

# Undergraduate Admissions, Equity of Access and Quality in Higher Education: An International Comparative Perspective

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## Abstract

*This study looks into undergraduate admissions to higher education from an international perspective involving seven countries selected on the basis of their representation of centralized and/or decentralized admissions models and types, on the basis of their diversified higher educational systems, and their representation of four geographical regions, i.e., East Asia, North America, Europe (including West and Central Europe) and Eurasia. The countries selected are: Japan; the United States of America; the United Kingdom; the People's Republic of China; Austria; France, and the Republic of Georgia. Data and information were obtained from a host of sources including policy papers of Ministries of Education, refereed journal articles, websites of selected higher educational institutions, the International Association of Universities (IAU), UNESCO, and the National Association for College Admission Counseling (NACAC), and many others. A frame analysis which is most commonly used in journalism was employed in analyzing information derived from websites and building thematic frames for systematic analysis.*

*Rather than reporting one typology for admission composed of type and model as provided by Helms, this study yielded different typologies of admission consisting of: (i) a typology of models and (ii) a typology of types and their patterns in higher educational institutions in the countries selected for the study. The country with the most wide-ranging admission system was the U.S. with 4 different models of admissions though applied differently across higher educational institutions. The type was pervasive in all countries studied. Further, in terms of procedure all variations appeared among the seven countries compared, excepting the U.K. which had a distinct procedure worth emulating. Expansion, massification, and the increasing number of entrants to higher education were discussed. These were further examined in relation to quality in higher education.*

## I. Introduction: Framework and Objectives of the Study

Perhaps one of the most 'untidy', yet vivacious areas in comparative educational research is admissions to higher education. Its 'untidy' nature rests with the multiplicity of often confounded

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models and types encapsulating a wide range of policies and practices within and among countries. This diversity has implications on equity of access and quality in higher education. Despite the untidy nature of undergraduate admissions, the subject becomes vivacious when approached from a comparative perspective.

This study looks into undergraduate admissions in seven countries selected on the basis of their representation of centralized or decentralized systems, diversified higher educational systems, and representation of four geographical regions, i.e., East Asia, North America, Europe and Eurasia. These countries are: Japan; the United States of America; the United Kingdom; the People's Republic of China; Austria; France, and the Republic of Georgia.

The study is organized as follows: definition of key concepts; method for collecting information; undergraduate admissions and equity in each country; a comparative discussion revealing the lessons learned, and finally an overall summary.

## 1. Definition of Concepts

This section defines the following key concepts used in the study: admissions; equity of access; quality in higher education, type and models.

### a. Admissions

According to the code of practice of the assurance of academic quality and standards in higher education by the Quality Assurance Agency for Higher Education (QAA) in the U.K. in 2006, admissions encapsulates all activities, policies, procedures and practices involved in admitting students to higher education. Another definition is provided by (Helms, 2008) who equates admissions to entrance as a process through which students are selected to enter higher education. In this study, admission is used to refer to the types and models derived from policies and procedures to admit or select students to higher education or to defer them.

### b. Equity of Access

In concert with the literature on equity of access (e.g., Helms, 2008; James, 2007; Harman, 1994), equity refers to justice in admission processes, involving certain measures which provide additional opportunities (e.g., scholarships, appeals, lower cut-off scores in case of entrance tests, reaching minority groups etc...) to those who did not get them from the system of opportunities for access, particularly minority groups including female students, people with special needs, those with a low socio-economic status, minority ethnic/racial groups, and many others such as farmers and people in remote areas as is the case of China and Georgia.

### c. Quality in Higher Education

The term 'quality' in higher education looms large and according to Parri (2002), the term lacks a standardized definition that could be applicable to all fields. However, quality in higher education is equaled to special (Lomas, 2002). In this study, quality is discussed in terms of measures used to assure that students who are admitted to higher education also have access to quality education.

