

Summer 8-1-2016


Should the New England Education Research Organization Start a Journal in the Age of Audit Culture? Reflections on Academic Publishing, Metrics, and the New Academy

Edward Lehner
CUNY Bronx Community College

Kate Finley
CUNY Bronx Community College

[How does access to this work benefit you? Let us know!](#)

Follow this and additional works at: http://academicworks.cuny.edu/bx_pubs

 Part of the [Cataloging and Metadata Commons](#), [Educational Assessment, Evaluation, and Research Commons](#), [Higher Education Commons](#), [Scholarly Communication Commons](#), and the [Scholarly Publishing Commons](#)

Recommended Citation

Lehner, Edward and Finley, Kate, "Should the New England Education Research Organization Start a Journal in the Age of Audit Culture? Reflections on Academic Publishing, Metrics, and the New Academy" (2016). *CUNY Academic Works*.
http://academicworks.cuny.edu/bx_pubs/15

This Presentation is brought to you for free and open access by the Bronx Community College at CUNY Academic Works. It has been accepted for inclusion in Publications and Research by an authorized administrator of CUNY Academic Works. For more information, please contact AcademicWorks@cuny.edu.

Should the New England Education Research Organization Start a Journal in the Age of Audit Culture? Reflections on Academic Publishing, Metrics, and the New Academy

Edward Lehner, Ph.D.

EDWARD.LEHNER@BCC.CUNY.EDU

*Department of Education and Reading
2155 University Avenue, Colston Hall
Room 430
Bronx, New York 10453*

Kate Finley, MSLS

KATE.FINLEY@BCC.CUNY.EDU

*Library Department
2155 University Avenue, North Hall and Library
Room 259
Bronx, New York 10453*

Abstract

A large regional educational research association can straightforwardly establish a scholarly journal associated with its annual meeting. However, this work underscores the complicated scholarly ecosystem that an association enters when publishing a journal. The social sciences' scholarly literature exists in a related series of networks that could be described as a type of "audit culture." Within audit culture, two major academic publishers, Elsevier and Thomson Reuters, have established competing, yet strikingly collinear, journal metrics systems: Scopus and Web of Science, respectively. These and other bibliometrics systems are used to assess, order, and rank the supposed value of a researcher's work. This analysis notes that a large regional education conference likely serves its members more fully by expressly teaching researchers the rigors of the academic publishing process and the role metrics play in the longevity of their academic careers. Such work does not preclude the need for a large regional education conference to create and publish a journal. However, the importance of this endeavor pales in comparison to teaching members "scholarly publishing literacy." The educative significance of scholarly publishing literacy is implicitly more valuable than developing a new academic journal, precisely because most graduate students and junior faculty require greater understanding of the academic publishing process writ large.

Keywords: academic publishing, altmetrics, audit culture, bibliometrics, journal value metrics, scholarly communication, scholarly publishing literacy

Introduction

During the New England Education Research Organization's (NEERO) 2016 annual meeting, a few members discussed the possibility of starting an academic journal associated with the conference. Over three days, this small group consulted former NEERO Presidents, current board members, and a number of junior faculty attending the conference to present their work. The NEERO community seemed largely in favor of starting a publication. In fact, at NEERO's Annual Board meeting, members discussed this topic and decided to revisit the issue at the summer meeting in June.

1 Talking about Starting a Journal is Quite Different from Actually Doing It

Discussing this issue with colleagues in preparation for the June board meeting, we decided to think about the issue more broadly. That is, how much social and academic capital would be

associated with publishing a work in a newly established journal? How would chairpersons, or even more potently, personnel and budget committees view such a journal? Could a junior researcher be offered a job based on such a publication? Could an assistant professor be offered tenure, or even tenure and promotion based on her publication in a newly established publication? Admittedly, these types of questions abound. In discussing this concern, we decided to broaden the scope. In particular, rather than discussing simply what a publication in a newly established journal could mean, we examined the peculiarities and practices of academic publishing. In this way, this document is purposefully consultative rather than prescriptive.

