

PUBLISHING EDUCATION RESEARCH IN THE CONTEXT
OF THE GLOBALIZATION OF KNOWLEDGE:
NOTES FOR AN UNFINISHED CONVERSATION

LA PUBLICACIÓN DE LA INVESTIGACIÓN EDUCATIVA EN EL CONTEXTO
DE LA GLOBALIZACIÓN DEL CONOCIMIENTO:
NOTAS PARA UNA CONVERSACIÓN INACABADA

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This article is being published in the fiftieth edition of the journal *Edetania, estudios y propuestas socioeducativas*, a publication launched in 1989 in the former Escuela de Magisterio of Godella, which is now part of the Universidad Católica de Valencia. In our modest contribution to the celebration of this landmark event, we would like to offer a few reflections regarding some of the challenges currently facing scientific publications in the field of education research within the context of the growing globalization of knowledge. These reflections arise from an ongoing conversation that the two authors of the present article have participated in during the last few years in the Council of the World Educational Research Association (WERA), marked by the contributions of the co-authors at the WERA symposium held in Guanajuato in November 2013 (Jover, 2013), and at the seminar “Trends and Opportunities in Education Research Worldwide,” which was organized the following year in Madrid by the *Sociedad Española de Pedagogía* and the Civic Culture and Educational Policies Research Group of the Universidad Complutense (Levine, 2014).

The co-authors represent two research societies that are very different with respect to their structure, history, and size. Felice J. Levine is currently the Executive Director of the American Educational Research Association (AERA), an organization with more

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than 25,000 members that was founded in 1916. Its formal establishment was after several decades of interest in the scientific study of education that emerged during the second half of the nineteenth century in the progressive political movement. This interest initially led to the creation in 1867 of the Department of Education, by virtue of an Act of Congress of the United States, which in turn would lead to the establishment of both the National Center for Education Statistics and the first university programs of study in the field of Education (Mershon & Schlossman, 2008). In contrast to other scientific associations within the United States, the AERA owes its early origins more to scientific interests within schools and school districts rather than from interests within the academy (Levine & Hill, 2015: 279-280), although the influence of the academy quickly emerged.

Gonzalo Jover has served as president since last June of a far smaller organization, the *Sociedad Española de Pedagogía* (SEP) which was founded by Víctor García Hoz in 1949, and which was designated with the name of the organization that had been created by Ezequiel Solana and Victoriano Ascarza in 1906. Two years earlier, in 1904, the Chair of Higher Education had been created as part of the doctoral program of the Faculty of Philosophy of the University of Madrid, the first Spanish university to offer a program of study in Education. The first holder of this chair was Manuel Bartolomé Cossío, who was later followed in the 1940s by García Hoz. As was the case with AERA, the Spanish organization initially had a scientific orientation that was more broadly professional than strictly academic.

Over and apart from their unique characteristics and separate histories, the two organizations share the goals of promoting education research and strengthening the educational knowledge base. Both organizations are engaged in disseminating research via congresses and journals, and encourage publishing in the best scientific publications in education research and the social sciences. Both are dedicated to the establishment of high standards of quality for research that serve as the basis for educational policies and practices.

In both the United States and Spain, the topics constituting the core of education research are generally similar to one another. A major study of doctoral programs in education research at nearly 100 US universities undertaken by the AERA in collaboration with the National Academy of Education points to these similarities. One of the major accomplishments of the study was the development of an empirically-based taxonomy of 17 areas that constitute the major fields in education research (Levine & Shepard, 2013). A comparison of these 17 fields to the dominant fields in Spain shows the presence or equivalencies in both countries of such fields as developmental and educational psychology, language education, mathematics and science education, social and



philosophical foundations (including theory and history), and methods and assessment (Levine, 2014).

The Spanish and the US organizations also share the goal of promoting national and international dialogue among researchers. This objective led to the creation of the World Education Research Association (WERA), which was formally established in San Diego in April 2009, with the founding ceremonies held in Vienna in September 2009. The formation of WERA followed more than two years of preliminary conversation by more than twenty regional, national and international organizations, including both the AERA and the SEP, which combined represent more than 60,000 education researchers worldwide. According to its founding principles, the aims of WERA are to advance education research as a scientific and scholarly field on a global scale, to build and expand capacity for education research, and to promote the use and application of education research worldwide. WERA undertakes activities that are global or comparative in scope and that therefore transcend what any association can accomplish in its own country, region, or area of specialization (WERA, 2009).



