



# Empowerment of Online Education to Publishing Education Ecosystem from the Perspective of Availability

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**Abstract.** The COVID-19 epidemic has pressed the “acceleration key” for the global online education industry and industrial reform. Based on the theory of availability, this paper discusses the new possibilities of online education in content, structure, evaluation and development for the publishing education ecosystem. On this basis, this paper discusses the development mode of online education for publishing majors, with a view to providing new ideas for the cultivation of publishing talents under the new situation and providing a new strategy for the sustainable development of the publishing education ecosystem.

**Keywords:** Availability · Online education · Publishing education · Ecosystem

## 1 Introduction

Education ecosystem is an organic whole composed of education and its surrounding environment (including internal, external, social and natural). With the rapid development of online education technology, all levels, system elements, element relationships and system rules of the education ecosystem are also undergoing rapid upgrading and evolution. First, changes at the system level. The embedded adaptive learning model of online education and new technology architecture have created gaps in the closed traditional education system, and the tide of intelligence and digitalization has begun to flow into all levels. Second, the connotation of each element of the system is expanded. The concept of school has been rewritten: it is no longer bound to the existence of physical space, but has turned to a more infinite and vast space-time boundary, casting diversified possibilities for the realization of a real “classroom in the air”; The form of the course has been refreshed: the new technological environment will promote the digital reconstruction of the educational link of teaching, learning, examination and practice. The immersive teaching situation is matched with the intelligent chemical situation assessment scheme, and the training quality of creative talents will step up to a new level. The third is the extension and improvement of the internal relations of the education system. With the generalization of digital resources, the identities and roles of teachers and learners may be subverted, and the distinction between subject and object will be

blurred between teachers and students in the virtual network. Fourth, changes in the rules of the system. Educational policies and regulations are inclined to online education, the development vision and strategic task of educational informatization have become specific goals, and new models of educational governance in the information age need to be explored urgently.

## 2 Online Education and Availability

The key to grasp the integration of online education and publishing education ecosystem is to understand the integration relationship between technology and various elements of publishing education ecosystem, and the availability theory provides an appropriate research perspective. In his 1966 book *The Senses Considered as Perceptual System*, James Gibson, an American Ecological psychologist, proposed the concept of “availability”, which refers to the behavioral possibilities obtained by animals in the environment [1]. The concept of availability has also gradually attracted the attention of media researchers. Stig shava used availability to explain “the characteristics of media and its relationship with social interaction. As a technology, media has a series of availability, which can promote, restrict and shape communication and action” [2]. In 2017, Pan Zhongdang introduced the concept of availability to the Chinese communication circle for the first time in an interview, dividing availability into three levels: production availability, social availability and mobile availability [3]. The perspective of availability focuses on the possibilities provided by emerging technologies for people to carry out actions, and emphasizes the interaction between people and technology [4]. Based on the perspective of availability, the integration of online education technology can bring unlimited opportunities for action to the publishing education ecosystem, thus promoting the structural change of publishing education.

## 3 Online Education Under Availability: Fully Empowering Publishing Education Ecosystem

### 3.1 Content Availability

At present, there are still few excellent courses of publishing type, and the system is not perfect. Therefore, colleges and universities should accelerate the construction of their own online excellent courses, encourage more colleges and universities to participate in the construction of the national excellent course platform, improve the design of the course system by gradients, launch a series of short and concise micro courses with diverse resources, real situations and convenient use, actively meet the development of the information age, adapt to the way users receive information, and make the sharing of resources more accessible to all corners, Complete the supply side reform of publishing education content.

The relevant industry association platforms should take the initiative to plan, take the lead in investigating high-quality general education courses and practical courses on the whole network, widely collect digital resources such as graphics, audio-visual and video, activate the curriculum stock on the basis of the original curriculum, build a

knowledge map in the publishing field, and transform one-way, planar and static high-quality publishing textbooks into interactive, three-dimensional and rich media digital education resources, So as to activate the discipline system, academic system and dis-course system of publishing, and actively respond to the practical needs of publishing practice for innovative publishing courses. Finally, it will iteratively form a high-quality curriculum resource bank and a high-quality curriculum evaluation system, with a view to promoting the normalization of normal curriculum and high-quality curriculum in the education ecosystem, and meeting the internal demand of learning individuals for deep learning.

