

# *Study on the Connotation of the Era and Practical Path of Ningbo's Learning City Construction*

Xueyan Zhang<sup>1,a</sup>, Kefeng Xu<sup>2,b,\*</sup>

<sup>1</sup>Lifelong Education Division, Ningbo Open University, Ningbo, Zhejiang, China

<sup>2</sup>Cixi College, Ningbo Open University, Ningbo, Zhejiang, China

<sup>a</sup>xyzh@nbou.cn, <sup>b</sup>45599284@qq.com

\*Corresponding author

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**Abstract:** The concept of lifelong learning is gradually recognized by the whole society, and the construction of learning cities promotes the continuous learning, adaptation, and development of individuals and cities. The practice and experience of Ningbo's learning city show that learning city is important for promoting sustainable urban development, upgrading the city's soft power, improving citizens' personal literacy, and promoting industrial development. Ningbo attaches importance to lifelong education, formulates relevant laws and regulations, adopts experimental projects to promote lifelong education, organizes rich activities to create a strong lifelong education atmosphere, digitally empowers the construction of learning city and explores the establishment of a scientific monitoring and evaluation index system, etc., which has made great achievements in the construction of a learning city, constructed a lifelong education network system at four levels of the city, districts, streets and communities, and formed a strong learning atmosphere. Based on the existing problems and challenges, the construction of China's learning cities should focus on the improvement of the lifelong education system, the development of continuing education, the cultivation of learning organizations, the establishment of leading and coordinating institutions, the establishment of a scientific evaluation system, and the establishment and improvement of laws and regulations.

## 1. Introduction

With the rapid changes in society and the continuous updating of knowledge, the traditional mode of education and the limited timeframe for learning can no longer meet the learning needs and continuous development requirements of individuals. The concept of lifelong learning has gradually been recognized and promoted internationally. In 1996, UNESCO formally included the concept of lifelong learning in the World Declaration of Ministers of Education and emphasized the role of lifelong learning in promoting personal development, social progress, and sustainable development. Lifelong learning provides the concept and motivation for individual learning, while learning cities provide the framework for creating a learning environment and promoting urban development, and together they promote continuous learning, adaptation, and development of both individuals and cities.

The concept of the learning city stems from the development of the learning society and is considered a new model for modernizing and developing cities. In recent decades, urban researchers and scholars have begun to recognize the need for cities to have the capacity for continuous learning and innovation, and have therefore conducted in-depth studies on the concept of learning cities. The construction of a learning city, which is basically characterized by learning for all and lifelong learning, has been one of the long-term development strategies of the Party and the government. The 19th Party Congress put forward the goal of "doing a good job of continuing education, accelerating the construction of a learning society, and vigorously improving the quality of the nation", while the report of the 20th Party Congress reemphasized the importance of "pushing forward the digitalization of education, and constructing a learning society with lifelong learning for all people, and a large learning country". "In 2001, the 10th Five-Year Plan for National Economic and Social Development of Ningbo Municipality was put forward for the first time the goal of "gradually building a learning city". After 21 years of difficult exploration, Ningbo has basically built up a perfect lifelong learning service system and created a favorable atmosphere for lifelong learning for all. Ningbo has developed a complete lifelong education system, including a four-level lifelong education system: "community college leading development - county-level community college demonstration development - township adult school connotation development - grass-roots learning point extensive development". This study takes the connotation of the era of learning city construction as the starting point and further explores the practical strategies of Ningbo's learning city construction by discussing the classic cases and practical strategies of Ningbo's learning city construction.

## **2. Connotation of the Era of the Learning City**

### **2.1. The Concept of Learning Cities**

The origins of the learning city can be traced back to the field of urban studies in the late 20th century, and the concept was first introduced by Peter Senge in 1990 in his book *The Fifth Discipline of the Learning Organization*. He defined a learning city as a city that is able to learn, adapt, and innovate in a continuous stream, and is able to respond quickly to changes and challenges, and in doing so, achieve continuous development and improvement. With the new technological revolution and the urgent need for social transformation, we are moving towards a new information age. The 21st century has seen rapid technological revolutions in areas such as new materials and microelectronics, which have made the technology the center of international competition. In this context, cities are becoming the center of technological change. Therefore, it has become imperative to build learning cities.

