



A PROFILE OF EDUCATION JOURNALS

Hedy Fairbairn, Allyson Holbrook, Sid Bourke, Greg Preston, Robert Cantwell & Jill Scevak

SORTI

The University of Newcastle, NSW Australia

ABSTRACT

Once a research project has been completed, one of the most prestigious forms of publication is a journal paper. In the current outputs-driven environment there is not only increasing pressure to publish, but to publish in 'top tier' journals. However, there is little comprehensive information about the range and scope of refereed research journals in education. The SORTI team aimed to thoroughly scope and analyse the field of research journal publishing in Education internationally, and to provide a context for discussion about the emphases in journal publication in the light of assessments of research quality

A database of over a thousand journals was compiled. The criteria for inclusion were that the journal be about education, publish research, be peer reviewed, and be published in English. Using a seven-step methodology, data on the 1042 journals was collected and refined covering information needed *to identify and locate journals, to select journals to meet your publication* and *to make a judgment about journal quality.*

A profile of the1042 journal is presented with all necessary information to allow authors to select appropriate outlets for their work including details on peer review, editorial boards, manuscript formatting requirements etc. Two new fields of information are described: a 26 discipline classification covering all areas of education; and the QScore - composite measure of journal quality which encompasses the views of Australian and international scholars, the ISI Impact Factor and the internationalisation of the journal's editorial board. A table of QScore ranges by discipline is presented.

Australian journals claiming to be 'top tier' have been challenged as being too parochial. The mapping of the eight of top tier journals by QScore demonstrates that this charge cannot be upheld: Australian journals are no more or nor less parochial than those from other countries.

Keywords: education journals, publishing, journal mapping, research journals

<u>Contact:</u> Hedy Fairbairn SORTI Faculty of Education & Arts Newbold Building Corner Gavey & Frith Street <u>Mayfield</u> NSW 2304 Email: Hedy.Fairbairn@newcastle.edu.au SORTI Website: <u>http://www.newcastle.edu.au/centre/sorti</u>

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INTRODUCTION

In education, in common with other disciplines, once a research project has been completed, one of the most prestigious forms of publication is a journal paper. A journal paper is, among other things, generally regarded as important for enhancing academic reputation but in the current outputs-driven environment there is not only increased pressure to publish, but to publish in 'top tier' journals. For the academic, in particular the early career researcher, this poses a problem because there is little comprehensive information about the range and scope of refereed education research journals. At best, educational researchers are faced with a multiplicity of lists of journals with little accompanying guidance.

The choice of a publishing outlet is a decision to be made by the author/s but as Miller & Harris (2004) remind us, there are several parties involved in publishing scholarly journals: scholars, editors, publishers and subscribers. In the current outputs-driven climate, one might also add 'institutions' to this list. To be successful therefore, the article must meet the needs of more than just the author. The problem then becomes how to assist the author to best meet the needs of all parties.

Looking to the literature, the overriding advice is very clear: *choose your journal with care* (Sadler 2006; Luey 2002). First and foremost this means selecting an 'appropriate' journal. From his surveys of journal editors, Henson (1995) found that few beginning writers realise the importance of finding a match between their manuscript and the requirements of the target journal. This is supported by other writers who warn that preparing a manuscript before identifying an appropriate journal is a leading reason editors give for rejecting manuscripts (Sadler 2006; Finn 2005, Klinger, Scanlon & Pressley 2005).

To determine which journals are *appropriate* for their research writing, authors are advised to look for those outlets that publish articles in the same field and scope as their research (Nihalani & Mayrath 2008; Klinger et al. 2005; Finn 2005; Luey 2002). Further elaborating on this advice, Sumison (1996), after surveying editors of Australian and international journals, suggests that a smaller specialist journal may be more appropriate for disseminating highly specialised research, and for research concerned with Australian contexts and issues, a national journal may be more appropriate than an international one.

This advice is helpful, but 'appropriate' has many dimensions. Is the article appropriate for the journal's aims, its scope and article type and its audience and is it appropriately formatted to comply with the stated technical specifications of the journal? To make these judgments the author must **get to know the journal**. Unfortunately, according to Denham, " ... many prospective contributors do not have ... the information necessary for making an intelligent decision about where to send their article manuscripts .. nor do they know whether a particular type of article will be appropriate for a given journal" (1982 p. 207). What then should the author know about a journal in order to make a judgment about its appropriateness?

To begin with, there must be a clear sense of audience. This means looking for journals that publish material targeted at the same audience you are writing for or risk rejection (Sadler 2006; Klinger et al. 2005). "One of the leading (US) journals rejects more than half of the manuscripts it receives without sending them out to be reviewed because the articles are written for the wrong audience (Henson 1999, p. 780).

Equally important as knowing the journal's audience is knowing the scope of the journal. After poor quality research, an inappropriate subject or one outside the scope of the journal is a common reason for rejecting good manuscripts (Nihalani & Mayrath 2008; Noble 1989). Journal editors also frequently reject manuscripts because of style, length, referencing or citation violations (Nihalani & Mayrath 2008; Eggleston & Klein, 1997). This is supported by Noble (1989) who surveyed 23 education journal editors from five countries. One third responded that failure to adhere to the guidelines meant immediate rejection of a manuscript.

