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## Report Review: ICDE OERAC: Open Science, Open Educational Resources, and Open Innovation



Ossiannilsson, E., Martins Gomes de Gusmão, C., Leonor Ulloa-Cazarez, R., & Obiageli Agbu, J.-F. (2022). ICDE OERAC: Open Science, Open Educational Resources, and Open Innovation. *International Council for Open and Distance Education*. ISBN: 978-82-93172-50-5. <https://www.icde.org/knowledge-hub/open-innovation-framework-oerac-2022>

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### Introduction

In the digital age, resources and information are increasingly available in formats other than published books, such as white papers and grey literature. This evolving landscape—particularly in open education where more traditional publication routes are often circumvented—has created opportunities for reviews of emergent resources in alternative formats. Therefore, this review seeks to describe a recently published report by the International Council for Open and Distance Education (ICDE).

### Origins of the Report

In October 2021, the ICDE Open Educational Resource Advocacy Committee (ICDE OERAC) brought together 13 participants from different countries to engage in a workshop as part of the ICDE Virtual

Global Conference Week. The purpose of this workshop was to create a framework for open innovation that could be published and disseminated globally to those in higher education, including scholars, researchers, and institutions. The report authors are deeply and broadly experienced scholars, practitioners, and leaders in open education initiatives worldwide, and, interestingly, they applied an open science approach to this project.

Participants in the workshop were presented a small survey, and 11 of them provided responses to a series of open-ended questions. The survey questions were designed to help the authors explore “how open science can support the design, implementation, and validation of formal, non-formal, and informal learning environments in innovative ways (e.g., using the term open innovation)” (Ossiannilsson et al., 2022, p. 11).

The survey results revealed that 6 of the 11 participants had no experience in open science. Nine of the participants worked in formal learning environments. The verbatim responses to the open-ended questions were included in the report, and the authors used these responses to develop a framework for open innovation. Additionally, the authors provided recommendations on next steps to support open innovation that can be taken by educational institutions, research institutions, and governments.

## **Open Science and Open Innovation**

The authors began the report with a concise description of the history of the evolving relationships among open education, OER, open access, and open science. They explained that in 2019, UNESCO unanimously adopted the recommendation on OER in order to support the achievement of several Sustainable Development Goals (SDGs), and that over time, the concept of open education has expanded beyond open access and OER to include open research, open pedagogy, and more (Ossiannilsson et al., 2022). In particular, Ossiannilsson et al. (2022) stated that open science has emerged as an approach to research and development that encourages open access to infrastructure and data, uses collaborative processes at all stages, and advocates for policy with a goal of eliminating barriers. At the time of the workshop, the UNESCO recommendation on open science was under discussion, but it was officially adopted between the conclusion of the workshop in October 2021 and publication of the report in March 2022.

In the discussion section of the report, the authors provided a comprehensive explanation of the importance of having a framework for open innovation to support open science. They defined open innovation as “a management model for innovation that encourages collaboration with people and organizations outside the organization” (Ossiannilsson et al., 2022, p. 15). However, in the words of the authors, using an open innovation approach requires “a true cultural break with the silo mentality of business and the secrecy traditionally associated with corporate R&D culture” (Ossiannilsson et al., 2022, p. 15). Open innovation requires embracing collaborations across and between departments, institutions, organizations, and beyond (Ossiannilsson et al., 2022). Up to this point, how precisely this could be done or what aspects of openness would be required was not clear. Therefore, the framework developed by the authors could help provide some guidance and direction for further discussions.

## The Framework

The framework was developed based on the responses the authors received from participants during the workshop. The framework has been built on the features and attributes of open access, OER, and open science (Ossiannilsson et al., 2022). It mentioned open culture, open access, open infrastructure, open software, open frameworks, open education, open practices, open principles, open ideas, and common definitions. Interestingly, the framework also included a component called open X, representing future—currently unknown—initiatives that might have a role in the framework. The history of open education has been one of evolution, growth, and refinement, so pre-emptively making space in the framework to acknowledge and account for future open initiatives was both pragmatic and strategic.

It appears part of the sixth question asked of participants, as listed on page 14, was unintentionally combined with the first participant response. The resulting question wording is “What are the possible barriers to supporting Open Science and a possible framework Lack of skills and opportunities to open up their research and educational artifacts” (Ossiannilsson et al., 2022, p. 14). Upon clarification in correspondence with the editor of the report (Dr. Ossiannilsson), the question should read “What are the possible barriers to supporting Open Science and a possible framework?” The report editor stated this will be corrected in the published report.

This report could be further improved by providing more commentary on the framework itself. The authors do not provide much discussion on the relationships among the components in the framework and how they fit together, though I do acknowledge the framework is intended to be a starting point for conversation. However, some of the design decisions in the visual representation of the framework left me with questions. For example, some of the components had a solid thick border, some had a solid thin border, and others had a dotted border. It was unclear to me why these different components were presented differently and what implications this might have for the use of the framework itself, the relationships among the components, or the importance of each component. However, upon follow-up, the report editor confirmed that the thicknesses of the borders were intended to represent the strength of connections among, and importance of, the framework components.

The authors have provided several thoughtful and detailed recommendations for how, where, and why discussions about open innovation and the framework should go next. These recommendations provide concrete, tangible action items that individuals, institutions, and organizations can begin working towards. These recommendations were organized into two lists; the second list is targeted specifically to colleagues and institutions. It is less clear to whom the first list of recommendations is targeted, but on follow-up, the report editor clarified that the first list provides general recommendations. Overall, the recommendations make clear that there are many avenues and opportunities for further discussions, and several starting points for people and organizations across disciplines and at different levels are available.

In my opinion, the strength of this report is its discussion of the complexities inherent within open innovation and the systemic barriers to it. Another strength of this report is in highlighting the urgency and importance of these issues globally. The emergence of the COVID-19 pandemic necessitated innovations in education, business, research, and more—innovations that could continue to have positive impacts in a post-pandemic world (Ossiannilsson et al., 2022). Therefore, it is important to consider how

these developments and innovations could be leveraged and transformed into long-term, sustainable practices. As well, the application of an open science and open innovation approach to discussing issues of and future directions for open science and open innovation was an excellent example of openness in practice. For these reasons, this report would be of broad interest to all who are interested in open education.

