Research on Optimal Configuration and Sharing Mechanism of Quality Teaching Resources in Urban and Rural Areas Within the Background of Internet Plus Education

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Abstract. We will base on the research on effective ways of co-construction and sharing of quality teaching resources under the background of “Internet plus Education”, actively explore innovations in policies, systems, mechanisms, and application models, form diversified and three-dimensional quality teaching resources for gradually lessening the gap among regions, urban and rural areas and schools and constructing “everyone can learn everywhere at any time” so as to raise new ideas for co-construction and sharing of quality teaching resources.

Introduction

The fifth Plenary Session of the 18th CPC Central Committee raised clear demands for educational informatization: “We should construct an effective mechanism to expand the coverage of quality educational resources by means of information technology, gradually lessen the gap among regions, urban and rural areas and schools. Its core was constructing effective mechanism to expand the coverage of quality educational resources.” With the rise of Internet and informatization, comprehensive penetration of information technology, “Internet plus education” have become the dominant model of promoting educational informatization as well as found an effective solution for digital gap in urban and rural education\(^1,2\).

However, it was difficult to cover network digital education resources and informatization teaching faced many difficulties in relatively backward rural small-scale schools due to limitations of geographical location, poor conditions for running schools, relatively low informatization quality and enthusiasm lack of teachers as well as insufficient educational funds. Thus, under the background of “Internet plus education”, the center especially has proposed innovative and effective mechanisms in order to realize resources sharing which can be seen that how important is “mechanism innovation”. \[^3\] Therefore, actively exploring the effective ways to co-construct and share of “Internet and quality educational resources in cities and rural areas, establishing open concept, multiple ways and multiple channels to expand quality educational resources, realizing sharing and co-construction of quality teaching resources in cities and rural areas, solving digital educational gap between in cities and rural areas, which were questions that cannot be avoided in deepening comprehensive reform of the educational field it is also a practical subject for the educators.

Connotation of “Internet Plus Education”

“Internet plus education” is based on the respect towards the intrinsic characteristics of education and uses internet thinking and behavior patterns to reshape the teaching mode, content, tool and
method of education. It is a kind of integration, re-optimizing and allocating educational resources [4]. Thus, it could lower the study threshold for students, increase teaching level and learning effect and enable education content to update continuously, making the education pattern different and the education evaluation diversified day by day. Micro Learning Resource, MOOC, Flipped Classroom and Mobile Micro Class and etc. are exactly the products of “internet plus education”. The essence of “internet plus education” is to deploy new educational teaching mode with the help of “internet plus” technology under the circumstance that teacher and students are not staying together [5]. Such new teaching mode is an innovation to the original teaching structure, realizing the teaching philosophy that centers students and making teachers the organizer and guider of overall teaching activity.

**Innovative Diversified Education Mode**

We analyze the thought and application mode of the “internet plus education” on a basis of its current theories, technologies, applications and practical experience. We analyze the necessity of applying “internet plus” technologies in teaching from current educational mode and educational information resources, structure teaching and learning environment resting on “internet plus”, integrate current or new teaching resources and provide the “internet plus education” platform with higher effectiveness and better expansibility to teachers and students for realizing a free, personalized and diversified teaching and learning environment.

We will implement the innovative research of diversified education mode through “internet plus” teacher, “internet plus” course, “internet plus” study and “internet plus” teaching.

**Co-construction of Educational Resources**

Firstly, system planning is the key to the development of educational resources, in the era of “Internet plus”, we should break the school physics space restriction and realize co-construction and sharing of multi-schools virtual space. Platforms should be developed by regional administrative department for education uniformly so as to avoid repeated construction in each school which can truly realize the construction, sharing and application basic of micro class resources. There were inherent reasons of the low utilization rate of existing educational resources which needed to review completed construction resources, reasonably classified and checked missing and repaired trap as well as sorted out the knowledge points according to the class knowledge system and developed new teaching resources designedly in order to avoid uneven distribution of educational resources.

Secondly, we should accelerate the formulation of educational resources evaluation standards and construction standards. The framework of norms and standards can restrict the development of disordered development of educational resources for making resource development gradually move towards mature and appropriate path [6]. In the initiate stage of the development of educational resources such as micro courses, rationally and scientifically establishing and improving the evaluation standards will have overall influence and guidance on their subsequent development.

