

A Study on the High-Quality Transformation Strategy of Small - Scale Schools

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Abstract

In recent years, Taiwan's population structure is facing major changes from the traditional "pyramid" gradually inverted to "inverted triangle" of the population structure. Nowadays, schools are facing a decline in the school-age population, the program of high-quality transformation is necessary for student enrollment. Through the research review, we can find the research result of high-quality transformation in Taiwan: 1.To cultivate students' well-diversified capacity. 2.Sustainable development and implementation of quality school curriculum. 3. Sustainable development and implementation of quality school curriculum. 4.Advanced teaching and teachers' professional development. 5.Supporting of school administration mangement for curriculum and teaching mechanism. 6.Setting up and marketing school's characteristics. 7. School – community partnerships.

1. Introduction

In recent years, Taiwan's population structure is facing major changes from the traditional "pyramid" gradually inverted to "inverted triangle" of the population structure; the trend of less birth-rate is evident. According to statistics' Department of Household Registration, M.O.I. (2016), during the past 20 years, from 1995 to 2005, Taiwan birth rate dropped from 326,547 to 206,465 children. Through tke

By 2010, Taiwan birth rate that fell to the lowest point in 20 years was 166,473 children, and the birth rate had risen slightly to 21,393 children by 2015. In the past twenty years, the number of births in Taiwan has decreased by nearly 40%. Wu, Jheng-Fong (2011) states that many scholars in Taiwan indicated gradual worsening in a phenomenon of less birth rate from 2006 and as long as the timeline is foreseen. The most serious low birth rate has affected to the shortage of pupils in primary schools in 2016, extended to junior high schools in 2019, and to high schools in 2022. Finally, higher education institutions will be faced with the most challenges in student recruitment in 2025.

Nowadays, schools are facing a decline in the school-age population. Besides, the shortage of funding and the rise of awareness of education marketization are the main obstacle to education development. Schools still need to actively seek other funding and create innovative ways in teaching and learning activities. Many schools in Taiwan have developed school's characteristics through community cooperation, integration of various resources to build strategic alliance and potential value of schools (Lin, Jhih-Cheng & Lin, Ren-Huan, 2008; Lin, Ying-Ru, 2007; Peng, Cheng-JYun, 2008; Zeng, Kun-Huei, 2007; Syue, De-Yong, 2008). Therefore, the quality transformation of small schools is an important opportunity for schools to enhance their competitiveness and to maintain their sustainable existence.

2. The origin of high-quality transformation

The small scale schools have their positive and negative benefits. The positive benefit is to improve the quality of education and economies of scale, to lighten the financial burden of the government as well as the integration of resources. Students go to large scale schools to have more interpersonal interaction and learning competition, and there are more spaces where are reused after school integration, and so on.

The negative impacts of the school integration are at schools in remote areas, there is expand widening gaps between urban and rural areas, students may produce adverse learning reactions, and lost opportunities to the diversification of education development (Lin, Jia-Ming, 2009). Wu, Jheng-Da (2006) believes that the rising problems in small scale schools are caused by low birth rate and lead to low efficiency in education investment, waste of educational resources. Wu, Jheng-Da (2006) also suggests that (1) Providing students with broader cultural stimulation, peer-to-peer interaction, and learning effectiveness. (2) Ensuring the effective use of educational funds to enhance the quality of learning and teaching environment. (3) Caring for the educational rights of children in remote areas. (4) Adjusting the turnover rate of teachers in remote areas, enhancing professional division of labor, advancing teaching standards, focusing on the development of the most suitable scale of operation to adjust educational resources and the economic benefits. Huang Yi-Yuan (2009) mentioned that the small scale schools could better implement the concept of small classes, teachers will have more time and energy to pay much attention to each student with experimental teaching.

To persuade the parents and community in ensuring the quality of students' learning and teachers' teaching in merging schools, Taiwan Ministry of Education assess the development of small scale schools and issues the relevant principles to local government for reference:

(1) According to the Local Government Act, national primary and secondary schools is a local government autonomy, because of the of trend in low births in Taiwan, Ministry of Education issued assessment indexes for small scale school development in February 2006. They are included general indicators and specific indicators. If a town or a village has only a primary school - an aboriginal school, and there are safety concerns in going to neighbouring school, the assessment school meets standard-matched

and should not be merged schools.

(2) Due to protect rights and interests of pupils, teachers, and staffs, Ministry of education in Taiwan in 2008 sets up the "Principles for the Treatment of Merging National Primary and Secondary Schools", which standardized the best learning environment for pupils. Principles also consider to internal and external factors, such as the effect of pupils' learning, group learning, culture stimulation, social adaptability of pupils in future, the distance between neighboring schools, traffic transportation and the population of the community and the school shall be implemented under the local Education Committee for review and approval.

