IMPROVING PRIMARY EDUCATION QUALITY THROUGH THE PILOT OF ESCUELA NUEVA MODEL IN VIETNAM

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Abstract

Vietnam has always emphasized education as a keystone of its development policy and has had considerable success with strong evidence of illiteracy eradication and universal primary and lower secondary education. Progress has also been made towards increasing the quality of education and training at all levels. To further improve the education quality, in 2013 Vietnam adopted the Fundamental and Comprehensive Education Reform (FCER) to move away from a content-based to a more competency- and quality-based approach to learning. One of such initiatives is the pilot of the Colombia’s Escuela Nueva (New School) model which focuses on teaching method innovation, classroom organization and assessment of the students toward modernization. The pilot project was implemented in nearly 1,500 schools nationwide in three years. In the school-year of 2015-2016, another 2,730 schools (in 53 provinces) volunteer to apply the model with another 318,793 students, making 4,177 schools applying the model nationwide. They accounts for nearly 28% of all primary schools in the country. The paper will present various innovative efforts and initial results of the project in term of improved student performance. The research uses impact evaluation method to assess the cognitive and non-cognitive skills of students in piloted schools.

Key words: primary education level, Escuela Nueva model, New school model, student performance, impact evaluation, Vietnam.
Introduction

Vietnam has always emphasized education as a keystone of its development policy. As one sign of this commitment, it allocates nearly 20 percent of public expenditures to education, significantly above the Organization for Economic Co-operation and Development (OECD) average of 12.9 percent.\(^1\) A network of educational institutions has expanded nationwide, dramatically improving access to education at all levels. The country has achieved universal primary education. The Ministry of Education and Training (MOET) has developed the “Fundamental School Quality Level (FSQL)”—minimum standards for physical facilities, school organization and management, teaching materials and teacher support, and school-parent linkages for primary students. Full-day schooling for primary and lower secondary education has gradually expanded to increase learning hours. Vietnam has also attained higher levels of student learning achievement. Its performance on the 2012 Program for International Student Assessment (PISA)\(^2\) surpassed the OECD country average and many developed economies.\(^3\)

While achievements are impressive and well-acknowledged, Vietnamese authorities are concerned that their education system is not well positioned for the age of globalization and international competition because it does not provide the population with the skills and competencies needed today for producing greater value.\(^4\) Addressing this challenge is the next frontier of education development in Vietnam. In 2013, Vietnam adopted the Fundamental and Comprehensive Education Reform (FCER)\(^5\) with priority in general education (K-12 grade), where it aims to move from a content-based to a more competency- and quality-based approach to learning. It intends for all Vietnamese students to obtain higher order cognitive and behavioral skills, such as the ability to think critically and creatively, apply knowledge from many subject areas to solve practical problems, work in teams, and convincingly communicate verbally and in writing.\(^6\) To that end, general education will introduce new curricula and methods of instruction, develop a comprehensive learning assessment system and reform teacher education. One of initiatives to reform teaching and learning is the pilot of the Colombia’s Escuela Nueva (New School) model which focuses on teaching method innovation, classroom organization and student assessment in a modern way. This paper will provide an overview of the Escuela Nueva (New

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\(^2\) Vietnam scored 511 (17th place out of 65 tested countries) on math, 508 on reading (19th place), and 528 on Science (8th place).
\(^5\) Resolution No 29/NQ-TW issued on 4th November 2013 of the 8th Conference of the 11th Session of the Central Executive Committee on Fundamental and Comprehensive Education Reform.
\(^6\) Ibid.
School) model in the world, an introduction of the pilot of this model in Vietnam and initial results of the impacts over student performance.

**The New School model in the world**

Escuela Nueva was originated from the Unitary School approach promoted by UNESCO in the 1960s (AERA, 2013). In many Latin American countries and worldwide, this model aims to offer primary education in schools with only one teacher working with all grades. The model was tested in Colombia in the seventies as a small scale initiative on teaching and learning for multi-grade schools in rural areas. The model was designed that student is promoted to the next level once s/he accomplishes the minimum educational objectives, which could take more than one academic year. Special instructional materials are used, including manuals for teachers and supervisors and students guides that facilitate individual and group work. Curriculum and materials encourage the practical application of what is learned to life in a rural community. The system supports peer instruction, with older students coaching younger ones. Schools have study corners focused on different subject areas and a small library that also functions as the community information center. Many activities – such as an agriculture calendar and a county monograph – are designed to involve parents in support of their children’s learning.

