presents a value-added service to the education and training community throughout Australia, especially those interested in or conducting research. [7]

EdNA Online is one of the world's largest education and training web services. The website provides access to quality online resources for Australian teachers, academics, administrators, librarians, researchers, trainers, parents and students. EdNA also provides a range of free tools and services, and syndicates educational content with a range of national and international partners. EdNA's search facility provides access to ten national and international high quality digital repositories. These repositories enable the Australian education and training community to search and locate relevant and quality resources.

EdNA Online is a joint initiative of the state, territory and Australian Governments through their education departments, and is managed by *education.au limited*.

Further information on EdNA Online is available from www.edna.edu.au/, and www.edna.edu.au/edna/search?SearchMode=Advancemode

5.5 Education Research Theses (ERT)

The Education Research Theses Project began in 1978 and now constitutes a sub-set of the AEI. In recent times the strategic environment has changed, and in Australia most universities are moving to make their theses available in full text online – open access. Statements such as the *IFLA Statement on Open Access to Scholarly Literature* and *Research Documentation and the Glasgow Declaration on Libraries, Information Services and Intellectual Freedom* enunciate fundamental access principles in order to ensure the widest possible availability of scholarly literature and research.

The Cunningham Library has therefore been exploring ways of continuing the functionality of ERT in this environment, and participated in the government-funded Australian Digital Theses Project.

Paradoxically, this resource was available free of charge on the Web until 2002, when funding for this ran out, and a subscription charge was introduced.

The future of the ERT is under consideration. However, in a 14 month period up until recently, the ERT database on the web had over 27,000 individual searches conducted, around 1,900 per month. This indication of interest in education theses does not include those thesis specific and general searches that may be happening in the AEI. The product therefore still has a significant value to its users.

<http://www.acer.edu.au/library/catalogues/theses.html>

5.6 Online publishing: Australasian Education Directory

Produced since 1990, the first electronic version was a CD-ROM version in 1999. The directory was first produced in a web version 2001 and available from the ACER Library website.

This new 2006 edition marks a milestone in the history of the publication with an expanded coverage including entries from both Australia and New Zealand and a new name, the **Australasian Education Directory**. The New Zealand entries were previously only available in the online version but have now been incorporated into the print.

The **Australasian Education Directory** is a concise accurate guide to 793 educational institutions and related organisations. It is the comprehensive directory of organisations and personnel in Australasian education.

The 2006 edition has been extensively revised and includes two sequences 1) Australia and 2) New Zealand. Organisations covering both Australia and New Zealand *are* listed in the Australian section; this includes entries beginning with *Australasian or Australia (n) and New Zealand*. Indexes include the following: organisation, acronym, name and subject.

Entries include wherever possible, full addresses, telephone and facsimile numbers, email addresses, homepage addresses, regional information where applicable, and names and position titles of key personnel.

All organisations listed in the 2006 edition were invited to update their entries for this edition and every effort has been made to ensure the information is accurate. Changes were accepted up to November 2005.

The editors welcome notification of any changes from organisations listed in the directory, so that a current database can be maintained. Organisations not listed are invited to contribute relevant details. Contact us at aed@acer.edu.au.

This year the electronic version is available via RMIT Publishing's Informit service. The website address is <http://informit.com.au>. Enquiries are directed to the Sales and Marketing department on +61 3 9925 8100 or email sales@informit.com.au

The directory will no longer be available through the ACER Cunningham Library.

5.7 Australian Thesaurus of Educational Descriptors (ATED)

Australian Thesaurus of Education Descriptors (ATED) is the definitive reference on Australian terminology in the area of education. It reflects terminology used to describe research and practice in Australian education. ATED is developed and maintained by ACER Cunningham Library.

The Thesaurus can be used to index documents, whether in print or electronic and also to index web sites. It can also be used to organise reading lists and bibliographies.

ATED is used to index the **Australian Education Index, Education Research Theses** and the **ACER library catalogue** and can also be used to consult these databases.

The online version is available to search for free on the web. Updated February 2005, the online version is the definitive reference on Australian terminology in the area of education. The 'Vocabulary Browse' option allows for quick searching of Subject Groups.

The third edition of the Australian Thesaurus of Education Descriptors (August 2003) is available in print. The thesaurus has been completely revised and updated with 140 new terms reflecting trends and emerging areas of interest in education. It now contains over 5,400 terms with links to broader, narrower and related terms and explanatory scope notes. An interesting feature is the rotated descriptor display providing an alphabetical index to all words that form thesaurus terms.

<http://www.acer.edu.au/library/catalogues/edthesaurus.html>

5.8 Database of Research in International Education (DRIE)

The database has been developed for the Australian Department of Education, Science and Training. It encompasses Australian and international research and, where possible, includes links to the full text of catalogued research. It also includes links to over forty relevant websites, other useful databases and a

range of international education journals and publishers.