This short paper concentrates on four precise aims. Firstly, we describe the current academic publishing environment and the fact that it is steadily and unpredictably changing. We note that even the most experienced researchers have misunderstood these trends. This first section also underscores the caveats and considerations for starting a scholarly journal that likely will include largely qualitative research. Secondly, we forthrightly engage the broadening of audit culture practices and how these appraising and indexing methodologies are likely to be applied to the whole of educational publishing. Thirdly, this work introduces the need for graduate students and junior faculty to be trained in scholarly publishing literacy. Scholarly publishing literacy is possibly a less labor-intensive approach to publishing a journal, while it embodies a sense of catalytic authenticity (Guba & Lincoln, 1989) that may meet the scholarly needs of NEERO's core membership more fully. The fourth point centers on recommendations. In particular, seemingly contrary to the bulk of the paper, we recommend that NEERO start an academic journal. The recommendations are candid, noting the intensity of the work and the likelihood that the publication would fail without a sophisticated distributed work approach.

2. Audit Culture: Framing the Problem

We use the term audit culture to mean a theoretical and methodological framework that accompanies the enactment of neo-liberal academic publishing policies. *Audit Cultures: Anthropological Studies in Accountability, Ethics, and the Academy* (2000) is an edited volume that provided a framework describing a neo-liberal accountability culture that, admittedly, seemed futuristic at the time of its publishing. Strathern's (2000) tone and the book's chapters connoted an overarching, governmental audit narrative that appeared to be fully out of synchrony with a zeitgeist that included seemingly boundless opportunities with the internet and record low unemployment and inflation rates. Optimism and even utopianism strongly influenced this era. Perhaps influenced by the times, Strathern and the potent ideas contained in her work went largely underappreciated.

Yet, in the years following, rapid epistemological and methodological changes occurred in both educational measurement and governmental educational funding policies. Shore (2008) strongly critiques education's audit culture, noting how systemic review techniques added exponentially to the administrative weight of public schools' and universities' elaborate bureaucracies. Shore (2008) writes, the "managerialist conception of accountability is coercive and authoritarian; it also reduces professional relations to crude, quantifiable and inspectable templates. Far from 'promoting accountability' to taxpayers and stakeholders, audits tend to obscure transparency and fuel mistrust" (p. 290). Strathern (2000) and Shore (2008) note the far-reaching changes that audit culture brought to public education. Kinchloe and Tobin (2009) would later describe these policy transformations in educational measurement and the defunding of qualitative research as crypto positivism. Nonetheless, new educational policies and measurements mirrored the auditing framework described by Strathern (2000).

The implications of these new educational funding parameters, accepted research measures, and scientific methodologies were often missed even by the most innovative of scholars. In the celebrated, then-branded *Sage Handbook on Qualitative Research*, 3rd and 4th Editions, Denzin and Lincoln (2005; 2011) may have inadvertently miscalculated the growing threats to qualitative research and therefore misunderstood the ramifications of audit culture. In 2005, by the publishing of the 3rd edition, qualitative educational research was being systemically defunded by the George

W. Bush Administration. Paradoxically, Denzin and Lincoln (1994; 2000; 2005; 2011) had a reputation for embodying a level of complexity descriptive of modern scholarship and epitomizing relevance. However, in both the 2000 and 2005 editions, Denzin and Lincoln tended to select chapters that were erudite yet seemingly not fully aware, or uninterested, in explicating the profound, systemic changes in academic surveillance particular to academic publishing and research.

Audit culture seemed to take many scholars by surprise, particularly in academic publishing and research. For example, these changes may have even caught Denzin off-guard. In an underpublicized interview, Denzin (2014) discusses the complexities of academic publishing and research during the last 20 years. He straightforwardly describes how many researchers in the field felt that their qualitative research had both voice and relevance. Note, the text is Denzin's spoken language and lacks the polish associated with his written work. However, Denzin (2014) fully describes the nuances of audit culture in the paragraph below:

