

## Chapter 46

# Quality Assessment and Certification in Open Scholarly Publishing and Inspiration for MOOC Credentialing

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### ABSTRACT

*This chapter looks at the changing landscape of quality assessment and certification/credentialing in open knowledge systems by a comparative study between open publishing and open education. Despite the disruptive changes driven by open publishing in scholarly communication, it is challenging to develop widely accepted methods for quality assessment and certification. Similar challenges exist in open education platforms like the massive open online course (MOOC). This work reviews four types of innovations in open publishing in terms of quality control, namely “light touch” peer review, post-publication assessment, social peer review, and open peer review. Synthesising the principles and strategies of these innovations, it discusses how they might be inspiring for developing solutions and models for MOOC assessment and credentialing. This chapter concludes by suggesting future research directions. It argues that the open initiatives are co-evolving with the “traditional” systems and integrating with the established models.*

### INTRODUCTION

Knowledge communication is being confronted with the challenges and opportunities of Web 2.0 technologies, social media, and a variety of open ethos (Scanlon, 2014; Schroeder, 2007). The creation, dissemination, and consumption of knowledge become increasingly informal, and develop outside the traditional institutional setting in the open and networked age. This is transforming how knowledge is being transferred either from authors to readers, or from educators to students. Despite the emerging transformation that happens in a variety of open knowledge communication areas, it is widely agreed

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that dynamic open initiatives are facing challenges that result from the absence of an established and accepted system for quality assessment, certification, and credentialing. Open publishing and open education are thus not able to provide quality and reward to the participants as practically as the traditional counterparts (Freeman, 2010; McGreal, Conrad, Murphy, Witthaus, & Mackintosh, 2014).

This chapter reviews the innovations of open publishing relating, in particular, to quality assessment and certification and discusses the inspiration for massive open online course (MOOC) credentialing. It also compares the development, impact, and challenges of open innovations in the open publishing and open education areas. It discusses the implications of these methods in MOOC credentialing as well as the wider settings of open education.

The chapter focuses on four types of innovations:

1. “Light touch” pre-publication peer review is increasingly popular in the open access publishing industry. It questions the timing, purpose, and methods of assessment and credentialing in an open knowledge environment. To what extent and in what ways, could MOOC assessment be “light touch”?
2. Post-publication assessments are essential in both the traditional and emerging academic publishing systems. The MOOC system also needs some assessments at the post-course stages, either tracking the performance of graduates, or assessing the overall quality of the MOOC platforms.
3. Social peer review is a growing trend in open academic publishing, depending on peers as well as the community as a whole to assess the quality instead of just a few expert reviewers. Likewise, peer assessment is regarded as one of the future trends in MOOCs.
4. Open peer review makes quality control much more transparent as it publicises the feedback of reviewers and the responses of authors in academic publishing. It raises a question about MOOC platforms regarding whether they should make the processes of examination and assessment open and how to do it.

Using a comparative study, this work aims to identify common issues of open initiatives and derive practical solutions from the lessons learned in different fields of open knowledge practices.

## **BACKGROUND**

The term “open publishing” includes two key changes compared to the traditional publishing model. As Scanlon (2014) points out, scholarly publishing “may be subject to change in two ways, due to the impact of open access publishing and the prominence of Web 2.0 technologies and social media” (p. 15). Open publishing primarily refers to “open access”: the unrestricted online access to scholarship. Moreover, openness means an open communication system, in which content is being published without traditional gatekeeping and authors, readers, and reviewers are connected and collaborative without publishers’ intermediaries (Brown & Boulderstone, 2008; Nikam & Babu, 2009). In other words, “open means ensuring that there is little or no barrier to access for anyone who can, or wants to, contribute to a particular development or use its output”<sup>1</sup>. Specifically, these open models,

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