<http://aei.dest.gov.au/AEI/PublicationsAndResearch/ResearchDatabase/Default>

6. NEW DISSEMINATION TOOLS

There is a wide range of new tools emerging which store and disseminate information. These include open access research repositories, RSS Feeds, weblogs and a wide range of new, emerging tools. The Economist, in a survey article on new media [8] surveyed blogging, wikis, podcasting, and other emerging forms of interactive and participatory new media. These trends are also relevant to the world of research. The Cunningham Library disseminates and published information, and it is experimenting with the new collaborative forms of dissemination. Examples of these are outlined below.

6.1 ACER Research Repository

An ACER research repository has been developed using D-Space open source software with support and assistance from the *Australian Partnership for Sustainable Repositories (APSR)* at the Australian National University, a federally-funded repositories project, to facilitate a common approach for the management of ACER's research outputs. This does not preclude content being available on individual research web sites or non ACER websites, e.g. OECD, as an information architecture would provide links between sites and a resource discovery mechanism would provide cross searching of different sites.

Each Research Program has a search facility to find information using interoperable metadata standards and OAI metadata harvesting software. Also, a common search facility is used to search all ACER publications across all research programs.

The research repository has not yet been launched but the prototype may be found at the following url: <http://frodo:8180/dspace/>

It is estimated that this initiative will increase the number of visits to ACER's website by 50% and double the number of downloads from the website by 2005-2006 while making ACER research more visible and accessible.

6.2 Information Dissemination using RSS feeds

Cunningham Library is experimenting with RSS feeds as a technology to assist information dissemination. The Library uses the Inmagic DBTextworks & WebPublisher Pro software as its integrated library management system and web publishing software.

6.2.1 New Resource Feeds

Advantages of using RSS feeds for information dissemination:

1. The Library plays a positive role by adopting a new syndication technology and encouraging and supporting research staff in using it
2. Research staff learn to use RSS for the Library alerting services, having the opportunity to use this method of content delivery for other information sources they are interested in.
3. Library staff have the chance to learn a new set of skills

The Library is setting up RSS feeds for dissemination of information to internal clients, in circumstances where information is disseminated in a regular way such as new acquisitions lists.

6.2.2 Information Feeds to the Library Website

RSS feeds could be used to bring information to the Library website from the EdNA site.

6.2.3 Australian Education Webblog

There is a place for the development of an Australian Education Weblog, and the Cunningham Library is investigating how this might be implemented in order to continue to publish and disseminate information.

7 CONCLUSION: CHALLENGES FOR INFORMATION PROVIDERS

Professional and research organizations have a range of services available to their members and stakeholders. ACER seeks to explore its position in the national information infrastructure by continually developing new business models according to customer needs and changes in scholarly publishing.

Some questions considered in this paper, and which need a great deal of further consideration include:

- 1 The role of information providers in the Google web world – will people just use Google to find information or will they go to a systematically indexed database?
- 2 What is the role of organized systematically indexed material and constructed thesauri and taxonomy vs. free text searching of full text?
- 3 With more and more material being made open access, will people pay for information? If not, how will the provision of information in new and more flexible forms be funded?
- 4 How does systematically organized information fit with the new collaborative web spaces such as users as providers of information in wikis & blogs?
- 5 How will institutions such as ACER's Cunningham Library maintain the valuable role of information creation and dissemination?

ACER is strategically placed to work with the educational research community and other collaborative partners to explore new business models. The Library will continue to embed libraries in learning and research and to create a national library for Australian educational research.

10 B. Williams, *Education with Its Eyes Open: a Biography of Dr K.S.Cunningham*, Melb., ACER, 1994, p. 169 [4]

8 REFERENCES

- 1 ACER/ education.au, *Press Release*, March 2006-03-28 [7]
- 2 A.Bryan, Web 2.0: “A New Wave of Innovation for Teaching and Learning?” *Educause Review*, Volume 41, Number 2. pp 32-44, March/April 2006 [4]
<http://www.educause.edu/apps/er/erm06/erm0621.asp?bhcp=1>
- 3 W.F. Connell, *The Australian Council for Educational Research 1930-80*, Melb., ACER, 1980. [5]
- 4 Department of Education, Science and Training, *Backing Australia’s Ability* [3]
<http://backingaus.innovation.gov.au/default2001.htm>
- 5 The Economist, “ Among the audience: a survey of new media April 22nd, 2006 [8]
- 6 Glasgow Declaration on Libraries, Information Services and Intellectual Freedom
<http://www.ifla.org/faife/policy/iflastat/gldeclar-e.html> [2]
- 7 IFLA Open Access Statement IFLA Statement on Open Access to Scholarly Literature and Research Documentation
<http://www.ifla.org/faife/policy/iflastat/gldeclar-e.html> [1]
- 8 B. Williams, *Education with Its Eyes Open: a Biography of Dr K.S.Cunningham*, Melb., ACER, 1994, p. 194 [4]
- 9 B. Williams, *Education with Its Eyes Open: a Biography of Dr K.S.Cunningham*, Melb., ACER, 1994, p. 55 [4]