The American Journal of Education: challenges and opportunities in translational science and the grey area of academic publishing

American Journal of Education: retos y oportunidades en las ciencias translacionales y la zona gris de la publicación académica

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Abstract:

The American Journal of Education (AJE) is one of 11 core journals identified in the field of education and publishes new research across a broad range of educational disciplines. Located at Penn State, the journal is supported by associate editors from around the nation as well as an advisory board of senior scholars. The journal also supports an online forum (AJE Forum) that is managed by the student editorial board. The major issue facing the journal is how to effectively disseminate peer-reviewed research to a broad audience that includes administrators, policy makers, reform advocates and educators. Given the limitations of university resources, the journal has experimented with new ways to disseminate information about its articles via social media and continues to assess how best to monitor the impact of journal articles in academic and policy contexts.

Keywords: academic publishing, education, social media, translational science, innovation.

Resumen:

American Journal of Education (AJE) es una de las once revistas más importantes en el campo de la educación y publica nuevos trabajos de investigación en un amplio espectro de disciplinas educativas. Con sede

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en la Pennsylvania State University, la revista trabaja con editores asociados de toda la nación y con un consejo asesor de académicos sénior. También cuenta con un foro online (AJE Forum) gestionado por el consejo editorial estudiantil. El mayor problema que afronta la revista es cómo difundir eficazmente la investigación revisada por pares para que llegue a un público amplio, incluidos gestores, responsables políticos, reformadores y educadores. Dadas las limitaciones de los re-

cursos universitarios, la revista ha explorado nuevas vías para difundir información sobre sus artículos a través de las redes sociales, y continúa evaluando la mejor forma de analizar el impacto de los artículos publicados en contextos académicos y políticos.

Descriptores: publicación académica, educación, redes sociales, ciencias aplicables, ciencias de transferencia, ciencias *translacionales*, innovación.

1. Introduction

The American Journal of Education (AJE), first published as The School Review in 1893 is one of 11 core journals identified in the field of education (Goodyear et al., 2009). The journal focuses on publishing new research across a broad range of sub-disciplines within education (e.g. political studies, social science, history, philosophy and pedagogical research). The journal is methodologically agnostic, publishing highly technical pieces (Goddard & Goddard, 2015) and qualitative research that draws on post-modern traditions (Cerecer, 2013). Despite the title, the journal publishes research from outside the U.S. and continues to encourage an international field of scholars to participate. Over the almost 125-year history, the journals' focus has shifted from a concern with topics related to U.S. secondary education, to recruiting articles that provide new knowledge or insight, based on empirical evidence or systematic analysis, that can inform educational policy, theory or practice at a national or international level.

In a field as large and diverse as education -SciMago currently identifies over 1,261 journals in the field1- there will be considerable disagreement about how to determine the prestige or influence of journals. The use of impact factors has now become routine within U.S. education departments for the purposes of promotion and tenure, which tends to obscure other ways of assessing a journal impact. As editors, we realize impact factors (and h-indexes) provide important data, but we are concerned that the sole use of such indices limits the assessment of academic journals to their usefulness solely within the academy. As a journal founded for practitioners, we are keenly aware many research articles run the risk of becoming too abstract in method, or arcane in theoretical nuance, to have any value in a classroom, policy strategy session or a legislative assembly.

The single greatest challenge to our journal that we see is how to continue to make scholarly knowledge relevant



in an age when information is cheap, abundant and often of questionable quality. In the late 1890s, AJE and other academic journals served as primary organs of information dissemination among both practitioners and scholars. Today, URLs in tweets and Facebook posts disseminate «information» around the world within hours or perhaps even minutes. The role of journals appears to have shifted from providing cutting edge information, to establishing where valid (authenticated) knowledge ends. But in the densely networked world we live in (Castells, 2004), journal articles are rapidly becoming removed from the debates about educational practice and reform that take place on social media sites or even forums like The Conversation. More disturbingly, major debates about educational practice or policy may occur without reference to pertinent information, as key disseminators of information heavily influence the communication networks in which they reside (Supovitz, 2017). The challenge that AJE faces is how to maintain both its academic rigor, and its relevance to a non-academic audience, in this rapidly changing world.

To set the context for how we are addressing this problem, we will first lay out the history and growth of the journal; how its audience and focus have changed. We provide some core operational statistics and an overview of the board structure that can help the reader understand the unique features of *AJE*. In particular, as the journal has moved into the *online world*, the work of the editorial staff has shifted in response to a need for a great-

er focus on *translating* or communicating complex research findings to general audiences. This has meant a considerable foray into the burgeoning *grey* areas of publishing in online and social media outlets. We end with a discussion of how our journal, and other academic organs, must navigate the role of social media in bridging the gap between information that informs practice and debate, and information that is highly esteemed in academic communities.

2. History

The American Journal of Education (AJE) has a long and rich history chronicling and impacting the work of educational research in the United States. In 1893, Jacob Gould Schurman launched the School Review as one of his first acts as president of Cornell University. Despite a large number of educational journals in existence at the time, only two focused primarily on the emerging interests surrounding secondary education, The Academy and School and College. When both of these journals ceased operation, Schurman noted there was a gap to be filled in the area of secondary education. He proposed that the new educational journal's target audience focus on practitioners (principals, superintendents, and teachers) and others interested in the academy's contribution related to the high school.

The School Review's first decade tells a story of financial success coupled with expanding its reach beyond the parochial influence of the state of New York and east coast academia. Cornell University sub-



sidized the first two years of publishing costs while readership grew to sustainable levels. By 1896, *School Review* moved to Chicago with editor Charles Thurber, a contemporary of Schurman, who began a partnership with the University of Chicago. The new connection with the University of Chicago bore fruit quickly, with faculty member John Dewey writing the first article for *School Review*'s first issue published by the University of Chicago Press (Dewey, 1896).