(3) The whole legal procedures for merging schools is completed, included the relevant processes and supporting measures, the local government should promote and is necessary to communicate with local residents for protecting the interests of students.

(4) To encourage and support the overall educational reform of local schools, Taiwan Ministry of Education has invited Taiwan National Political University to carry out the "rural school based experimental education project" to assist schools in rural schools in implementing experimental education in the remote area. Local characteristics and culture will be integrated into the school campus, and many ecological characteristics, arts, history have been developed in national primary and secondary schools. The project achieves innovative teaching methods and integration of the campus space characteristics to the curriculum. The project not only enhances students in learning motivation but also creates high-quality school brand, the source of stability pupils to become the highlight of sustainable management school.

In sum, the policy of merging small scale schools is related to the survival of the schools, the flow of teachers and effectiveness of learning pupils. Merging small-scale school strategy not only influences the development of local community but also transfers to the high educational quality of small-scale schools.

3. The Origin and Implementation of High - Quality Schools

In the current era of knowledge economy and globalization, the school has been unable to stay out of the relationship between its internal and external environment. The management and organization of school education, as well as the nature of teaching and learning are changed and met to the new trends of 21st-century. Kenichi Ohmae (2006) states "M-type society" model, he/she believes that education will be the main factor in the flow of the "M-type society" at the beginning of 21st-century. Education can open people's wisdom, improve human quality and talent training and promote the social mobility, and as a result, the school performance has attracted attention and expectations of the community.

The importance of educational quality has become the trend of the world (B anjamin, 2007; Filzeraald,

2005; Hulley&Dier, 2005; JuhaVaso, 2007) . In recent years, educational researchers have focused on the quality of school education, such as Jhang, Hong-Jyu (2007) stated that high-quality education must enhance the learning experience and has a positive influence on the growth of students, teachers have dialogues and integration of learning and environmental challenges to shape the quality of students' learning experience. Hoy, Bayne-Jardine and Wood(2000)point out that education quality is the process of evaluating education, raising pupils'achievement, developing pupils' potentials, establishing desired performance indicators, and pushing pupil performance. The context of low fertility affected to recruitment students in schools from level primary education to higher education. Therefore, how to improve the quality of school education and to attract students become important factors for the sustainable development of schools.

In recent years, schools at all levels are facing of competition in the education market, as well as evaluation and assessment for improving the high quality of school education. Educational institutions in various countries have begun to formulate strategies for improving the quality of school education, such as President George W, Bush in 2002 signed the “No Child Left Behind Act” and “No Child Left Behind Act-Blue Ribbon School Program.” There were 278 schools to be chosen for the Blue Ribbon; these schools are either academically superior or high student achievement in their states. U. K. Department for Education and Skills (2005) offered “Beacon School” program to choose the best schools with growth community and to become examples of successful experiences. Hong Kong published the “Report No. 7” in 1997 with the establishment of the Outstanding School Award Scheme in 1998, and launch of the "Outstanding School Award Scheme" in 1999 (Hong Kong Quality Education Foundation, 2009). Taipei City, Taiwan in 2003 held the first meeting of the working group, proposed "School Quality Indicators" and "Exquisite Education - Taipei City High School Management Manual," and formally implemented in 2006 (Department of Education – Taipei City Government, 2004).

The Hong Kong Outstanding School Award focuses on four areas of school management and organization, teaching and learning, student performance, school ethos and nurturing. The four categories contain an overview of different levels.

Table 1: Hong Kong Outstanding School Award Scheme

Category	Scope	Rank overview
Category 1: Management and Organization	1. Planning	Including the development of school visions and missions and development plans
	2. Staff collaboration and professional development	Including staff collaboration, staff development, job planning and assessment systems

	3. Resource allocation in implementing the project	Including the effective allocation of resources to implement school development programs
	Assessment and feedback	Including the effective assessment of school development programs and learning feedback
Category 2: Teaching and Learning	1. Curriculum	Including curriculum management, planning and organization
	2. Classroom instruction and learning	Including teaching strategies, teaching techniques, classroom atmosphere and school environment
	3. Learning assessment	Including policies and systems of assessment, application of assessment data
Category 3: School ethos and nurturing	1. School-based services	Including training, guidance and counseling
	2. Development of personality, community and culture	Including extracurricular activities and cross-curricular activities
	3. Providing learning resources with different educational needs to different students	Including learning support programs and caring services
	4. With parents and community contact	Including family school co-operation and participation in community affairs
	5. School atmosphere	Including morale and interpersonal relationships
Category 4: Student performance	1. Goals and the specific expectations	Including school capacity and uniqueness, which meet the needs of students
	2. To students and parents to convey learning desired approaches	Including persistent and pluralistic approaches
	3. School capacity	Including professional competencies of staff, collaboration, commitment
	4. Monitoring and evaluation	Including progress in finding problems and improvement; developing more appropriate target objectives
	5. Reward systems for learning experience	Including both teachers and students