In 1987, Ministry of Education of Colombia conducted a quasi-experiment study to assess the cognitive achievement of third and fifth grade students in Math and Spanish, as well as self-esteem, creativity and civic behaviour. In all, 168 Escuela Nueva schools and 68 traditional schools were visited and 3,033 students were sampled. There were cognitive achievement tests in Spanish and Math, which was complemented by the application of a set of tests on self-esteem, creativity, and civics (democratic behaviour), aspects that are supposed to be positively affected by Escuela Nueva. In addition questionnaires were used to generate information on the characteristics of students, teachers and schools. Psacharopoulos et al (1992) shows that Escuela Nueva third grade students had higher achievements in both measured cognitive and non-cognitive skills. Grade 5 Escuela Nueva students had only little lower achievements than Grade 5 traditional students in Math and creativity. Moreover, the costs of this program was only 5 – 10% higher than that of traditional model.
Figure 1: Comparison of mean scores by grade between Escuela Nueva and traditional students in Colombia

Source: Psacharopoulos et al (1992)

After two decades, it had become the model of rural education in the country. The successful model was expanded to 20,000 schools in Colombia and not only for multi-grade classes. Nowadays the model has even been expanded to urban schools. According to an international comparative study conducted by UNESCO in 1998, other than Cuba, Colombia provided the best primary education in all of Latin America to children living in rural areas. Also with the exception of some major cities, Colombia became the only country where rural schools outperformed urban schools.

This model has now been implemented successfully in nearly 22 developing countries in the Latin America, Asia, and Africa. The human development-based objective of the new school model is consistent with the objective of the advance school models in the developed countries. There has been discussion on the application of key characteristics of this model even in the USA (Epstein and Yuthas, 2012).

Escuela Nueva (New School) model in Vietnam

1. VNEN pilot process

Vietnam has not fully copied the Escuela Nueva model from Colombia, but adapted it to the country’s context. The key objective is to develop students’ competences through student-centered approach. The project was called “Vietnam Escuela Nueva” (VNEN) and was funded by the Global Partnership for Education (GPE). Its development objectives include:
i) Create conditions for groups of disadvantaged students to complete a high quality primary education level by renovating educational and teaching activities at primary schools, i.e.
changing teacher’s role from purely teaching to facilitating learning activities by students without changing standard levels of knowledge and skills and lesson plans of the current curriculum.

ii) Draw lessons on renovated teaching and learning activities to prepare for the comprehensive renovation of curriculum, contents, teaching methods and student assessment of the general education curriculum after 2015.

Accordingly the pilot renovated the methodologies of (i) teaching which teachers play the facilitator role, (ii) learning which students are more active in their learning process, (iii) student assessment which includes both cognitive and non-cognitive assessments and focuses more on non-cognitive achievements; (iv) parent involvement in student’s learning process; (v) teachers’ professional development which makes teachers more active and creative in their capacity building process; and (vi) school management.

After the small-scale pilot period in the school-year of 2011-2012 in six provinces (Lao Cai, Hoa Binh, Ha Giang, Kon Tum, Dac Lac and Khanh Hoa), the new school model was implemented at 1,447 primary schools in 63 provinces and cities nationwide in the school-years of 2012-2016. An algorithm was used to identify three priority groups as follows:

<table>
<thead>
<tr>
<th>Priority number</th>
<th>Number of provinces</th>
<th>Number of schools</th>
<th>Participating conditions</th>
<th>Including satellite schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>1,143</td>
<td>Most disadvantaged socio – economic conditions</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>21</td>
<td>282</td>
<td>Medium disadvantaged socio – economic conditions</td>
<td>Yes, with limited number</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>22</td>
<td>Advantaged socio – economic conditions</td>
<td>No</td>
</tr>
</tbody>
</table>

The project ended in May 2016 with another 2,200 schools voluntarily applying the model. A video contest was organized for VNEN teachers and attracted nearly 10,000 short video clips filmed by teachers on how the model was implemented at their schools. The contest now becomes an annual education event to boost the quality of teacher training. Methodologies of teaching,
learning and teacher’s capacity building have been selectively used by other education projects and schools. In the school-year of 2015-2016, another 2,730 schools (in 53 provinces) volunteer to apply the model with another 318,793 students, making 4,177 schools applying the model nationwide. They accounts for nearly 28% of all primary schools in the country.

