March - 2025

Editorial - Volume 26, Issue 1

Terry Anderson

Professor Emeritus, Athabasca University

I have been blessed in retirement by the knowledge that some of the projects I worked on over the years have outlived my time in academia. Thus, the invitation to co-author an article on IRRODL's 25 years of publication, as well as a chance to get "back in the saddle" and write this editorial is less a task and more a privilege.

The issue begins with the article "A celebration of IRRODL's 25-year history." Founding Editor Peter Cookson, subsequent editors Rory McGreal and myself, and Managing Editor Serena Henderson co-authored the article, providing an overview of the accomplishments and challenges of publishing a pioneering online journal. We document issues and opportunities faced by IRRODL as the technology and the interest in distributed and open education expanded from the fringes to a viable and sometimes essential component of education systems. After reviewing the first draft, I noted to Rory McGreal that the article was too much a "brag rag," so we tuned it down a bit. However, I am sure you realize that those directly involved in production, as well as the numerous scholars and students who have used IRRODL over these 25 years, have a great deal to be proud of.

IRRODL is a success story, partly because it was in the right place (fully digital) at the right time (an explosion of interest in distributed education) with the right tools (unprecedented access to personal composition, publication, research, and networking technologies) and at the right price (free and open for both readers and authors). When we published the first issue, there were many (including my PhD supervisor) who believed that publishing in an electronic journal had about much scholarly value as mailing the work to a friend. Times changed. I recall boxing up those old paper journals for the recycler. These works retain relevant and historic value, but the paper format makes them unretrievable by even subscribers, much less accessible by the multitude of new students and scholars globally.

IRRODL would not have succeeded, much less flourished, without the ongoing support of Athabasca University. Though the focus of IRRODL matches the delivery mode of the University, many larger open and distance education institutions have not supported full-and part-time staff to edit, mange, and produce a quality international journal focussed on their core business – quality distributed teaching and learning.

By contrast, one can imagine if IRRODL had chosen or been forced to gain support from one of the large academic publishing giants. Just last month, we heard of the mass resignation of editors from *The Journal of Human Evolution*. This journal has been managed for decades by Elsevier. In recent years, copy editor and special issue editors have been let go, the number of articles published severely limited, and an astounding Article Processing Charge (APC) of \$3,990 USD (\$5,727 CAD) assessed to authors if they wish—

Editorial – Volume 26, Issue 1 Anderson

or are forced—to publish their article open-source. These cost-cutting measures were necessary for a company that earned profits of \$3.23 billion CAD in 2023!

IRRODL's success has also benefited from the pioneering work of John Willinsky and Simon Fraser University, which created the Public Knowledge Project (PKP). This open-source toolset manages the submission, review, editing, publication, and archiving of IRRODL and most of the other open access journals around the world.

Of course, IRRODL could not have succeeded without the contributions of thousands of scholars from many countries of the world. Many of these authors' efforts have been rewarded by the thrill of seeing their work reviewed and published in a globally read, high-quality academic journal. Another rewarding experience is receiving notification from Google Scholar or other indexing systems that the work has been read and cited by other researchers.

We also recognize the efforts of thousands of authors whose work was not accepted for publication. We hope that the comments from editors and reviewers have been helpful to these scholars and served as a springboard for publication in other journals.

Perhaps the biggest thank you goes out to the thousands of anonymous IRRODL reviewers. These scholars have taken time from their busy days to critically review and help improve the work of others—most of whom they have never met and whose names they do not know. Of course, they do this work voluntarily. I am confident that not one of the 1,304 articles published in IRRODL during these 25 years that has not been edited, either in small or major ways, to enhance its quality and readability.

To conclude, all of us at IRRODL extend a heartfelt thank-you to everyone who has helped make these 25 years of quality scholarly research freely accessible to all.

Volume 26, Issue 1

As we celebrate this milestone, we are delighted to present the first article in this issue under the *Research Articles* section:

"Predicting online learners' performance through ontologies: A systematic literature review"

At the time we were starting IRRODL, we devoted time and effort trying to understand the semantic web, the ontologies underlying the technology, and their application in *educational objects* and *educational modelling languages*. Subsequent developments in whole language models and search engine efficiencies have made this work appear somewhat obsolete. However, it is interesting to observe how the semantic web and the roll of ontologies remain relevant and can still be used successfully to predict learners' performance.