The evolution of the concept of the learning city has been a complex process, influenced by different regions, cultures, and contexts. [1] The first phase, in the 1970s and 1980s, focused on the education and training needs of city dwellers and how to provide a variety of learning opportunities and resources. The second phase, known as the development phase, saw the concept of the learning city begin to focus more on the promotion of knowledge and innovation over time, with a focus on transforming cities into environments with the capacity for continuous learning and innovation in order to adapt to changing economic and social needs. In the third phase, also known as the integration phase, the concept of the learning city is gradually integrated with sustainable development and social participation. This stage emphasizes the importance of knowledge sharing, democratic decision-making, and community participation to promote holistic urban development and social equity. In the fourth phase, the most recent development, the learning city has begun to merge with other concepts, such as innovation cities, smart cities, and sustainable cities. This integrated concept sees learning as a key element of urban success and promotes an interdisciplinary,

cross-sectoral, and cross-border collaborative approach to urban development and change.

UNESCO defines learning city building as: learning city building for lifelong learning for all, designed to enhance individual capacity, strengthen social cohesion, promote economic and cultural prosperity, and lay the foundation for sustainable development; Lifelong learning for all, and the promotion of learning cities, will bring social, economic and cultural benefits to individuals and groups. [2] Future directions for the construction of learning cities in China include promoting the idea of lifelong learning as a leader, providing quality education and lifelong learning opportunities for all; The concept of sustainable development is used as a guide to improve the reform and development of policies, systems and institutional mechanisms; Different stakeholders act as a grip to facilitate the collaborative participation of different disciplines under the leadership of the government; And promoting digitalization of education as a support to meet the diversified learning needs of digitalized citizens. [3]

## **2.2. Key Characteristics of Learning Cities**

The first Global Conference on Learning Cities, held in Beijing in 2013, released the Beijing Declaration and Key Characteristics of Learning Cities, which set out the basic characteristics of a learning city. Based on this, the key characteristics of a learning city should include: (1) Accessibility and inclusiveness: Learning opportunities should be equally accessible to all people, regardless of age, gender, race, economic status, or ability. Cities need to ensure equal distribution of education, training, and learning resources to promote social inclusion and equity. (2) Learning environments: Learning cities need to create relaxed, open, and stimulating learning environments that enable residents to acquire knowledge and skills in a variety of ways. Cities need to provide diverse learning venues, such as libraries, learning centers, and cultural institutions, to meet the learning needs of different populations. (3) Promote innovation and creativity: Learning cities encourage the development of innovation, creativity, and problem-solving skills. Cities should support innovative activities and provide entrepreneurial support and resources to foster economic growth and social development. (4) Continuing professional development: Learning cities are committed to providing professional development opportunities and training to help residents adapt to a rapidly changing work environment. Cities need to work with educational institutions, businesses, and social organizations to design and implement vocational training programs to improve the employability of residents. (5) Community participation and co-operation: Learning cities encourage the participation and co-operation of community residents to promote learning and development. Cities need to establish platforms and mechanisms to facilitate cooperation and exchange among residents, schools, community organizations, and other stakeholders.

In the construction of China's learning city, the emphasis is on "equal opportunities for learning and inclusive attributes of education", highlighting the pursuit of learning and the humanistic care of life consciousness in social governance, social construction and social development. [4] In the construction of China's learning city, the development plan of Espoo's learning city can be learnt from the development plan of Espoo's learning city, based on which. Implement the five development concepts of "innovation, coordination, green, openness and sharing". At the same time, through the participation and coordination of various organizations, we can form an all-round cooperation and win-win situation to promote the construction of learning cities. [5]