In getting published, the aim is to reach as large an audience as possible. One means to achieve this is to look to the large publishing houses because, by virtue of their size, they are well organised to deliver market penetration and so boost exposure and citation rates (Eggleston & Klein 1997). They are also likely to deliver high visibility through extensive indexing of their journals. Laflin, Horowitz, & Nims consider that indexing has received far too little consideration: "An article published in a journal that is not listed in an index commonly available in libraries or commonly used by researchers will more likely become obscure and therefore contribute little to the body of knowledge in the field" (1999, p. 210).

In an environment where output quality is as important as its quantity, knowledge about a journal must also include quality measures such as the journal's editorial board, its peer review process and its citation statistics, if any. The scholar should be familiar with at least some of the names on the journal's editorial board. Not only this, but editors are a valuable source of information for the intending author and both Sumison (1996) and Henson (2003) found that most editors they surveyed welcome communication with intending authors. The second quality measure is whether or not the journal is peer reviewed. The academic referee system is an accepted mechanism to insure the quality of professional publications. "It is almost universal experience that refereed journals carry more weight than non-refereed journals" (Laflin et al. 1999).

The final important quality measure is the citation statistic. Despite cautions about their use, for example, "mindlessly ranking journals according to impact factors for a particular year is a misuse of statistics" (Adler, Ewing & Taylor 2008, p. 9), they continue to be used as measure of journal quality. Pressure to target articles for the so-called higher status journals – seen in UK since the Research Assessment Exercise (RAE) of 2001 and the ERA in Australia – has seen undue emphasis placed on these statistics (Wellington & Torgerson 2005 p. 36).

Where does the intending author find this information on which to make a decision about which outlet is most appropriate? There is a multiplicity of lists of journals, now mostly in electronic format, provided by publishers, professional associations, libraries, commercial providers, quality/banding exercises etc but by and large they are limited in scope, in what information they provide or how they can be accessed or searched. What little published research is available is similarly limited. See for example Loke (1990) who provides a detailed database of 356 journals in Psychology and Education; Laflin et al. (1999) who published a database of 86 Health Education journals; Henson (2003, 1999, 1993) who has surveyed journal editors, biennially for 20 years, producing a database of approximately 50 education journals but the surveys are American, are limited in scope and the journals are a mixture of refereed and non-refereed journals. In Australia, Sumison (1996) surveyed the editors of Australian and international journals and provided information on 143 journals but these were restricted to those of potential interest to early childhood academics.

Many attempts have been made to achieve a full list of education journals. But even to list those in the English language is a formidable task: there are vast numbers and they change constantly. Moreover education is a diffuse, broad area of study; many articles on education could equally well appear in journals in a wide range of adjacent areas (Eggleston & Klein 1997, p. 8).

The research reported here is an attempt to meet this formidable challenge.

AIMS

Suppose, as an Australian academic you have an article ready for submission. Which would be the most appropriate journal to approach given your research interest, the length of the article and your target audience? What would you look for with regard to the journal profile?

The SORTI team had two aims in considering the profile of education journals: To thoroughly scope and analyse the field of research journal publishing in Education internationally, and to provide a context for discussion about the emphases in journal publication in the light of assessments of research quality.

METHODOLOGY

The scoping and analysis of the field of research journal publishing in education took place over several years and refinement is envisaged to be an ongoing process due to the fluid nature of the publishing world and to meet the changing needs of education scholars.

Establishing a framework for data collection

The precise nature of the data collected and reported here, while framed to appeal to academics and institutions worldwide, will primarily serve as a tool for, and meet the needs of Australian researchers.

With this in mind, the criteria for inclusion were that the journal

- be about education including those areas of study which are seen as being outside the narrow four category classification applied to education in the ERA journal ranking (ARC, 2008). For example *Educational Psychology* is now listed under Psychology (1701); *Education and Society* under Sociology (1608) and *Studies in Philosophy and Education* under History and Philosophy (1402);
- 2. publish **research** articles as all or part of its regular content. This meant that many education journals were excluded because they were practitioner journals, trade magazines or monographs;
- 3. have in place some form of **peer review** process; and
- 4. be published in **English**, a requirement that does not exclude those journals published in more than one language or where English is not the first language.

Mining discipline-based lists/databases

The starting point for the scoping was the large electronic databases including, but not limited to Ulrich's International Periodicals Directory

Scopus A+ Education ABI Inform Current Contents Education Journals (Proquest) Educational Research Abstracts ERIC FirstSearch Informit Databases JSTOR Ovid Databases Proquest 500 Social Science Journals (Proquest) The Web of Science Informaworld The large publishing houses journal lists were then searched which covered, for example Wiley InterScience SpringerLink Oxford Journals Online Science Direct (Elsevier) Cabells Publishing Sage Publications

Other sources of journal lists are universities and university affiliated groups, associations including AERA, AARE, ACER, BERA, AVERTA, NZARE and NGOs such as British Education Index, National Writing Project and European Reference Index for the Humanities.

The mining and cross-checking is an ongoing process.

Cambridge Journals Online

Researching journals for suitability according to the pre-determined criteria

The next step involved researching each journal to determine if it met the established criteria - education, research, peer review, English. Another criterion was added at this point as it became apparent that a number of journals are 'invisible' for the research population at large. While a web presence was not a necessary prerequisite for inclusion, it became increasingly obvious that those journals that do not have a virtual presence would be difficult to access and publish in and may have a very narrow readership. Conversely, a web presence is not a sufficient criterion for inclusion as some journal websites give so little information that no judgement can be accurately made. Journals for which little or no information was available were excluded after all attempts to contact the editor failed.

