

The Differences in Educational Systems among Senior High Schools of Taiwan, New Zealand and
Finland from Exchange Students' Perspectives

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Zealand and Finland from Exchange Students' Perspectives

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I. INTRODUCTION

The essay desires to probe into the educational differences among Taiwan, New Zealand and Finland.

A. The Purpose of Our Research

Nowadays, the educational system in Taiwan is going through a huge reform. One of the main purposes of the reform is to decrease the pressure of college entrance exams on Taiwanese high school students. According to *CommonWealth Magazine* (2014, *CommonWealth Magazine*, No.523), the reformation-thought has started when National Parents Organization (NAPO) believes it is time to learn from some foreign educational systems. However, some opponents argue that Taiwan has its own circumstance and should not copy other educational systems blindly. After all, Eastern and Western have different cultural backgrounds and different thoughts in teaching and learning methods. For example, according to *Headline Daily* (2009, Cui Zu Xiong, *Headline Daily*), Eastern Countries value learning outcomes and theoretical studies. On the contrary, Western Countries value learning process and practical applications. In order to further investigate the differences among Taiwanese and other western educational systems, the researchers have decided to write down the observation and self-experience of two foreign educations, Finland and New Zealand, in hope of achieving these two goals:

1. Compare the essential differences among Taiwan, Finland, and New Zealand's educations.

2. Provide an available and useful first-hand data to those who are interested in foreign educational circumstances or those who are involved in Taiwan educational reform.

B. Motivation

The educational system in Taiwan has been gradually compared with those in western countries (Mu-Hsuan Huang, 2011; EP-Nuffic, 2015). When it comes to studies on the differences between eastern and western education, many of the researches have been conducted on the educational systems of Finland and New Zealand. When conducting cross-cultural and international educational studies, Finnish and New Zealand students seem to be ranking at the top of the list (e.g. Program for International Student Assessment). The result has aroused the researchers' attention and bombarded them with the following questions: Is there something fundamentally different about Finnish or New Zealand schools? Or is it even rational to compare these three countries in the first place? This essay aims to answer these questions and moreover to shed some light on the overarching question: What do Finnish and New Zealand schools do that Taiwan schools don't and vice versa?

According to reports from Programme for International Student (PISA), Finland had been the 1st in the topic of science and reading twice from 2000 to 2006. Though its ranking has dropped down, it is still in the top 20 in the world. Furthermore, the mass media has reported about the Finnish educational system and has regarded it as the world-topping education. For example, the Taiwanese well-known business

magazine *CommonWealth* says that “education has now become Finland’s most successful export commodity” and also uses “Secrets to Finland's World-topping Education” as the title of the article (2007, *CommonWealth Magazine*, No.384). Meanwhile, New Zealand is also regarded as a high-standard education country by PISA (ranked 7th in both science and reading, also 13th in math) in 2009. Additionally, in 2009, Taiwan was ranked the 23rd in reading, the 5th in math and the 12th in science. However, the total scores of ranking of Taiwan climbed up quickly as the ranking of math is at the 4th, reading at the 8th and science at the 13th in 2012 by PISA.

The statements earlier had encouraged one of the three researchers in this research to study in Finland and to spend an exchange year in senior high school in 2013. The purpose of this study was to find out the differences of the educational system between Finland and Taiwan. At the same time, the second researcher went to New Zealand in 2013 and stayed for a year as a third grader in senior high. As for the last researcher in our team, she is an ordinary Taiwanese student who has been educated in the conventional track in Taiwan and could provide her perspectives of Taiwanese education.

The researchers hope this study could eventually give the readers a wide range of educational information and a more detailed educational circumstance of these three countries via our personal experiences of foreign and local educations.

C. The Method of Research

The study aims to explore the differences in educational systems among senior high schools of Taiwan, New Zealand and Finland from exchange students' perspectives.

As a result, there are three major methods used in this study: personal experiences of being studying abroad, interviews among the researchers and their teachers during the exchange year, and data found on the Internet. Having been educated in Finland and New Zealand is one of the greatest resources that the researchers have had. One of the advantages that the researchers in this study have is that they have first-hand information and experience which Taiwanese students may not have.

II. THESIS

A. Entrance Exam to Senior High School

The way how teenagers enter senior high school is one of the different traits the researchers would like to compare. In Taiwan, junior high school students must take The Basic Competence Test at the end of their Year 9 (in May). On the contrary, students in New Zealand are not required to take any exam to enter high school. In Finland, the qualification of high school entrance is the total score on their reports from junior high school, including general and quizzed score in each period.

B. Time Period

Many people wonder if the length of time in per class will affect the effectiveness of students' knowledge absorption. Therefore, the researchers list the factor from the studying countries in this essay. The time length per class lasts for 50 minutes in Taiwan and also in New Zealand. However, in Finland, the length of a period is 75 minutes, which are one and half times of the length in the other countries.