### d. Type and Model

Helms (2008, 7) provided a "typology of admission systems" that consists of "types", which lay emphasis on test scores, and "models" that encompass non-test factors for admission (e.g., the applicant's portfolio, activities, interviews, and recommendation letters). Within "types", Helms established a typology derived from admission systems worldwide that categorizes test scores into 5 types that comprise 17 subtypes as follows:

#### Type 1: Secondary leaving exams

- National exam score only
- National exam score, plus secondary school performance

- Regional score/state score, plus secondary school academic performance
- National exam score plus application dossier

**Type 2: Entrance exams**

- National exam score only
- National exam score, plus secondary school academic performance
- Institutionally administered exam scores only
- Institutionally administered exam scores, plus secondary school academic performance

**Type 3: Standardized aptitude tests**

- Standardized aptitude tests scores or secondary school academic performance
- Standardized aptitude tests scores, plus application dossier

**Type 4 : Multiple exams**

- National entrance exam score, plus institutionally administered exam scores
- National entrance exam score, institutionally administered exam scores, and/or secondary school academic performance
- National secondary school leaving scores, plus standardized aptitude test scores
- National secondary school leaving scores, plus institutionally aptitude test scores
- Multiple exams administered by multiple entities

**Type 5: No exam**

- Secondary school academic performance
- Application dossier does not require exam scores

## 2. Method

### a. Data Collection

Data were obtained from: Wikipedia; policy papers downloaded from Ministry of Education websites, as available; journal articles; websites of selected higher educational institutions; the International Association of Universities (IAU); the British Council; UNESCO; the Organization for Economic Co-operation and Development (OECD); the National Association for College Admission Counseling (NACAC) in the U.S.; and the National Center for Education Statistics (NCES) in the U.S.

### b. Validity of Information

The validity of information was checked by comparing information derived for similar topics from different sources. Although Wikipedia's accuracy and credibility are debated (e.g., Read, 2007), its use in academic research is becoming more accepted (Guess, 2008) due to continuous refinement by users.

### c. Analysis

A frame analysis which is most commonly used in journalism was used in analyzing Wikipedia and information from websites. According to (Jamieson et al, 2002, xii), frames are "structures underlying the depictions that the public reads, hears, and watches". Frame analysis is of two types: "episodic frames" which revolve around the personalization of events and "thematic frames" through which a researcher can systematically explore an issue, and explore its place in a broader social or political context (Bennett, 2005, p. 213 - 214). In this study, keywords, phrases, facts, announcements, and sentences were clustered for analysis and discussion.

### d. Limitations

This study encountered several limitations. First, in some of the countries selected for the study (e.g., U.S., U.K, Japan, and the People's Republic of China) there was a wealth of up-to-date information, while this was not the case in other countries (e.g., Georgia). Moreover, data related to ethnic and minority group access to higher education are not disclosed as is the case for

France, Japan, China, Georgia, and Austria. In addition, higher educational institutions, whose websites published material in languages with which the author is not familiar such as Chinese, Austrian, or Japanese, made understanding quite arduous due to the need for translation. In addition, because higher education in the countries selected is so diverse and complex, any standard description of case-by-case may misstate much about individual higher educational institutions in these countries. Therefore, not all individual countries selected are presented and analyzed in the same depth and breadth.

## II. Undergraduate Admissions in Higher Education

### 1. East Asia

This section concerns two countries, Japan and the People's Republic of China.

#### a. Japan

Undergraduate admission in Japan is represented in the type and the mixed model-type requirements.

##### 1) The Type

The type relies on the national entrance test and other tests that may be required by many individual higher education institutions, particularly the elite ones. Whether in public, national, or private universities, admission requires the Upper Secondary School Certificate of Graduation (Kotogakko Sotsugyo Shosho) and, in most cases, is based on the highly competitive National Center for University Entrance Test which is administered throughout Japan over a two-day period each year. The overall score on the test determines the specific institution which the student is eligible to join (Helms, 2008). Other tests are administered by the individual universities. This type is mostly entrenched in what Hawkins et al (2008) described as first- and second-tier institutions, which, besides the national test, started to use a new common test (Mori, 2002). Practically, a number of private institutions started to use the new common test as of 1985, based on the recommendations of the Council for Reform in University Entrance Examination (CRUEE).

The environment of these tests is described by the Japanese as the "exam hell", being fierce, competitive and stressful (Mori, 2002). Although it is becoming less severe, admissions are still competitive (about 1 in 3 test takers will get a place at the university of their choosing) and in any given year about 20% of the applicant pool is comprised of «non-students»—, «ronin» (master-less samurai) who are kept out of higher education for one or more years for another attempt at entrance examinations. These ronins enroll in private schools called Juku where they undergo preparation for the entrance test.

