The Significance and Strategy of Innovative Learning in the Age of Intelligence

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Abstract

Knowledge has been common interest of mankind in intelligent era, it's complex and changeable, and has various value orientation, we can get it by lots of ways. The fact means more attention needs to be paid to participation and holistic practices of innovative learning. Participation is a kind of social activity, representing care and resonance in emotion. Only out of concern for human development, can we fulfill the responsibility of solving human problems, truly trigger the motivation of innovation, and then turn the motivation into efforts. Integrity means the ability of cooperation and problem-solving, is the main purpose of innovative learning. Innovative learning with the characteristics of participation and integrity, needs government to change education view and knowledge-based view, and adjust curriculum politics and teacher training system to create an inclusive learning system. It also needs teachers to reform their educational ideas and teaching methods and strengthen the training of education technology to improve students' capability of innovation learning, at last achieving sustainable development of mankind.

Keywords: The Age of Intelligence, Innovative Learning, Participation, Integrity



Introduction

Since the Club of Rome first mentioned "innovative learning" in the report called Knowledge was boundless in 1979, innovative learning has been an important target of educational reformation and development all over the world, and affects the whole educational research and decision making. However in the process of realizing innovative learning, people pay more attention to the anticipation of innovative learning for future problem discoveries and solutions, but ignore the participatory feature of it. Emphasis more on independence of innovative learning than integrity. Currently, it has been the age of intelligence, and the way of knowledge recognition and acquisition has changed greatly, how to realize the participation and integrity of innovative learning is extremely urgent.

1. The significance of participation and integrity in innovative learning is emphasized in the intelligent age

Human learning mainly consists of two types: sustaining learning and innovative learning. The former is an essential way for every society to run well and remain stable. However, in order to survive in the long term and deal with various changes more smoothly, innovative learning is also needed. Especially in the era of intelligence, the core of human resource is innovation ability. It is because intelligent promotion brings changes to production mode. At first, producing depends on abundant manpower, followed by ample funds, then technology intensive. At present, it is the innovative application of professional knowledge, which becomes the connotation of current human resource. Therefore, it is particularly important to get the ability of innovative learning, especially enhance the ability from the perspective of participation and integrity.

1.1 Challenges to learning in the age of intelligence

Nowadays, every second there are knowledge and information changing, only by learning to adapt to changes can one have autonomy, and learn how to learn innovatively is the vital step to deal with the changing world.

1.1.1Complex and changeable resources of knowledge

It is of great importance to gain knowledge in the process of learning, and the change of way to deliver and obtain knowledge pose an direct influence on the knowledge acquisition. In an era of intelligence, it is inevitable for us to acquire knowledge in a more and more fragment manner. Chinese scholar Liu Tiefang held the key is, "how we seek for a path to the completion in the fragment of knowledge acquisition to integrate it into the growth of our life, and to make it to be the pursuit of knowledge and truth, and to make it be open, thus arousing the sustainability of the growth of life. Once education has become the process to seek for the conclusive knowledge and end, the gradualness of life growth will terminate and conform to the existing knowledge and conclusion. Knowledge is the limit of individual life, so that individual life is being divided in various imbuement of knowledge and individual life cannot be complete in the pursuit of higher knowledge. Only when gaining knowledge features a sustainable openness to higher matters can this process be open-minded to the integrity of individual development. As such, knowledge

acquisition should not have an end but to uphold a possibility to the next moment and to the future. Then, the individual that is obtaining knowledge can keep its integrity and turn to completion." [1]

1.1.2The diverse value orientation of knowledge

Now, people who can participate in network all are spokesmen of the intelligent era. Thus, everyone or a certain group can present their value judgement on the internet. Seriously, the era of intelligence is an era of "truth-rebuilding". This truth may be true or may be "false truth" which guided by a kind of value judgement. However, due to the rapid update of information, new events will arise before you make a judgement of something, which brings challenges to education. Education is an activity to teach people to seek for truth and kindness, and teach young people how to keep original intention with holding one's own opinion tightly.