C. Number of Students in Each Class

There is an undoubted point that the number of student in a class affects the chance that teachers grasp every student's state of learning. Therefore, the researchers list the situations of this factor from the three studying countries below: in Taiwan, public and private high schools have around 40 to 45 students within a class. However, in Columba College (New Zealand), 11 is the average number of students in a class. The reason behind this phenomenon is probably related to the elective-courses policy that students are not required to choose any compulsory subject. Similarly, in Finland, the minimum number of students in each class is 10 and it can goes up to 30. It is probably due to the students' attendance necessary for their compulsory subjects. The further information of compulsory and elective credits in these three countries will be discussed in the following part "Courses Arrangement".

D. School Operation

As the argument of school time rages in Taiwan, the public generally consider it is too long and it will decrease the efficiency of reviewing lessons in home or engaging in extra curriculum activities. Due to this popular controversy, the researchers decide

to show readers the school time in the three studying countries. In Taiwan, students go to school at 7:30 in the morning and go home at 5:10 in the afternoon (according to Dayuan International Senior High School in Taoyuan City). However, in New Zealand, the first class is started at 9 a.m. and the last class is ended before 3 p.m. nationwide. Similarly, in Finland, the first class is started at about 8 to 8:20 a.m. and the last class is ended before 4 p.m.

E. Qualification of Teacher

The reason why the researchers are going to compare the pathway to getting a teaching license in the studying countries is because it could be a possible factor of the learning quality among students. The public generally believes that the teacher's experience and their educational background are proportional to their teaching ability. Therefore, the researchers list the pathway of getting teacher license in these three countries below. The high school teachers in Taiwan are required to get the teacher's certificate through the national exam and need at least a university degree. Above all, they need to apply for the jobs by attending the exams which include paper test, interview and teaching demonstration. The high school teachers in New Zealand need at least a bachelor degree and a one year teacher training certificate. The teachers in Finland have to obtain a master degree and pass the teacher's qualification exam to teach in high school.

F. Teacher's Duties

While students hardly work on their academics, people do concern how their performances are marked out of the exam. In school, teachers play very important roles. They not only pass on their professional knowledge but also give their students marking in order to show them how much they have done and how much left to achieve to a better situation. Hence, the researchers list the three responsibilities teacher are given by legal relevant units in these three countries below, including courses design, teaching approach and measurement tool.

1. Course Design

1.1 Course Design in Taiwan

Teachers have no right to decide the courses; they must follow the order and arrangement which come from the Ministry of Education. However, they have the right to assign the summer and winter vacation's homework.

1.2 Course Design in New Zealand

On the contrary, teachers are allowed to choose the courses from the course-list which Ministry of Education designed in New Zealand. Moreover, teachers have the right to decide the dates and the arrangement of internals. However, the score they mark is indicated by the rules written by Ministry, which could show their rights are limited in the marking part.

1.3 Course Design in Finland

In Finland, besides the curriculum has been established by the Ministry of Education, the Finnish teachers have wide spaces to exert. For instance, they can choose either using the text book or not. Also, they are allowed to select text books if they need. Additionally, they can set the mechanism of achievement for students and arrange the courses in school.

2. Teaching Approach

In class, the way of teaching is a factor that might influence the way students absorb and comprehend the knowledge during classes. Hence, the researchers list the conditions among these three countries.

2.1 Teaching Approaches in High School in Taiwan

In Taiwan, our high school teaching custom is more likely to be teacher-centered (Note 1), not only because of the large numbers of students, but also the teachers are required to explain as much content as possible in a period due to the internal deadline. Therefore, the time for students giving their own opinions is little or even non-existent.

2.2 Teaching Approaches in High school in New Zealand

On the contrary, in New Zealand, teachers are always asking students questions during the class. Moreover, teachers in different subjects often use online videos or short clips as their teaching materials. Except for frequent conversations and vivid videos, the experimental lessons are also given to students by teachers. For example, in physics, chemistry and biology classes, teachers will prepare many experimental practices for students to carry out during the semester.

2.3 Teaching Approaches in High School in Finland

In Finland, teachers apply to many different ways to teach, such as using the forum on the Internet and playing videos in order to let students read and discuss, have them write reports and have quizzes sometimes.

3. Measurement Tool

In this part, the researchers write down the methods of examination in these three countries. While observing the phenomena of the way of exams, our purpose is to see if the way of examination does affect the way students studying and preparing for the exam.

3.1 Measurement Tool in Taiwan

In Taiwan, written test is so far the major mode being applied in every subject. It focuses on reviewing the lesson students learned from the textbooks, and keeping the

knowledge students learned in mind. All quizzes and exams are designed for students to prepare the university entrance test.

3.2 Measurement Tool in New Zealand

In New Zealand, the methods of exam and quiz have many kinds: In English external, there are thesis writing, analyzing article, news, poem and movie; in Physics, there are not only the paper test but also the experimental operation and analysis; in Chinese, you must give a speech publicly, record the Chinese conversation with your classmates, and pass the writing and listening test. The exam which is taken at the end of the year is called the final. The content in the final is from some parts of the courses which students take in the year. Apart from the final, students take internals which the marking and the credits are separately and differ from externals.

3.3 Measurement Tool in Finland

There are many ways of exams; for example, many calculating questions for math and physics, writing for chemistry, and reports for psychology and music. Furthermore, there are many essay questions with few multiple choice questions in some of these exams. Students are allowed to take formula-books and calculators in any exams.