"The impact of switching intention of teachers' online teaching in the COVID-19 era: The perspective of push-pull-mooring"

Academic publishing (as well as practice) was profoundly affected by the COVID-19 lockdown. Many students, teachers, and institutions realized that it was distance education or no education at all. Some teachers were given the choice to move their work online, driven by both push factors (e.g., institutional mandates) and pull factors (e.g., students' need for access). This article itemizes and quantifies these push and pull factors, evaluating and measuring their effects.

"Automatic classification of online learner reviews via fine-tuned BERTs"

MOOCs continue to provide learning opportunities to millions of users, offering a "massive" source of data collection. Using 365,000 student reviews of courses from Class Central, the authors use an AI technique of natural language processing known as Bidirectional Encoder Representations from Transformers (BERTs). While the research methods may be complex, particularly for those without a technical background, the applications of these tools in addressing both large and small educational challenges are widely valued. The intricate procedures yield simplified recommendations for comparing and improving MOOCs across various subject domains.

"Impact of simulation-based learning on learning loss among nursing students: A quasi-experimental study"

One of the projects I worked on during retirement was a part of a team from Harvard University investigating the impact of distributed health-related simulations on student performance. My initial understanding of simulations was based on computerized processes used to demonstrate and measure natural or scientific processes. However, I quickly learned from this experience, as highlighted in this article, that a medical simulation is viewed as a medical intervention conducted by teachers or students on human actors posing as or simulating patients. Additionally, this study posits that the emergency cessation of on-campus education and the shift to online learning during the pandemic resulted in "learning loss" in optimal learning. It demonstrates how simulations can help mitigate some of this "learning loss." Unfortunately, the quasi-experimental component of the study compares those receiving remedial

Editorial – Volume 26, Issue 1 Anderson

simulations face-to-face with those watching the simulations on video tapes—a media comparison study often yielding minimal differences in performance.

"Self-, peer, and tutor assessment in online microteaching practice and doctoral students' opinions"

Similar to the concept of "simulation training" used by medical researchers, microteaching involves a student teaching a short segment of a class to peers. In this paper, the microteaching was conducted online, with the process recorded for feedback. This study examined the concordance among self, peer, and tutor assessments in online microteaching practices, along with students' views on their online microteaching experiences.

"Peculiarities of the development of students' musical skills under the influence of modern software"

I love educational experiments like the one described in this article that enrolls students located in four different countries. The course is also innovative as music education is exploding as technical tools enhance the possibilities for creative expression. Finally, the article details and measures student perceptions of the value associated with use of digital and distributed music creation tools.

"Implementation of an on-the-job training method in a distance education environment"

As an ex-hobby beekeeper, I couldn't help but enjoy this emergency distance education application focused on teaching student beekeepers effective techniques for spring colony management. Unlike some hastily assembled emergency online delivery, I appreciated the systematic evaluation of the tasks and the thoughtful way they were taught at a distance—especially under the pressures and constraints of pandemic education. We are seeing ongoing need for vocational skill training and retraining, and while this presents extra challenges for distributed education, we have decades of experience developing learning designs and new innovative tools emerging monthly to teach and learn practical skills.

"Evaluating Al-personalized learning interventions in distance education"

The holy grail of education has always been personalized feedback, tailored learning designs, and motivation to allow each individual to learn at their optimal effectiveness. Theoretically, with AI continually customizing instruction at an individual level, one should see improved learning outcomes. This study puts this to the test by comparing an experimental group provided with customized practice activities to a control group offered conventional online learning material. As expected, "the experimental group who interacted with personalized AI-based learning materials showed significant improvements in fluency, accuracy, and overall effectiveness." AI is rapidly transforming many aspects of teaching and learning. Given differences in age, local context, and learner expectation, these AI tutors may be more effective at assisting learners at a distance than those gathered in-person. Education is more than individual learning—it is also about learning how to interact with and engage socially within a community.