The paradigm wars of the 60's and then the 80's, I was of an age, and trained in the 60's, as a sociologist. We had no training as qualitative researchers. In fact, qualitative research did not exist as a category within sociology... We were trained in quantitative methodology only. Well, that breaks loose in the 60's. And in the 70's, we get works like the *Discovery of Grounded Theory*, which is the Glasser and Strauss breakthrough text. Which was really, if you read it today, was a positivistic account of how to do research that would satisfy the criteria of an audit culture. It was a pre-audit culture tool kit. In the 1980's, we get the big paradigm war. Between the quants and the quals, so to speak. And Egon Guba is a major voice in this space as well as Yvonna (Lincoln) in that moment. When, suddenly, the discourse coalesces around the notion that we have two incompatible, incommensurate discourses. One is quantitative and one is qualitative. And they can't be measured against each other. They have to be allowed to speak to each other, and they have their own autonomy. That was a breakthrough. So, that opens up a space for qualitative inquiry. And, for 20 years that is what reigned. The notion as qualitative researchers we can write books and talk about our methodologies. We can train people how to do this kind of work or that kind of work. We were in a new space. A free space. And that is when the whole field explores. Sage sort of becomes a small industry to publishing qualitative research textbooks. And we are all comfortably thinking the war is over. And we can leave. And this is the first edition of the handbook, 1994. What is this field all about? It is a separate complicated discourse. And we can celebrate it. It has all these paradigms and points of view and methodologies. It is like the war was over. And we were coasting. We had really won the battle. Well, that holds for about- less than 10 years. Because at the cornering of the next century, suddenly on the horizon is the science-based research movement, which then gets cooped by the mixed method movement. These people come out of nowhere. Or they were there, but we weren't listening to them. Suddenly, the mixed method people are saying -well there is no difference between quantitative and qualitative. (Spooner, 2014)

Undeniably, we could continue to quote Denzin, who is a resident expert in the matter discussed in this work. The above quote, part of a 45-minute interview, captures only a small portion of a complicated and scholarly discussion from one of the foremost leaders of the field. Denzin notes his surprise at the new developments in audit culture and its manifestations in academic publishing and research. However, surprise about audit culture and the science-based research movement is

not necessarily the undergirding topic in the Denzin and Lincoln handbooks, particularly the 2000 and 2005 editions. When closely reading many of the sections in the 2000 and 2005 handbooks, it is hard not to sense the sentiments of freewheeling present after “winning” the paradigm wars.

For example, Denzin repeatedly highlights this sense of coasting that existed since the paradigm war was won. This sense of “winning” may be seen in the more arcane chapters selected for *Paradigms and Perspective in Contention and Locating the Field*, two particularly visionary parts of the book in the first edition. *Paradigms and Perspectives in Contention and Locating the Field* are both subdivisions of the handbook that had been principally relevant and anticipatory of change. By 2000, however, both of these segments from the book seemed sectarian and full of cant. For example, the selection of chapters that populated *Paradigms and Perspectives in Contention* in 2000 and 2005 were both different in tone and mainly devoid of the nuances of the actual contentions that were afoot in the field. Admittedly, a number of authors strongly criticized positivism. However, the positivism that was being denounced was not the dynamic new positivism that would spearhead the audit culture movement. At the time of the writing of Denzin and Lincoln’s 4th volume, George W. Bush has already enacted two terms of neo-liberal educational reform and Barack Obama was extending this legacy with the now controversial *Race to the Top* (2009).

The chief point here is not that Denzin was wrong or that he fully misunderstood the impending growth of audit culture. It would be overly simplistic to state that Denzin misjudged the development of audit culture’s particular influence on educational publishing and research. At the time of this writing, we are privileged with the historical knowledge veiled to Denzin and Lincoln. We dare not deploy a type of presentism when exploring the complexities of the field of educational publishing and research. However, it may be fair to describe Denzin’s understanding of the “20-year reign” of qualitative research as somewhat naive. The lesson here may be that even the best and most experienced researchers may misjudge the scope of their achievements and underestimate the wherewithal of their epistemological opponents.