1.1.3The various ways of knowledge acquisition

In ancient times, the younger generation gained knowledge from the older ones by word of mouth. After written language was created, we made it another carrier of knowledge acquisition. In the era of intelligence, it is the media language that helps spread knowledge. In terms of education, teachers started with nothing but teaching orally, the condition has changed a lot now, there are countless methods of knowledge acquisition in school, such as Computer-assisted teaching, E-bags, E-learning, Cloud computing, Internet+, Internet thinking, Ubiquitous learning, micro class, MOOC, Flipped learning, Flipped class, smart class, Maker education and so on, not to mention daily studying. Various ways to obtain knowledge challenged learning, so we have to think about two questions in the process of learning--what kind of style is suitable for myself and which one can spread and develop my knowledge. At the same time, how to mix different kinds of studying modes together needs innovation of learning method.

1.2Participation and integrity are the core concepts of innovative learning

In the age of intelligence, knowledge has become a common interest of human beings. We can no longer study knowledge changelessly. Therefore, more attention should be paid to the participatory and holistic characteristics of innovative learning. Participation is a kind of social activity, which reflects a kind of concern and understanding. Only out of concern for human development, can we fulfill the responsibility of solving human problems, truly trigger the motivation of innovation, and then turn the motivation into efforts. Integrity is the main purpose of innovative learning, which means the ability to cooperate and solve problems.

1.2.1 Participation is the essential feature of innovative learning

The Club of Rome believes that anticipation and participation are two key characteristics of innovative learning. "Anticipations are not limited in various kinds of desirable trends to foresee, to choose or avoid catastrophic trends, but also create new choices". It is a mental activity, may be there is disharmony. Therefore, participation, as a social activity, is needed to balance different anticipations. In a sense, participation is the essential characteristic of innovative learning, making it

totally different from sustainable learning. When we participate in activities personally to help human develop better and then we can make some innovation, which is a process of struggling creation.

1.2.2 Integrity is the ultimate goal of innovative learning

The Club of Rome held the opinion that autonomy and integrity is the main purpose of innovative learning. In fact, people pay too much attention to autonomy of innovative learning but neglect the integrity, which does not reject autonomy, on the contrary to serve autonomy better. Integrity means that "access to wide relationships, cooperation for common purposes, connection with others, understanding of larger systems, seeing individuals as a whole as part of them" and means the ability to understand issues and how they relate to each other and connect with each other." The Club of Rome believes that global issues will increasingly encourage these natures of integrity: the concept of mutual respect, self-discipline, common interests and the ability to abandon selfishness. These essences are the foundation of world.

2. The essence of innovative learning

2.1Participation and integrity is beneficial to developing studying interest

In the book"Learning To Be", The UNESCO points out that, scientific and technical revolution is the first true revolution, which not only gives a new meaning of knowledge and training but also provides people with lots of new knowledge and methods in thinking and behavior. It put forward challenge to education directly: how to keep the balance between sense and sensibility. American scholar, John Dewey gave an example in his book"Democracy and Education": A man at some distance is waving his arms wildly. One has only to preserve an attitude of detached indifference, and the motions of the other person will be on the level of any remote physical change which we happen to note. If we have no concern or interest, the waving of the arms is as meaningless to us as the gyrations of the arms of windmill. But if the interest is aroused, we begin to participate. After taking part in, we have our own judgement of the whole surroundings, and then practice will happen with care and interest. In a word, without participation, we can't create or discover at all.

2.2Participation and integrity can help students develop their inclusiveness

The fusion of different knowledge is increasingly frequent, which needs us to get a better understanding of them with tolerance through innovative learning. Thus, "Relevant learning must reflect how different culture and groups define the elements of a dignified life. We have to admit there are different standards of life's quality, therefore, there are different definitions of necessary knowledge." The UNESCO emphasizes that mainstream educational thoughts of utilitarianism should accept other definitions of human's welfare, and focus on education as a part of human's common interest, which means we should listen to the silencers' heart when others are all going after happiness. The diversity within great treasure is able to inspire everyone.

2.3 participation and holistic practices is benefit for culturing students responsibility

Scientific technology brought from intelligent era is a double-edged sword, on one side, it expanded the way people understanding and acquiring the knowledge, on the other side, it also contributed diversification and complex to knowledge, people becoming the producers and disseminator. If lack of the responsibility for worldwide development, excessive selfish will be easily formed, narrowly focus on self-interest, neglect to pay attention to the global environment and the future development. The Club of Rome has pointed out in the 1970s that "it is the key point to re-determinate the direction from the progress of all people and the understanding of their own heart and responsibilities human should bear". As the UNESCO report states, "the aim of human development is to perfect their own; Make their personality rich and colorful, expression way complex and diverse; Make him as a person, a member of a family and society, a citizen and producer, a technical inventor and a creative idealist to take on different responsibilities." [4]

Innovative learning of participatory and holistic practices helps foster a sense that people care about the world, others and take responsibility for themselves.