Extracting journal details informed by the research

Twenty three details were extracted for every journal to include such information as potential authors would need to make an informed decision about the journal's appropriateness.

The information collected can be broadly grouped under three heading:

- 1. Information needed to identify and locate journals (9 items): Journal title, Acronym/ Acronym descriptor, Prior/Alternate/Variant/Parallel title, the ISSN for all the journal formats, Journal's website, Editor/Contact email, Publisher and Country of publication
- 2. Information needed to select journals to meet your publication needs (10 items): Journal description, Language, Length of research/feature articles, Number of issues per year, Referencing style, Abstract (Y/N), Research Orientation, Audience, Start date, Abstracted/indexed (Y/N)
- 3. *Information needed to make a judgment about journal quality* (4 items): 2007 ISI Impact Factor (Y/N)¹, Type of peer review, Editorial board (Y/N), International editors (Y/N)

Developing new details

1. Discipline Area: One noticeable omission in existing journal lists is a system specifically designed for education whereby the list of journals could be categorised to assist researchers locating journals in their area. Details on the foci of each journal had already been collected so categorisations were initially made on the basis of how the journal described its coverage coupled with the descriptors given in the various databases. The research team and current President of AARE worked through several iterations of assigning journals to the discipline areas until consensus on groupings was obtained,

¹ Impact Factors are not given in the database. For this information see Thomson Reuters 2008

drawing on UNESCO and ABS frameworks in place at the time. If necessary, the journal editor was contacted.

Many journals in education have a broad scope and were classified as 'Comprehensive'. Others tend to fall into categories or sub-fields primarily based on level of education (e.g. higher education), discipline (e.g. psychology), or curriculum and practice (e.g. teaching areas). The reference panel arrived at 26 categories which can be seen in Table 1².

While there is a case for some journals to be placed in two discipline areas, to avoid possible double-counting confusion, the decision was made to put each journal in what was seen as its major area of interest. There is scope to expand this in the future.

2. QScore: As the ISI Impact Factor is a less than adequate measure of quality for Education journals as will be seen later is this paper, a new composite index of quality was developed. Using the data from the Journal Banding Study (Holbrook et al. 2007) a measure called the journal Esteem Percentage was calculated based on respondents' selection of their top 10 education journals³. The QScore, as an index of quality based on this Esteem Percentage, the journal Impact Factor if it had one, and whether the journal had an international Editorial Board, was then developed (Bourke, 2009 forthcoming)

The advantage of the QScore over other esteem measures is that the highest weight is given to the views of educators and, in particular, Australian educators: "Despite the importance of international comparisons, we believe it to be equally important for Australian education that the strongest influence on a quality measure for journals continue to be based on Australian-derived esteem ratings" (Bourke, 2009 forthcoming).

Refining, verifying and updating data

Journals are constantly changing not only their title and their focus but in almost all aspects and verifying and updating is a continual and continuing process. Journals also cease or pause and new ones are introduced so this is a research area in constant flux. To complement the sources described above, the process was informed and data verified and refined by the Journal Banding Study (Holbrook et al. 2007; SORTI website) where participants were invited to add journals they felt were missing or re-categorise a particular journal. Latterly, the journal list was cross-checked against the ERA Journal Ranking List (ARC, 2008). It took many iterations and refinements to arrive at the current dataset and this process will continue.

Analysing the database to develop a profile of educational research journals

The analysis phase was two-fold. First to analyse the full dataset to build a profile of all education research journals. In this, the types of questions that had to be answered included: In what discipline area does the current emphasis lie? Which are the high quality journals and in what discipline areas do they fall? How many education journals have an ISI Impact Factor? The second phase mapped the author affiliation of a small sample of top tier journals and so developed a clear picture of who is successful in publishing where, a finding which has implications for the current research assessment exercise.

² The categorisation process is explained in detail in a previous publication. See Holbrook et al., 2007.

³ There are 1042 journals now in the database. At the time of the Journal Banding Study there were 913 journals in the database and the QScore was calculated for each. Of these, 897 remain in the database, leaving 145 journals which do not currently have a QScore.

FINDINGS

The findings described here are based on 1042 journals and the 25 details on each collated into a searchable Excel spreadsheet known as PAJE (Publishing in Academic Journals in Education)⁴.

Information needed to identify and locate the journal

From our scoping experience we know that locating a journal can sometimes be difficult. For this reason we included more than just the **journal title** as a way of locating a journal. Acronyms, as alternate identifiers, are used by 169 journals; 351 journals had prior/alternate/variant//parallel titles and all but 37 have a registered ISSN. The ISSN is a critical identifier as evidenced by the ERA Journal Ranking Exercise (ARC 2008) where the ISSN of so many education journals was missing, leading, for example, to journals being entered under more than one title and users interested in the journal's tier, not being certain which journal was being referenced.

Seven hundred and thirty (70.1%) of the 1042 journals are currently available in both **print and electronic formats**. Interestingly, only 130 (12.5%) are online only so journals are still continuing the traditional format though there does appear to be a trend to both versions or to e-journals. However, those with print format only (182 or 17.5%) generally maintain websites with all necessary information and often also include abstracts of articles but not the full papers.