By 1900 the School Review had a high circulation relative to other journals at the University of Chicago Press and was positioned alongside other top U.S. educational journals (Wechsler, 1979, p. 92). What had started as a regional educational journal in upstate New York had become a national publication. Efforts to entice readership and bring gravitas to the journal focused on their practitioner audience, delivering an impressive amount of content, contributed by geographically diverse authors, on prescient topics, perceptive of their audiences' interests. John Dewey assumed editorial responsibility between 1901 and 1902, during which time the School Review boasted 850 pages of content, delivered in 10 monthly issues annually. In aligning with contemporary publications, School Review promoted its special topic issues (athletics, commercial education, and school architecture), its foreign correspondents, and a robust number of published articles and book reviews representing the work of researchers from thirty North American colleges and from teachers in twelve states (Wechsler, 1979, pp. 93, 86-87).

The primary competition of School Review in its first decade was the Educational Review, published through Columbia University in New York, NY. School Review differentiated itself from Educational Review by focusing primarily on the secondary education niche. A more substantial distinction, however, is the different audiences that each journal focused. School Review focused primarily on connecting educational practitioners in the field with the latest research, whereas Educational Review chose a more academic audience. It was a true review, in that it contained «comment, opinion, and information, as well as scholarship germane to its broad constituency» (Wechsler, 1979, p. 94). As such, School Review's articles contained lighter content, addressing the real-world challenges and concerns of educators, leaving the headier considerations to the Educational Review.

By the 1920's School Review began publishing copious amounts of empirical studies and endeavored to convince educational leaders to apply education science in the classroom setting (Wechsler, 1979, p. 98). Additions of theoretical studies in the 1940's also note an important shift in journal content (Wechsler, 1980, p. 229). Despite a shift to a more research-rich content, School Review remained the most read and most helpful journal by school principals (LaPoe, 1927). Through numerous editorial changes and the growing shift toward scientification of education, the School Review's continued to function as a review, and as such, maintained its broad and numerous readership (Wechsler, 1979, p. 103).



School Review underwent several shifts in focus between the mid-1950s and late 1970s, reflecting the interests of new editorial heads as well as shifts in channels of dissemination of published research. Each shift represented a reaction to financial constraints and a move away from the practitioner audience espoused to be a central focus of the journal. By the mid-1970s, it was clear that the School Review's substantial audience of teacher-practitioners faded away (Wechsler, 1980, p. 234).

By 1979 the School Review's subscription base had plummeted to pre-1969 levels, necessitating decisive action. In an effort to leave behind the practitionerfocused legacy of the review, in November 1979 it was renamed the American Journal of Education (Wechsler, 1980, p. 236). This name change formalized the shift of the journal toward an academic audience and acknowledged the importance of positioning of the publication as dissemination of academic writing increased in complexity. A second crisis occurred in the late 1990s when, in the wake of the University of Chicago's decision to close its education department, editorial support for the journal was imperiled.

A team of scholars organized by William Lowe Boyd entered a successful potential to take on the editorship of the journal. The goal, as he wrote, was «to renew and revitalize *AJE* while continuing its mission as one of the premier scholarly journals in the field of education» (Boyd, 2004, pp. 105-107). This period, as Boyd noted, was one in which social institutions like public education

were under attack, and the impacts of globalization on American society were slowly being realized. It marked a significant turn in the journal that framed the broader field of education in global terms. As Boyd wrote: «As we relaunch AJE, we invite our readers to submit manuscripts to our journal that deal with these and other significant issues facing education today, not just in the United States, but internationally, as the world becomes an increasingly "global village" facing increasingly complex issues» (2004).

The historical challenge of the journal has been to bridge the gap between academic and practitioner knowledge in ways that meet the demands of the times. The practitioner audience of School Review helped to distinguish the journal from others in the field through much of its early history, a notion which has relevance to today's market for academic journals interested in growing the subscriber base. The connection between content, audience, and factors that relate to the journal's financial stability are important to consider in light of the quick speed and myriad of channels by which information (academic information in particular) is shared.

The historical legacy of the journal still shows through today as the list of most accessed articles in all years includes a 1903 article by Lewis on «Method of Teaching English Literature», the 1913 article by Judge on «The Meaning of Secondary Education», Bobbitt's 1920, «The Objectives of Secondary Education», and Forman's 1903 «Aim and Scope of Civics». Historically, the



most significant piece —which is often read in history of education classes— is the Report of the Committee of Ten by Mackenzie in 1894. This committee of educators reported on standardizing the American High School Curriculum to include English, Mathematics, History/Civics to every student in every academic year in secondary school.

3. Focus and Audience

Of the core educational journals identified by (Goodyear et al., 2009), four are official organs of the American Educational Research Association (AERJ, EEPA, ER, and RER). Three, AJE, Harvard Education Review and Teachers College Record are independent journals —i.e. journals owned or managed by publisher, not by the association. In AJE's case, the journal is part of the University of Chicago Press' holdings, although it is housed and managed at the Pennsylvania State University. This means that the editorial selection, and staffing support for the journal is considerably different from journals like AERJ.

How is this salient? Unlike most association journals, the editorship of *AJE* does not rotate at any fixed term, nor are the editorial board members terms set. This means the journal has low editorial turnover over time, which diminishes instability in terms of journal focus and the handling of reviews, but also means the journal needs to be continually reaching out to new board members and reviewing the work of existing board members. The responsibility for ensuring a dynamic board that reflects the

leading thinkers in the field resides with the current board, and not a publications committee elected to or appointed by an association.