At some tier-one universities, such as the University of Kyoto, students who make the «cut off» on the Center Test scores are then asked to start from scratch and compete against all the other people taking a particular university's own test. Other universities, typically lower-ranked ones or second tier, combine the Center Test score with their own test scores in order to determine admissions for specific programs (Japan Time Online 2009, <http://www.japantimes.co.jp>).

At community colleges, like Aichi Bunkyo Women's College, admission policy, as described by the institution's website, "superior quality" and "academic ability" are requisites for admissions. For admitting students, an additional local test is administered.

##### 2) The Mixed Model-type Requirement

This encapsulates wide-ranging requirements for admissions including tests, interviews,

school reports and letters of recommendation. According to Arai (1999), the diversification of admissions in Japan has increased greatly since the late 1980s. As of 1998, the proportion of undergraduate students who submitted recommendation letters as part of their admission evaluation was 9% in national universities, 14% in public (excluding national) and 34% in private institutions. The aim behind adding more requirements can serve two purposes; one for selection, while the other to lessen the competition caused by a single entrance test score. In three tier-one Japanese university websites surfed (Hiroshima University, the University of Tokushima, and Kanazawa University), admission centered on ability and willingness of students to acquire skills. However, different requirements and procedures were identified. At Hiroshima, applicants must pass the national test. Then, those who pass the national test are required to complete the following: report, letter of recommendation and applicant's self-assessment. Then, applicants listen to a 20-minutes lecture and compose an essay about the lecture. Finally, applicants are also interviewed ([http://home.hiroshima-u.ac.jp/admicen/nyusi/ao\\_qa0019-.html](http://home.hiroshima-u.ac.jp/admicen/nyusi/ao_qa0019-.html)). Different weights are given to each assessment area prior to admission decision.

At the University of Tokushima, applicants are selected according to the following: the results of their national entrance test; academic achievement tests conducted by the University; and the application documents that the applicant sent to the University. The subjects of examination and all subjects of the test are specified by the University Center according to the applicant's major ([http://www.tokushima-u.ac.jp/pdf221/bosyu\\_ippan.pdf](http://www.tokushima-u.ac.jp/pdf221/bosyu_ippan.pdf)).

At Kanazawa University, admission centers on the national test results, the separate academic achievement tests held by this university and the screening of the applicants' dossiers.

As for Chiba Keiai Junior College, A and B systems are used for admissions: the A format requires tests in English and mathematics as well as interviews. The B format has entrance tests in the Japanese language and mathematics plus an interview. These two formats represent the general admission requirements at the college where students can choose either format, based on the major to which they apply (<http://www.u-keiai.ac.jp/prepstu/tandai2005nf.pdf>).

Unlike universities or junior colleges, colleges of technology admit graduates of lower secondary schools. At these colleges students who have completed the upper secondary school join the program in the fourth year. Graduates of the five-year program are awarded the Koto Senmon Gakko Sotsugyo Shosho (Technical College Graduation Diploma) and are considered to be trained technicians. Virtually, applicants to the colleges of technology take an entrance test in the Japanese language plus an interview.

To join specialized training colleges, students should complete either lower or upper secondary education. Some of these colleges require the national central test while other specialized training colleges have recently come to admit students on the basis of recommendation letters from upper secondary school principals, and a thesis or interview only ([http://www.jagam.org.my/05\\_student/05\\_student02.html](http://www.jagam.org.my/05_student/05_student02.html)).

#### **b. The People's Republic of China**

Admission to higher education is stated in Article 19 of the higher educational law, which provides that graduates of senior secondary school education or those with an equivalent educational level shall, upon passing the examination, be admitted by institutions of higher learning and obtain the qualification for admission as specialty students or undergraduate students. Thus, two requirements are identified by the law: passing the exam and students' status of admission; hence representing a type and a model.