## **3. The Practice of Building a Learning City in Ningbo**

### **3.1. Practical Measures and Policies for Building a Learning City in Ningbo**

Firstly, multiple departments are involved in the creation of the program, with strong

administrative and financial support. A professional steering group for community education in the city was formed with the deputy secretary of the municipal party committee as the leader, and community education committees were set up in all counties and municipalities led by the secretary in charge of the district party committee or the mayor in charge of the district government (district mayor) with the participation of a number of departments, including the Ministry of Propaganda and the Office of Civilization. At the same time, a municipal community education office has been set up, with the director of the Education Bureau as the head of the office and the director in charge as the deputy director, and community education steering committees and community education leading groups have been set up in the streets and communities to coordinate and guide the work. In order to further promote the work of community education in Ningbo, the Ningbo Community University was formally established in 2009 on the basis of the Ningbo Radio and TV University, with five major functions, such as business guidance, information exchange, resource development, community training and theoretical research, etc. In 2014, the Municipal Education Bureau set up the Division of Lifelong Education and Private Education, which is responsible for coordinating the city's lifelong education and the construction of a learning city. On this basis, a Committee for the Promotion of Learning City Construction and Lifelong Education was established in 2020, whose members include the Education Bureau, the Finance Bureau, the Human Resources and Social Affairs Bureau, and the Agriculture and Rural Affairs Bureau, and which coordinates major matters in the construction of learning cities and formulates supportive policies and incentives.

Secondly, relevant legislation and supporting systems are being actively promoted to ensure that the institutional system is more complete and comprehensive. Implementing the Regulations on the Promotion of Lifelong Learning in Ningbo City and the accompanying implementation rules will include professional organizations for community education, social organization construction, institutional mechanisms for community education and safeguards. Promulgate policy documents on lifelong learning and carry out systems related to the construction of learning cities (societies). During the "14th Five-Year Plan" period, in order to build an open, diversified, wide-coverage, and more convenient lifelong learning support and service system for the public, to continuously meet the learning needs of all kinds of people, and to enhance the ability to serve economic and social development, Ningbo has implemented the lifelong education "double-high" project, focusing on building a number of new-era high-level social organizations. Ningbo has implemented the "double-high" project of lifelong education, focusing on building a number of high-level adult schools and high-efficiency projects in the new era, establishing and improving management and training systems for community education teams. According to the Basic Requirements for the Position of Community Education Workers and the Suggestions for the Implementation of Professional Standards for Lifelong Education Teachers in Ningbo, to further improve the business level of lifelong education workers in Ningbo, to deepen the connotative development of community education, to set up a lifelong education service system with advanced management and high efficiency, and to ensure the quality of lifelong education services, the Open University and the districts and counties of Ningbo are actively conducting training for lifelong education workers.

Once again, the construction of the organizational network of the learning city has been strengthened to ensure the effective operation of the organizational structure and the powerful implementation of safeguards. The Ningbo Learning City Construction and Lifelong Education Promotion Committee plays a leading and coordinating function, and the Municipal Community Education Guidance Centre plays an organizational and functional safeguard role, continuing to deepen the connotation construction, focusing on the transformation and development, and constantly expanding the functions of community education, to form a strong support for the construction of Ningbo's high-level learning city. All districts have established community colleges and given play to the functions of district-level community guidance centers. Ningbo has built a

lifelong education system consisting of four levels, namely, city, county, town, and village, and four systems, namely, school, industry, community, and network, which has basically formed a development pattern with comprehensive coverage, diversified characteristics and clustered brands, and has formed a lifelong learning service circle covering both urban and rural areas and targeting the public, thus laying a foundation for deepening the construction of a learning city and its sustainable development. Ningbo has been built as a learning city in the whole region and has made remarkable achievements in promoting the construction of learning cities with experimental projects, community education in rural cultural halls, and double-height projects.

Finally, a clear financial guarantee mechanism is in place to provide adequate funding for the development of learning cities. The promotion and sustainable development of learning cities is supported by Ningbo's strong overall economic strength. Ningbo has incorporated lifelong education into its national economic development planning, and the city's education expenditure, per capita education expenditure, and cultural consumption expenditures of its citizens have been increasing year by year and have grown steadily in recent years, and the inputs focused on lifelong education and community education have also maintained a steady growth trend. At the same time, the Regulations on the Promotion of Lifelong Education in Ningbo City clearly stipulate that "the people's governments of cities and counties (cities) shall include lifelong education funds in the relevant funding budgets, and guarantee the gradual growth of lifelong education funds", which ensures to a certain extent the government's investment in the cause of community education. The counties and municipal districts have basically established an input mechanism for raising funds for the construction of learning cities through multiple channels. In accordance with the standard of 4 yuan or more per capita for the household population, counties and urban areas have set up special funding for community education, and the per capita funding in a number of counties and urban areas has reached or even exceeded 10 yuan per capita.