Association journals typically have more resources and can support more active production schedules. AJE receives support from UCP and the College of Education at Penn State. In sharp contrast, AERA has contracted with a global corporation -Sage Publications- to provide production support for their journals. The size of the publishing house supporting the journal is one factor that may impact the function and distribution of the journal. For example, AJE's physical output in total printed pages averages roughly 650 pages over four volumes compared to AERJ at 1500 pages over six volumes annually. This order of magnitude difference in printed output has significant ramifications for impact factor ratings as we will discuss below. AJE also relies on UCP's outreach efforts to distribute the journal equitably within the global context.

4. Operation

When the journal moved to Penn State in 2008, a special board structure and set of policies were initiated by Boyd to promote the quality of the journal. A two-tiered board structure was used with the senior associate editors all residing at Penn State and the editorial board or advisory board drawing on nationally and internationally recognized scholars in the major disciplines of the field (which closely paralleled the decisions



made when the name change occurred to shift the focus of the journal to a broader, multi-disciplinary audience). In order to guard against the journal's being perceived as a *Penn State Journal* senior associate members and their colleagues were not permitted to submit articles. After several years, this policy was reviewed, and it was decided that the journal's reputation was sound enough to rescind this prohibition.

The internal structure of the board was also revised. The two-tiered editorial system was abolished, and a singled board of associate editors was created. An external advisory board was retained, but a policy of three-year review was established. That is, every three years, the editorial board conducts a review of advisory board members work and decides on renewal. The editorial board has also been expanded to scholars outside of Penn State, and now consists of scholars from several universities. During this period, a student editorial board, a goal first envisioned by Dr. Boyd, was established.

4.1. Base statistics

In its current form, *AJE* is organized into quarterly print issues. It publishes roughly 20 research articles and 8 book reviews annually. The articles in the journal are well cited in comparison to the broader field of education, with a two-year average of 1.99 citations per article (Scimago, January 2018) placing the journal 33 out of over 1,000 education journals tracked and an h-index of 40, which means the journal is at 133rd place within

all the journals ranked by Scimago. While we recognize the widespread use of these statistics, we have considerable reservations about their use which we will discuss in the following section and explain these and other tools we use to assess the journal's impact on academic and non-academic readers.

Arguably a more important impact characteristic is measured by how many articles are accessed electronically. Between 2015-17 the number of individual accesses to articles in the electronic versions was close to 400,000. The vast majority of AJE subscribers are comprised of institutional partners purchasing electronic licensing to the journal, with individual subscribers maintaining a small but steady proportion of the total circulation base, i.e. about 32% of paid subscribers get print with their subscription. The overall circulation has averaged a little over 1,200 for the past five vears.

In terms of global access and international engagement, AJE receives manuscripts from around the globe. In 2017, we received submissions from 49 nations outside the U.S. The largest number of submissions came from Iran and Turkey. Like other major education journals, we find that many of these papers are either of poor quality or are on topics that would not engage a broad readership. In terms of international access to journal content, UCP engages in a program that provides institutional access to qualifving institutions in low and middleincome countries around the world. About 3,262 eligible institutions that were registered to access UCP journals



in 2016 via this program, thus providing increased access to many who could not otherwise afford it.

4.2. Academic production and quality

The roughly 20 articles that AJE publishes annually go through a highly selective process, with just under 10% of all submissions making it to print, i.e. the overall acceptance rate (the percent of manuscripts that are eventually published) is less than 10%. This seems on par with the other core journals in the field of education, based on discussions at the yearly AERA meeting of editors. Each article that is sent out for review receives a minimum of three peer reviews in a double-blind process (e.g. reviewer and author are not known to each other). Reviewers are selected by senior editors after an initial reading of the manuscript and discussion by the senior editors. In cases where it is difficult to find reviewers, or when specific areas of expertise are warranted, the editors will reach out to consult with members of the advisory board.

In 2017, it took about a month, on average for authors to receive an initial decision on their manuscript. The length of time for response is, of course, highly dependent on reviewers completing their reviews on time. In 2017, we drew on the services of nearly 500 separate reviewers, who averaged about one month to complete their review (starting from the date the invitation was sent out). All correspondence and decisions are tracked in Editorial Manager, the manuscript submission system used by UCP.

AJE publishes on a broad range of topics and across the Pre-school to Professional spectrum of education. There were slightly more manuscripts on tertiary education than on primary education in the last decade, but we do not have any quotas for levels. In terms of topics, it is very difficult to assess what topics are more or less common. In the initial years of the journal's management at Penn State we struggled to create a database of reviewers with certain topic expertise. We drew on the list that AERA had generated and attempted to use to link scholars with similar interests. However, we found it difficult to adopt this system as the number of terms makes it unwieldy, and because authors may exhibit great variation in how they categorize their work. A general report on topics show that no one topic dominates and manuscripts are evenly distributed across a broad range. More details of the topics of interest and levels can be seen in Table 1.

Table 1. American Journal of Education publication overview, 2006-2016.



Top Interests	Frequency
Higher Education	13%
Teacher Education/Certification	10%

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Top Interests	Frequency
Secondary Education	10%
Public Schools	8%
Elementary Education	7%
Top Subjects	
Policy	4%
Curriculum, Design, Evaluation and Policy	3%
Academic Outcomes	3%
Achievement	3%
School/Teacher Effectiveness	3%
Top Populations of Interest	
Teachers	18%
Minorities	12%
Adolescents	11%
At-Risk Students	11%
Children	10%

Source: Own elaboration.