All but seven journals have a **website**, but these varied greatly in their completeness, accuracy and how current they were. If this detail was unobtainable or no response was received from the given contact, the journal's suitability for inclusion was reassessed

Fifty-two percent (540) of the journals were **published** by major publishing houses. Routledge was the largest with 116 (11.1%) followed by Sage and Springer with five percent and four percent respectively. This sector is becoming increasingly concentrated with fewer but larger publishers dominating education journal publishing.

The remaining 502 journals (48%) were published within universities (e.g., colleges, distance education units, resource centres, programs, collaboratives, regional networks, faculties, research centres, organisations, associations, institutions, schools, colleges, associations, etc); other commercial entities (e.g., national and international organisations, foundations, commissions, national associations, world councils, research centres, United Nations organisations, research associations, institutes etc) or self published. The top in the second group were American Counseling Association, Association for the Advancement of Computing in Education (both with 5 publications), American Educational Research Association, Arizona State University, Human Kinetics, National Council of Teachers of English and University of Alberta (all with 4 publications).

As shown in Figure 1, publishing is not only concentrated in the large publishing houses but, as a direct result of our criterion that journals be published in English, is also concentrated in a few **publishing countries**. Eight countries publish 1009 (95.6%) of the journals and 483 (46%) are published in the US. There are 34 countries in all represented but 22 had only one or two publications. The relative prominence of Australia is notable (116 or 11%) and an important consideration when looking for a publisher as will be seen later in this paper.

⁴ A publication will be available early in 2009 containing the complete database.

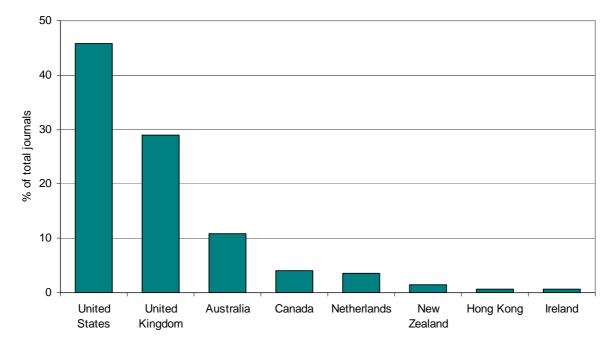


Figure 1: Journal distribution by publishing country

Information needed to select a journal to meet your publication needs

Table 1: Education journal distribution across discipline areas: Frequency and Impact Factor

Discipline Area	All jou	urnals	Journals with an ISI Impact Factor			
	No.	%	No.	%	Mean	
Administration, leadership, education management & policy	56	5.4	7	12.5	0.5	
Assessment, testing, educational measurement & research methods	22	2.1	9	40.9	0.9	
Comparative, cross-cultural & indigenous education & ethnic issues	24	2.3	4	16.7	0.3	
Comprehensive	80	7.7	18	22.5	0.7	
Creative arts, media & communication	53	5.1	1	1.9	0.1	
Design & technology	5	0.5	1	20.0	0.3	
Early childhood education	27	2.6	2	7.4	0.6	
Economics, accounting, business & management education	25	2.4	2	8.0	0.4	
Educational psychology	57	5.5	28	49.1	1.2	
Educational technology, computing & ICT	66	6.3	8	12.1	0.7	
English & literacy education	30	2.9	8	26.7	1.0	
Higher education	66	6.3	7	10.6	0.6	
History & philosophy of education	22	2.1	3	13.6	0.2	
Languages, linguistics, ESL (including TESOL & LOTE)	52	5.0	10	19.2	0.7	
Law, political science, international relations, social work, welfare ed'n.	17	1.6	2	11.8	0.3	
Mathematics	33	3.2	1	3.0	0.7	
Medical & nursing education	41	3.9	16	39.0	1.2	
Pedagogy & curriculum: theory & practice	36	3.5	3	8.3	0.3	
Physical education, sport, personal health & hygiene	27	2.6	6	22.2	0.7	
Religion & religious education	17	1.6	0			
Science & engineering	68	6.5	17	25.0	0.7	
Social & cultural context, educational sociology & anthropology	40	3.8	6	15.0	0.6	
Social Sciences & humanities (including environment & geography)	10	1.0	1	10.0	0.7	
Special education (including disability studies) & gifted	68	6.5	28	41.2	0.8	
Teacher education	51	4.9	6	11.8	0.6	
Vocational, further & adult education & training	49	4.7	3	6.1	0.8	
TOTAL	1042	100	197	18.9	0.8	

When searching for a journal as a potential outlet for your research, a starting point is likely to be the **discipline area**. The 'All journals' columns in Table 1 show the distribution of the 1042 journals across the 26 disciplines, sorted alphabetically.

The largest area is Comprehensive with 80 journals (7.7%). This area includes such top tier journals as *American Educational Research Journal* and *Australian Educational Researcher*. Science & Engineering and Special Education follow with 68 (6.5%) each, then Educational Technology and Higher Education both with 66 (6.3%). At the other end of the scale were Social Sciences & Humanities with 10 (1.0%) and Design & Technology with only 5 (0.5%).

Knowing the **length requirement** of a journal is an important factor especially if an article is already written as no author takes pleasure in deleting large sections of a carefully crafted article. A surprising 29 percent of the journals either did not specify a length requirement or stated that they would consider any length (Table 2). This could be a consequence of the rise in electronic publishing but since only 12.5 percent of journals are published as e-journals only, this is not the complete answer.