### **3.2. Achievements and Impact of Ningbo's Learning City Construction**

After more than 20 years of endeavor, the construction of a learning city in Ningbo has achieved a series of results and had a remarkable impact. As one of the eight pioneer demonstration cities for the construction of learning cities in China, Ningbo has comprehensively promoted the construction of a learning society in which everyone learns, everywhere learns, and all time learns, passed the monitoring of the construction of learning cities by the Ministry of Education, and has taken the lead in becoming a model for the creation of learning cities in China. Details are as follows:

Firstly, a complete four-level lifelong education network has been established. After more than 20 years of effort, Ningbo has established a complete four-level lifelong education network at the municipal, district (county), street (township), and community (village) levels. Organizational and leadership institutions to achieve a two-wheel drive, the party government, the municipal level set up a professional steering group for community education, the counties and municipalities set up community education committees; education, the municipal level set up the Ningbo Community Education Office, the county level set up community colleges (Community Education Guidance Centers), the street and the community also set up community education steering committees and community education leadership groups to coordinate and guide the work respectively. The complete lifelong education network and strong organization and leadership institutions have led to the rapid development of lifelong education in Ningbo. The city has a 100% coverage rate of community education in rural cultural halls, realizing the goal of a learning city in the whole region and becoming one of the eight pioneer demonstration zones for the construction of learning cities in the country Figure 1.