Authors are asked to keep their manuscript submissions to 10,000 words, excluding tables, references and figures. We are typically quite strict with this requirement, and it sometimes means that an author must make a final revision to reduce the manuscript once the reviewer concerns have been satisfied. We do publish special issues, which are included within the yearly print allocation from the Press. Editors who wish to propose a special issue must submit a proposal for the full editorial board to review. If accepted, the guest editors work with the editors

to select reviewers, but the handling of reviews and final editorial decisions on acceptance are retained by the *AJE* editorial board. We have tried to limit the number of special issues to no more than one per year.

The electronic access system allows the editorial team an alternative way to track the impact of specific work, and we feel this is an important counter balance to impact factor analysis. See Table 2. The amount of times an article is accessed, we feel, is a better indicator of the broader policy and practitioner audiences that might make use of the



academic material. For example, Doris Santoro's piece on teaching has garnered broad media attention that would not be reflected in any count of academic citations.

Table 2. Top 5 Most Accessed Articles, 2011-2017.

Rank	Article
1	Santoro, D. A. (2011). Good teaching in difficult times: Demoralization in the pursuit of good work. <i>American Journal of Education</i> , 118 (1), 1-23.
2	Rigby, J. G., Woulfin, S. L., & März, V. (2016). Understanding How Structure and Agency Influence Education Policy Implementation and Organizational Change. <i>American Journal of Education</i> , 122 (3), 295-302.
3	Park, V., & Datnow, A. (2017). Ability grouping and differentiated instruction in an era of data-driven decision making. <i>American Journal of Education</i> , 123 (2), 281-306.
4	Roda, A., & Wells, A. S. (2012). School choice policies and racial segregation: Where White parents' good intentions, anxiety, and privilege collide. American Journal of Education, 119 (2), 261-293.
5	Coburn, C. E. (2016). What's policy got to do with it? How the structure-agency debate can illuminate policy implementation. <i>American Journal of Education</i> , 122 (3), 465-475.

Source: Own elaboration.

More recently, we have attempted to understand how different networks of scholars, policy makers or practitioners make use of our articles. By examining the key words that authors use to define their own works, we can get a sense of what topics are of interest to those who cite articles in *AJE* and how those topics are related. This, we feel, is a promising field of analysis as it will allow us to better track how different educational topics are connected in the academic literature, and what changes may be taking place over time.

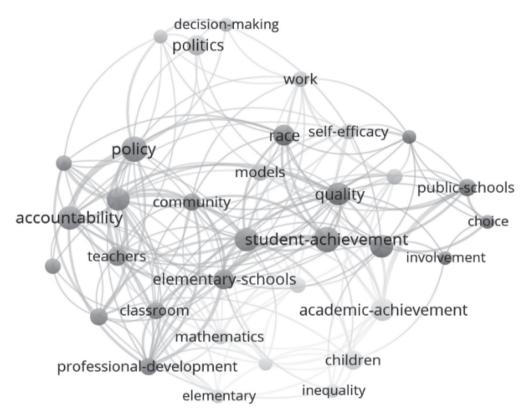
Graph 1 shows a co-occurrence map of keywords from published articles that notes difference in topic prominence and linkage to other terms. Student achievement, accountability, and policy stand as the most frequent keywords. These terms are most frequently coupled with teachers and classrooms, forming a distinct cluster. Interestingly, race, quality, choice, and involvement form another distinct cluster of articles that use the same constellation of keywords, followed by a third cluster connecting academic achievement, inequality, mathematics,



and elementary. These groups provide a window into the type of articles that have been most often published by *AJE* over the past 5 years, and we are continuing

to discuss how these topic occurrence analytics might inform how we as editors communicate research findings to different interest groups.

Graph 1. Keyword Co-Occurrence in the American Journal of Education, 2012-2017.



Source: Figure generated by co-occurrence of author-defined keywords, clustered according to a normalized fractionalization algorithm for linkages with node distance indicating relatedness of co-occurrences (Eck & Waltman, 2014). Article metadata culled from Web of Science covering AJE publications from 2012-2017.

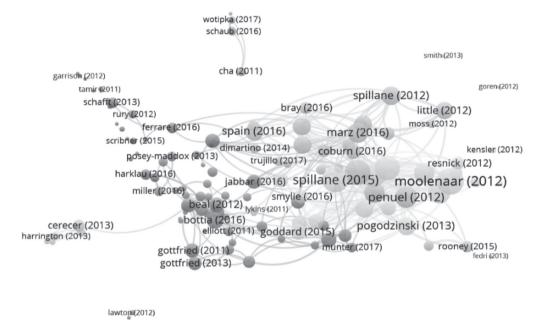
Another set of analyses we have recently undertake looks at how author networks appear, see Graph 2. Even within the academic community, scholars may become insular in their search for new publications, and a relatively few scholars may dominate a specific sphere of inquiry. For example, AJE has published several articles that cluster around the same idea or theme, such as social networking and school reform. Graph 2 below groups AJE publications



over the past five years by similarity of citations, known as bibliographic coupling. This indicates how similar authors are in terms of the citations they use in their own work, as an indication of closeness of author influence networks (Eck &

Waltman, 2014). Notably, seven main groups of bibliographic coupling may be identified, with the two largest groups existing closely together and drawing heavily from Spillane (2015) and Moolenaar (2012).

Graph 2. Bibliographic coupling in the American Journal of Education, 2012-2017.



Source: Figure generated by co-occurrence of bibliographic citations from articles published by *AJE* from 2012-2017, clustered according to a normalized fractionalization algorithm for linkages with node distance indicating relatedness of co-occurrences (Eck & Waltman, 2014).

