

## The Research of School Innovation and Effectiveness

Hui-Min Huang\*

Department of Educational Policy and Administration, National Chi Nan University, NCNU

**Abstract.** The main purpose of the study is to explore primary and secondary schools' innovation and to investigate their effectiveness. This research used the methods of literature review and made some examples to illustrate. After doing the research, I found out that there were many education researches which talked about the issues of school innovation. From the literature, we can know that countries with innovative capability are up the ladders of development and it is necessary to develop education innovation system for countries which want to catch up. Education concerns with the development of a country, and primary and secondary schools are the basic resource to cultivate good citizens. The effectiveness of human resources is vital to the future development of a country. Therefore, innovation must start from education. I made some suggestions to schools and administrators of schools at the end of the research. Hoping that they could have better understanding to school innovation and the effectiveness, and they could try hard to improve their schools. Then the best profited ones would be students.

**Keywords:** school innovation, strategy, effectiveness

### 1. Introduction

In post-industrial era of 21st century, the public pays attention to specialization and flexibility. To meet the needs of the times, schools should go on innovation. They should go under the principles of current education policies. Schools need to have plans or strategies to achieve the goals of innovation. It is also important for the government to encourage every school to go on.

Schools now are required to be knowledge-based schools. A researcher [1] pointed out that unless schools completely accept new ideas, or the public education system will be replaced by a powerful new force. Some researchers [2] pointed out that governments believe that education innovation, especially primary education can enhance the society and the economy of a country.

School innovation means that schools want to change the current situation, including change the ideology and the practice. Members of schools might have to re-learn new skills or adjust to meet the new challenge; and the school itself might set up new modes of operation or make some changes. Therefore, schools go on innovation might be a test of schools.

Most staffs of schools know their situation of their schools. They know where needs most to innovate or fix. Therefore, they should involve in innovation, and the content of innovation and subsequent changes should be understood by the staffs. The policies which schools made would be easily accepted or supported with the understanding, and then they could easily have effectiveness.

The National Education Law of the Republic of China was announced by the president on May 23, 1979. It has been revised several times. Most recently the revised draft was announced on January 27, 2010. The key points were: the combined or abolition of elementary and junior high schools, the syllabuses of elementary and junior high school, textbook selection approach, school principal selection method, the establishment of national education and counseling groups, updating students Grievances system, increasing the participation of parents in school, and so on. These approaches would have impact on elementary and

---

\* Corresponding author. Tel.: 04-7983891; fax: 04-7990919.  
E-mail address: s99407903@mail1.ncnu.edu.tw

junior high schools. The effectiveness of its implementation was also concerned by the community. Besides the government set legal system to promote innovation, the school staffs' attitude and practices also affect the effectiveness of innovation. This research focuses on the strategies and effectiveness of schools. Collect relevant literature to make further exploring about the strategies and the effectiveness of school improvement.

## **2. Literature Review**

### **2.1. The content of school innovation**

In order to maintain or increase schools' competitiveness, they convinced that innovation is necessary. The capacity of innovation is the most important factor to affect the performance [3]. A researcher [4] divided schools innovation into administration and teaching. In administration, it refers to strengthen or renew school system, members' roles, leadership, and communication way. In teaching, it refers to strengthen or reconstruct curriculum, pedagogy, assessment, and teacher-student interaction.

A researcher [5] divided innovation strategies into seven kinds: a) reasonable strategy: Using reasonable persuades members to accept innovation. b) empirical strategy: Giving relevant evidences convinces members and let them accept it. c) the strategy of power: Using the power forces members to accept innovation. d) the strategy of education: Impose further education to what the members do not understand. After they understand, and they can accept it. e) reward strategy: Making attractive conditions, so members would be willing to accept it. f) psychology strategy: Using psychological tactics lets members feel that the decision of innovation can not be changed and must be accepted. g) culture innovation: Creating culture of innovation, so members would be willing to cooperate actively and then accept it.