### **1) The Type**

The Chinese education system and Chinese citizens are extremely test-results focused (Dunrong, 2007). All higher educational institutions follow the test type. All students who finish 12 years of schooling are eligible to apply to higher education. These students take the National College Entrance Test (NCEE)<sup>2</sup>, or Gaokao in one of the two categories: (1) humanities or (2) sciences and engineering. Gaokao comprises three compulsory subjects (Chinese, English and mathematics) and one extra subject, i.e., a foreign language. Although applicants specify the institutions and programs they wish to enter in order of preference, student admission is assigned by the government based on their test scores and preference of the institution and the majors intended based on Article 32 of the Chinese higher educational law which assigns the percentage of admission to departments and disciplines in accordance with the requirements and demand of society, conditions for running the institution and scale of the institution should be verified by the state. The MoE sets cut-off scores for admission to each department in key universities, but in the case of universities situated in the provinces, the minimum score for admissions is determined by the provincial education office (Mullins, 2005). Workers, peasants and soldiers are often given preferential treatment in admissions. In addition, students who pass the minimum score for admissions undergo a physical examination and an investigation into their social behavior and moral character (<http://www.index-china.com/index-english/education-s.htm>).

### **2) The Recommendation Model**

This model is new in China, specifically offered where secondary school graduates are all assigned jobs including transfer to the countryside for work. Anyone who has two years of experience in the workplace can apply to university admission provided that he/she has academic knowledge equivalent to secondary schooling (China Education Newspaper, 2007). The practice of recommending is selective for outstanding upper secondary school graduates skipping national entrance tests for admission to higher education. Thus, only outstanding students are exempted from the national test. A separate admission is organized for some special disciplines or fields needed by the state (OECD Report on China, 2007).

## **2. North America**

### **a. The United States of America**

Most undergraduate colleges and universities maintain the policy that students are to be admitted to higher education or rejected from the admission to the entire college, not to a particular department or major, unlike graduate admissions. Some students, rather than being rejected, are «wait-listed» for a particular college and may be admitted if another student who was admitted decides not to attend the college or university. There are a number of tests used by these institutions, including the Scholastic Assessment Test (SAT). The SAT is a three-hour exam intended to measure basic skills and aptitude (Carton et al, 1997). Most universities look for student SAT scores in addition to high school certificates. Students must also list academic qualifications and extra-curricular interests. They can also be asked to complete a number of essays. Character and academic references are also required. Undergraduate admission in U.S. varies as shown below.

### **1) The Open-policy**

This connotes open admissions, specifically in two-year community colleges which award

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<sup>2</sup> A special agency appointed by the state educational authority to be responsible for mapping out the test content in line with national testing guidelines.

associate degrees at the completion of two years of full-time study, where many students transfer to a four-year college or university to complete their bachelors' degrees.

## **2) The Type**

The type in the U.S requires one or more tests for undergraduate admissions. According to the National Association for College Admission Council (NACAC) in 2006, 94% of four-year colleges and universities considered the Scholastic Aptitude Test (SAT), or the American College Test (ACT) scores in their undergraduate admissions. SAT-I is required for all undergraduate admissions and SAT-II is required for specific majors. Also, TOEFL is required for international students seeking higher education in the U.S. Although the requirement of the secondary school report and transcripts (report cards) for the final tests, application form, and letters of reference (<http://www.infozee.com/usa/app-procedure-ug.htm>) is a mundane practice for admission, the major weight is given to test scores. Within the type, many elite four-year colleges require additional testing such as the Career Programs Assessment test (CPAT), or the College Board's ACCUPLACER (Douglass, 2007). These additional admissions requirements are requested by selective colleges and universities.

## **3) The Application Model**

This model does not rely on entrance tests for admissions. Instead, a holistic set of admissions requirements replace tests scores which are optional to students to take and submit to the college or university where they intend to enroll.

Students can apply to some community and liberal arts colleges using the Common Application (informally known as the Common App) which is an undergraduate college admission application which applicants may use to apply to any of the 346 member colleges and universities in the U.S. It is managed by the staff of a not-for-profit membership association (The Common Application, Inc.). Its mission is to encourage college «access» by promoting holistic admission (the use of subjective criteria like essays and recommendations alongside objective criteria). (College admissions in the United States).

## **4) The Comprehensive Model**

This relies on school grades, activities and other non-test requirements. An increasing number of higher educational institutions such as the University of Oklahoma, Arizona State University, and a number of highly selective private liberal arts colleges such as Bates College and Bowdoin College in Maine only consider SAT scores if the applicant so wishes. The main admissions requirements at these institutions are students' high school records, extracurricular activities, applicants' essays, interview and letters of recommendation.