Having identified these couplings, can we use this knowledge to recommend core research from one grouping to others? Scholars within tightly unified disciplines or sub-disciplines may be quite prolific, and even small advances in their specialty may be rapidly cited, thus offering the potential for higher impact factors but decreasing the number of scholars, over-

all, who view this research. Given that our journal seeks articles that are likely to be of interest to a broad audience, can knowledge of this clustering help us better direct tweets or Facebook posts about articles to reach more diverse audiences? We have no concrete results from these assessments to date but continue to discuss how to best use these kinds of data.



5. Challenges and opportunities

In this section we will outline what specific challenges and opportunities we see for the journal and the broader field of education. We will begin by returning to a discussion of the core issue of quality and impact. We then discuss challenges presented by increased dissemination of articles on sharing sites, the open access movement, and other issues related to the distribution of academic knowledge. We see these as issues that pertain to the entire field of academic publishing, and as such AJE is one of many journals that face these challenges. We also see that these challenges will move journals to be more explicit in their statement and enactment of ethics. Finally, we provide a brief overview of a major innovation -the AJE Forum- what we initiated some years ago. We believe this kind of forum has the ability to address some of the concerns over access and usability that are of concern for the field as a whole.

5.1. Measuring the impact of AJE

As we noted above, historically impact factor (IF) has been used to indicate the status of a journal and provided a means for comparison across publications. Although much has been written on this issue, we will use Sebire (2008) as a reference point: «The IF is calculated as: the number of citations in Year 3 of articles published in the preceding Year 1 and 2 divided by the total number of 'citable' articles published in Years 1 and 2» (p. 843). Alternatively, the h-index—which focuses on «h» number of papers

which all have «h» number of citations—has also been a popular assessment tool as it can be calculated for both individuals and journals (Sebire, 2008). While these two key measures have noted purpose and value, developments in how information is accessed and promoted have subsequently demonstrated a need for additional creative measures of assessment.

As editors, we are keenly aware of how much cachet impact factors have come to have in academic educational research in the U.S. Many aspiring scholars list the impact factor of the journals their articles are published in on the curriculum vitae they submit for promotion and tenure. As noted above, simple volume of publishing can improve impact factors; given the limitations already evidenced in the literature (Garfield, 2006)) we tend to be skeptical. Although we applaud attempts to make impact factor analysis more precise, the IF is too limited in time, from our perspective to be a driving statistic. We have made editorial decisions which we believe may not boost our IF, but we feel are likely to contribute to the longterm quality of the journal -which is perhaps better reflected through the use of h index, or a review of citations over time.

For example, see Graph 3. Using the Web of Science database, we tracked the number of citations for *AJE* for roughly the last 20 years. While there is year-to-year variation, we see a definite upward trend from 2008 onward. This sharp upward trend in citation is co-terminus with the founding of the *AJE* Forum, a



key innovation we discuss below. While we do not have data that can empirically test the link between *AJE* Forum activity and increased citations, anecdotal evidence from colleagues in the field sug-

gest that the coverage of topics provided in *AJE* Forum has indeed resulted in the work of the journal being cited more frequently.

900 813 800 715 700 600 535 529 495 500 418 430 393 400 286 300 198 208 204 189 194 187 200 100 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Graph 3. Total Citations: AJE 1997-2016.

Source: Web of Science, 2018.

5.2. The impact of social media

Operating within a contemporary context influenced by social media, many editors are now faced with determining what they can do to more clearly assess the impact of their journal on practice and policy. According to Cosco (2015): «There has been increasing use of alternative means of quantifying journals' impact, notably using the Altmetric statistic, which conglomerates an article's social media presence through blogs, news outlets, Facebook and Twitter» (p.1353). Moving beyond citation analysis, the influence of social media on impact -both scholarly and social- is a growing area of interest across multiple academic disciplines.

Recent studies on this topic have focused on a range of topics and social media platforms. A study by Evans and Krauthammer (2011) examined the impact of social media on the citation counts of PubMed journal articles posted through Wikipedia. The research and analysis presented by Evans and Krauthammer (2011) indicated that iournal articles posted via Wikipedia had significantly higher citation counts than when tested against a random sample of PubMed journal articles not posted through Wikipedia. In this study, Evans and Krauthammer (2011) also drew attention to the timing of social media posts against article publication dates indicating that the coordination of



these dates matters. A closer look into the construction and timing of social media content related to journal articles was further articulated in a study by Eysenbach (2011) which focused on the Journal of Medical Internet Research (JMIR) and Twitter. In this study, Eysenbach (2011) collected tweets related to 55 articles released in 2009-10, eventually drawing a comparison between the social media impact and citation data gleaned from Scopus and Google Scholar at least 17 months post-publication. Eysenbach (2011) concluded:

Tweets can predict highly cited articles within the first 3 days of article publication. Social media activity either increases citations or reflects the underlying qualities of the article that also predict citations, but the true use of these metrics is to measure the distinct concept of social impact. Social impact measures based on tweets are proposed to complement traditional citation metrics. The proposed impact factor may be a useful and timely metric to measure uptake of research findings and to filter research findings resonating with the public in real time (p. 1).

The predictive quality of social media is reiterated in an ecological study by Cosco (2015) on medical journals which examined the relation between scientific merit and the number of Twitter followers. Cosco (2015) specifically focused on Twitter accounts that were identified as journals (not individuals or publisher accounts) to include in the study sample. Cosco (2015) identified a positive relation between scientific merit and

a journal's Twitter following, stating: «With the exception of a few outliers, most journals had Twitter followings that corresponded with their impact factor and citations» (p. 1357). Interestingly, Cosco (2015) noted that Twitter was under-utilized with less than 30 percent of medical journals having an established profile with the platform at the time of the study.