2. **VNEN renovation of educational methodologies**

2.1. Renovation of teaching contents and methods

The traditional teaching model focuses on imparting knowledge: teachers lecture and raises questions, while students do thinking to understand the lessons and acquire knowledge. In the new school model, the role of teachers is changed from transferring and lecturing knowledge to organizing, and instructing students to perform activities individually, in pair and in group, and monitoring, assessing and supporting each student. Teachers will study contents of lessons and learning activities in the learning guides to make reasonable adjustments for students, if needed; plan for possible pedagogic situations, prepare for teaching and learning aids, etc. to ensure the best achievements of learning lessons.

Meanwhile students self-perform learning activities or tasks following specific steps specified in the learning guides or by teachers’ instructions. They listen to, discuss and cooperate with classmates in pair, in group or in the whole class to acquire new knowledge, practice skills, which then establish their competencies and qualities. They have more chances to apply self-learning, listening, speaking and communicating skills; combine learning activities in the class with application activities at home; participate in discussions, express ideas and develop competencies according to each student’ ability. Especially, students with poor learning achievements will receive more support to catch up with their peers.

In the learning guides, each lesson is designed into three main groups of activities, including Basic/Warmup activity, Practice activity and Application activity. This design of learning activities facilitates the self-learning process to acquire new knowledge through different learning steps. At the higher level, teachers will help students assimilate learnt knowledge and skills to solve practical and similar problems/situations/issues. At home, application activities make students apply knowledge and skills to solve new problems/situations/issues. Such activities are useful for students to practice or involve in solving practical problems of their families and/or communities and learn how to do research, innovation and problem-solving.

2.2. Renovation of classroom organization

In the class, students learn in groups, in pair or independently. Group learning activities are implemented following the learning guides with relevant adjustments instructed by the teacher to match with actual situations of the class. The selection of learning organization types, individual, pair or group work, will depend on learning contents or knowledge. Teachers and students are not required to follow the learning organization types proposed in the learning guides. Based on
general situations of the whole class and student’s characteristics, teachers will flexibly choose suitable learning organization types to ensure lesson effectiveness as well as to create passionate learning process for students.

2.3. Renovation of student assessment

Together with testing new teaching and learning methodologies, the new school model conducted pilot primary student assessment from the school-year of 2012 – 2013, generating important lessons for the development and application of renovating policies on primary student assessment throughout the country. In the new school model, primary student assessment is conducted for the sake of students’ progress. There will be no comparison between students, but on individual students’ learning and competency development progress. It includes both continuous and periodical assessment. The periodical assessment will mainly be used for assessing academic achievements, while the continuous assessment will focus on competency development. This minimizes learning pressure on students, teaching pressure on teachers and high expectation from parents which, in turn, cause pressure on students and teachers. In addition students have chances to develop their individual qualities, in addition to their knowledge. This model also involve teachers, students and parents as assessors.

2.4. Renovation on the participation of parents and community in the educational process

Students’ parents become one of key players in the educational process in the new school model. Along with community members, parents do not only create an enabling educational environment in the family and society, but also participate in the learning process of their kids. For example, they can deliver some training sessions at schools to share their cultivation experiences or to teach children on how to make some special products popular in their community. The fact that parents more directly participate in the learning process of their kids helps them better understand their kids’ cognitive and non-cognitive skill levels and provide them with suitable support. In addition to parents, community is also mobilized to support local schools in the education process.

2.5. Renovation of school management and professional development activities

In the traditional model, the principal/vice principal give detailed instructions to teachers, leaving limited room for them to maneuver. In the New school model, teachers have more freedom in designing lesson plans, arranging classroom activities and modifying the learning guides, if they consider it relevant. This makes teachers more creative and efficient in helping students learn.

Also, professional development activities have higher quality, as teachers are allowed to play a more active role in their capacity building process. Pedagogical meetings are no longer dictated by a senior experts to junior teachers, but an experience sharing environment where teachers share their day-to-day teaching issues and get advice from their peers. There are meetings at various levels, within a subject group of teachers, within a grade group of teachers, within a
school, among a group of schools. Nowadays, it is easy to use a smart phone to make video clips. Therefore, teachers are also encouraged to film their own lessons to share their teaching experiences in these meetings. With regard to annual teacher training programs, the project tries to limit the number of levels of cascaded training to maximize the training quality. Training events are organized at provincial level for large groups of trainers who can be school managers or teachers. They will then deliver training to their peers at the district and school levels. The project prefer provide training to teachers rather than educational researchers/lecturers, with the understanding that teachers will be the ones who directly implement the model at their schools and correctly share their experiences with their peers.