### **3. Europe**

This section describes undergraduate admissions in the United Kingdom, Austria, and France.

#### **a. The United Kingdom**

In the U.K., students are eligible to apply to higher education after completing 13 years of pre-university education (<http://www.liv.ac.uk/>). The General Certificate of Secondary Education (GCSE), which is part of a single examination covering England, Wales, Northern Ireland and Scotland, is a prelude to deciding whether students go to Advance Level Courses (A-Level)<sup>3</sup>. A-level is the gate to higher education in the U.K being designed to screen students for their specialization. Those who opt for university education are required to take 8 to 10 subjects in

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<sup>3</sup> A-Levels are two-year courses taken just before the university, right after completion of the secondary school, i.e. after a General Certificate of Secondary Education (GCSE) is obtained. Usually, students that attend A-Levels are 15 - 16 years old.

the A-level while those considering the vocational track study fewer A-level courses (Carton et al, 1997). In terms of organization of admissions, Section 10 of the Code of Practice (Admissions to Higher Education) of the Quality Assurance Agency for Higher Education in 2006, is intended to help institutions to assure that policies and procedures they use to attract, recruit, select, admit and enroll students are clear, fair, explicit and consistently applied. The Code of Practice recognizes that many higher educational institutions make use of admissions schemes, particularly the Universities and College Admissions Services (UCAS), which coordinates applications for admission to full time undergraduate courses while each institution retains its autonomy in admitting students.

Applicants submit an application dossier to UCAS consisting of A-level scores, intended course, or predicted score for applicants who are still in school, a personal statement about purpose of applying, a letter of reference from the school, along with six higher educational institutions to which the applicant seeks to apply. Each application is sent to the selected institutions, each of which decides whether to accept the applicant or not based on its standard criteria for admissions, i.e., conditional or unconditional acceptance. Conditional, where an applicant may accept two offers, of which one is their firm (first) choice, the other made by the institution, usually with one with lower conditions attached, is their insurance choice (one of the rest of choices). Conditional acceptance is when A-level scores are not published yet for the respective applicant. On the other hand, unconditional acceptance means that the applicant has been accepted. The third decision is “decline” where applicants who receive no offers or did not meet admission requirements can elect to enter the UCAS EXTRA system from late February. The EXTRA system offers guidance for students to prepare well for A-level tests. In terms of admissions decision, this is made by Admissions Tutors at the institution, and later verified by the Admissions Officer who makes sure that the decision made by the Admissions Tutor complied with general admissions requirements such as the applicant’s completion of certain academic levels. Undergraduate admissions in the U.K. adhere to the test type.

### **1) The Type**

The type followed in the U.K. is A-level. Virtually, all higher educational institution’s websites stated in their admission policy full compliance with Section 10 of the Code of Practice (Admissions to Higher Education) of the QAA, and other legislations including the Disability Act of 1995, the Race Relations Act of 1997 and its amendments, the Sex Discrimination Act. Some of these institutions such as the University of Liverpool in England and the University of Glasgow in Scotland offer a one-year preparatory program designed to overseas students. There remain differences within the admission type, particularly between elite and less prestigious institutions (Greenbank, 2006). Most elite institutions identified as HEI-10 which is a Russell Group<sup>4</sup> request higher grades than less prestigious institutions. At Cambridge University, additional tests might be required such as the “Thinking Skills Assessment” (DFES, 2003).

### **2) The Open-policy**

The open-policy applies to the Open-University which has no entrance requirements.

### **3) The Supplementary Model**

Other supplementary requirements for undergraduate admissions are set by a number of higher educational institutions across the U.K. such as the University of Glamorgan in Wales. One of the requirements at Glomorgan is the validity and relevance of the applicant’s

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<sup>4</sup> The Russell Group is a group of 19 self-selected research universities considered to be the most prestigious in the U.K.



information submitted to the University which is checked for verification. Admissions at Oxford University emphasized merit and ability. In addition, students who passed the A-level are re-distributed based on availability of seats and further interviews with selected candidates are conducted.

