

Eight Nations Education Research Project

**Report to the Steering Committee
December 1-2, 2007**

GENERAL AND VOCATIONAL EDUCATION

**A COMPARATIVE STUDY OF THE ROLES OF
SECONDARY AND TERTIARY EDUCATION PRACTICES
IN SIX NATIONS AND THE IMPLICATIONS FOR POLICY**

High School to Higher Education Transition

Executive Summary

Draft, do not use it as reference yet

1 About the project in general

Based on the tendency, that the economic health of developed and developing countries depends increasingly both on higher levels of general education and more and more specialized levels of vocationally training, this report examines how the education systems in six nations from East and West – Hong Kong, Japan, South-Korea, Thailand, Switzerland, and the United States – meet these challenges by offering general and vocational education, with a focus on the transition from secondary to tertiary education.

The six nations participating in this project are diverse geographically, politically, linguistically, and economically. Regarding post secondary education a common tendency of moving beyond secondary education can be noticed.

The main research questions driving the project were: Who needs a traditional college or university education and who a non-academic vocational education to succeed economically? How should we prepare and select students for college or university and for non-academic tertiary education? How can we meet the vocational needs of youth who do not go on to a traditional college or university? What are the impacts of such exercises to the education systems respectively? Are there any contextual factors contributing to such systems?

The collaborative research process consisted of three overlapping phases of data collection and analysis: Qualitative and quantitative analyses regarding each country (desk research by each country's representative, discussion and synthesis by the research team), case studies in three countries (Thailand, Switzerland, U.S.) by the research team, comparative analysis based on both country reports and case studies

The Cross National Comparisons of Educational systems were structured as follows:

- Structure of the systems (degree of differentiation, degree of permeability, numbers of institutions and financing the system, main reforms)
- Commonly held education values and beliefs driving the educational system (values of Vocational Education, beliefs in Testing and Private Tutoring, notion of Trust,
- Content/Curriculum of the Educational System
- Transition and Access to Higher Education (institutional autonomy, postsecondary admission and application processes, the role of entrance and exit examination, access to Post-secondary Education)

2 The Case Studies

Case studies built a main part of the project, done as ethnographic studies. Mutual visits by the entire research group were accomplished in three countries. In each country a small, but nevertheless typical sample of institutions and persons was chosen, representing levels of the education system respective, actively involved in the transition issue. The procedure was threefold: site visits to different institutions of interest, defined by the host, interviews and conversation with groups of persons concerned (faculty, students, administrators, researchers, politicians, and in the case of vocational education in Switzerland also managers and apprentices, etc.) based on questions defined by the research team, drawing conclusions by the research team.

The case studies affirmed the general nature of the upper secondary and post secondary education systems in Switzerland, Thailand, and the U.S. that were described in the individual country reports. Moreover, they offered some interesting perspectives on the factors

that were instrumental in shaping each system and on the strengths and weaknesses of each, given current social and economic contexts.

The two most notable *contextual factors* that appear to account for areas of similarities and differences relate to economic conditions and values. Both Switzerland and the U.S. are wealthy in comparison with Thailand. Wealth differences are mirrored in the levels of investments in education at all levels, but particularly at the post secondary level. The case studies identified several links between national values (vocational versus general and academic education) and the nature of secondary and post secondary education.

There are *four notable contrasts* of the upper secondary and post secondary education systems and their products that appear to have been shaped in part by these two forces.

Locus of control over decision- regarding the design and administration of various segments of the education systems. The education systems of the three focal countries differ with respect to the degree to who controls the curriculum and instruction and who controls access. Consistent with shared national values regarding all four of the key segments of the upper secondary and post secondary education system, Switzerland has a highly centralized system of access to higher education based on certifications of skill mastery conferred by the secondary educational institutions. The U.S. system of secondary and post secondary education is at the other end of the continuum with respect to control. Despite recent increases in federal and state oversight of K-12 education, school districts in the U.S. have a high degree of autonomy over the design and operation of their schools, but little control over the number of characteristics of the students they must serve. Thailand has a highly centralized system by the national entrance exam, but the independence of institutions has increased regarding non-test-based application materials which can be considered.

Status of Vocational Education. With regard to the status of Vocational Education Thailand and the USA are rather similar and differ very clearly from Switzerland. While in Switzerland about 65% of the students on upper secondary level go through a well organized, dual system of vocational education wherein they become apprentices learning and working in the real workplace and going to vocational school and are ready to enter professional life, the situation in both Thailand and USA reflects a *considerable stigma of Vocational Education*, associated with attending vocational high schools. However, Switzerland does face problems similar to the USA and Thailand for the lowest 25 percent of a school cohort: The lower academic performance of these students – often related to a different language- and socio-economic background – causes them to face greater difficulties in finding an apprenticeship of their first choice.

