

# Resource Integration and Operation Strategy of Education + Publication Digital Platform

Lei Zheng

*Xi'an Foreign Language Audiovisual Textbook Publishing House, Xi'an 710018, China*

**Abstract:** In order to enrich the theoretical research results of education and publishing digital platform, and provide reference for industry enterprises to build and operate digital platform, this paper discusses the resource integration and operation of “Education + Publishing” digital platform. On the basis of defining the core concept, the paper systematically analyzes the development mode and main challenges of the current “Education + Publishing” digital platform. In order to construct a high quality, wide coverage, easy access, can be combined dynamic educational resources pool, we need to start from both inside and outside. Namely, internally through digital activation stock paper content, external cooperation through professional content aggregation, while innovating resources copyright management mechanism. In addition, in order to maximize the role of resource pools, the “Education + Publication” digital platform shall constantly optimize the operation strategies of users on the demand side and the supply side, build diversified profit models, and strengthen brand communication and market promotion.

**Keywords:** “Education + Publishing”; digital platform; resources integration; operations

## 1. Introduction

In April 2022, the Publicity Department of the CPC Central Committee issued the Implementing Opinions on Promoting the In-Depth Integrated Development of Publication (the “Opinions”), deploying the integration of publication for the first time in all aspects, making it clear that efforts will be made in content construction, technology application and other aspects, and encouraging copyright cooperation in building resource pools, promoting the application of AI and other technologies and the cooperation between publishers and network platforms [1]. In 2025, nine departments, including the Ministry of Education (“MOE”), issued relevant opinions, proposing to build a national intelligent education platform, develop high-quality digital teaching materials, and specify the target market and service standards for the “education plus publication” platform from the education side. In this context, it is of great practical significance to optimize the resource integration and operation strategy of the “Education + Publishing” digital platform.

## 2. Definition of Core Concepts

### 2.1. Education + Publication

From the perspective of this paper, “Education + Publishing” refers to the evolution of publishing industry from a traditional content provider to a comprehensive knowledge provider and from a single product to an overall solution. In particular, the concept does not simply overlap the two fields of education and publishing,

but rather embeds the core competencies of publishing in the whole process of education and teaching [2].

## 2.2. Digital Platform

The digital platform, especially the platform of “Education + Publication”, is an online ecosystem based on Internet technology. The core value of the system is to break the information barrier among creators, publishers, educational institutions, teachers and students, and form a win-win cooperative network based on resource integration, role connection and service adaptation. Each participant can find a clear value orientation in the platform, and realize the interactive value-added.

## 2.3. Resource Integration

Resource integration, as the key link in building the core competitiveness of the “Education + Publication” digital platform, specifically refers to the systematic reshaping of content, data, technology, channels, human resources and other originally dispersed elements of the platform, the optimization of their configuration, in-depth exploration of their value, and ultimately the formation of a resource aggregation effect of  $1 + 1 > 2$ . Unlike traditional resource piling, resource integration emphasizes the principle of “adaptation to demand and organic integration”, clarifies the core value points of different resources and the connection points between resources, and then promotes resource synergy through technical means and process design.

## 2.4. Operation Strategies

This article refers to the operation strategy, especially “Education + Publishing” digital platform in order to achieve user growth, activity and value maximization, develop and apply systematic planning program. It covers user operation, content operation, activity operation and so on. The core logic is to realize the benign cycle of platform ecology based on user demand and driven by data.

# 3. Existing Models and Development Challenges of the Digital Platform for Education + Publishing

## 3.1. Existing Modes

With the support of national policies, three kinds of “Education + Publication” digital platforms have emerged in the fields of education and publishing, which are sensitive to technology and social development. Traditional publishing institutions take resource accumulation as an advantage to transform [3]. For example, Higher Education Publishing House builds intelligent vocational education platform relying on nearly 80% of the core textbook resources of vocational education nationwide, and extends services through digital processing of textbooks, development of teaching modules and joint construction of resource databases. Internet technology companies with technology and traffic access, Tencent classes back ecological courses to achieve stable storage and precision push, through WeChat drainage to reduce customer costs. Vertical field platform is focused on the needs of subdivision, teenagers are focused on 7–15 years old children’s literacy training, adapt to classic content, cooperate with publishing houses, launch audio books and evaluation, accumulate more than 20 million users, become industry benchmarks.

## 3.2. Development Challenges

Although the “Education + Publication” digital platform presents a good trend of evolution from resource database to intelligent knowledge service platform, it faces challenges in resources and operation [4]. At the resource level, the homogeneity of paper electricity is prominent, many platforms only digitize paper content in a simple manner, and different publishers have different resource format standards, which affects the retrieval efficiency. The copyright integration of high-quality content is also costly and time-consuming due to complex licensing. In operation, most platforms have a single profit model, rely on the sale of digital content and member subscriptions, and are weak in risk resistance, coupled with the lack of strategies to enhance user activity and retention, so it is difficult to form continuous stickiness and fall into the vicious circle of “B-end procurement dependence + C-end activity low”.