When considering Table 2 it should be noted that analysing article length is difficult and no attempt was made to standardise length requirements. There are nearly as many length requirements as there are journals. These variations cover word versus page requirements and within this latter group there are various page sizes (A4, manuscript etc) and formatting requirements (double or single spaced, margin size). Then one has to consider the multitude of possible exclusions and inclusions (tables, references, footnotes, appendices, bios, diagrams, musical examples etc). Next comes the way the length requirements are worded: between 1000 and 5000, a maximum of ..., a minimum of ..., a reasonable length would be... Lastly, how rigid the journal is in adhering to these requirements. For example, longer for ground-breaking research; over length not accepted; exceptions may be made when the topic and treatment so warrant; those beyond 9,000 words will not be read.

Putting these variations aside, 50 percent of journals specified the required length as number of words with the modal length being between 5,000 and 6,000 words. Manuscripts over 10,000 words are accepted by 31 journals but this does not include those that will consider longer articles under certain conditions. Just over a 20 percent of the journals gave the length requirement in pages. To avoid falling at the first hurdle, the main message here is that it is very important to check the specific length requirement of each journal⁵.

Measurement	Range*	No.	%
Words	<3000	22	
	3000-3900	36	
	4000-4900	53	
	5000-5900	114	
	6000-6900	108	
	7000-7900	85	
	8000-8900	56	
	9000-9990	12	
	>=10000	31	
	Total	517	49.6
Pages		224	21.5
Any length accepted		34	3.3
Length not specified		267	25.6
Total		1042	100.0

Table 2: Average journal article length requirements

* The upper limit was used to categorise articles when a range was specified

⁵ The PAJE database gives the exact length requirements and all detail as stated by the journal

The number of issues per year (see Figure 2) can be an indication of the activity level of a journal but many e-journals have one rolling issue per year so the publishing format has to be considered. The modal number of issues is four (411 or 39.4%), 75 have one issue per year and one journal has 15. It could be concluded that, other considerations aside, there is a greater chance of being accepted by a journal with a larger number of issues per year but there are two cautionary notes. The first is the number of articles per issue will vary greatly not only from journal to journal but also from issue to issue. For example *Harvard Educational Review* and *Medical Education* both have 12 issues per year but the latter publishes three times more articles. Second, there may be few research articles in each issue or the entire contents may be research articles. To help clarify this, a research orientation field is included in the database.

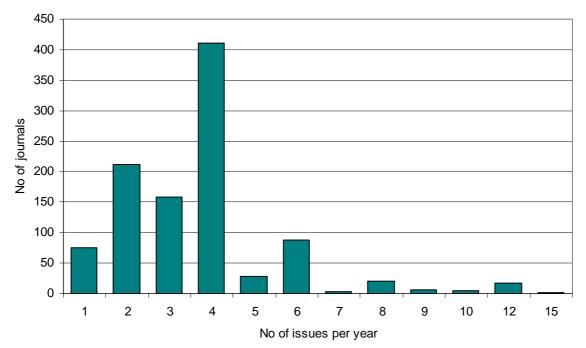


Figure 2: Number of issues per year

* Note: Figure does not include the 15 journals with an irregular number of issues

The **research orientation** information is given to inform, not only about the type of research published, but also what other content is published in the journal. For example, theses summaries, commentary, theoretical perspectives, innovative practices, software, media and book reviews, essays and thought pieces, or professional observations and discussions.

Referencing style (see Table 3) is another common requirement editors look at as a cause for rejection so it must be an early consideration. Having to change an extensive reference list from, for example, a footnoting to an in-text style can be both tedious and time consuming. Referencing style tends to be discipline or research method specific with almost 474 (48.7%) education journals using American Psychological Association (APA) style and another 19 specifying APA for quantitative research articles. The next is Journal House style (323 or 33%) which in many cases is a variation of APA.

Being able to access article abstracts is valuable when assessing the appropriateness of a journal particularly if the journal description is not sufficiently detailed. Over 900 (87%) of the journals required an **abstract** or some form of summary to accompany the full article. Where the journal publishes in more than one language it is often specified that there be an abstract in the other language/s to accompany the full paper.

Table 3: Journal referencing style

Referencing style	No.	%
APA	474	48.7
Journal house style	323	33.2
Harvard	60	6.2
Chicago	52	5.3
APA and Chicago*	19	2.0
MLA	7	0.7
AMA	7	0.7
Other	23	2.4
Any standard format	5	0.5
No set format	4	0.4
Total of those available	974	93.5
Not available	68	6.5
Total	1042	100.0

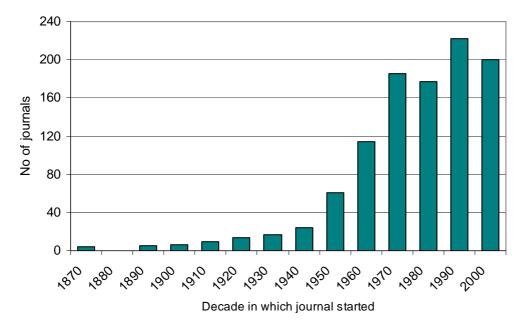
* APA for quantitative and Chicago for non-quantitative research