Competitiveness and Selectivity. The three cases studied differ with regard to the degree of the transition-system's competitiveness remarkably - from low in Switzerland to high in both Thailand and USA. However, it became clear that a less competitive system can be strongly selective.

The Swiss system does not seem very competitive, nevertheless it appears as very selective. The general matura entitles students to move from the gymnasium to any university and any department (study any subject), not depending how well the students perform in the matura, as long as they meet overall a "sufficient" level, and they also do not compete for study seats, because the universities have to adapt their supply to the number of entering students. The same is true for the case of the Vocational Matura. Nevertheless the Swiss system shows a high degree of selectivity: Big drop out rate (30 to 40%) during the first year of stud-

ies; the gymnasium-curriculum is both including a broad variety of subjects and requiring a remarkable high level in all subjects; the students drop out over the four to six years of gymnasium is quite remarkable; the transition from secondary level I to II is characterised by selections.

The Thai system shows a very high degree of competitiveness as far as the prestigious universities are concerned. This is not so much the direct consequence of the high importance of the national exam and also not of the increasing importance of the high school GPA, but the fact that these universities can define the level of requirements by themselves. On the other hand, not least based on this entrance selection, the drop out at these universities itself seems to be quite low. Regarding the remaining majority of universities the competitiveness and selectivity vary much from medium to almost non-existent. The competitiveness described can be observed already at the stage of transition from low secondary school to high school, at least regarding a few most elitist schools which are well known to be most successful in preparing for the transition to elitist universities.

The US system is very selective with regard to the very good to top ranked universities, both public and private. As in the Thai system that's because these universities can define the level of requirements themselves and by that can support their vision and strategy to be very elitist. The drop out at these institutions might vary from place to place and will be much higher in the first year than in the following, in the most elitist schools however, not selectivity but coaching for study success in that institution might even be the main goal. Regarding the remaining majority of universities the competitiveness and selectivity vary much from medium to almost non-existent. The selectivity described in the US-case can already be observed at the stage of transition to high school, since the reputation - and to a certain degree at least - the quality of high schools correlate quite remarkable with the socio-economic background of students and the communities they live in.

Centralization vs. Decentralization. The Swiss admission system may be viewed as a centralized system since the universities have no decision as to who they are going to admit, with the exception of the cases of medical schools and foreign students. This is due to the fact that each university has to accept any student who has his/her Matura. The Matura is the gate to universities. Although each school administers its own Matura, it has to have been certified or accredited by a federal commission.

The USA transition system is most decentralized due to high degree of autonomy of schools and colleges. However, there are many central markers/indicators available for their use, for example, standard tests provided by private organizations, information or statistics about schools, etc. Available accreditation, ranking and information on other indices are free of charge or purchasable to all. Networking and clustering of universities/colleges also provide some degree of standardization and centralization. These are considered indirect kinds of centralization. For the non-competitive colleges/universities, however, decentralized system is usually the case.

A centralized system exists in the Thailand case, as in many Asian countries, in the form of the national tests. The system relies on the central databases of the national test results from the newly established National Institute of Educational Testing Services grown from the Central Testing Division of the Ministry of University Affairs and students' GPAs from the Office of the Commission on Basic Education, and specific requirements of each university that participates in the central system. The decentralized system exists in the direct admission

system of both competitive and non-competitive universities/colleges, where they can exercise full autonomy in their admission procedures.

Private tutoring is inevitable if universities consider test results seriously. The tutoring can be as extensive and as rigorous as that in Thailand and many Asian countries, due to the importance of the national tests in the transition to high-rank universities. But personal/parental tutoring also occurs in the cases of Switzerland to pass the Matura and the USA to get high scores on tests, like SAT or ACT. College prep school is structured for this specific purpose of preparing students for good schools.

The case studies affirmed the general nature of the upper secondary and post secondary education systems in Switzerland, Thailand, and the U.S. that were described in the individual country reports. Moreover, they offered some interesting perspectives on the factors that were instrumental in shaping each system and on the strengths and weaknesses of each, given current social and economic contexts. All systems are on the move, because general and vocational education are facing challenges. The transition / admission systems tend to become more comprehensive.