Council of the *World Educational Research Association*. Vienna, September 26, 2009.



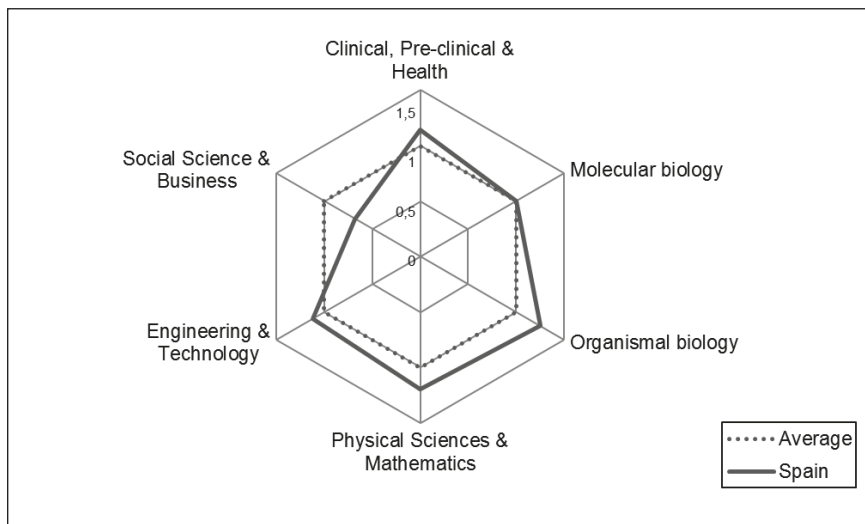
Currently, WERA consists of education research associations from Africa, Asia, Europe, Latin America, and North America. AERA and SEP were founding members of WERA in 2009. Among WERA societies, AERA and SEP are among the oldest education research organizations in the world, having been formed in 1916 and 1949, respectively (Levine & Hill, 2015: 285).

But let us return to Valencia. The appearance of *Edetania* in 1989 was not an isolated occurrence. Elsewhere, an analysis has been offered of how international events during that year affected education, and how these events interacted with the local context of Spanish education research (Jover, 2016). The decade of the 1980s had seen rapid expansion and diversification of institutional channels of education research. This tendency was spurred by, among other factors, the organization of university structure in areas of knowledge, and the distancing of some groups with respect to the *Sociedad Española de Pedagogía*, which was the official body representing the education profession during Franco's dictatorship. Thus, the 1980s saw the emergence of a number of scientific associations characterized by varying degrees of formality representing those areas. At the same time, numerous academic journals were launched. The database of the Center of Humanities and Social Sciences of the Council of Scientific Research includes 294 journals dedicated to education, 86 of which are no longer published. The greatest explosion in this regard occurred during the 1980s, which saw the number of such publications more than triple, from 37 to 121. In the 1980s and 1990s combined, 164 publications were launched.

Since the beginning of the 21st century, the main challenges faced by these journals have involved their positioning themselves competitively in order to maximize their international impact. In this regard, the *Revista Española de Pedagogía*, which was included in the 2007 Thomson Reuters Journal Citation Reports (JCR), was a pioneer. Currently, JCR includes half a dozen Spanish journals in the category of education and educational research. Of these publications, only one falls within the first quartile, with another falling in the third quartile, and the rest in the fourth quartile. This situation stands in contrast to the 88 US journals included in the JCR in the same category—a full third of all such publications. Nearly two-thirds (57) of these 88 publications fall within the first and second quartiles. According to Thomson Reuters' 2013 report, Spain's situation with respect to education research journals mirrors that of its position in the social sciences and economics, fields in which Spanish journals fall below the international mean. This standing is in contrast to Spain's position in other fields, such as the physical sciences, engineering, biology, and health sciences.