5.3. Academic impact and broader utility

One of the challenges to the management of an academic journal is balancing the purpose to publish high quality research while making the research of use to practitioners, policy makers administrators or even community activists who seek change in education. The irony that a century ago the School Review was largely ready by administrators is not lost on us. But, we believe this is symptomatic of the broader field of academic publishing in education, not something that is specific to AJE. Seeing our, and other journals, caught between ever increasingly specific methods and a need for clear, general reporting on data, we struggle with how to weigh the quality and importance of articles and journals in an age of electronic access (Case, 2005).

The rise of the open access movement and the proliferation of websites that provide free access to academic articles is one that challenges not only the field of education, but the whole endeavor of academic publishing. The issues are complex. Increasingly, a number of academics are questioning the traditional practices of free-peer reviews and editorial



management of journals, especially in cases where journals are owned by private corporations, as opposed to university presses or academic organizations. As we noted above, large corporations like Sage and others have acquired more and more academic journals in education. According to their websites, the following major publishing houses together own hundreds of educational journals: Blackwell-Wiley (98), Routledge (267) and Elsevier (68).

These publishers charge substantial fees to institutions for electronic access to journals; without access to an institutional account, individuals must pay significant fees for each article. This access structure has led many researchers to support OER (open educational resources) such as Research Gate and Academia.edu to provide free access to their articles. The push for open access to academic content and the ability to access content through various means has an initial appeal of making information available to all. But, there are always costs, and the work of providing highly research, peer-reviewed studies is considerable. The support for many small academic journals resides in departments and universities that underwrite their publication, but few of these have the resource to provide long-term support (e.g. decades) of the publications.

We also recognize the allure that Academia.edu and other sites have as a networking tool, particularly for young scholars eager to disseminate their work. The growth of these networks proffers a

«no-cost access» to licensed journal articles that poses a substantial challenge to the financial viability of academic journals as we know them today. This shift opens the possibility of multiple versions of an article being cited, and also of the long-term viability of these websites to warehouse and maintain their databases of articles. It has also led to the creation of online only journals and «wiki» style journals.

The flip side of this dilemma is the increase of «predatory» journals in education -journals that require payment for submission and publication. Lists of such journals have circulated informally within education. As this article was being written, news reports stated that Cabells was compiling a pay-to-access list of academic journals with questionable practices. But the underlying dilemma, as we see it, is that both OER sites and publishing houses essential repackage a resource that has considerable costs to produce. The industry of academic publishing is clearly profitable, but much of this «profit» derives from what is essentially «free labor» in the form of peer reviewers and the willingness of public institutions (e.g. state-supported university libraries) to pay considerable fees.

As we survey the larger forces affecting academic publishing and the future of our own journal, we find ourselves looking more closely at issues of ethics as we develop a more systematic process for operating the journal. The standards of ethical research cannot be assumed —especially as the publishing reach



expands to a broader range of researchers within the United States and globally. Increasingly, journals are providing a statement of their ethics, and requiring researchers to provide evidence of IRB approval for publications that use data involving human subjects. COPE (https:// publicationethics.org/) is routinely cited as major source of models for ethical publishing and journal activities. COPE provides a manual of conduct for editors as well as flowcharts to inform editorial processes (https://publicationethics. org/files/Full%20set%20of%20English% 20flowcharts 9Nov2016.pdf). We have created a committee to review our guidelines and help the senior editors consider important questions about our role in monitoring and enforcing ethical behavior in research, especially research that takes place in schools with young children.

5.4. Key innovation: AJE Forum Student Forum

To increase visibility of the journal and to draw more readership to the online version of the journal, in 2007 the managing editors of AJE launched the American Journal of Education Forum, an online platform associated with the journal that published brief, relevant articles on timely topics in education. A key aspect of the outward facing platform was to publish short pieces that did not require advanced or specific knowledge but was informed by rigorous underlying scholarship. Without any need for a subscription, the AJE Forum began as a way to disseminate quality educational scholarship to the public directly.

A second component was that the AJE Forum would be run by a student board. Made up of graduate students from across the College of Education (and now including multiple institutions worldwide), the student board began as a group to manage the AJE Forum website and content, but quickly evolved its own standards for publishing. The board now has an internal blind peer-review process for web content. This both enforces quality standards, and also gives nascent scholars an opportunity to learn about and improve their skills in reviewing. AJE Forum essentially claims a niche in the information marketplace whereby content built for public dissemination and access is connected with academic research.

This model is different from that adopted by many journals today, i.e. that the website is simply the journal on line. Material posted on the AJE Forum is not intended to replicate the journal content nor be self-contained research. Rather, most of the postings are summaries, examples, and opinions on literature established either in the American Journal of Education itself, or from other peer-reviewed sources. In this sense, it is often both secondary commentary on educational issues, as well as a promotion tool to guide readers towards research. Given an increasingly crowded market for publishing outlets, the AJE Forum acts as a means to reach a wider, more diverse audience of readership.

Currently, the Student Board is comprised of 15-20 doctoral students from around the world, organized into three subcommittees focusing on content



creation and direction, technical publication and management, and promotion and awareness. While the activity of the *AJE* Forum board varies, members are typically responsible for publishing one to two articles monthly, reviewing and editing submitted pieces, and promoting new article posts through social media and at various conferences.

While a major purpose of the AJE Forum was to help raise awareness about AJE through a broader readership, the AJE Forum postings are often decoupled from the content of AJE. Journal article authors are invited to promote their work by offering a more public-facing AJE Forum piece, but the frequency of these types of submissions are currently low. This is one area we seek to support and increase. In addition, the student board is examining ways to promoting forthcoming publications in the journal. One idea is for the AJE Forum to focus on topics that are more directly link to pieces in press. This could be a beneficial opportunity that has the potential to directly affect the number of article downloads and indirectly influence *AJE*'s impact factors.