"The impact of a learning analytics based feedback system on students' academic achievement and self-regulated learning in a flipped classroom"

This study also compared the performance of students when provided with ai-generated feedback based on their learning performance, alongside a control group that used only online learning materials produced by the instructor. Similar to the previous study, this research revealed only small changes in learning outcomes between the two groups. However, it is important to note that we are still in the early days of using AI-generated student feedback.

"Analyzing learning sentiments on a MOOC discussion forum through epistemic network analysis"

This is a fascinating, if not entirely convincing, use of network analysis to identify so-called "learning sentiments." Our decision not to include some form of affective presence in the now well-known Community of Inquiry model continues to spark discussion among researchers. At a conference, I once flippantly responded to this concern by noting that you have to remember that the Community of Inquiry (COI) was developed by three males from Alberta, and that cowboys are not known for their affinity with affect.

The results from this study of learning sentiment are intriguing, if not surprising. They caused me to reflect on over 25 years of analyzing text-based interactions and the evolving use of AI analytic techniques to alleviate the arduous task of manual analysis. The traces left by networked education continue to present exciting opportunities for researchers to explore teaching and learning processes.

"A categorical confirmatory factor analysis for validating the Turkish version of the self-directed online learning scale (SDOLS-T)"

The importance of self-directed learning has long been recognized as critical in all types of formal education, especially those delivered at a distance where instructor presence is often reduced. This study employs advanced analytics to evaluate the effectiveness of a Turkish translation of a robust instrument originally developed in English. As anticipated, factor analysis confirmed the theoretical foundation of the instrument. The study further demonstrates the positive impact of using this instrument in diagnosing and supporting learners to gain self-direction in their formal learning.

"Comparative effectiveness of approaches to students' labour education in universities in the new era with the use of information technologies"

This study focusses on the importance of employees being highly motivated and aware of the role, needs, and rewards of engagement in the workforce. The study compared two different methods—one involving hands-on practical activities and the other featuring more theoretical teaching methods. The two groups were assessed on their resulting attitudes towards work, with interesting though somewhat contradictory results.

Editorial – Volume 26, Issue 1 Anderson

Following the insightful research articles in this issue, we are pleased to share a contribution under the *Research Notes* section:

"Manuscript selection in a literature review: "Free-full-text-or-next" as a new criterion"

One of the strengths of IRRODL is that a MEd student from Australia can have their work and thinking promoted through an international journal. In this article, the author examines the increasingly important systematic literature review process that strives to insure we continue to "build upon the shoulders of others." AI-assisted online access allows researchers to easily select relevant papers and their contexts from a large and ever-growing archive of reviewed work. One of the critical steps in doing a systematic review is selecting the articles that meet the criteria relevant to the research questions. In this case, the author suggests that reviewers check if the article is available freely in full text—if not then "next," and the article is rejected from for the review. It took me a few reads to understand what "Free-Full-Text-or-Next" even meant, but I eventually got it. The author makes a good argument illustrating the inclusive value of full-text access for all scholars. However, I wasn't convinced. If possible, I want a review of all the relevant articles—even those hidden behind paywalls.

Rounding out this issue, we share with you two insightful contributions under the *Literature Reviews* section:

"Facilitating students' emotional engagement in synchronous online learning: A systematic literature review"

The easiest distance education system to implement in emergency contexts is to substitute synchronous videoconference classes for those formerly conducted face-to-face in a classroom. Thus, there has been a surge of interest in using and measuring the impact of this technology, with a special focus on engagement. This study employed a grounded theory approach using data collected from a systematic review of the literature. Factors influencing engagement using this medium were grouped into four categories: (a) instructor actions (e.g., interacting informally before and after class, encouraging the expression of ideas), (b) learner behaviors (e.g., building rapport with peers, recognizing individual accountability), (c) environment characteristics (e.g., creating a supportive atmosphere, selecting communication modes), and (d) activity design (e.g., using breakout rooms, embedding diverse elements. This sounds to me much like the characteristics of good teaching in any context.

"Bibliometric insights into the open education landscape"

The popularity and diverse contexts of use of open education has resulted in a rich research literature focussed on various components and contexts of open education. This study stands out for its quantitative approach in mapping the current academic topics and focus of open education, providing insights into the dynamic interplay between technology, policy, and pedagogy.