FIGURE 1
Impact index of Spanish journals by field of knowledge



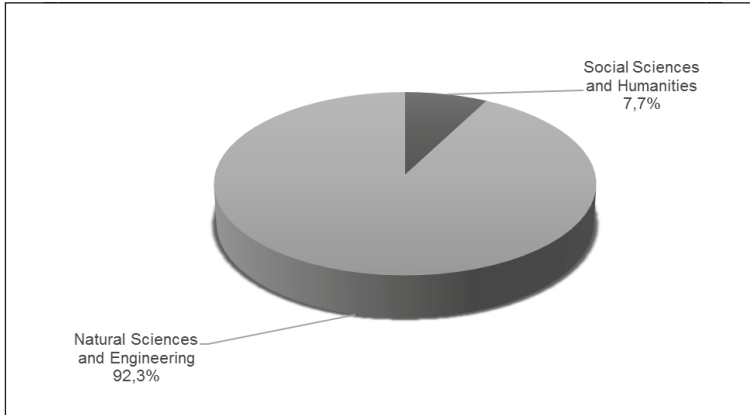
Source: Adams and Gurney (2013).

These data reflect a number of different factors. One particularly important factor to be considered in this regard is the predominance of English as a *lingua franca* of scientific communication, and its respective weight in social sciences and the humanities, on the one hand, and more technical disciplines, on the other. According to *Scimago Journal & Country Rank (SJR)*, which uses Scopus data as the basis of its rankings, an article published in an educational journal in the United States, the United Kingdom, or Holland (i.e., in English) is more than twice as likely to be cited than one published in a Spanish journal. Nonetheless, Levine (2014) reports an overall pattern of an increasing number of citable documents from Spain based on SCImago trend data from 2004 to 2013.

Another factor in play in the situation described in the social sciences is economic in nature. According to the 2016 World Social Science Report, Spain not only lags behind other countries when it comes to investment in research (at 1.23% of GDP, less than half of the 2.73% spent by the United States). In addition, the percentage of investment dedicated to social sciences and the humanities is also low, at 7.7%, as compared to 92.3 percent allocated to research in the natural and technical sciences (ISSC, IDS, & UNESCO, 2016: 306).



FIGURE 2
Proportion of Gross Domestic Expenditure on R&D (GERD) by field of knowledge (Spain)

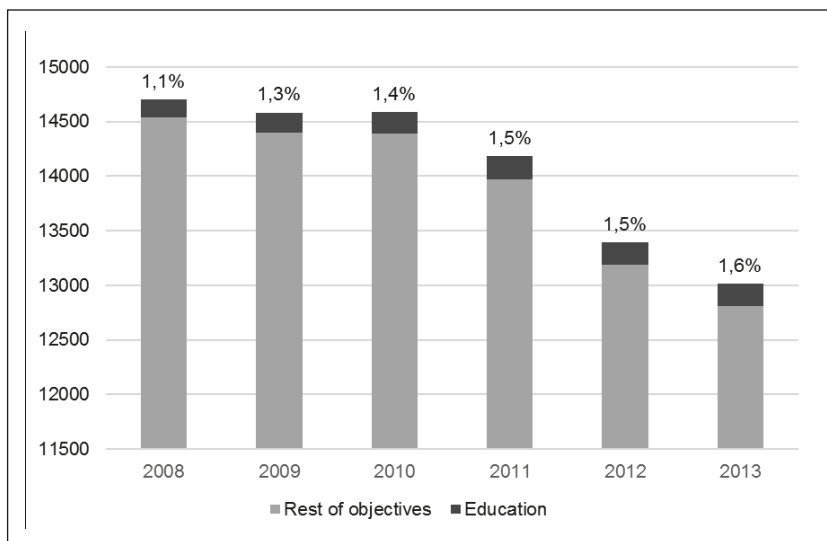


Source: ISSC, IDS, & UNESCO (2016).

Within the context of the dramatic reduction in the funding of research during the most difficult years of the economic crisis, the small proportion of such expenditures dedicated to education research has at least remained steady, even increasing from 1.1% in 2008 to 1.6% in 2010. These data suggest that, with reduction of funding, education research was not more vulnerable than other fields.