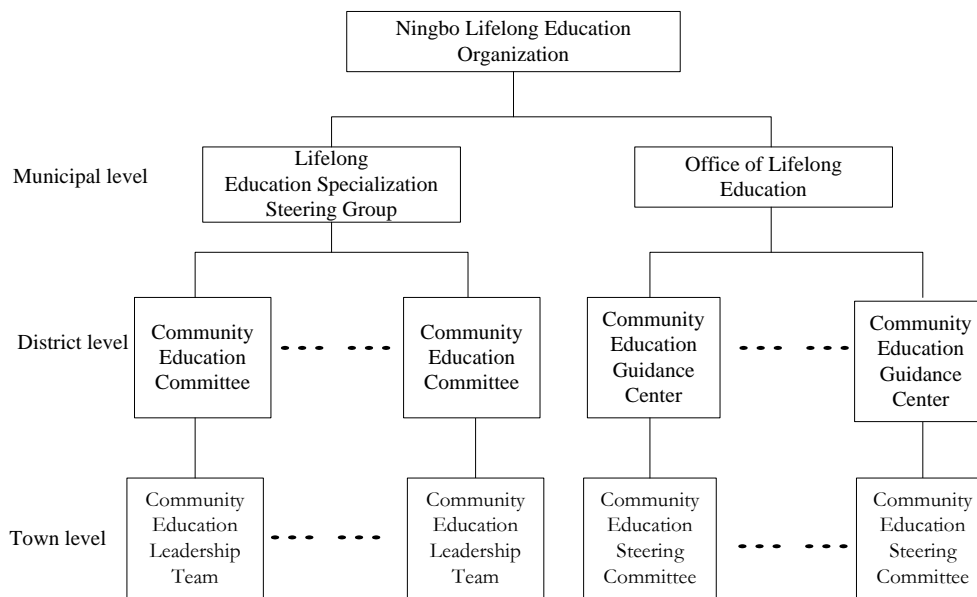


Figure 1: Ningbo Lifelong Education Organization

Secondly, it has raised the overall level of education in Ningbo. Through the construction of a learning city, Ningbo has made remarkable progress in the field of education. The optimization and integration of educational resources, as well as support for teacher training and research, have raised the level of education in Ningbo. Pre-school education is of high quality and universally beneficial, with the aim of providing "good schools" for all. Compulsory education is of high quality and balanced, promoting the building of good schools at the doorstep. Higher education will be upgraded, new high-level research universities and Chinese-foreign co-operative universities will be established, and local colleges and universities will be built at a high level. Vocational education will be upgraded to achieve a "high level" of talent cultivation. By 2021, Ningbo's primary to junior high school ratio will reach 100%, the ratio of junior high school to senior high school will reach 98.5%, the ratio of general education to vocational education will be 53:47, the gross enrollment rate of higher education will exceed 75%, the proportion of children of migrant workers enrolled in public schools will reach 86.9%, the kindergarten enrollment rate will reach 99.9%, the coverage of public kindergartens and privately-run kindergartens of universal benefiting will reach 92.8%, the coverage of kindergartens at the level of 99% and the coverage of townships and townships in the level of 99%. The coverage rate of public kindergartens and privately-run kindergartens with inclusive benefits reached 92.8 per cent, and the enrolment rate of graded kindergartens reached 99 per cent, with the rate of kindergartens in public centers in townships reaching 100 per cent. The city's college entrance examination acceptance rate has reached 96.29 per cent, and the one-time comprehensive employment rate for vocational education in the current year has reached more than 99 per cent.

Finally, lifelong learning has been promoted in Ningbo. Firstly, Ningbo has focused on the concept of lifelong learning, providing learning opportunities and resources for people of different ages through the establishment of model adult schools, community universities for the elderly and other diversified educational institutions, which have promoted the possibilities for continued learning and career development for individuals. Secondly, Ningbo makes full use of all kinds of media to promote the concept of lifelong learning by adopting various forms, to make the public identify with the concept of lifelong learning. Thirdly, flexible and diversified lifelong learning activities have been carried out to promote the full development of a learning city with the Double-High Project. Rich lifelong learning activities are organized to create an atmosphere of



lifelong education. Ningbo Book Day" is held to create an atmosphere of lifelong learning. For 17 consecutive years, the Lifelong Learning Week has been held to promote the idea of lifelong education, establish the concept of lifelong education for all, stimulate people's enthusiasm for lifelong learning, improve the quality of nationals, and mobilize and organize social institutions to actively participate in lifelong education for all.

### **3.3. Problems and Challenges Facing the Construction of a Learning City in Ningbo**

While achieving a series of results, the construction of Ningbo Learning City also faces a number of problems and challenges. Specifically as follows:

First of all, the management system needs to be further improved, and the leadership and coordination mechanism needs to be further improved. The construction of a learning city is a complex systematic project and a long-term task, which needs a strong organizational and operational system to support and promote it. Based on the four-level network and organizational leadership system of lifelong education, Ningbo has set up a Learning City Construction and Lifelong Education Promotion Committee composed of various departments such as the Education Bureau, the Finance Bureau, the Human Resources and Social Affairs Bureau, and the Agriculture and Rural Affairs Bureau, which is responsible for leading and coordinating the relevant work in the city. However, the Learning City Steering Office has not been set up for various reasons, and there are certain problems in resource integration, information sharing, and promotion of implementation, which is slightly insufficient in sustainably promoting the construction of a learning city.

Secondly, relevant laws and regulations need to be improved, and specific promotion initiatives need to be further refined. Ningbo has formulated a series of laws and regulations related to lifelong education, but looking at these laws and regulations, mainly soft provisions, the lack of rigid and specific provisions can be landed. Specific rigid landing provisions are often scattered in various types of education documents, with the lack of implementation effectiveness. For example, it is not stipulated in the laws and regulations to ensure the independent establishment of adult schools and the ratio of two ten thousandths to be equipped with professional community education teachers, etc., which has led to a continuous decline in the scale of the former lifelong education professional teachers' team, and the independent school buildings of many adult schools cannot be guaranteed.

Finally, the learning city evaluation index system needs to be further improved and refined. In general, the evaluation index system of Ningbo Learning City refers to the national index system, and at the same time refers to the development index of county-level learning cities in Zhejiang Province. However, basically no localized transformation has been done to highlight the characteristics of Ningbo. At the same time, the collection of data for monitoring the construction of learning city mostly relies on the education system, and it is basically impossible to get data from other systems. Improving the monitoring system, building a scientific and perfect data collection system, guaranteeing the staffing and stability of the monitoring team, and providing the necessary financial support are all urgent issues that need to be solved at present.