6. Cultivating students' self-learning ability Including lifelong learning

From a view of Taipei City - Outstanding Quality School Program, the whole "input - process - output" system begins with school administration leadership, and full staff participation of school to set up school culture and to achieve the goal of engaging in high-quality schools. The input system includes leadership (moral leadership, trend leadership, professional leadership, integrated leadership). The processing system includes administrative management, curriculum development, teaching teacher, learning student, professional development, resource consolidation, campus construction, school culture. The output system includes quality schools. The operating strategies are bellowed:

1. *Leadership*: (1) moral leadership, (2) trend leadership, (3) professional leadership, (4) integrated leadership.
2. *Administrative management*: (1) knowledge management, (2) e-management, (3) quality management, (4) performance management.
3. *Curriculum development*: (1) system planning, (2) effective implementation, (3) evaluation implement, (4) continuous development.
4. *Teaching teacher*: (1) professional teaching, (2) creative teaching, (3) effective teaching, (4) active training class, (5) mentor model.
5. *Learning student*: (1) learning cognitive experiences, (2) learning to accept yourself, (3) learning to respect others, (4) learning to be more responsible person, (5) learning and career development.
6. *Professional development*: (1) professional growth plan, (2) engaging in educational research, (3) establishment of teaching archives, (4) participating in academic activities, (5) evaluating education outcomes.
7. *Resource consolidation*: (1) parent participation, (2) parental involvement, (3) use of community resources, (4) guide to community development.
8. *Campus construction*: (1) safe campus, (2) humanistic campus, (3) natural campus, (4) science and technology campus, (5) art campus, (6) healthy campus.
9. *School culture*: (1) full staff participation of school activities, (2) team work, (3) Harmonious and warm spirit, (4) sustainable innovation, (5) sustainable development.

Comprehensive analysis of above two cases in quality education programs found that Taipei City - Outstanding Quality School Program gets specific assessment measures, and adopts nine items for evaluation; Hong Kong Outstanding School Award Scheme adopts four items for evaluation. The selection criteria of above two cases are similar. But Taipei city - Outstanding Quality School Program is more attention to the leadership indicators. Regarding indicators and management strategies, both two cases adopt guidance policy and promote educational reform through the selection of good schools, then construct the goal of the quality school. From teaching and learning perspectives, both two cases consider to curriculum

and teaching, student learning and building parent-teacher-student relationships.

4. Implication of Quality Transformation Implementation

In recent years, Yunlin County, Taiwan promotes school transformation quality education policy; the implementation strategy is shown in Table 2.

Table 2: A Reference for Implementation Strategy of Quality School Transformation, Yunlin County

No	Item	Reference Strategy
1	Developing students' diverse capabilities	1. Creating a suitable learning environment to stimulate students' creativity 2. Enriching teaching facilities and equipment to provide learning resources for students 3. Guiding students to set up learning records, cultivation of autonomous learning ability 4. School activities provide a platform for students to show their abilities 5. Evaluating students' diversified ability with multiple assessment 6. Others
2	Development and implementation of school curriculum	1. Shaping the school vision, corresponding to the curriculum objectives in a consensus of professional dialogue among teachers 2. Combining the curriculum plan with the school calendar plan 3. Designing learning activities that meet the curriculum and teaching objectives 4. Continuing curriculum review and improvement 5. Others

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| 3 | The improvement of teachers' teaching and professional development | <ol style="list-style-type: none">1. Implementing teaching presentations and classroom observation2. Actively participating in teacher professional growth activities, and improving teachers' teaching ability.3. Encouraging teachers to participate in evaluating professional development to enhance teaching effectiveness4. Using positive class management and counseling strategies to enhance the learning effectiveness5. Teachers actively participate in educational academic research and share teaching outcomes6. Setting innovative teaching and assessment methods to improve teaching effectiveness.7. Others |
| <hr/> | | |
| 4 | Strengthening administration management to support for teaching task | <ol style="list-style-type: none">1. Paying attention to the needs of teachers and students to shape school vision2. Integration of e- environment and effective use of technology3. Building learning organization and providing a platform for teachers' professional dialogue4. Developing school curriculum objectives and curriculum reform5. Referring to educational trends and translating them into practical teaching strategies6. Implementing teaching guidance7. Integration of internal and external resources to help teaching and administrative operation8. Using strategic alliances to build support systems9. Others |
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|-------|---|---|
| 5 | Setting and planning characteristic schools | <ol style="list-style-type: none"> 1. Building high quality campus environment and integrating it into curriculum and teaching activities. 2. Through the school building and landscape to create a cultural characteristics of the campus 3. Using dynamic combination of public arts to create the learning space of campus with diversified artistic characteristics 4. Using community resources, industrial cultural, natural ecological planning for developing outstanding school characteristics. 5. Sharing experienced lessons for developing outstanding school characteristics 6. Conducting vacation study programs to continue learning. 7. Others |
| <hr/> | | |
| 6 | A perfect school and community symbiosis | <ol style="list-style-type: none"> 1. Understanding about the culture of the community 2. School and community build partnerships to share resources 3. Inviting community members to participate in the quality school transformation program, and shaping the common vision. 4. Using of community resources to assist in curriculum planning and teaching activities 5. By educational and cultural activities for assisting schools and communities on issues in marketing 6. Analyzing school district demographic trends and community's characteristics to assist school development plans. 7. Others |
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Resource: Department of Education - Yunlin County (2008)