Despite the difference in allocation of resources, volume of investigation, and so forth, the prevailing scenario of globalization of knowledge has resulted in scientific publications in both Spain and the United States being subjected to similar tensions and transformations, one of the most significant of these being the growing emphasis on open access publishing. Since early in the 21st century, there has been a dramatic change with respect to the value of research transparency and accessibility of knowledge, as well as in the ways in which scientists and citizens receive and use information. Researchers today – especially early career researchers – expect faster dissemination of and potential access to knowledge, with a focus on a direct search bearing upon a specific subject area and a reluctance to await the publication of studies in journals.

FIGURE 3
Trend in Gross Domestic Expenditure on Research and Development for Education
versus all other areas (Spain)



Source: OECD (2016; in millions of euros).

Developments in open access publishing and in making especially publicly funded research freely accessible first took form in the fields of science, technology, and medicine (STM) before the entry of the social sciences, including in education research. Even in the United States, the social and behavioral sciences have, until comparatively recently, been absent from the national discussion regarding open access, despite the fact that the policies requiring this kind of access to the results of all research funded by the federal government affect both the social sciences and the experimental and technological sciences.

In the context of this discussion, in November 2012, the *American Educational Research Association* organized a working conference on “Open Access Publishing in the Social Sciences”, that brought together representatives of scientific societies in the social and behavioral sciences, libraries, commercial publishers and university presses, researchers, journal editors, and experts in open access for the purpose of exploring fundamental questions regarding the role of academic organizations in that process. The



conclusions that they reached are applicable beyond the specific context of the AERA and were shared widely thereafter at a conference convened on open access publishing by the United Kingdom Academy of Social Sciences (Levine, 2012).

This AERA conference made evident the numerous benefits of open access and the challenges in considering forward-looking models of knowledge dissemination. One such benefit is the greater degree of access to research allowed by open access publishing within traditional journals (for example for federally funded studies) and more fully through open access journals. Making articles freely available through online, open access journals widens the readership and accelerates use of results across a range of fields, the general public, communications media, responsible public officials, and so forth. In addition, open access publishing may encourage new areas of research, provide ways of connecting researchers working within different fields, and stimulate research in cross-cutting related areas. Researchers working in institutions or countries with fewer resources might especially reap important advantages from open access.

It was advantages such as these that led the AERA in 2015 to launch *AERA Open*, an open access peer reviewed journal that places an emphasis on the rapid review and dissemination of articles that are published on an ongoing basis as soon as they are accepted. Publishing open access journals entails costs that are not recovered through subscription fees paid by institutions and individuals. Instead, costs need to be covered by some form of revenue generation in order for journals (and the societies that publish them) to be financially viable. Most commonly, revenue is generated through fees paid by authors for article processing charges (APC). Under some circumstances, these fees are covered by research grants or funds set aside by academic institutions to cover these costs; under other circumstances authors may not have such funds available and cover their own charges.

Publication of an article in *AERA Open* costs US\$700.00, with much lower rates for AERA members (US\$400.00) and AERA student members (US\$100.00). A very low introductory rate is still in effect, with non-member rates at \$200 and all other rates progressively lower. Also, authors from World Bank low economies pay no fee. In Spain, the *Sociedad Española de Pedagogía* has also initiated a policy of “gold open access” for articles published in *Bordón. Revista de Pedagogía* that can be exempted from the mandatory waiting period of one year required for the online version in exchange for a payment of 600 euros.

Levine (2012) points out that APCs can be very steep depending on the publisher and the financial model under which the journal operates. STM journals typically have high APCs. APCs have also been adopted by the AERA and the SEP, among other education research and social science journals. Priced at actual cost and revenue needs, this model may be problematic for those social science researchers who are independent,



have limited resources, or lack the necessary subsidies. Even in those cases in which subsidies are available, the amount of assistance provided in the social and behavioral sciences is on average much less than in STM fields, which is yet another comparative disadvantage.

Further, academic institutions may not be as viable an alternative for payment of APCs to research associations such as AERA and SEP or the social sciences more generally. If the cost is going to be paid by universities or their libraries, then it is necessary to ensure that institutions do not devalue the investment when allocating resources for fees to social and behavioral science journals. Unfortunately, at least in Spain, when it comes to providing resources for research, universities do not always attempt to redress the imbalances inherent in relative public expenditure.