## **4. The Practical Path of Building a Learning City in Ningbo**

### **4.1. Provide the Necessary Safeguards for the Development of Learning Cities by Promoting Institutional and Policy Development**

Institutional and policy guarantees provide the necessary safeguards and support for the sustainable development of learning cities. Firstly, relevant planning and guidelines for the development of learning cities should be formulated. This includes defining the strategic objectives, development paths, and key areas for the construction of learning cities, to provide unified planning

and guidance for the construction of learning cities. Second, establish a sound system of laws, regulations, and policies. This includes formulating laws and regulations related to learning cities, clarifying the legal responsibilities and rights and interests of learning city construction, and providing rule of law protection for learning city construction. Third, strengthen the guidance and support of the government. The government should increase investment and support in learning city construction, implement special financial budgets and policy support, encourage social capital to participate in learning city construction, and promote substantial progress in learning city construction. Fourth, promote the sharing and opening up of learning resources. Through institutional and policy support, schools, libraries, museums, and other educational and cultural institutions should be encouraged to share resources and provide open learning venues and platforms, to provide learners with broader and diversified learning opportunities. Fifth, promoting education reform and innovation. The building of systems and policies should promote the innovative development of education, break down traditional classroom barriers, promote comprehensive assessment and personalized learning, and cultivate students' innovative thinking and practical abilities to meet the requirements of future social development.

#### **4.2. Popularizing the Concept of Lifelong Learning and Creating a Strong Atmosphere for Lifelong Learning**

Popularizing the concept of lifelong learning and creating a strong atmosphere for lifelong learning are of great significance to the development of society and the growth of individuals. Firstly, the publicity and promotion of lifelong learning should be strengthened. The importance and advantages of lifelong learning should be made known to the public through extensive and targeted publicity campaigns. This can be disseminated through a variety of channels such as the media, the Internet, and social media. At the same time, it is important to focus on publicity methods targeting different groups to attract more people to participate in lifelong learning. Second, provide diversified learning opportunities and resources. Establish sound learning institutions and platforms, including adult schools, community learning centers, online learning platforms, etc., to provide flexible and diverse learning courses and resources to meet the different learning needs and interests of individuals. This can stimulate people's enthusiasm for learning, so that everyone can find learning paths and ways that suit them. Third, establish learning organizations and learning enterprises. Encourage enterprises, institutions, and organizations to establish a learning culture and provide employees with opportunities and conditions for learning. This can be achieved through the establishment of training mechanisms, employee exchanges, and learning activities, making learning a common value and behavioral habit of organizations and enterprises. Fourth, advocate and cultivate a learning family environment. The family is an important place to cultivate lifelong learning habits, and through the guidance of family education and the influence of role models, family members are encouraged to learn, exchange, and share knowledge with each other. Parents should establish the value of learning, cultivate their children's curiosity and desire for knowledge, and make learning their way of life. Fifth, establish reward and incentive mechanisms. Through mechanisms such as the establishment of scholarships and the display and selection of learning achievements, individuals should be motivated and encouraged to actively participate in lifelong learning. At the same time, a certification and evaluation system for learning achievement should be established so that the results of learning can be recognized and valued by society.

#### **4.3. Creating a Sound Lifelong Learning Service System to Provide a Solid Foundation for the Development of Learning Cities**

The creation of a comprehensive lifelong learning service system plays an important role in the



development of a learning city.[6] First, a learning resource network with comprehensive coverage should be established, including the construction of diversified learning institutions and learning centres to cover the learning needs of different fields and levels. For example, adult schools, continuing education institutions, and online learning platforms have been established to provide a wide range of learning programmes and resources, so that everyone can easily access the learning support they need. Second, build an efficient and convenient learning service platform. Through the establishment of a unified learning service platform, integrate and consolidate all kinds of learning resources and information, and provide personalized and accurate learning guidance and recommendation services. Such a platform can help learners better plan their learning paths, obtain learning resources suitable for them, and improve the efficiency and quality of learning. Third, promote the establishment of a learning, evaluation and certification system. Establish evaluation and certification mechanisms for lifelong learning, including competency assessment and certification of learning outcomes, so that learning outcomes can be recognized and disseminated. This will motivate learners to learn continuously and increase their motivation and incentive to learn. Fourthly, strengthen the construction of lifelong education teachers. Cultivate and reserve a professional and high-quality lifelong education teacher team to provide learners with personalized learning guidance and support. They can provide services such as guidance on learning planning, counselling on learning methods, and solutions to learning difficulties, helping learners to better achieve their learning goals.