I. Courses Arrangement

In this part, the researchers discuss the ways students choose their courses in

these three countries so that readers can know how different the curriculum arrangements are among these three countries. The comparisons of courses arrangements in these three countries will be listed in the table below.

1. Courses Arrangement in Taiwan

The relative policy of course-arrangement of Taiwanese students are usually regulated and enforced by Ministry of Education. For three years in high school, Chinese, math, English are three constantly compulsory subjects. Besides the compulsory subjects, there are also other subjects such as history, music, chemistry, etc. In the first grade, students have to take every subject. However, they are required to decide which tracks (such as advanced liberal art group or sciences group) they are interested in on the second year in high school. By the decision they make, except the three compulsory subjects, they could skip certain elective subjects, but the curriculum are also scheduled by the government. For example, students who chose advanced liberal art group will need not study advanced science such as physics, chemistry or biology in the rest of their high school time. However, they must study advanced civil ethics, history and geography; in contrast, students who chose advanced science group will not need to study civil ethics, history, and geography in the rest of their high school time, but they would need to study advanced physics, chemistry, and biology (some students will chose the other science group which does not include biology). This is different from New Zealand and Finland because Taiwanese students have to obey the timetables that scheduled by the government.

2. Courses Arrangement in New Zealand

In New Zealand, students are able to choose at least five subjects or up to six in senior high school. The timetable will depend on their course-decisions so it will differ from one to another. There are almost 35 different subjects for students to choose from, such as normal academic major subjects (like chemistry, math, English, physics, etc.), fashion and design, tourism, food and nutrition etc. Moreover, according to the New Zealand Qualification Authority (NZQA), in 2nd and 3rd grades there are no compulsory subjects at all. Therefore, students can choose any subject to fill their course-timetables. Moreover, the three compulsory subjects including English, Mathematic and Science only existed in 1st grade.

3. Courses Arrangement in Finland

In Finland, students have opportunities to arrange their own timetable. There are five phases in a semester, and the students have to arrange their timetable with their teacher in each phase. In addition, besides the compulsory subjects, students also have chances to choose other subjects they want. There are three different types of subjects, which are compulsory subject; specialization subject and applied subject. Moreover, there are totally 17 subjects (such as history, physics, religion, philosophy, etc.). Based on those subjects, there are 75 courses that students have to choose from during their high school years. Aside from the requirement of the minimum of the 75 courses, students can choose as many subjects as they want.

Table: Comparison of Differences in Educational System

| Countries / Comparisons of items | Taiwan | Finland | New Zealand |
|--|--|---|---|
| Qualification of High School Entrance | Levels of The Basic Competence Test | Reports from junior high school | No requirement |
| Time Period | 50 mins | 75 mins | 50 mins |
| Number of Students in Each Class | 40~45 | 10~30 | 10~15 |
| School Operation | 7.30a.m. ~5.10p.m. | 8a.m. ~4p.m. | 8.30 a.m. ~3p.m. |
| Qualification Requirement of High School Teacher | A bachelor degree, teacher certificate, and a half-year training certificate | A master degree and teacher qualification exam certificate | A bachelor degree and one year teacher training certificate |
| Course Design | 1.Assign homework | 1.Choose to use textbook or not 2.Set mechanism of achievement | 1.Choose lessons from course-list 2.Decide the date of internals |

Table: Comparison of Differences in Educational System

| Teaching Approach | Teacher-centered (Note 1) | | Student-centered (Note 2) | | Student-centered | |
|---------------------|------------------------------|----------|---|----------|---|----------|
| Measurement Tool | Written test mostly | | 1. Calculating in math and physics 2. Reports in psychology 3. Essay in English | | 1. Oral test in languages 2. Short essay 3. Experimental Practice 4. Speech 5. Conversation-recording in second language 6. Practical performance in music | |
| Courses Arrangement | Compulsory | Elective | Compulsory | Elective | Compulsory | Elective |
| | Yes | Yes | No | Yes | No | Yes |

III.CONCLUSION

There are many different viewpoints on how to improve the educational system in Taiwan which needs improvement. Therefore, in order to develop a more effective educational system at home, many scholars and psychologists have looked abroad for finding clues to what fit in our country. Many scholars believe that the educational systems of many international countries are finding a better quality of education.

Hence, the researchers hope this essay, giving the first-hand information from two researchers who really experienced the function of Finnish and New Zealand high schools, can be one of the information referred by scholars or the public to do further research.

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Notes:

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1. The definition of teacher-centered:

In teacher-centered education, students put all of their focus on the teacher. The teacher talks, while the students exclusively listen. During activities, students work alone, and collaboration is discouraged.

2. The definition of student-centered:

When a classroom operates with student-centered instruction, students and Instructors share the focus. Instead of listening to the teacher exclusively, students and teachers interact equally. Group work is encouraged, and students learn to collaborate and communicate with one another.

<http://education.cu-portland.edu/blog/classroom-resources/which-is-best-teacher-centered-or-student-centered-education/>