Over the years, experts who analyze the school innovation believe that the fundamental innovation of school not only implement the new policies, plans, organizational structure, or the results of actual teaching, but also be a learning organization. All staffs of schools should take action to the continuing cycle of progress and results, and change direction to achieve the vision or goals. The focus of school innovation should be placed on student learning and academic performance [6].

School innovation strategies are: a) School personnel use information in decision-making and sharing leadership; b) In the innovative practices should have phases, and consult the practices and actions of other schools; c) Principals play important roles in innovation. They should empower to the administrative staffs and teachers. They should assign the responsibility of leadership and support the efforts of teachers and the team; d) Changing the organizational structure, leadership roles, and using the database goes on innovation [7].

From the above we can see that in order to improve teaching quality, recruit students, meet the demands of parents, match modern technology, change equipments, or decentralize administration, innovation is essential. School improvement might be initiated by school or be advocated by the government. Schools are designed for students. Its purpose is to create a good learning environment for students, thus students could have better learning performance.

### **2.2. The effectiveness of school innovation**

A researcher [9] pointed out that the result (effectiveness) is the target of the organization that is eager to reach. The effectiveness of school innovation is seen as the degree that a school achieves. It manipulates through the special context of the school conditions, and schools compare with those equal with them [10]. From this view, the indicators of school performance are the dependent variable of school goals and tasks. We can see that the effectiveness of school innovation might be unique to school itself. The degree of effectiveness that school achieves might depend on the school's actual condition.

### **2.3. Innovation-related models**

#### **2.3.1 Innovation implementation model**

Some researchers [11] propose an innovation implementation model. The model advocated that there are two key factors of innovation effectiveness: a) the atmosphere of execution; b) the fitting value of innovation. Atmosphere affects the effectiveness of innovation through implementing skills, encouraging, and removing

the obstacles. The fitting value of innovation is the degree of the members who make efforts on it and it would influence the effectiveness. These two factors would have positive impact to the effectiveness of innovation.

The atmosphere of execution refers to the awareness when the staffs join in the actual implementation. It also refers to organizations encourage individuals to implement innovation. If an organization has a strong /positive atmosphere to innovate, it would set up policies and practices clearly and provide available training programs. It would also assist and encourage employees to use the new system [11]. Some researchers [12] pointed out that training can help individuals increase self-efficacy (Having abilities to make people believe that they can achieve a specific task). Some researchers [13] found out that providing resources and giving necessary technical support can reduce the obstacles of knowledge and resources.

The fitting value of innovation is when employees believe that the new system can meet the requirements of their value. They will generate power from hearts, and then they will be willing to learn a new system [14]. The empirical studies have confirmed that there is positive correlation between the commitments of employees and employees' performance [15].

From the above we can understand that having the atmosphere of execution innovation and fitting the values of employees would produce the greatest effectiveness.

### **2.3.2 Social influence theory**

Social influence occurs when an individual's behavior, attitudes, or beliefs influence the behavior of others [16]. Some researchers [17] pointed out that individuals may take the following actions to innovate: a) comply with social influence, in order to obtain specific rewards or avoid being punished; or b) internalize social influence, especially when it matches his / her values or just because of its reward. Social influence such as the impact of peers, parents' expectation, and social perception will affect individuals' willing to involve in. Leaders can make good use of social influence, and it will have multiple effects. From the above, we can see that social influence affects individuals in a silent way. Many people were influenced by others, but they didn't have perception on it. Schools can make good use of it to achieve their goals.

## **3. Examples**

There are some examples of school's innovation. Here are the follows.

Take James Madison University in Virginia for example, they set the challenging horizons program (CHP). The original target is the attention deficit / hyperactivity youth. The strategies are as follows: a) to ensure this intervention can take a long-term sustainability; b) to ensure the students they served are the ones who need help the most; c) to ensure the implementation process can maintain the most powerful design; d) to ensure that the intervention process can be flexible and faithful; e) to decide who will execute plans and train members; f) to prove its effectiveness in a meaningful way [8].