Thirdly, promoting the teaching application of educational resources. Although mix learning and fragmentation learning greatly affected the way of people to learn, teachers should pay more attention to the teaching application of educational resources which was the basic purpose of developing educational resources. Teachers should not only develop educational resources from a practical point of view, but also be able to use and make flexible and good use of educational resources.

Fourthly, strengthening the subject knowledge of integrated technology. As educators, the problems should be viewed in rational perspective, neither the new technology can be ignored, nor can be led by nose. Internet was only a technical means of educational reform and education was the core objective. Nowadays, educational technology circles basically affirmed that teaching application of educational resources was useful for teachers to master and use the application ability of information technology which also was also theoretical guidance for teachers to improve the application ability of information technology. With the improvement of the teaching level of teacher
education resources, their ability to develop educational resources and apply teaching resources independently will be improved gradually.

Educational Resources Sharing

“Internet plus” made education from closed to open. Internet connected learning resources closely and unconsciously affected people's learning: we unremittingly learned fragmentally. Progress in information technology made learning model combined online and offline such as Inverted Classroom become possible. The development of social media contributed to the formation of learning community [7]. Better learning results will be obtained if these new development was applied in teachers’ network research and studies.

Firstly, combining systematic learning with fragmentation learning. If project-based teacher network research and studies was systematic learning then the accumulation of bits and pieces was fragmentation learning. Fragmentation learning was the important supplement of systematic learning which should send fragmentation learning resources to teachers through social media timely when systematic training projects was carried out. Secondly, combining online learning with offline research and studies. Teachers used existing network training resources for online autonomous learning while researched and discussed with experts about related offline issues for improving learning efficiency and quality. It was believed that many teachers has applied Inverted Classroom model in their own teaching practice and then Inverted Classroom model of teacher network research and studies was also worth to expect. Thirdly, playing a role in the function of learning community. Teachers participating in training should form an efficient learning organization, develop group dynamics function, share understanding from different point of view and strengthen cohesion of the group in learning process at the same time [8].

Suggestions on the Construction of Educational Resources

Strengthen Top Design

We needed to aim at establishing a higher quality basic education district, deepen “Internet plus Education” action plan, further clarify the development goals and implementation strategies of wisdom education, make full use of huge data service for realizing standardization of education management and precision of teaching service, structuring “networking, digitization, individuation, lifelong” educational system that everyone can learn everywhere at any time for the realization to connect quality educational resources with every household.

Deepening teaching reform

“Internet plus” era and “everyone can learn everywhere at any time” gradually have become the development trend. Educational teaching faced reform and innovation, mix learning way combining online with offline has popularized gradually. Systematic learning in primary and middle schools was rather necessary. A batch of universality and standardization course resources can be constructed and teachers and students were encouraged to use school resources for learning [9]. With the rise of grade, more students should be encouraged to use the internet resources for extra-curricular learning at any time and place and make students share the experience and harvest of online learning in class. Extracurricular internet learning was an organic complement for systematic learning in class. Quality educational resources of internet learning and the way of famous teachers answer questions online will become more popular. Digital learning has become one of the effective ways to implement the new curriculum reform. Schools should accelerate the exploration of the integration and innovation of information technology and subject teaching for making students master learning skills for the 21 century and promoting educational quality comprehensively.

Optimize the Allocation of Resources

Urban-rural difference can be lessened and educational balance can be promoted further by using
“Internetplus”. On the one hand, “Internet plus” quality educational resources can send famous teachers to schools with weak education for making up for the shortage of teachers, equipment and other resources in these schools [10]. On the other hand, weak schools promoted the comprehensive development of students and improved schools influence as well as followed the characteristic and the connotation development road by using “Internet plus” characteristic development. Actively planning and implementing “Internetplus Education” action plan for making educational resources more optimized and balanced.

**Perfect Education Evaluation**

In “Internetplus Education” era, students’ learning is more selective, more personalized and so on. Researching and making reasonable education evaluation system, correctly guiding the community, family etc. to participate in the education evaluation, actively carrying out collection and analysis of huge data, researching the needs of students for quality educational resources, student evaluation was more procedural, diversified and personalized for gradually perfecting education and teaching evaluation mechanism, promoting the construction and development of quality educational resources and promoting comprehensive development of students.

**Conclusion**

Under the background of “Internet and Education”, the center especially has proposed innovative and effective mechanisms in order to realize resources sharing which can be seen that how important is “mechanism innovation”. Thus, establishing open concept, multiple ways and multiple channels to expand quality educational resources for making educational resources more optimized and balanced.

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