#### **4.4. Building Learning Organizations across the Region to Energize the Building of Learning Cities**

Building learning organizations across the region can not only inject vitality into the construction of learning cities, but also enhance the innovation and competitiveness of organizations. Territory-wide construction of learning organizations is an important initiative to promote the construction of learning cities. First, establish the concept of learning organization. Learning organizations in the whole region do not only refer to educational institutions, but also cover organizations in various fields such as administrative institutions, enterprises and institutions, and social organizations. These organizations should be encouraged and guided to develop a learning culture and atmosphere with learning at its core. This means that organizations should advocate the importance of learning, encourage employees to actively participate in learning activities, and provide opportunities and resources for learning. Second, building mechanisms and platforms for learning organizations. Provide learning resources and learning platforms for learning organizations, and provide employees with learning opportunities and conditions through internal training and external resource cooperation. At the same time, we establish assessment and incentive mechanisms for learning organizations to encourage employees to continue to learn and improve their abilities. Thirdly, promote the communication and cooperation of learning organizations. Learning, resource sharing, and experience exchange can be carried out between organizations to establish alliances or networks of learning organizations. Through joint research and project cooperation, interaction and mutual assistance between organizations can be achieved to jointly promote the development of learning cities. Fourthly, strengthen the leadership and staff development of learning organizations. Leaders play a key role in the construction of learning organizations, and they should take the responsibility of stimulating employees' enthusiasm for learning and leading the learning culture. At the same time, organizations should focus on the career development and growth of employees, provide opportunities for learning and further education, and encourage employees to continuously improve their skills and knowledge. Fifth, strengthen the interaction between learning organizations and the community. Learning organizations should be in close contact with the community,

participate in community education and cultural activities, and provide learning resources and support. Through cooperation between schools, community learning centers, and so on, learning resources can be shared and integrated to provide more convenient learning opportunities for community residents.

#### **4.5. Promoting Digitalization to Meet the Personalized Learning Needs of the Public**

Promoting digitalization is an important strategy to meet the personalized learning needs of citizens. Digital learning provides more flexible, convenient, and enriched learning modes, offering citizens greater autonomy and room for choice in learning. First, building a comprehensive and universal digital learning platform. By building a comprehensive and universal digital learning platform that provides online learning resources, learning tools, and learning communities, citizens can conveniently access quality learning resources anytime, anywhere. Such a platform should have user-friendly interfaces and functions, and be able to recommend learning content in a personalized manner, to meet the individual learning needs of the public and at the same time provide a high-quality learning experience. Second, promote digital learning tools and technologies. By promoting digital learning tools and technologies, such as online classrooms, virtual labs, and learning apps, citizens will be provided with richer ways of learning. With the help of these tools and technologies, citizens can choose learning contents and learning modes suitable for themselves according to their own interests and needs, thus realizing personalized learning. Thirdly, customized and personalized e-learning courses will be developed. Diversified e-learning programs will be built, covering different categories, levels, and directions of learning content. At the same time, a customized course development mechanism will be introduced to enable citizens to select and customize learning courses suitable for them according to their own learning needs and objectives. This can meet the personalized learning needs of citizens in different fields and at different levels. Fourth, strengthening digital education and learning skills training. Digital construction requires citizens to have appropriate digital education and learning skills in order to make better use of digital learning resources for learning. Therefore, training in digital education and learning skills should be strengthened to enhance citizens' digital literacy and learning abilities, helping them to better cope with the digital learning environment and meet personalized learning needs. Fifth, increase policy and investment support. The government should formulate corresponding policies and measures to encourage and support the development of digital learning. At the same time, it should increase funding to promote the advancement of digital construction in education and learning and provide more digital learning resources and services.