The other example is about a junior high school. There was a school which wanted to change their daily schedule. The administrators made a questionnaire to ask the opinions of the teachers and students. They made some statement on it first. It explained the reason why the daily schedule should be changed, and then it stated the advantages of changing the time schedule to the teachers and students. At the end of the questionnaire, it asked the teachers and students to express their opinion freely. After collecting the questionnaires, the result met the expectation of the administrators, and it also implemented smoothly.

In 2010 school year, one public junior high school in Taiwan happened something and was reported on the newspaper. It was about that before school beginning, many new students didn't enroll to the school. They did so because the parents of the students wanted to choose teachers and classes for their children. They took their children to register after the school had finished arranging the classes. These students were over two hundred. They were too many for the school to let them choose the classes by themselves. The school decided to allocate them uniformly by the school. But the parents of the students refused the idea of the school. They threatened to let their children go to another private school nearby. They tried to force the principal changed the decision, but the attitude of the principal was tough. The school considered that if they gave up the principles of theirs, it would not be fair to the students that followed the enrolling rules. And if they followed the willing of those parents, they would be controlled by them in the future. The principal didn't give way to those parents, and the school lost those two hundred students at that time. But after a

period of time, about three-fourths of the students went back to the school. It proved that the principal's doing is precise. By doing so, the doing of the school won the respect of others.

Years ago, there was one school whose playground soaked in water and was rotted during the typhoon. The PU lane was damaged. After the typhoon, the school rebuilt a new PU lane, but once again it was damaged by another typhoon at the year. The school took the annual typhoons and the large sum of expenditure they spent on rebuilding the lane into consideration, so they consulted the practice of Japan. There are typhoons in Japan almost each year, and most of their schools' playgrounds are made by red soil. The lane won't be damaged by heavy rain. But one of the disadvantages of the lane is full of sand in windy days. The solving method to it is to rub the furniture and the classrooms frequently. Although some experts and scholars had different views on it, the school decided to change the PU lane into red soil lane. The strategies and practices in the schools of Taiwan are quite unique, but they are proud of their practice and decision.

Sometimes the school innovation does not always bring good effectiveness because of its cost. For example, there was a school which wanted to improve the appearance of its campus. The school decided to build a small fountain near the entrance of the gate, and they can keep some fish in it. The purpose of school was to make students have a beautiful learning environment. After finishing the fountain, it didn't look better than before, and they felt unsatisfied with it. Because of the ugly looking and the heavy cost, the school was teased by the public. The principal was angry and made others to destroy it. They found another designer to rebuild a new fountain, and they were satisfied with the new one. The price was lower than the old one, but the total fee they spent was so much. They learned a lesson from this time. A wrong decision is not only wasting time and money, but also teased by the public.

## **4. Conclusion and suggestions**

### **4.1. Conclusion**

In this age, information changes rapidly. Schools search to keep up with the time, and they plan to go on innovation under the main principles of current educational policies. Schools that implement innovation have their own purposes, whether they initiated by schools themselves or they just matched with the policies advocated by the government. The content of school innovation is often multiple. For example, many schools often innovate in the aspects of curriculum, budget, class schedule, teacher professional development to meet the actual situation of schools. The decision-making process usually had an overall plan and detailed approach. To minimize the resistance they might meet and to make them go on smoothly, all staffs of school should participate in the plans. Schools should also invite the community and parents of students to join the decision. When innovation goes on, we expect it to have good outcome and to achieve its goal. The main affecting factors that affect the effectiveness are the implementing process and strategies. Schools want to have a successful innovation should design carefully, and then could have great effectiveness. Schools are set up for students, and students' learning and academic performance should take into account at the beginning of school innovation.

### **4.2. Suggestions**

According to the literature of the study, I made the following suggestions to schools and administrators.

#### **4.2.1 The suggestions for schools**

- Making innovation policies has to plan in advance. And schools should know that achieving the goals of innovation should take time. Don't expect it would succeed at a short time.
- The development of school innovation should meet the concept of the school staffs, or they should re-educate to understand the content of innovation.
- During the process of school innovation, evaluation should be held to correct in time.
- The content of school innovation is usually multiple. Many factors should take into consideration. Find ways to solve the problems that might encounter in the future.
- When school innovation has some effectiveness, the outcome could become a norm, and then make further improvement.
- Schools should establish good relationship with the community, and they should have their own principles. Managing carefully is needed to establish the reputation of school.