Beyond costs and the fair allocation of resources, there are other considerations important to quality publication in open access journals. The growth of open access publication has brought with it an increase in predatory journals directed to profit making. They charge fees for publishing articles that are not peer reviewed or subject to other editorial services, potentially taking advantage of vulnerable authors and distributing information of low or no merit. An important rationale for scientific associations like AERA and SEP to be engaged in open access publishing is to maintain quality research standards under a free access environment (Levine, 2012). All this means that that research associations face new responsibilities for which they do not always have suitable resources.

But perhaps the most important accomplishment of the AERA conference on open access was the creation of synergies among participants, and the commitment of social science organizations to work together in this and other areas. What the pragmatist Charles S. Peirce applied to individual scientific work has now become a necessity of academic organizations such as those we represent:

I do not call the solitary studies of a single man [person] a science. It is only when a group of men [persons], more or less in intercommunication, are aiding and stimulating one another by their understanding of a particular group of studies as outsiders cannot understand them, that I call their life a science. It is not necessary that they should all be at work upon the same problem, or that all should be fully acquainted with all that it is needful for another of them to know; but their studies must be so closely allied that any one of them could take up the problem of any other after some months of special preparation and that each should understand pretty minutely what it is that each one's of the others work consists in; so that any two of them meeting together shall be thoroughly conversant with each other's ideas and the language he talks and should feel each other to be brethren (Peirce, 1987).



Within the context of work and dissemination that is increasingly international in scope, knowledge can no longer be isolated within the confines of the classical limits of each separate discipline. The *Sociedad Española de Pedagogía* has met this challenge by transforming its congress, which has been held without interruption since 1949, into a meeting point of the different Spanish associations and networks that work in different areas of education research. This experience began at the most recent congress, which was held last June, and which involved the participation of 15 academic networks and more than 1000 attendees. That event will serve as a springboard for the design of future collaborations.

Many of the changes occurring with respect to conducting and publishing education research have been driven by technological advances and the possibilities that the Internet has created for researchers and scientific organizations for sharing research and their results both among themselves and with the general public. But these changes also reflect the transformation occurring with respect to the very meaning of the publication of knowledge. To a great extent, the audience of published work no longer comprises those whom Wolfgang Iser called the “implied reader” (Iser, 1978), but instead the authors of the studies themselves. Publication has thus become an end in itself, rather than a product to be read. At most, the reader becomes someone who might cite the work in the future, reflecting a transformation from the traditional “publish or perish” into “to be quoted or not to be” (Bergeron, 2013). This pressure can especially be seen in certain habits of emerging researchers, who keenly feel the need to build their résumés. This pressure means that it is now nearly impossible to heed the counsel provided by Ramón y Cajal more than 100 years ago to those embarking upon research careers:

Our classrooms and laboratories are full of these capricious and restless souls who love research and suffer through mishaps with the retort or microscope day after day. Their feverish activity yields an avalanche of lectures, articles, and books—upon which they have lavished a great deal of scholarship and talent. They constantly exhort the garrulous throng of dreamers and theorizers with the indispensable need for observing nature directly. Then, after long years of publicity and experimental work, those closest to them (their satellites at the prestigious yet mysterious meetings where the great preside) are asked about the discoveries of the master. The allies are forced to confess shamefacedly that the great burden of talent, combined with the virtual impossibility of summarizing in a nutshell the extraordinary magnitude and range of the work undertaken, make it impossible to state what partial or positive progress had been made. These are the inevitable fruits of negligence or excessive lack of focus, not to mention childish, encyclopedic ostentation. This approach is inconceivable today, when even the most renowned scholars specialize and concentrate in order to produce (Ramon y Cajal, 1999: 32-33).



The final challenge facing education research and scientific publications is that of providing an outlet for the pressures currently experienced by researchers, but without calling into question the quality of their work. Within an environment characterized not only by the drive to continually expand *résumés* but also by what to some extent seems to look like a monopoly of knowledge management exercised by publishing behemoths, we can only be grateful for the existence of journals like *Edetania* which, while locally managed, maintain high standards of quality.

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