#### **4.6. Establishing Scientific Monitoring and Evaluation Indicators to Promote the High-quality Development of Learning Cities**

Establishing scientific monitoring and evaluation indicators provides effective guidance and supervision for the high-quality development of a learning city[7], which helps optimize the allocation of learning resources, improve the quality of learning outcomes, and make the learning city an organism with the ability to make continuous improvements, providing citizens with better learning opportunities and a better environment for their development.[8] Firstly, the development objectives and key indicators of the learning city should be clearly defined. The development objectives of a learning city should be clear and quantifiable, such as increasing learning opportunities, improving learning outcomes, and optimizing the learning environment. At the same time, key indicators should be formulated, including the richness of learning resources, the implementation of learning activities, and the degree of learner participation. This will ensure that the monitoring and evaluation indicators are scientific and targeted. Second, establish a scientific

data collection and monitoring mechanism. The evaluation of the development of learning cities needs to rely on a large amount of data support. Therefore, establish a scientific data collection mechanism, including conducting relevant statistical surveys and monitoring participation in learning activities. Through regular collection and updating of data, we can understand the development status of learning cities and provide a scientific basis for evaluation. Third, carry out multidimensional evaluation and analysis. The development of a learning city needs to consider a variety of factors. Therefore, the evaluation indicators should cover multiple aspects such as the quality and quantity of learning resources, learners' learning outcomes and satisfaction, and the improvement of the learning environment. By comprehensively analyzing and evaluating these indicators, a comprehensive and objective understanding of the development of learning cities can be obtained. Fourth, an evaluation report and exchange mechanism for learning cities should be established. Based on the monitoring and evaluation indicators, evaluation reports on learning cities will be issued, regularly, announcing the city's development progress and problem areas. At the same time, establish an exchange mechanism for the evaluation of learning cities to promote learning and experience sharing among cities, learn from the successful experiences of other cities, and promote the high-quality development of learning cities. Fifth, strengthen the support and supervision of the government and society. Government departments should actively participate in the monitoring and evaluation of learning cities, formulate relevant policies and measures, and provide support and resources. At the same time, social organizations and the public should also participate in the monitoring and evaluation process to jointly promote the high-quality development of learning cities [9-10].

## 5. Conclusions

Building a learning city is a long-term process which aims to enhance the city's learning capacity. It is a complex project that requires the Government and all parties to give full play to their roles and continue to promote it. Both advanced international experience and domestic practice provide guidance for further promoting learning cities in China. First of all, we must take "people" as the ultimate goal of social development, not just a way or means. Therefore, the practical strategy for building a learning city in Ningbo, and by extension in the whole country, should focus on the following aspects:

1) Relevant departments should focus on broad benefits and improve the lifelong education system: emphasize learning for all, build inclusive educational environments, provide a wide range of learning opportunities, and ensure that everyone can continue to learn and improve their abilities.

2) The education sector should encourage continuing education and promote the sustainable development of learning cities: advocate the concept of lifelong learning and promote the provision of high-quality continuing education programs in schools and institutions at all levels and in all types of settings to meet the learning needs of different groups.

3) Relevant enterprises should promote the application of digital technology and fostering learning organizations: actively introducing digital technology, building digital learning platforms and tools, providing learners with personalized learning experiences, and fostering learning organizations to encourage learning and innovation within organizations.

4) Management should strengthen the organizational construction of learning cities and building a multiparty coordination and participation mechanism: establishing the organizational structure of learning cities, clarifying the responsibilities of all parties and the ways of participation, and promoting multiparty co-operation to achieve resource sharing and synergistic development.

5) The government should give full play to the advantages of the system and build a learning government: the government plays an important role in the construction of learning cities and

should optimize the policy environment, provide support and incentives, promote the construction of a learning government and provide solid support for learning cities.

6) We should focus on the construction of a green evaluation index system that promotes broad effects: establish a scientifically sound evaluation index system that focuses on learning outcomes as well as on the environment and sustainable development of the city, so that the construction of learning cities produces broad social benefits.

7) Legal workers focus on the construction of laws and regulations so that lifelong education can be truly based on law and regulation: rigid and landable provisions will be written into laws and regulations, or in the form of implementation measures to promote the concrete implementation of the construction of learning cities, to safeguard the rights of the public to lifelong education, and to promote the process of the construction of Ningbo's learning city.

In general, we need to systematically understand the intrinsic connection between the lifelong education system and the construction of learning cities, and to grasp the connotation characteristics and evaluation index system of learning cities, which is of great significance to the promotion of the construction of learning cities in China. Through these endeavors, we will provide city residents with richer learning opportunities and a quality learning environment and promote the sustainable development and social progress of the city.

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