#### **4.2.2 The suggestions for the administrators of schools**

- Schools develop policies should let all the staffs participate. The reasons of changing the policies should explain in detail by the administrators and ask the staffs to express their opinions. Although the administrators might feel more complicated, but the staffs' feeling might be better. Then obstacles from the staffs might be less.
- When schools implement innovation, the principal could appropriately apply social influence to affect the staffs' willingness to participate the innovation.
- When schools implement innovation, the administrators could consult the experience and the practice of other schools. Fix and adjust the methods to make them become suitable for the school itself.
- The administrators should take into account the cost of innovation, and it is important to do prior assessment. The best choice would be the least cost and produce the greatest benefits.
- The starting point of school innovation is for students. The purpose of school innovation is to promote students' learning. After all, schools are set up for students.

## 5. Reference

- [1] M. Barber. *Education Reform Lessons from England*. Washington, D. C.: Education Sector, 2006.
- [2] T. Khaniya, and J. S. Williams, Necessary but not sufficient: challenges to (implicit) theories of educational change: reform in Nepal's primary education system. *International Journal of Educational Development*. 2004, **24**(3): 315-328.
- [3] R. Hurley, and G. T. M. Hult. Innovation, market orientation, and organizational learning: An integration and empirical examination. *Journal of Marketing*. 1998, **62**(3): 42-54.
- [4] Y. Li. Blue ocean strategy of school improvement. *School Administration*. 2006, **46**: 193-219.
- [5] W. C. Xie. *Educational administration*. Educational administration Taipei: Higher Education Press, 2007.
- [6] W. Hawley, and G. Sykes. Continuous school improvement. In W. Hawley (Ed.). *The Keys to Effective Schools: Educational Reform as Continuous Improvement*. Thousand Oaks, CA: Corwin. 2007, pp. 153-172.
- [7] M. Fullan. Educational reform as continuous improvement. In W. Hawley (Ed.). *The Keys to Effective Schools: Educational Reform as Continuous Improvement*. Thousand Oaks, CA: Corwin, 2007, pp. 1-12.
- [8] J. M. Langberg, and B. H. Smith. Developing evidence-based interventions for deployment into school settings: A case example highlighting key issues of efficacy and effectiveness. *Evaluation and Program Planning*. 2006, **29**(4): pp. 323-334.
- [9] G. W. Huang. Elementary school-related knowledge management and school effectiveness research. Unpublished master dissertation, National Chung Cheng University, Chiayi, 2003.
- [10] J. Scheerens. Improving School Effectiveness. Paris, UNESCO: International Institute for Educational Planning, 2000.
- [11] K. J. Klein, and J. S. Sorra. The challenge of innovation implementation. *Academy of Management Review*. 1996, **21**(4): pp. 1055-1080.
- [12] D. Compeau, and C. Higgins. Application of social cognitive theory to training for computer skills. *Information Systems Research*. 1995, **6**(2): pp. 118-144.
- [13] V. Venkatesh, and S. A. Brown. A longitudinal investigation of personal computers in homes: adoption determinants and emerging challenges. *MIS Quarterly*. 2001, **25**(1): pp. 71-102.
- [14] V. Venkatesh. Creation of favorable user perceptions: exploring the role of intrinsic motivation. *MIS Quarterly*. 1999, **23**(2): pp. 239-260.
- [15] M. A. Siders, G. George, and R. Dharwadkar. The relationship of internal and external commitment foci to objective job performance measures. *Academy of Management Journal*. 2001, **44**(3): pp. 570-579.
- [16] R. A. J. Leenders. Modeling social influence through network autocorrelation: constructing the weight matrix. *Social Networks*. 2002, **24**(1): pp. 21-47.
- [17] M. Sussmann, and R. P. Vecchio. A social influence interpretation of worker motivation. *Academy of Management Review*. 1982, **7**(2): pp.177-186.