2.1 Implications for NEERO

It may not be readily apparent how Denzin and Lincoln’s work applies to the question of NEERO starting an academic journal. We shall make this clear: NEERO, even with the best of intentions, could lose track of seminal transitions in the field as a result of being inundated by the pedestrian tasks of running a regional journal. Entire movements could be altogether unanticipated. It is possible that NEERO and important members, in focusing solely on publishing a journal, could misinterpret salient empirical, epistemological, ontological, practical, or theoretical trends. This fact may be particularly relevant since a large portion of NEERO’s presented papers are qualitative in orientation. Training in qualitative research is often the primary training that many of NEERO’s graduate students and junior faculty receive. If NEERO were to start a journal, it is likely that many submitted articles would use qualitative frameworks. NEERO needs to deploy a sense of caution before embarking on developing a journal that may be deeply intertwined with qualitative frameworks. This comment is not a critique of the trustworthiness of qualitative work. However, such frameworks tend to more readily shift and the corresponding literature also reliably change. Altogether, an author’s work may not yield the needed academic capital to sustain a career in the academy. In brief, a journal that does not have adequate journal metric scores may be dismissed even if the quality of the work is high.

The section above notes the complicated, ever-changing ecosystem of academic publishing and research. Denzin serves as a living example of the difficulty of navigating this terrain, especially as it relates to qualitative research. The educational publishing and research space, as noted above, can often be misjudged, even by experts. In considering the development of a journal, NEERO should likely need to train a group of scholars to stay abreast of the research zeitgeist. Denzin attests that this is no small task (Spooner, 2014). Lastly, and specific to the qualitative orientation of NEERO, it would be wise to fully research the types of qualitative work

being funded by major organizations and kind of qualitative papers being published in the leading journals. Some educational researchers may see this approach as pandering to positivism. We see no shame in fully understanding the complexities of a field that is wrought with ambiguities, audit cultures, ever-shifting funding sources, money laundered into the field by the uber-wealthy, and an orientation toward numbers and positivism. The professoriate, particularly senior faculty that may be nearly unaffected by audit culture, may pledge that the study of audit culture, big data, and positivism is outside of their field. Such claims, however, may be too qualitatively orthodox and result in underpreparing NEERO's membership. We recommend fully equipping NEERO's graduate students and junior faculty by extending the scope of training specific to scholarly publishing literacy and providing a forum that explicitly teaches the nuances of scholarship and career endurance in the academy.

3 Audit Culture and Metrics

The current metrics climate can have problematic implications for both journals and individual scholars, as the issues associated with audit culture publishing extend to bibliometric practices as well. Roemer and Borchardt (2015) define bibliometrics as “a set of quantitative methods used to measure, track, and analyze print-based scholarly literature” (p. 234). Bibliometrics is epitomized by two of the giants in this field: Thomson Reuters, the provider of Web of Science, and Elsevier, the provider of Scopus. Both Web of Science and Scopus have strict criteria for the inclusion of journals in their indexes and have traditionally assessed journal quality using bibliometric indicators, the most popular of which is the “impact factor,” a journal-centric indicator calculated by dividing the number of citations made to articles within a particular journal during the last two years divided by the number of articles the journal published during those two years (Roemer & Borchardt, 2015; Misteli, 2013).

Various authors have critiqued bibliometrics as a whole and the impact factor in particular. Haustein (2012, p. 13) notes that assessments of journal quality focused on the impact factor overlook the many other factors that can influence quality, such as “journal output, journal content, journal perception and usage,” and “journal management.” Furthermore, Roemer and Borchardt (2015) critique bibliometrics' focus on impact in the print world, asserting that such a concentration is not prudent today in view of the myriad types of impact that can now be measured. Additionally, the historical exclusion of other modes of scholarly work, such as books, from the primary citation indexes and thus impact factor calculations has a heightened negative effect on social sciences and humanities journals, as citation relationships include books much more often in these fields than in others (Haustein, 2012). Haustein (2012, p. 4) notes that when judging such journals using bibliometrics, “one should be aware of capturing only a fraction of the scholarly output.” The two-year wait time associated with the impact factor is also problematic.

Indicators such as the impact factor are problematically used to assess not only journals as a whole but also individual articles and scholars (Misteli, 2013). Bladek (2014) makes the connection between bibliometrics methods and audit culture, noting that decisions regarding tenure, promotion, and grants often involve the consideration of bibliometrics data. As Roemer and Borchardt (2015) indicate, the various problems with these indicators highlight bibliometrics' inability to handle the ever-increasing demands on faculty to provide evidence of their scholarly impact.