Content from the both *AJE* and *AJE* Forum is promoted through several social media platforms. Facebook and Twitter are the two social media platforms most commonly used in the past few years (with profiles also set up with LinkedIn and Instagram). Taking into account the opportunities and limitations of each platform, postings are specifically tailored. For example, a post on Facebook permits a larger amount

of text than a post released via Twitter. For a Facebook post, members of AJE Forum typically include the title of the piece, list the authors (tagging them with possible), pull quotes or questions from the manuscript, and include a link to the article. For a Twitter post, which is more limited in the number of characters, the design of the post includes the title of the piece, listing the authors (tagging when possible), and including hashtags that speak to the content of the post. With the Facebook and Twitter platforms, hashtags are frequently used to signal a connection with the Journal and the Online Forum (#AJE and #AJEforum are our most commonly used hashtags). Having a picture included as part of a post —across all of our social media platforms— has had a positive impact on a post's popularity and corresponding reach. Being able to tag an author, which is only possible when that author has an account on that specific social media platform, can also be very influential in the reach of a post.

There are some simple steps that journals can take to develop awareness of their social media impact. Members of *AJE* Forum monitor data provided by Facebook (referred to as «Insights») to get a sense of data points like the number of page views, page likes, people reached, post engagements, and page followers. Similarly, members of *AJE* Forum use analytics data from Twitter (https://support.twitter.com/articles/20171990) to monitor the number of tweets, tweet impressions, profile visits, and followers. At the start of De-



cember 2017, the American Journal of Education Facebook page had over 1,500 followers and page likes. Posts can vary in popularity; a less popular Facebook post typically reaches just over 100 people, while a popular post can easily reach around 1,000 people. At the start of December 2017, the @AJEForum Twitter account 772 followers. Auto-generated had monthly summaries of the @AJEForum Twitter account additionally highlight the top tweet, top mention, and top follower. Typically, within any given month, @AJEForum will have roughly between 1,000-3,000 impressions. In November 2015, March 2016, and April 2016 a series of Twitter chats drove up the number of impressions to over 15,000 for each of those three months.

6. Conclusion

In a world where demagogues, «dark money» teams and subversive political operatives can rapidly and directly disseminate «information» to mass populations, how does a mere academic journal respond? As editors we are deeply concerned about how fast «information» moves in online media, and the impact this may have on educational reform debates, policy formulation and ultimately practice in schools. We also see that many actors —from local parents to state policy makers- deeply care about getting information that is well-researched and not created merely to support an ideological position. How can a journal -bound by academic quality restrictions that mean a slow production time and

often ponderous language— make itself relevant?

We have watched as alternative access sites have become more commonly used, and the creation of mass «translational» sites -such as The Conversation— weigh heavily on public debate. We seek to find ways to bring recent, scholarly data and analysis to a more general audience that does not undermine the ability of our journal to sustain its quality of scholarship. Our efforts to engage with and analyze the journal's impact with alternative measures is, we hope, a good start at operating in the «grey» area that exists between the rigorous demands of peer-reviewed articles and posts on a Facebook page about the local charter school debate. What seems abundantly clear to us is that academics can no longer retreat to the position that they only need concern themselves with «valid» scientific knowledge. New information technology makes it too easy to undercut valid science by flooding the information networks with questionable material.

We currently see the need to invest increasing resources to support the translation and promotion of the work of our authors. The duties of a journal editor to seek out rigorous research and assure a high-quality peer review process are no long sufficient to assure that articles will be read and information disseminated beyond a small sphere of scholars. We see the need for supporting some kind of translational process where material that is written explicitly for a broad audience shows how a



particular finding can inform a local debate, reform movement or practice. The production of this material must itself be both rigorous in quality and timely. This means that pieces must be continually written that remind (and relink) the readers to seminal work that has been done but re-contextualize that work.

Academic journals serve a powerful function of preserving a stable record in a world of transient websites, but if no one accesses the knowledge that is archived, what end does it serve? As competition for academic positions in research universities intensifies and sub-fields become more specialized, research articles run the risk of becoming too abstract in method. or arcane in theoretical nuance, to have any value in a classroom or legislative assembly. To successfully make rigorous educational studies pertinent to broader audiences appears twofold. First, journals will need to «translate» papers with increasingly complex methods in ways that can make them accessible to a general audience. Second, the ongoing specification within academic fields of study means that authors and editors alike will need to make special efforts to demonstrate the broader relevance of academic articles.

The translational task goes beyond a simple «re-packaging» of academic content. We see that the work of educational research journals will increasingly need complementary or subsidiary organs that maintain high academic standards but operate at speeds and in mediums that tap into the information stream the general public accesses. Lan-

guage itself is a limiting factor: the concentration of influence and impact of a small number of pre-dominantly North American educational journals in a globalized world raises significant questions about language hegemony and ethnocentrism in the global context of knowledge production (Altbach, 2007). Translation will involve finding innovative ways to communicate across languages, and across increasingly specialized fields of practice.

Communication —an interaction of ideas—will be needed if academic articles are to be broadly relevant. Journals like AJE once served as the primary means of communicating new findings to both a practitioner and academic audiences. To meet this need in the current world will require sites that allow feedback, comments and questions from many readers. This feedback would allow many to assess and articulate the relevance (or lack of relevance) of particular articles and findings to areas of practice, policy or reform. Such dialog, we hope, would work to make research more relevant by re-defining how we consider a journal's «impact».