#### **b. Austria**

Before the Bologna process, admissions required 17 years of schooling. Then after, the Fachhochschule split its program into undergraduate and graduate studies offering about 40 different programs, requiring completion of 12 years of schooling (<http://www.fh-ooe.at/fh-oberoesterreich/international/admission>). Different admissions exist between the Fachhochschule, other public, and the private sector.

##### **1) The Type**

At public universities, admission requires the national test which is a secondary school-leaving examination called Reifeprüfung/Mutra. Students take the national test at the same time simultaneously across the nation. (Wadsack et al, 2004). Applicants are required to submit proof of artistic aptitude in case of arts studies and proof of aptitude for physical/motor skills when wishing to enroll in teacher training in physical education (Leibeserziehung) and for the sports science (Sportwissenschaften) (The Federal Ministry of Education, Science, and Culture, 2004). Persons who did not take the Reifeprüfung/Mutra have the possibility of taking the university entrance qualification examination (Studienberechtigungsprüfung) for a specific major. In art studies, an entrance exam is required as a proof of artistic aptitude and the Reifeprüfung/Mutra is required for a number courses in these institutions.

##### **2) The Model-type Mixed Requirement**

This model exists in Fachhochschule Eintritt or (admissions). Admission is based on availability of seats in the majors offered. Thus, standard admissions requirements are set, and supplementary requirements are added to allocate seats, taking into consideration the highest achievers. The general requirements are:

- High School diploma;
- Written application submitted by June 30 for the following academic year;
- An on-site entrance examination and personal interview are required;
- Proficiency in the German language (intensive German courses are offered).

An additional entrance examination is required or an additional admission procedure whenever the number of applicants exceeds available seats. The model-type mixed requirement is observable in private higher educational institutions which administer their own entrance tests and interviews as is the case of Modul University Vienna (<http://www.modul.ac.at/>). Additional requirements may be set such as the Webster University Vienna which is a U.S. university branched in Austria ([http://www.akkreditierungsrat.at/cont/de/privatuni\\_03.aspx](http://www.akkreditierungsrat.at/cont/de/privatuni_03.aspx)).

#### **c. France**

In France there are: (1) the test type, and (2) the model-type mixed requirement.

##### **1. The Type**

After completing high school, students have three choices to enroll in higher education; universities or technical institutes within the university. For the university, students who obtain a passing score on the nationally administered essay-based baccalauréat examination have open access to most programs (majors) and higher educational institutions without any further examination or admission requirements outside those pertaining to regular application forms.

## **2) The Model-type Mixed Requirement**

This is represented in prestigious higher educational institutions which are allowed by law to have special admission requirements (e.g., Instituts de Technologie, or Classes préparatoires aux Grandes écoles). These institutions often require, besides the baccalauréat, school grades and interviews, while recommendation letters are not used as an admission criteria (Helms, 2008; Carton et al, 1997). Also further entrance test (concours) is requested, particularly in Grandes Ecoles.

## **4. Eurasia**

### **a. The Republic of Georgia**

University admission in the Republic of Georgia is based on a newly introduced National Examination Center (NEC) which is modeled after the SAT. The purpose of the entrance test was to curb rampant corruption in admissions. From reviewing undergraduate admissions documents, the test model is identified in the public sector and the mixed model-type requirement in many private institutions.

#### **1) The Type**

Students must pass entrance tests in order to accede to higher education. Minimum scores are determined yearly by individual higher educational institutions. After test administration, the NEC sends an institution a ranked list of candidates who have attained the minimum score for admission. Institutions must admit students based exclusively on these lists (MOE, the Republic of Georgia, 2004).

#### **2) The Mixed Model-type Requirement**

This was observed in one private higher educational institution, namely, the Georgian American University (<http://gau.caucasus.net/eng/admissiondoc.php>), where in addition to the national entrance test scores, students go into further evaluation through interviews for selection.

## **III. Equity of Access**

This part reviews equity of access measures in light of the diversified models and types in undergraduate admissions in the countries selected.

### **1. East Asia**

Article 9 of the Chinese law promulgates that all citizens shall enjoy equal opportunity of education regardless of their nationality, race, sex, occupation, property or religious belief. In addition, the state shall help all minority nationality regions develop educational undertakings in light of the characteristics and requirements of different minority nationalities. Despite this law, unbalanced development of regional economies and a wide income gap among different social classes makes equity of access problematic.