### **3.2 Structural Availability**

With the popularization and expansion of online education, the “Matthew effect” will gradually become prominent among colleges and universities, resulting in an imbalance in the allocation of educational resources. Many colleges and universities only provide small-scale restricted online courses, and most of them choose the form of Sino foreign cooperation and inter University Association. “Double first-class” colleges and universities will be united, while ordinary colleges and universities with limited funds and poor quality teachers will be marginalized. Therefore, it is necessary to strengthen the sharing and opening of high-quality courses among universities, further open up the channel of course sharing between publishing strong schools and weak schools, reduce the entry threshold of high-quality courses, and make the source of knowledge flow fully. The education management department or the Education Steering Committee should take specific actions and plans to establish an online education system platform covering publishing institutions across the country in the next five years.

### **3.3 Evaluation Availability**

For students’ course performance, with the help of the intelligent evaluation function of the online education system, it can truly record their online learning status, and comprehensively judge students’ learning situation in real time according to multiple indicators such as the click frequency of the course, the review rate, and the exercise error rate, so as to clarify learning shortcomings and blind spots, push targeted exercises for improvement, and give intelligent personalized remedies. For students’ credit scores, the evaluation system can establish a unified national standard, let the evaluation results be endorsed for online credit certification, further open up the credit mutual recognition and conversion mechanism of online and offline learning, reshape the degree awarding assessment standard in the education system, so as to mobilize students’ enthusiasm and initiative in learning, and improve the acceptance and social recognition of online learning results by employers. Wolfe University, the world’s first blockchain University, is an online university built by using blockchain technology. Students’ scientific research obtains corresponding degrees through online learning. The world’s first public chain of higher education, the Ivy League chain, initiated by Tsinghua University, was launched in May 2018. Ivy League plans to build a blockchain education and scientific

research chain jointly built by universities around the world through a transparent collaborative consensus mechanism. All these provide experience and ideas for embedding the evaluation of online education into the education system in the future.

### 3.4 Development Availability

The talents trained by the publishing major should not only be book editors who can proofread at the head of the desk and are good at topic selection planning, but also integrate the professional knowledge of publishing with other disciplines and the society, provide more extensive publishing and communication education for the society, create a group of senior composite talents who both know publishing and are good at management, a group of digital publishing leaders who are familiar with traditional publishing and master modern technology, a group of skilled professionals Professional and profound famous planner and famous editor. In view of this goal, an online career assessment model can be established to train “T” type publishing talents with one specialty and many abilities by giving play to the long board effect from the perspective of learners’ abilities. This new set of training objectives is mainly divided into three levels: one is to have a solid and broad basic theoretical literacy, systematic and in-depth expertise and extensive knowledge of relevant disciplines in the field of publishing, and at the same time, to comprehensively and systematically master the history, current situation and cutting-edge trends of the research field, so as to be able to independently make innovative research results in this field; Second, we should be innovative, constantly learn about online publishing, use the Internet concept to open up practical links such as topic planning, content editing, publishing and distribution, and become a new force to promote the deep integration of new media and traditional publishing industry; Third, we should have the awareness of creating fine works, give full play to the spirit of tireless craftsmen, improve political sensitivity, and launch publications with rich levels, diverse forms and popular with the people.

## 4 Conclusion

Based on the current international conditions and with an eye to international education, online education is also the only choice for innovative international talent training models if we want to embark on the road of “publishing power” around national policies such as the “the Belt and Road”. We can build publishing characteristic universities and online education platforms with countries along the “the Belt and Road”, especially the third world countries, to change the current situation of large online education curriculum deficit in the form of “shipbuilding to sea”, and to transport China’s high-quality publishing curriculum overseas. It helps to construct new concepts, new categories, new expressions and new paradigms of publishing with Chinese characteristics that are understood and accepted by the international community, so as to enhance China’s academic voice, academic influence and academic leadership in the field of international publishing. At the same time, teachers and students are encouraged to initiate and participate in multi-disciplinary and multi-national internet academic roundtables, promote international students’ exchanges and cooperation, improve their understanding of each

other's national publishing systems, expand students' international vision, inject more international elements into online education of publishing, cultivate publishing talents that meet the needs of the new era, and become another help to build and implement a community with a shared future for mankind in the educational dimension.

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