

“Education 4.0” - Policy Implications for an enhanced Copyright System in the Knowledge Society

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This **empirical** and **doctrinal study** deals with **copyright implications** of **new technology-driven teaching concepts**. During recent years, the ways we teach and learn have rapidly changed and new educational concepts are emerging. In this digital learning environment, we are switching from blackboards to tablets, textbooks to e-books and notebooks to cloud-based services. Virtual and augmented reality technologies are already in an advanced stage of development. Furthermore, the concept of analogue lectures and ‘local classrooms’ are increasingly displaced by lecture casts, (distant) e-learning and by massive open online courses (MOOCs). This new learning and teaching environment is especially characterized by the inclusion of audio-visual digital content, a certain level of interactivity in the dissemination of knowledge and by the internationalisation of education. From this perspective, a **wide availability** and **easy accessibility** of **digital educational resources** on **multiple devices** as well as a highly integrated e-learning infrastructure is required.

At the same time, **legitimate interests** of **authors** and **(scientific) publishers** or other **intermediaries** also have to be taken into consideration. In the recent discourse on “open education”, the role of publishers obviously became questionable – not only from a user’s, but also from an author’s perspective. In many cases, the dissemination process of research outcomes starts with sharing working papers on open platforms and the formal publication of the final paper in a renowned journal is just the icing on the cake. Thus, the services rendered by publishers in the dissemination process will become less and less sustainable and economically viable. Against this background, **the role** and the **level of protection of publishers** should be **reconsidered**.

From a doctrinal copyright perspective, the progress of teaching and learning concepts raises a number of legal issues regarding educational uses of copyright protected works. This concerns in particular the scope of copyright protection, ownership of rights, licensing as well as limitations & exceptions (fair use). In this paper, we propose that **copyright needs to provide both unambiguous exceptions for educational uses of copyright protected works** and **improved right clearance mechanisms**, which enable the online and cross-border uses of works for teaching purposes.

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