Some initial results of impact evaluation

1. Overview on GPE-VNEN project impact evaluation

The impact evaluation was conducted in three consecutive years to follow a cohort of students from Grade 3 who completed one year of study under VNEN model at the time of survey until they finish Grade 5 in 2016. There are 651 primary schools randomly selected for the study with half of them are VNEN schools and the other half are non-VNEN being treated as the control group. The survey instruments include Grade 5 Maths and Vietnamese language tests, student questionnaire and questionnaires for teachers, principals and parents. As the data analysis is still ongoing, this paper will limit the analysis to data of the last round of survey in the third year for Grade 5 students. Initial results on selected students' cognitive and non-cognitive achievements are presented below.

2. Cognitive assessment results

With regard to cognitive assessment, the Math and Vietnamese test scores are converted to competency score scale of 500, with standard deviation of 100. There is no significant differences in Math and Vietnamese test scores of VNEN and non – VNEN students. However in general the average score of the VNEN group is slightly higher than that of non-VNEN group. VNEN schools in the top highest group have the average score higher than 600, while similar non-VNEN schools have the average score lower than 600.

The average scores of the two subjects vary among surveyed provinces. Figure 2 shows the difference in average scores between VNEN and non-VNEN schools by province. About 20 provinces have the significant difference (>20 points) in average scores between the two groups, while others which have equal scores or only apply either model are not shown in this Figure. The higher the length of the bars, the higher the difference in average scores between VNEN and non-VNEN schools in those provinces. The Figure shows that the number of provinces which VNEN schools have equal or higher scores than that of non-VNEN schools is dominating.
With regard to Math scores, provinces that have the highest differences between VNEN and non-VNEN groups, i.e. VNEN schools have higher scores, include Phu Yen (59.77 points), and Lao Cai (54.15 points). Two provinces that have the lowest differences between the two groups, with VNEN schools having higher scores, are Yen Bai (21.00 points) and Bac Giang (20.81 points). The province with the highest difference in the average scores of the two groups, with VNEN’s score being lower, is Dong Nai (45.32 points). Provinces with the lowest differences in the average scores of the two groups, with VNEN’s scores being lower, are Gia Lai (27.92 points) and Quang Nam (24.32 points).

With regard to Vietnamese scores, provinces that have the highest score differences between VNEN and non-VNEN groups, with VNEN’s scores being higher, are Thua Thien Hue (78.11 points) and Lao Cai (67.62 points). Two provinces that have the lowest differences between the two groups, with the VNEN’s scores being higher, are Hau Giang (29.34 points) and Khanh Hoa (23.68 points). The highest differences in the average scores of two groups, with VNEN’s scores being lower, are in Lai Chau (52.66 points) and Kon Tum (49.71 points). The lowest differences in the average scores of two groups, with VNEN’s scores being lower, were in Nghe An (25.69 points) and Binh Dinh (24.29 points), Bac Lieu (22.72 points) and finally Dong Nai (21.69 points).
To summarize, there are significant differences in average scores between VNEN and non-VNEN schools in a number of provinces. The variances in Vietnamese Language scores are higher than those in Math scores. A limited number of provinces and cities that only applied either VNEN or non-VNEN model in all of their schools witness high average scores. Provinces and cities that applied both VNEN and non-VNEN models at their schools have significant score variances.

3. Selected non-cognitive assessment results

3.1. Cooperative skills

The question set on Class activities aims to evaluate the cooperative skills of students in learning, students’ frequency in discussing lessons with their peers, and their feedback to peers’ work. The survey result shows that discussion takes place regularly among VNEN school group.

![Figure 3: Frequency of peer discussion in VNEN classes](image)

Figure 3 shows that peer discussion during the learning process is the popular activity for VNEN students. Nearly 67% of VNEN students always or usually exchange views on lessons with their classmates, compared with 45.6% of non-VNEN students. That over 90% of students have discussions with each other on their lessons proves that this is the common learning practice in primary schools in Vietnam. However the proportion of 46% of non-VNEN students sometimes discussing lessons with their classmates might be understood that this is not considered as crucial in student performance in non-VNEN schools.
Figure 4 shows that over 49% of VNEN students always or usually provide comments on their peers’ works, compared with 36% of that of non-VNEN students. If including the proportion of students who sometimes provide comments on their classmates’ works, 93% of VNEN students do so compared with 84% of that of non-VNEN students.