However, there is promise in altmetrics, a set of emerging metrics that bring varying indicators of quality scholarship to the fore and emphasize the social web-based impact of scholarship (Roemer and Borchardt 2015). Cave (2013) outlines the various classes of altmetrics indicators, which include “usage,” “captures,” “mentions,” “social media,” and “citations,” as well as the countless venues at which these types of scholarly communication can occur, such as blogs, Twitter feeds, and Wikipedia pages. When viewed in light of audit culture, which offers “virtually no room for citizens' voices to be heard in any meaningful sense,” (Shore, 2008, p. 280) altmetrics can be

seen as a way for academics to have more influence on the definition of their impact on scholarship and thus exert more control over their academic future. Altmetric indicators' immediacy is also appealing: as Cave (2013) notes, altmetric indicators can supply "near real-time" (p. 349) data on scholarly impact, whereas bibliometric indicators often take years to show a researcher's impact, as noted above. Misgivings do exist regarding altmetrics: Haustein (2016), for example, fears that altmetrics will merely follow in bibliometrics' footsteps. Roemer and Borchardt (2015) indicate the importance of considering both altmetrics and bibliometrics in the current scholarly publishing environment.

3.1 Teaching Scholarly Publishing Literacy

The complex and evolving metrics ecosystem, burgeoning with a variety of opportunities and pitfalls, makes apparent the need for a strengthened focus on education in the realm of scholarly publishing literacy. Beall (2012) coined the term "scholarly publishing literacy" (p. 4) in reference to the competencies now required by researchers in a world of multiplying open access publications and the parallel proliferation of predatory publishers. Scholars such as Zhao (2014) broaden the term to incorporate the vast number of proficiencies necessary for participation in academic publishing today, including proficiencies in copyright, digital scholarship, and metrics.

Such education efforts can involve a number of approaches. Lapinski, Piwowar, and Priem (2013) mention the significance of highlighting article-level metrics rather than publication-level metrics when working with researchers and showing them how to gain access to article-level information on impact. This could involve merely viewing download statistics from an institutional repository housing a researcher's work or the use of more involved tools that have emerged in recent years to aid scholars in understanding and managing their overall impact (Lapinski et al., 2013). Among these tools is *Impactstory*, which combines bibliometrics and altmetrics data taken from multiple sources into a free narrative of the impact of a scholar's output (Lapinski et al., 2013).

Collaboration with librarians is one way in which these scholarly publishing literacy efforts can be made. Educational efforts in this arena have historically been provided by librarians: as Roemer and Borchardt (2015) note, librarians have long been "educators and gatekeepers" (p. 32) with regard to bibliometrics-related matters. The importance of this duty is increasing alongside the evolution of the altmetrics movement, as indicated by emphasis in recent years on titles such as "scholarly communication coach," (p. 2) a role that Bruns, Brantley, and Duffin (2015) propose subject liaison librarians take on in order to advise students and faculty on emerging issues in the academic publishing sphere. The complexities of this area of academia make clear the importance of scholarly publishing literacy among both those publishing journals and researchers trying to create an impact with their work.

3.1 Starting a Journal Takes a Village plus Faculty Mentors, a PR Team, Proof-readers, a Social Media Group, Ad Infinitum

We recommend that NEERO start a journal. The journal should admittedly have a slow start. For example, strand leaders could select one or two papers that reflect the best of that year's work. An editorial team could work specifically on publishing these papers. Another strategy could be the systematic electronic publishing of papers on a dedicated website. Starting slowly and steadily may be the best approach. However, at some point, the systemic journal publishing would be a significant factor leading to the journal's proper indexing.