Despite evidence from editors themselves as to the importance of targeting the correct audience (Henson 1999) just over a quarter (271 or 26%) of the journals did not supply information about their **target audience** to assist the researcher. This information, which reflects the scope of the journal, if explicit enough, can be used in conjunction with the journal description and discipline area. For example:

"Educational practitioners, policy-makers, scholars interested in queer-related issues in elementary, middle, secondary schools and undergraduate level, including curriculum directors, state and federal policy-makers, program administrators, educational researchers and professors, private foundation directors, LGBT high school youth group advisors, teacher educators, and local chapter leaders and academics" *Journal of L G B T Youth*

"Researchers and practitioners interested in scholarly investigations likely to have an impact on educational measurement practices. Practitioners interested in current best practices in testing and assessment" *Applied Measurement in Education*

As shown in Figure 3, a few education journals have been in publication for well over a century (e.g., *Journal of Education*, 1875; *Arts Education Policy Review*, 1879) but the 1960s witnessed a surge in the emergence of new journals – a trend which has continued with a slight interruption in the 1980s. Data for the present decade is incomplete, but if the trend continues, it is possible that the next two years will see the emergence of up to 20 new journals.



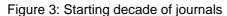


Table 4 shows, by discipline area, where the growth in new journals has been over the past nine years (2000-2008). If the upward trend in the emergence of new journals is to continue it could be in the key the growth areas: Administration, leadership, education management & policy; Science & engineering; and Educational technology, computing & ICT which together account for 25 percent of the growth.

Discipline Area	No.	%
Administration, leadership, education management & policy	17	8.5
Science & engineering	16	8.0
Educational technology, computing & ICT	15	7.5
Comprehensive	14	7.0
Higher education	12	6.0
Social & cultural context, educational sociology & anthropology	12	6.0
Creative arts, media & communication	11	5.5
Pedagogy & curriculum: theory & practice	11	5.5
Economics, accounting, business & management education	10	5.0
Teacher education	9	4.5
Educational psychology	8	4.0
Medical & nursing education	8	4.0
Vocational, further & adult education & training	8	4.0
Languages, linguistics, ESL (including TESOL & LOTE)	7	3.5
Early childhood education	6	3.0
Comparative, cross-cultural & indigenous education & ethnic issues	5	2.5
English & literacy education	5	2.5
Physical education, sport, personal health & hygiene	5	2.5
History & philosophy of education	4	2.0
Mathematics	4	2.0
Assessment, testing, educational measurement & research methods	3	1.5
Social sciences & humanities (including environment & geography)	3	1.5
Law, political science, international relations, social work & welfare education	2	1.0
Religion & religious education	2	1.0
Special education (including disability studies) & gifted	2	1.0
Design & technology	1	0.5
Total	200	100

Table 4: Number of journals that have started in the last five years by discipline

If a journal is **abstracted or indexed** it indicates that it has a 'presence' or visibility in the academic community and the more sources it is abstracted in, the greater this potential presence. In our database of 1042 journals, nearly 90 percent are abstracted or indexed in at least one source.

Information needed to make a judgment about a journal's quality

Referring to the last columns in Table 1, only 197 or 18.9 percent of education journals have a 2007 ISI **Impact factor**⁶. In view of the present emphasis on quality/top tier/high impact journals this figure is indicative of the lack of a robust metric to determine journal coverage in education. In addition, it must be pointed out that the average ISI of the 197 journals is only 0.8 with the maximum being for *Child Development* (3.38) followed by *Journal of Autism and Developmental Disorders* (3.21). The discipline with the highest percent of journals with an ISI Impact Factor is Educational Psychology with 49.1 percent. In stark contrast, the highest

⁶ For the ISI Impact Factors see Thomson Reuters, 2008

ISI Impact Factor in the JRC Social Sciences Edition is 17.46 (Psychology) and in the JRC Sciences Edition it is 69.26 (Oncology) (Thomson Reuters 2008).

While the literature cautions against comparing impact factors across different research categories within education as discussed above (e.g., Laflin et al. 1999), the findings outlined here are supported by those from the United Kingdom where a research assessment exercise has already been worked through: "While the use of an impact factor can give some indication of a journal's status, it can, arguably, not necessarily be a marker of a journal's quality" (Wellington & Torgerson 2005, p. 36).

A second indication of quality is if and how the journal is **peer reviewed**. Our criteria for selection meant non-refereed journals were excluded but this still leaves room for a great deal of variation: triple blind peer review, double or one-way blind peer review, editorial review, juried review, open peer review, public or private peer review, referee-assisted review etc. Table 5 presents a picture of some of these options. Some form of blind peer review operated in over 65 percent (687) of the journals. However, there is little consistency in how the various terms are used, especially blind and double blind which seem to be used interchangeably.

Table 5: Type and frequency of peer review

Type of Review	No.	%
Peer review*	338	32.4
Blind peer review#	570	54.7
Double blind peer review	117	11.2
Other forms of review	6	0.6
Optional peer review	6	0.6
Not known	5	0.5
Total	1042	100

* A journal was given the designation 'peer review' not only when this was stated by the journal but also when it could not be established if it was blind or not.

Often 'blind' is not specifically stated but could be implied from the 'Instruction to Authors'.

Other information which can be used to judge a journal's quality is if it has an **editorial board** and if this board has **international representation**. Just over 80 percent of the journals (851) had an Editorial Board but in nearly 179 cases (17.9%) this could not be established from the available information. International members were on the boards of almost 60 percent of journals (595) but again, in a quarter of cases this detail could not be established.