The survey also reveals that the proportion of VNEN students acknowledging that they have received comments from their peers is higher than that of non-VNEN students. Figure 5 shows that over 47% of VNEN students always or usually receive feedbacks from their peers on their
study works, compared with over 36% of that of non-VNEN students. If including the proportion of students who sometimes receive feedbacks from their classmates, this goes to 93% for VNEN students, compared with 85% for non-VNEN students.

3.2. Teamwork skills

Teamwork skill is assessed by two question items about student participation in group work in the student questionnaire. The questions follow the Likert scale. In order to show the linkage between these non-cognitive skills and the cognitive achievements of students, the test scores of individual students are matched with their responses to these questions.

Table 2. Students’ responses on their group-activity participation

<table>
<thead>
<tr>
<th></th>
<th>Vietnamese Language</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Rate %</td>
</tr>
<tr>
<td>1. Yes, regularly</td>
<td>4,204</td>
<td>73.39</td>
</tr>
<tr>
<td>2. Yes, sometimes</td>
<td>1,452</td>
<td>25.35</td>
</tr>
<tr>
<td>3. No</td>
<td>72</td>
<td>1.26</td>
</tr>
<tr>
<td>Total</td>
<td>5,728</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Students’ responses on their group-activity participation are described in Table 2. The Table shows that VNEN students regularly participate in group activities with the rates of 73.39% for Vietnamese Language and 66.15% for Math. Meanwhile 25% of students respond that they sometimes work in group in Vietnamese lessons. This proportion for Math subject is 32%. The Table also demonstrates that students who regularly work in group have higher Math and Vietnamese scores than those who do not do so.

3.3. Peer evaluation skills

Peer evaluation skills are assessed by two question items in the student questionnaire. The questions follow the Likert scale. In order to show the linkage between these non-cognitive skills and the cognitive achievements of students, the test scores of individual students are matched with their responses to these questions.
Table 3. Students’ responses on peer evaluation in class in VNEN schools

<table>
<thead>
<tr>
<th></th>
<th>Vietnamese Language</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Rate %</td>
</tr>
<tr>
<td>1. Yes, students within group evaluate</td>
<td>228</td>
<td>3.98</td>
</tr>
<tr>
<td>2. Yes, teachers evaluate</td>
<td>1,634</td>
<td>28.53</td>
</tr>
<tr>
<td>3 Yes, both teachers and students within group evaluate</td>
<td>3,207</td>
<td>55.99</td>
</tr>
<tr>
<td>4. No evaluation</td>
<td>566</td>
<td>9.88</td>
</tr>
<tr>
<td>5. I don’t know/remember</td>
<td>93</td>
<td>1.62</td>
</tr>
<tr>
<td>Total</td>
<td>5,728</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 3 shows that when working in group, students are evaluated by both their group members and teachers. About 56% of students select this choice for both Vietnamese language and Math subjects. This group also seems to have higher cognitive scores than others. It is also noted that nearly 30% of students answer that only teachers conduct evaluation. There should be further investigation on this issue. This might be interpreted that either students do not understand that they actually conduct evaluation when they discuss and give comments to their classmates, or teachers do not trust the evaluation by students and try to do this by themselves.

Table 3 also presents the average scores of students by evaluation method. Both test results in Vietnamese Language and Math subjects show that students who respond “Yes, both teachers and students within group evaluate” have the highest average scores of 509.55 and 509.07 for Vietnamese Language and Math subject, respectively. Students who respond “Yes, teachers evaluate” also have high average scores of 497.85 and 500.06 for Vietnamese Language and Math subjects, respectively. It might be concluded that VNEN students regularly participate in group activities. While participating in group activities, teachers evaluate students and students evaluate each other in their groups. Both of these evaluation methods have positive impact on the learning achievements of students.
Conclusion

It may be still early to confirm the suitability of the VNEN model in Vietnam, since it just has been tested for nearly five years, comparing with over 50 years’ experience of the Escuela Nueva model in Colombia. However initial results do show that VNEN students are not worse in academic achievements than their peers in traditional schools. And they have more chances to practice non-cognitive skills than their peers in traditional schools, which significantly contributes to non-cognitive skill development. The impact evaluation study does point out that VNEN students with good non-cognitive skills have higher academic achievements.
REFERENCES


Government of Vietnam (2013) Resolution No 29/NQ-TW issued on 4th November 2013 of the 8th Conference of the 11th Session of the Central Executive Committee on Fundamental and Comprehensive Education Reform