If NEERO decides to undertake the publishing of a journal, preferably electronically, it should be done strategically and systematically. We believe that starting a journal may present the worst of both Herculean and Sisyphean tasks. Firstly, in terms of Herculean work, a newly established educational journal requires recruiting an established editorial board, all of whom should likely

have a reputation for scholarly work and a degree of influence in the field. This may not be a Herculean task; more likely it is a Mercurial one. Recruiting people, glad handing, and deploying a type of “win friends influence people” mentality may be too low-rent for NEERO. However, some type of public relations will be required to recruit the initial board. This topic is controversial and may not fully align with the dispositions of many senior researchers. However, we recommend that considerable thought be given to the initial selection of the editorial board.

Next, we briefly discuss the Sisyphean tasks. When publishing a journal, the rock must always reach the top of the hill. For many, Sisyphus serves as a type of anti-model and anti-hero. However, when it comes to consistently churning out a quarterly publication, Sisyphus’s rolling of the boulder up the hill may sadly parallel the type of work academic journal publishing can be. Often, people starting a new journal espouse a type of enthusiasm that endures until the reviews begin to pile up. Publishing a journal often breaks down to a disincorporate amount of academic effort, usually distributed among very few people. This work routinely falls to one person, the editor, and her team. Frequently, the editors are tasked with the bulwark of the responsibilities. However, the sheer amount of work is just one aspect of the editorial team’s work. The concern of expert knowledge is also keen. Baruch, Konrad, Aguinis, and Starbuck (2008) write, “editors need to be at the top of their academic field, being able to know well the current issues in the field” (p. 212). Expert knowledge and close following of the field’s trends will likely play a central role. This consultative idea is not far afield from our discussion in the first section of this paper.

Space and time constrain this position paper. However, if the decision is made to develop a journal, this topic should be clearly discussed and a smart approach should be crafted. Mobilization should likely include the development of faculty writing mentors, a public relations team, proof-readers, a social media group, and librarians. Possibly more teams are needed. A next step in this process would be the creation of a visual mind/concept map outlining specific tasks.

4 Conclusion

In sum, this paper covered four broad categories. In our first point, we highlighted how the current academic publishing environment is in flux. We noted that even experts struggle and poorly predict the future of publishing and research trends. Secondly, we detailed the growth of audit culture, noting that only tenured academics are likely to be precluded from this academic measuring and indexing. Next, this work introduced the need for training in scholarly publishing literacy. The last section of this paper recommended that NEERO start an academic journal. Our recommendation greatly stressed the amount of work associated with this venture.

In concluding this work, it is important to note how deeply intertwined neo-liberalism and audit culture are. Through this work, we noted that publishing and journal value metrics have become a peculiar narrative that justifies “educational reforms” yet often contradict what we consider good practice. Audit culture uses data as its own type of logic and justification for policies that, at times, contradict what is already known in the field. Audit culture, and specifically, audit culture publishing can represent the opposite of scholarly inquiry. At its worst, audit culture publishing can create a type of “group think” that slows the advancement of the field. Greenwood (2006) calls for cogenerative research, work, and scholarly publications centered on bettering the lives of research participants. Audit culture quickly supplants the goal of the Levin and Greenwood’s work and that of the Belmont Report (1979). The Belmont Report (1979) highlights that all research should focus on justice and the beneficence of those studied. It is not hard to envision how a concoction of audit culture and journal value metrics may fully oppose the Belmont Report and all of its goals.

It may be best to conclude with two of the seminal voices from the paradigm wars of the 1980’s. Lincoln and Guba (1989) proposed that scientific inquiry and scholarly publication reflect a type of authenticity criteria, marking the highest benefit for the field and its members. Yet, audit culture publishing often creates a “data narrative” that explains away contradictions with the meta-narrative of journal value metrics. In audit culture, authenticity is defined very differently than

Guba and Lincoln's (1989) notions of the concept. In particular, audit culture publishing's metrics fail to serve the individuals within it, and there is a lack of fully developed alternatives to audit culture's assessment practices.

NEERO is in a unique position as a regional education conference. If balanced properly, NEERO can be both leader and critic of audit culture. Such an approach should be viewed as strategically Machiavellian. Few academics are aware of the extent to which auditing will be a routine educational practice in the near future. Therefore, we recommend that NEERO engage in audit culture, extensively researching this area and prodigiously publishing in this domain. However, NEERO should use its position within this arena to critique audit culture and its pitfalls. In such a unique publishing and research zeitgeist, we recommend resistance to audit culture through scholarly and empirical examination of its manifold fallacies.