According to OECD (2007), inequity of access is reflected in the disparity between urban and rural areas, particularly that students from rural areas have less access to higher education and fewer financial resources than their counterparts in cities. Despite this, China has stridden towards providing equity of access in higher education.

#### **a. Lowering Cut-off Scores**

Admissions in China give preferential treatment to the disabled, the disadvantaged and ethnic minority people in remote areas. According to the MoE in 1980 which is still applicable to the present (2009), the minimum score requirements will be lowered for minority applicants from

border areas, mountain regions, pastoral areas and other areas populated by minorities. All higher educational institutions are open to minorities whose test scores are lower than the cut-off score.

**b. Changing Test Dates**

In 2003, entrance test days were changed from July to June when the weather was more comfortable (Finnish National Board of Education, 2007). The aim was to give equal chances to peasants and people from agricultural areas.

**c. Lifting Age and Marital Status Restrictions**

In April 2001, the MoE lifted restrictions on marital status (the requirement to be single) and age (a maximum age of 25 years) (National Center for Education Development Research of the Ministry of Education of the P.R. of China, 2007), allowing for greater equity.

**d. Financial Allocations**

The Chinese government has taken proactive measures to better promote equity through providing loans to students from impoverished families (Finnish National Board of Education, 2007). Commercial banks appointed by the government provided loans to needy full-time students.

**2. North America**

Equity measures in the U.S. are outlined along affirmative action, remediation, re-admission, and financial aid.

**a. Affirmative Action**

Affirmative action in the U.S. represents a tutelage for policies and programs that take race/ethnicity and gender into account. Affirmative action programs provided bonus points for, and/or financial assistance to, students. Many courts ruled against using reservation or quota systems in higher education. For instance, in the Regents of the University of California vs. Bakke (1978), the Supreme Court held that the UC Davis Medical School violated the “equal protection clause” of the XIVth Amendment of the U.S. Constitution by fixing quotas for underrepresented minorities. According to this verdict, race and ethnicity could be considered as “one factor among many”, but not as “a dominant factor”. One can give some weight to race or gender or any other factor, but that cannot be the sole criterion for admission to a college or university in the U.S. (Douglass, 2005). These can be reflected in measures of equity which concern the different groups that attend higher education. With the exception of Texas which provides access to all students to prestigious higher educational institutions provided that they were ranked in the top percentile of their high school graduating class (Clancy et al, 2007), students can appeal to revoke an unfair admission decision.

**b. Admission by Remediation**

All (98%) of public two-year colleges and 80% of public four-year institutions offered at least one remedial in reading, writing or mathematics in fall 2000. (<http://www.ed.gov/news/pressreleases/200311252003/11/.html>).

**c. Re-admission**

Where students applying to a certain higher educational institution can later shift to another major, but not the original major for which they were not granted admissions, unless re-admissions is considered based on fulfilling the specific admissions requirements for that particular major. In addition, students who were not successful in getting admitted to a certain major, usually hard sciences, are given the opportunity to enroll in another less grade-demanding major, such as humanities, social sciences and business administration where the students have already set the schools they wish to enter by priority in the application form (<http://www.ecu.edu/cs-acad/ugcat0708/admission.cfm#readamission>).

#### **d. Financial Aid**

Equity in U.S. higher education encompasses financial aid which consists of work-study grants, loans, and scholarships. Certain requirements on the part of the financial aid applicant are required such as proof of good point average and need (National Center for Educational Statistics, 2007, <http://nces.ed.gov/pubs20042004075/>.pdf).

### **3. Europe**

#### **a. The United Kingdom**

Equity of access is protected by the Disability Act of 1995, the Race Relations Act of 1997 and its amendments, the Sex Discrimination Act and other legislation. Despite these, there have been concerns in the U.K. about the low participation rates of lower socio-economic groups in higher education since the 1960s (e.g., Robins Report, 1963). Today, the issue of equity of access in the U.K. engages higher educational institutions and policymakers with the aim of remedying inequalities of access, particularly among students from low socio-economic backgrounds. Equity measures in the U.K. are represented in clearing, Deliberate Action, and financial allocations.