## 4. Resource Integration Strategy of “Education + Publication” Digital Platform

### 4.1. Core Concepts and Objectives of Resource Integration

No matter how to build and develop the “Education + Publishing” digital platform, “content is king” is fundamental to follow, that is, only high-quality resources can support the platform’s long-term development. Therefore, the platforms should strengthen the integration of resources and optimize the integration strategy. Specifically, the core idea of resource integration is to adhere to user value orientation, ensure that all resource integration activities can meet the actual needs of core users, such as teachers, students, organization management, etc., and avoid integration for integration purposes. On this basis, the platform should actively break the fragmentation of resources, through standardized classification, indexing and structural association, so that users can quickly locate the required content. For example, experts are organized to disassemble various textbooks into knowledge points, chapters and courses, and each knowledge point is labeled with difficulty coefficient and related subjects. Meanwhile, the platform shall have the ability to update dynamically, and be able to optimize the resource structure according to external changes such as subject development and policy adjustment in a timely manner and in combination with internal feedback such as user behavior data. For example, in response to the adjustment of the catalogue of vocational education majors by the Ministry of Education, update the textbook resources of the relevant majors; in combination with the results of the analysis of the data on students’ answers, revise the ambiguous part of the content of the explanation of a certain knowledge point jointly with the resource producers. All platforms shall also release the cooperative attitude, throw out the open interface, and absorb multi-party resources to form a multi-synergistic resource ecology. For example, on the basis of integrating the publishing house’s own resources, we can enrich the structure of digital resources through API access to training cases of enterprises and academic papers of research institutions. The ultimate goal is to ensure the authoritativeness and accuracy of resource content, improve resource appropriateness, expand resource coverage and ensure that all resources are accessible and composable.

### 4.2. Multi-Dimensional Integrated Paths for Resource Content

The resources integration of “Education + Publication” digital platform needs three aspects [5]. First, we should digitally activate stock resources, and deeply process paper content through indexing, slicing, reconstruction and other means. For example, we should organize expert teams to label textbooks in multiple dimensions, divide the content into independent knowledge point modules, and then reorganize the content according to teaching logic, and integrate animation, 3D simulation and other elements to enhance the practicality of content and the sense of user participation. Secondly, external resources shall be expanded, core resources of other institutions shall be obtained through cooperative replacement and joint development, high-quality commercial resources shall be procured, and teachers and experts shall be attracted to generate content with AI tools by taking advantage of the incentive mechanism, and creativity shall be stimulated by homepage recommendation and income distribution. Finally, we need to promote cross-border integration and innovation, jump out of the traditional content boundaries, and integrate museums, enterprises and other social resources. For example, publishing institutions and museums shall jointly build digital museum schools, develop special courses on cultural relics, provide services such as high-definition cultural relics inspection and expert explanation, etc., plan cultural and creative design projects, integrate cultural elements and industry resources, and provide services such as expert guidance and software authority, so as to create a quality platform for cultural and educational integration.

### 4.3. Innovative Management Mechanism for Resource Copyright

When it comes to the integration and use of resources can not bypass the “copyright” issue. In order to avoid the impact of traditional single copyright procurement or licensing mode on the integration efficiency of quality resources of the “Education + Publication” digital platform, the platform shall establish more flexible copyright cooperation and billing methods. For example: an audio-visual platform for educational channels for different types of educational resources. A differentiated copyright cooperation and billing scheme is designed.

For the resources of lectures of well-known experts, the platform uses the mechanism of “payment by times”, that is, the platform and the copyright holders share the income according to the ratio of 4:6 after a single payment. For the serialized curriculum resources such as “Primary English Grammar Essentials”, the platform is managed according to the “subscription sharing model”: the fees for subscribing to the curriculum and the lecturers will be divided according to the ratio of 5:5; meanwhile, there is a corresponding ladder reward for subscribing to the curriculum, and the lecturers can get an additional 10% revenue plus for every 1000 people subscribed. For popular science audio resources that are free and open, the platform uses an “advertising revenue sharing” model, in which the revenue from short ads inserted before and after the resource is broadcast is divided between the platform and the copyright owner in a ratio of 3:7. Before the 10th of each month, the platform will automatically complete the settlement of last month’s revenue, and support copyright through the background real-time view of resources, paid times, revenue details. In this way, the platform will be able to attract more high-quality copyright parties settled.

## 5. Operation Strategy of the “Education + Publication” Digital Platform

### 5.1. Users’ Bilateral Operation Strategies

After improving the content volume and richness, the “Education + Publishing” digital platform should also optimize the operation strategy. Considering the characteristics of the platform, the platform should first adopt bilateral user operation strategies. On the one hand, from the demand side of learners, teachers, schools, actively use key data monitoring, learning analysis and intervention digital technology to enhance user stickiness and value. For example, the platform can establish a full link KPI monitoring system covering user activity, retention rate and conversion value. If the 7-day retention rate for a particular group of users is found to have dropped by about 7%, the platform must find the problem through data disassembly in time. If the problem is caused by a section of the video content is too obscure and other content problems, the platform can collaborate to optimize the content, and continuously monitor the user 7-day retention rate recovery. If it is found through data analysis that the conversion rate of the annual subscription of low-price experiential courses is low, the conversion rate shall be improved by adding value-added services such as academic analysis reports and exclusive consultancy interpretation. In addition, the platform can set up a three-level community system of “Class Learning Group–Subject Exchange Group – Interest Community Group”. Teachers were arranged to lead the management, synchronous teaching progress and answering questions; invite teaching and research staff to share teaching and research results; support students to regularly and independently carry out online reading sharing sessions. This form a platform-based “learning + social” virtuous cycle.