Notes

http://www.scimagojr.com/journalrank.php?area
 =3300&category=3304. Consulted on 1/21/2018.

References

Altbach, P. (2007). The Imperial Tongue: English as the Dominating Academic Language. *Economic and Political Weekly*, 42 (36), 3608-3611.



- Boyd, W. L. (2004). Relaunching the American Journal of Education in «Interesting Times». American Journal of Education, 110 (2), 105-107.
- Case, M. M. (2005). A snapshot in time: ARL libraries and electronic journal resources. *Journal of Library Administration*, 42 (2), 87-105. doi: https://doi.org/10.1300/J111v42n02_07
- Castells, M. (2004). Informationalism, Networks, and the Network Society: A Theoretical Blueprint. In M. Castells (Ed.), *The Network Society: A Crosscultural Perspective* (pp. 3-48). United Kingdom: Edward Elgar.
- Cerecer, P. (2013). The Policing of Native Bodies and Minds: Perspectives on Schooling from American Indian Youth. American Journal of Education, 119 (4), 591-616.
- COPE (2018). Promoting integrity in research and its publication. Eastleigh, UK: Home page. Retrieved from https://publicationethics.org/ (Consulted on 19-06-18).
- COPE(9November 2016). Manual of conduct foreditors. Retrieved from https://publicationethics.org/files/Full%20set%20of%20English%20flowcharts_9Nov2016.pdf (Consulted on 19-06-18).
- Cosco, T. D. (2015). Medical journals, impact and social media: An ecological study of the twittersphere. CMAJ: Canadian Medical Association Journal [Journal De l'Association Medicale Canadienne], 187 (18), 1353. doi: https://doi.org/10.1503/cmaj.150976
- Dewey, J. (1896). Influence of High School upon Educational Methods. School Review, 4 (1), 1-11.
- Evans, P., & Krauthammer, M. (2011). Exploring the use of social media to measure journal article impact. *AMIA Annual Symposium Proceedings Archive*, 374-381. Retrieved form https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3243242/ (Consulted on 19-06-18).

- Eck, N. J. Van, & Waltman, L. (2014). Visualizing bibliometric networks. In Y. Ding, R. Rousseau, & D. Wolfram (Eds.), Measuring scholarly impact: Methods and practice (pp. 285-320). Berlin: Springer.
- Eysenbach, G. (2011). Can tweets predict citations? Metrics of social impact based on twitter and correlation with traditional metrics of scientific impact. *Journal of Medical Internet Research*, 13 (4), e123. doi: https://doi.org/10.2196/jmir.2012
- Eysenbach, G. (2012). Correction: Can tweets predict citations? Metrics of social impact based on twitter and correlation with traditional metrics of scientific impact. *Journal of Medical Internet Research*, 14 (1), e7.
- Garfield, E. (2006). The History and Meaning of the Journal Impact Factor. *JAMA*, 295 (1), 90-93.
- Goddard, Y., & Goddard, R. (2015). School Instructional Climate and Student Achievement: An Examination of Group Norms for Differentiated Instruction. American Journal of Education, 122 (1), 111-131.
- Goodyear, R. K., Brewer, D. J., Gallagher, K. S., Tracey, T. J., Claiborn, C. D., Lichtenberg, J. W., & Wampold, B. E. (2009). The intellectual foundations of education: Core journals and their impacts on scholarship and practice. *Educational Researcher*, 38 (9), 700-706.
- LaPoe, J. L. (1927). The Senior High-School Principals' Professional Magazines. Educational Research Bulletin, 6, 259-61.
- Moolenaar, N. M. (2012). A social network perspective on teacher collaboration in schools: Theory, methodology, and applications. *American Journal of Education*, 119 (1), 7-39.
- Schwartz, S. (December, 2014). American Journal of Education Receives Top Rankings. College of Education, Penn State University: News and publications. Retrieved from



https://ed.psu.edu/news/news-oct-dec-2014/AJE (Consulted on 19-06-18).

Scimago (2018). Scimago Journal & Country Rank.

Retrieved from https://www.scimagojr.com/
journalrank.php?area=3300&category=3304
(Consulted on 19-06-18).

Sebire, N. J. (2008). H-index and Impact Factors: Assessing the Clinical Impact of Researchers and Specialist Journals. *Ultrasound in Obstetrics and Gynecology*, 32 (7), 843-845. doi: https://doi.org/10.1002/uog.6266

Smart, J., & Elton, C. (1981). Characteristics and Citation Rates of Education Journals. American Education Research Journal, 18 (4), 399-413.

Spillane, J. P., Hopkins, M., & Sweet, T. M. (2015). Intra and interschool interactions about instruction: Exploring the conditions for social capital development. *American Journal* of Education, 122 (1), 71-110.

Supovitz, J. (2017). Social Media is the New Player in the Politics of Education. *Phi Delta Kappan*, 99 (3).

University of Chicago Press (2013). Circulation and Marketing Report for the American Journal of Education. Chicago: University of Chicago Press Journals Division.

University of Chicago Press (2018). *Publisher's Report for the American Journal of Education*. Chicago: University of Chicago Press Journals Division.

Wechsler, H. (1979). The Primary Journal for Secondary Education, 1893-1938: Part I of a History of School Review. *American Journal* of Education, 88 (1), 83-106. Retrieved from http://www.jstor.org/stable/1085277 (Consulted on 19-06-18).

Wechsler, H. (1980). From Practice to Theory: A History of School Review, Part II. American Journal of Education, 88 (2), 216-244. Retrieved from http://www.jstor.org/stable/1085306 (Consulted on 19-06-18).

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