Journal QScore

The journal QScore ranges from 0 to 29.33. The QScore range for each of the 26 discipline areas is shown in Table 6 together with the mean and the number of journals in each discipline area. The prominent position of the high quality journals in the Comprehensive area is notable and includes such journals as *America Educational Research Journal* (29.33), *British Educational Research Journal* (29.30), *Review of Educational Research* (29.21) and the *Australian Educational Researcher* (24.34). Although journals in this area accounted for only 7.7 percent of the journals in our list (see Table 1) they had a much higher representation among the top tier journals. Of the 50 top journals ordered by QScore, 26 percent were 'Comprehensive'⁷.

⁷ For a complete list of the education journals and their QScore see Bourke 2008.

Table 6: Journal QScore by discipline

Discipling		QSo	core	
Discipline	No.	Mean	Min	Max
Administration, leadership, education management & policy	49	7.3	0.0	18.6
Assessment, testing, educational measurement & research methods	19	10.6	0.0	18.3
Comparative, cross-cultural & indigenous education & ethnic issues	22	8.5	0.0	18.8
Comprehensive	77	10.1	0.0	29.3
Creative arts, media & communication	38	9.8	0.0	17.6
Design & technology	5	14.8	10.7	19.6
Early childhood education	17	13.4	0.0	21.0
Economics, accounting, business & management education	24	8.3	0.0	18.2
Educational psychology	51	9.2	0.0	23.1
Educational technology, computing & ICT	55	8.2	0.0	20.7
English & literacy education	27	8.3	0.0	22.7
Higher education	60	5.8	0.0	20.1
History & philosophy of education	19	11.5	0.0	19.8
Languages, linguistics, ESL (including TESOL & LOTE)	43	11.0	3.0	21.4
Law, political science, international relations, social work & welfare ed.	15	9.9	0.0	18.4
Mathematics	26	11.6	0.0	21.4
Medical & nursing education	37	8.9	0.0	24.6
Pedagogy & curriculum: theory & practice	16	8.6	1.6	19.0
Physical education, sport, personal health & hygiene	24	11.2	3.0	22.5
Religion & religious education	17	10.0	0.0	20.7
Science & engineering	63	8.5	0.0	23.5
Social & cultural context, educational sociology & anthropology	37	7.5	0.0	24.2
Social sciences & humanities (including environment & geography)	9	8.5	0.0	13.8
Special education (including disability studies) & gifted	58	9.3	0.0	23.5
Teacher education	51	5.6	0.0	17.1
Vocational, further & adult education & training	37	6.9	0.0	15.7
Total	896 ⁸	8.8	0.0	29.3

Detailed analysis of a sample top tier journals

One concern expressed has been the level of parochialism in journals, especially Australian journals by ERA. In a sample of top tier journals based on the QScore, additional analyses surveyed, by geographic location of journal, the degree of representation of published authors from different countries. This is preliminary to exploring the potential for an internationalisation index as a useful tool for researchers seeking publication.

This part of the project involved examining and recording every article in every issue of the top eight journals by QScore to record the author affiliation. As Table 7 shows, this involved 2136 articles and 5281 authors. Not unexpectedly, five of the top eight journals were published in the USA. The journal *Medical Education* dominates with over 60 percent of the authors and almost half the articles mapped. It also draws authors from 22 countries not represented in the other seven journals.

The discipline areas in both quantity and quality are dominated by the 'Comprehensive' journals but this mirrors their representation in the total distribution of journals.

Appendix Table A1 shows the full mapping by country. Fifty-three countries are represented but author affiliation is very concentrated with 95 percent represented by 10 countries and

⁸ See footnote on page 6 for an explanation of the number of journals.

just five countries accounting for 85 percent of authors. With the exception of The Netherlands, four of the top five countries have English as their first language - a reflection of the journal selection criterion.

Journal	Discipline Area	QScore	Ranked by ISI	Publishing Country	No. of countries represented	No. of articles mapped	No. of authors mapped
American Educational Research J.	Comp	29.33	3	USA	9	117	273
British Educational Research J.	Comp	29.30	5	UK	12	175	391
Review of Educational Research	Comp	29.21	1	USA	14	74	170
Teachers College Record	Comp	28.54	7	USA	15	418	723
Harvard Educational Review	Comp	26.04	4	USA	2	95	99
Medical Education	Med & Nurse Ed	24.63	2	USA	53	1018	3263
Australian Educational Researcher	Comp	24.34	8	Australia	10	79	136
British J. of Sociology of Education	Social & Cultural	24.18	6	UK	20	160	230
Total						2136	5285

Table 7: Characteristics of the top eight journals by QScore

However, the question that needs to be asked of these 'top tier' journals is what proportion of the journal is populated by scholars from outside the country of publication? It can be argued that top tier journals should be international to afford this status. The assumption underpinning the peer review process is that, after meeting submission requirements, the articles are judged on their merit without regard to the author's country of affiliation. Table 7 and Figure 4 show otherwise. Based on articles actually published, with the exception of *Medical Education* (27%) and the *British Journal of Sociology of Education* (56%) there is a 30 percent or less chance of having an article accepted if you are not a 'local' author. *Harvard Education Review* stands out as being virtually inaccessible to anyone outside North America.