According to results of the qualitative thesis on quality school transformation in Taiwan from 2010 until now, findings can be divided into:

(1) Enhancing Students' Well-Diversified Capacity

The analysis of the quality evaluation indicators for the transformation of small schools in Yunlin County reach the highest evaluation indicators, and these indicators are considered as important factors. If

the small – scale schools meet difficulties to develop multiple courses, the schools carry out the school alliance strategies (Lu, Bei-Yi, 2013; Hou, Dian-Gu, 2013).

(2) Sustainable development and implementation of quality school curriculum

In the study of Jheng, Yong-Yao (2014), the highest evaluation score of the teacher indicators who participated in the quality school transformation and evaluation in Yunlin county were found. These indicators are considered as important factors. The school-based curriculum development should involve to the participant of teachers in their professional development and construct a school-based curriculum development model (Guo, Rong-Rong, 2011). Characteristic development of courses should be unique and innovative, and is used as community resources and natural resources Li, Siao-Ting, 2011).

(3) Advanced Teaching and Teachers' Professional Development

Improving the professional capacity of teachers is an important factor for the quality development of small-scale schools. Besides, teacher's willingness and professional investment are important keys to decide whether the transformation strategy of small-scale schools is high quality or not (Su, Mei-Syue, 2010; Li, Wan-Ru, 2010; Cai, Yi-Jia, 2014).

(4) Supporting of School Administration Management for Curriculum and Teaching Mechanism

Enhanced administrative cooperation in schools will reduce the burden of teachers, teachers will have the willingness to devote themselves to curriculum development.

(5) Setting up and Marketing School's characteristics

The transformation of high-quality small-scale school planning aims to the development of school characteristics. Identifying the characteristics of school management is the most important factor in affecting the quality of school education. The school should combine the enterprise management principles to establish the school high-quality brand for setting up the outstanding characteristics of the school. Parent involvement the transformation of school quality is positively positive (Wun, Siang-Yun, 2013; Syu, Jia-Ming, 2011; Jhang, Jheng-Yu, 2012).

(6) School – Community Partnerships

Schools and communities cooperate to develop specific courses. Parent involvement and their support often produce positive results to retain strong backing for schools. School-based curriculum development with cooperation schools and community can help students develop the knowledge, social and cultural values, and so on (Chen, Ji-Jing, 2011; Shen, Yi-Jhen, 2012; Peng, Jing-Wun, 2013).

5. Integration Analysis of High-Quality Transformation Strategy of Small-Scale Schools

Putnam (2004) states current challenges facing the future of schools are requirements of high

achievement of educational outcomes. The global education reform movement, schools are facing the overall education environment of competition and challenges. In the future, schools should focus on development and students' learning achievement, the quality of teaching, and the continuous improvement of quality system (Covington, 2005). Organization for Economic Cooperation and Development (OECD, 2005) also mentioned schools and school principals can achieve high quality as based on a basis for development of curriculum and instruction.

From the perspective of quality school to the analysis of high-quality transformation strategies, the researcher found that small-scale schools should focus on several following efforts:

(1) Administrative management: Building the school long-term development plan and vision, the reasonable allocation of resources, effectiveness evaluation and having feedback.

(2) A truly Exquisite Teaching: Strengthening teachers' professional development, teaching strategies, teaching skills, and class management.

(3) Dynamic curriculum: Designing curriculum organization, promoting course development.

(4) Enhancing students' capacity: Enhancing students' learning efficiency, creativity and self-study ability.

(5) Development of school's characteristics: environmental characteristics, special features of curriculum and teaching.

(6) School and community symbiosis: Promoting community integration resources and establishing partnerships between schools and communities.

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