2.4Participation and holistic practices are benefit for culturing students' practical abilities

Bernstein says "Participation is not just about discourse and discussion, it's about practice and a practice must have output." [5]Participatory innovative learning places more emphasis on the output of the results after knowledge and innovation in practice, which is also the inevitable requirement of innovativeness. Only through participatory innovative learning that we produce innovative results is the essence of learning. Learning should not be just matter of one personal, but also a social experience which requires others involving, and learning through discussion and debate with peers and teachers.

3. Conclusion: strategy of consciousness training from participation and holistic innovative learning

Previous education is to absorb the wisdom of predecessors, but education of intelligence era should be the wisdom of pioneer. Innovative learning needs to fresh current education concept, curriculum concept and teacher-student relationship.

3.1 set up innovative education concept

In 2015, UNESCO emphasized in report of Education Reflection that the new education concept should include training students to learn critical thinking, independent judgment and debate. The country, government, teachers and whole society should realize innovative literacy is the core of human capital, and also the foundation of international competitiveness. Innovative learning is the main way of current learning and safeguard of future happy life. Thus we all need to establish innovative educational concept, through innovative teaching strategy to culture innovative talents, which not only can promote the international competitiveness, also play an important role in positive function of education. Based on this principle,

establish the innovative education concept is the first step to change the traditional examination-oriented concept.

3.2Set up diverse curriculum concept

At the intelligence era, knowledge is diversified, and curriculum resources are abundant. In order to cultivate talents with innovative and integrated ideas, the curriculum setting and content should respect its diversity. In Education Reflection, UNESCO proposes to establish a humanistic curriculum concept, put the curriculum on the base of cross-cultural education, and admit social diversity, in the meantime, keep the balance of diversity and universal values. This requires the course policy coordinating with the course interest subject, legalize the course framework when setting up, and establish processing of education goals policy dialogue which must be universally involved and inclusive. Course policy and course content must be guided by the principles of social and economic justice, equality and environmental responsibility, which are the pillars of sustainable development. Intelligent technology will not replace schools or teachers. All the teacher has to do is to become a guide, start from childhood and traverse through the whole learning path to achieve development and progress by constantly expanding knowledge base. Critical pedagogy holds that it is necessary to reposition the textbook knowledge as an explorable subject, as a learning process rather than an end point. Such transformation allows students to question their own life experience, and develop their critical thinking (Freire, 1990).

3.3 Set up democratic teacher-student relationship

UNESCO report Learn to Live pointed out that, in addition to the problems of form and method, we should fundamentally re-evaluate the teacher-student relationship, the traditional cornerstone of education, especially when it becomes into rulers and ruled. The rulers and ruled relationship became entrenched by the advantage of one party's age, knowledge and supreme authority, and the inferior and submissive position of the other. So to achieve education democracy, we need to fundamentally change the duty of teacher, which is should not just be a knowledge giver, but be a consultant, an exchange participant, a person who helps find contradictory arguments. If the relationship between teachers and students does not develop follow this way, it won't be truly democratic education.

The democratic teacher-student relationship helps to promote the innovative teaching of teachers and learning of students. The past relationship overemphasized the dignity, authority of teachers, but the democracy of teachers and students suggested eliminating the authority of teachers. When authority disappears, teachers and students are in the same position to explore knowledge, and teaching is no longer one-way indoctrination, but two-way dialogue (Freire, 1998). This kind of dialogue enables both teachers and students to explore the multiple meanings of textbook knowledge from various perspectives. To have this function, the classroom must be defined as either democracy and public sphere (Aronowitz and Giroux, 1991) or culture BBS (Shor, 1996). Based on the above principles, innovative teaching does not directly tell students answers, but asks them to think, discuss and express with open questions. Through the communication and sharing with teachers and their peers, each student can understand and explore the multiple meanings of textbook

knowledge based on their own experience, and enhance their understanding of the world and interest in learning, develop their innovative consciousness and thinking.

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