5 References

- Baruch, Y., Konrad, A., Aguinis, H., & Starbuck, W. (2016). *Opening the black box of editorship*. New York, NY: Springer.
- Beall, J. (2012). Predatory publishers and opportunities for scholarly societies. *Paper presented at the American Educational Research Association meeting*. Washington, D.C. Retrieved from <http://eprints.rclis.org/18044/1/AERA%20paper%202.pdf>
- Bladek, M. (2014). Bibliometrics services and the academic library: Meeting the emerging needs of the campus community. *College & Undergraduate Libraries*, 21(3-4), 330-344. doi: 10.1080/10691316.2014.929066
- Bruns, T., Brantley, S., & Duffin, K. (2015). Scholarly communication coaching: Liaison librarians' shifting roles. *Faculty Research & Creative Activity*. Retrieved from http://thekeep.eiu.edu/cgi/viewcontent.cgi?article=1100&context=lib_fac
- Cave, R. (2013). Overview of the altmetrics landscape. Proceedings from *The Charleston Library Conference*. doi: 10.5703/1288284315124
- Denzin, N. K., & Lincoln, Y. S. (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Denzin, N. K., & Lincoln, Y. S. (2000). *Handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Denzin, N. K., & Lincoln, Y. S. (2005). *The SAGE handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.
- Denzin, N. K., & Lincoln, Y. S. (2011). *The SAGE handbook of qualitative research* (4th ed.). Thousand Oaks, CA: Sage.
- Greenwood, D. J., & Levin, M. (2006). *Introduction to action research: Social research for social change: Social research for social change*. Thousand Oaks, CA: Sage.
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Thousand Oaks, CA: Sage.
- Haustein, S. (2012). *Multidimensional journal evaluation: Analyzing scientific periodicals beyond the impact factor*. Walter de Gruyter. Retrieved from <http://site.ebrary.com/lib/bcc/detail.action?docID=10562607>
- Haustein, S. (2016). Grand challenges in altmetrics: Heterogeneity, data quality and dependencies. *Scientometrics*, 1-11. doi: 10.1007/s11192-016-1910-9
- Kincheloe, J. L., & Tobin, K. (2009). The much exaggerated death of positivism. *Cultural Studies of Science Education*, 4(3), 513-528. doi: 10.1007/s11422-009-9178-5
- Lapinski, S., Piwowar, H., & Priem, J. (2013). Riding the crest of the altmetrics wave: How librarians can help prepare faculty for the next generation of research impact metrics. *College & Research Libraries News*, 74(6), 292-300. Retrieved from <http://crln.acrl.org/content/74/6/292.short>
- Misteli, T. (2013). Eliminating the impact of the impact factor. *The Journal of cell biology*, 201(5), 651-652. Retrieved from

- <http://jcb.rupress.org/content/201/5/651.short>
- Roemer, R. C., & Borchardt, R. (2015). *Meaningful metrics: A 21st century librarian's guide to bibliometrics, altmetrics, and research impact*. Chicago, IL: Association of College and Research Libraries. Retrieved from http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf
- Ryan, K., Brady, J., Cooke, R., Height, D., Jonsen, A., King, P., Stellar, E. (1979). The Belmont report. *Washington, DC: US Department of Health, Education and Welfare, US Government Printing Office*.
- Shore, C. (2008). Audit culture and illiberal governance: Universities and the politics of accountability. *Anthropological Theory*, 8(3), 278-298.
- Spooner, M. (2014, December 9). *Interview with Norman K. Denzin*. Retrieved from https://www.youtube.com/watch?v=_ekg5FMKpYo
- Strathern, M. (2000). *Audit cultures: Anthropological studies in accountability, ethics, and the academy*. New York, NY: Psychology Press.
- Zhao, L. (2014). Riding the wave of open access: Providing library research support for scholarly publishing literacy. *Australian Academic & Research Libraries*, 45(1), 3-18. doi: 10.1080/00048623.2014.882873