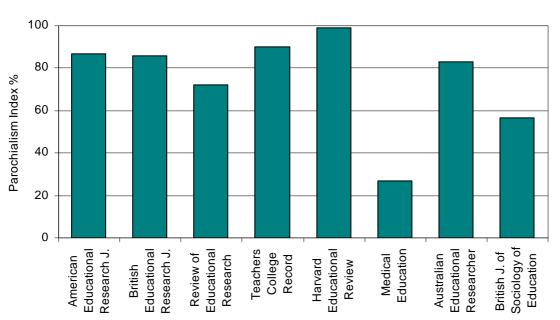


Figure 4: Number of authors affiliated with the country of publication

Figure 5 gives this information in more detail. It shows the distribution of authors from each of the five countries for each journal. It can be seen that *Harvard Educational Review* only had one percent of its authors from outside the US and the *Teachers College Record* was only slightly better with six percent. *Medical Education* on the other hand drew almost equally

from the USA and the UK. The *Australian Educational Researcher* only fared slightly better with 12.5 percent of its authors affiliated outside Australia.

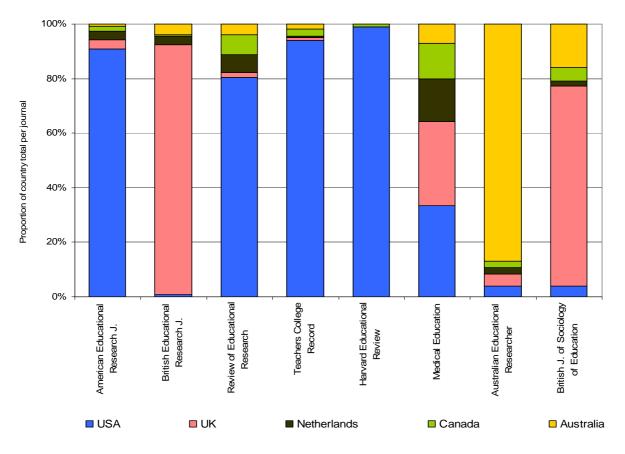


Figure 5: Distribution of authors across the top five countries

While this mapping exercise was only able to include those articles that were accepted for publication, the question has to be asked: Is something happening in the editorial review process that leads to this parochial bias? In a study undertaken in the UK, Wellington & Torgerson (2005) asked a random sample of 100 professors of education in UK and USA what counts as a high status journal. In one striking difference between the USA and UK is the criteria given to 'eminence'. Not a single USA respondent mentioned the issue of "internationality, whether it be in readership, authors or the refereeing process. This contrasts with UK respondents where the importance of being international was third most important criterion." (p.44).

In answer to the charge of parochialism against the Australian journals, this exercise has shown, albeit on a small scale, that Australian journals are no different from those of the USA or UK.

CONCLUSION

The compilation and analysis of 1042 education research journals provides a resource for authors looking for the most appropriate outlet for their articles and as well as information on how, in an outputs-driven environment, to maximise the impact of their research publication output.

The findings of the profiling and mapping exercises revealed three important points. First is the need for a comprehensive set of categories within which to organise education research

journals. The 1042 journals were grouped under a set of 26 discipline areas. Second, the ISI Impact Factor was shown to be an inadequate quality measure for the education. The development of the QScore provides a composite measure reflecting the preferences of Australian (and to a lesser extent international) researchers as well as other quality indicators

Finally, it was shown that parochialism in author choice is not unique to Australian top tier journals. In terms of what articles are published, all other things being equal, and with a couple of notable exceptions, there is less than a 30 percent chance of success if you are not a local author

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APPENDIX

Table A1: Distribution of author affiliation by country and journal

No %	Country	Educa Rese	rican ational earch rnal	Educa Rese	tish ational earch rnal	Revi Educa Rese			hers lege cord	Educa	vard ational view	Education E		Australian Educational Researcher		British Journal of Sociology of Education		Total	
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Nepal											9	0.28					9	0.17
Uganda							1	0.14			8	0.25					9	0.17
Greece			1	0.26							6	0.18			1	0.43	8	0.15
Argentina											7	0.21					7	0.13
Nigeria											7	0.21					7	0.13
Bosnia & Herzegovina											6	0.18					6	0.11
Lebanon											6	0.18					6	0.11
Mexico					1	0.59					4	0.12					5	0.09
Austria											4	0.12					4	0.08
Macedonia											4	0.12					4	0.08
Portugal					1	0.59	1	0.14							2	0.87	4	0.08
Chile											3	0.09					3	0.06
Columbia					1	0.59					2	0.06					3	0.06
Republic of Cyprus	1	0.37	1	0.26											1	0.43	3	0.06
Thailand											3	0.09					3	0.06
Bahrain											2	0.06					2	0.04
Czech Republic															2	0.87	2	0.04
Indonesia											2	0.06					2	0.04
Philippines											2	0.06					2	0.04
Trinidad											2	0.06					2	0.04
Ghana													1	0.74			1	0.02
Grenada											1	0.03					1	0.02
Iran											1	0.03					1	0.02
Kuwait											1	0.03					1	0.02
Mongolia											1	0.03					1	0.02
Oman											1	0.03					1	0.02
Sri Lanka											1	0.03					1	0.02
Total	273	100	391	100	170	100	723	100	99	100	3263	100	136	100	230	100	5285	100