On the other hand, the platform shall be oriented to the supply side of content creators, publishers and others, and use A/B testing, product iteration and other methods to ensure continuous high-quality content supply. As mentioned earlier, the platform’s use of incentives to attract incoming teachers to create quality content is one such strategy. On this basis, the platform can also implement the “master IP program”, that is, to provide quality creators exclusive operation team, and comprehensive use of platform home recommendations, special interviews, offline lectures and other ways to enhance IP awareness. For example, the author is responsible for writing the content and recording the courseware, the publisher is responsible for editing and proofreading, the technicians can provide the relevant services for making the supporting virtual experiment video, and the backstage operators can put forward suggestions on optimizing the content and output form of the course based on the data such as the amount of resources played, the completion rate, the user evaluation and the rate of knowledge points. Multiparty online real-time communication, effectively enhance the exposure of the IP.

### 5.2. Construction of Diversified Profit Model

Only the multi-profit can provide the impetus for the sustainable and healthy development of “Education + Publishing” digital platform. Therefore, the platform should get rid of the dependence on the sale of a single content, and build a “content realization + value-added services + platform capacity + data advertising” multiple income system. Among them, direct realization of content as the most basic profit model, mainly refers to the sale of high-

value, targeted vocational qualification examination courses, exclusive digital textbooks and other quality resources, and the adoption of a single payment model. Membership subscription is more suitable for rich content system, users need to use long-term scenarios to improve the subscription rate and renewal rate. For example, when building a digital platform for the education of technicians, publishing houses of vertical machinery industry can offer a complete set of courses for registered mechanical engineers, including digital teaching materials, analysis of real problems, simulation examinations, etc. At the same time, VIP member services for vocational education shall be launched, and members may apply for monthly cards, annual cards and lifetime cards according to their own needs, and enjoy the platform digital teaching materials, vocational skill courses and item bank resources of different quantities and categories. The value-added service, which emphasizes the high value profit model based on the content, is to provide personalized and professional services to meet the needs of users. Taking an education tutoring platform as an example, it provides one-to-one tutoring service for students, that is, matching tutors and customizing learning plan based on tutoring data. For teachers, the platform provides value-added services of “intelligent homework correction + learning analysis”. After the teacher uploads the homework, the AI module automatically corrects the objective questions and counts the correct rate, and provides suggestions for correcting the subjective questions. In addition, providing SaaS solutions to B-end schools, providing anonymous academic analysis reports under the premise of privacy, and other ways to realize platform empowerment and data and advertising are also effective choices to expand platform profit path.

### *5.3. Brand Communication and Marketing Strategy*

In the systematic operation strategy system, brand communication and marketing strategy is essential. This kind of strategy can reach users through content precision, deep transformation of high-quality resources, expand brand effect. In practice, “Education + Publication” digital platform can choose the combination strategy of content marketing, channel cooperation and scene marketing. Channel cooperation, for example, emphasizes close cooperation with partners such as education bureaus, schools, training institutions and hardware manufacturers to ensure value complementarity in the promotion process. For example, the platform can cooperate with the education bureaus of several provinces, connect the existing platform resources to the local cloud platform of intelligent education, and provide free resources access for schools in the cooperation area. In this way, the platform can rely on the education system to transform school teachers and students, increase the number of new users. At the same time, the platform can reach a resource exchange agreement with well-known training institutions, which will recommend the supporting resources of the platform in their courses, and the platform will provide exposure flow for the training institutions. The two sides can not only jointly reduce the promotion costs and new user acquisition costs, but also to achieve effective complementary user resources.

## **6. Concluding Remarks**

Under the background of digital technology promoting the rapid development of education and publishing industry, it is a useful exploration to actively build “education + publishing” digital platform. In the process of promoting this part of work, the platform should pay attention to the integration and operation of resources, that is, through rich content volume, scale, improve content quality, and optimize marketing methods, enhance overall competitiveness. In the future, the “Education + Publication” digital platform shall continue to grasp the development trend of generative artificial intelligence, digital twinning and other technologies, pay attention to the new forms of education and publication, constantly optimize the resource integration and operation strategy system, and promote the orderly flow of data, resources and users within a healthy ecology.

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### **Institutional Review Board Statement**

This study does not involve humans or animals and is not subject to ethical review.

### Informed Consent Statement

This study does not involve humans and does not require informed consent.

### Data Availability Statement

This study explores the theoretical and strategic aspects of resource integration and operation of the “education + publishing” digital platform, and does not involve generating or analyzing empirical data that needs to be publicly archived. The research conclusions are drawn based on an analysis of the industry status quo, policy documents, and typical cases, and no relevant datasets were involved in the research process.

### Conflicts of Interest

The author declares no conflict of interest.

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