##### **1) Clearing**

Within the national admissions process in the U.K. undertaken by UCAS, an important factor in placing students in higher education is based on matching enrollment demand to higher education, where there is capacity, i.e. available seats even if it was not the student's first choice identified in his/her application to UCAS. This process is called clearing and seeks to provide a seat for students who passed A-level somewhere in the system of higher education.

##### **2) Deliberate Action**

Deliberate Action in the U.K. focuses on expanded outreach programs to minority groups, particularly the "underserved" (Douglas, 2005), with substantial autonomy given to higher educational institutions to alter admissions policies to increase students' diversity. Existing research (e.g., Greenbank, 2006) argued that the practice for lowering standards for minority groups is observed more frequently in "recruiting" institutions than in "selecting" institutions.

##### **3) Financial Allocations**

In 2004 the Office for Fair Access (OFFA) was established to widen access in U.K. higher education. The OFFA signed a five-year "access agreement" with 124 higher educational institutions that charge fees above £1,225 for home students. The widening participation allocation is distributed to higher educational institutions by the Higher Education Funding Council for England, Scotland and Wales (HEFCE). These allocations seek to encourage students from areas that have low participation in higher education to apply.

#### **b. Austria**

Equity measures in Austria differ based on sector of education, where all passing students are given access to public institutions and other opportunities are provided in the private sector for those who fail or whose grades were not high enough to guarantee a seat. This later is most applicable in Fachhochschule institutions where seats are barely available for all students. Equity measures are re-admission and financial allocations.

##### **1) Re-admission**

Admissions to the Fachhochschule are highly competitive. Applicants who do not qualify for admissions because of their grades and other admissions criteria have two options, either they reapply the following year (Leitner, 2004), or may begin university study in any discipline in the public sector. At the public sector, access is given to all students regardless of background, provided they meet the required admissions criteria.

## 2) Financial Allocations

Higher education students in Austria pay fees. However, study grants are provided to the needy and females. Only in the case when the parent's income is not high enough and if the student can prove that she/he will successfully complete his/her study, then, a study grant is provided. ([http://en.wikipedia.org/wiki/Education\\_in\\_Austria#Higher\\_education](http://en.wikipedia.org/wiki/Education_in_Austria#Higher_education)). It is worth mentioning that public funding to finance some Fachhochschule is based on the record of recruiting females (Kottmann, 2008).

### c. France

Access to higher educational institutions is free. It is known that all students pass through an attrition period in their first year of enrollment where classes in certain majors might be overcrowded; thus, the first year final examination weeds out failing students. While admission is free, a second path admission that seeks to widen participation of minority groups in elite institutions is remarkable.

Second Path Admissions: Grandes écoles can use a second admissions path to widen their student body. According to (Clancy et al, 2007), these strategies included building links with high schools in poor areas, registering a higher number of immigrant students by offering them scholarships based on merit and also by preparing them for the different examinations and requirements needed to enroll in Grandes écoles.

## 4. Eurasia

### a. The Republic of Georgia

The only equity measure in Georgian higher education is preparation for success in the entrance test and remediation in the private sector.

#### 1) Preparation for Success in the Entrance Test

According to Helms (2008), free classes are provided to prepare students in minority regions for the national entrance exam. Thus, this policy suggests a step towards equity in preparation for the national-based entrance test.

#### 2) Remediation

In the private sector, remediation is offered to students who need additional skills in languages and mathematics for pursuing normally in their respective majors based on their entrance exam results.

## IV. Comparative Conclusion

Several conclusions emerged from this study. Although the three regions (East Asia, North America, and Europe) are not representative of all continents, they still provide lessons that can serve policymaking processes in Arab higher education. The presentation below compares undergraduate admissions and equity of access with quality implications in the seven countries.

### 1. The Type

The test-type was the most dominant criterion for undergraduate admissions in the seven countries. In the European countries (France, Austria, and the U.K), the dominant type for undergraduate admissions was the nationally administered school-leaving examination, with the exception of some elite institutions such as Russell Group institutions in the U.K. and Grandes écoles in France, and in the Fachhochschule sector in Austria where additional testing and/or screening was required. Thus, two types emerged; single test (school-leaving examination), and multiple testing in elite institutions for selectivity (U.K. and France) or

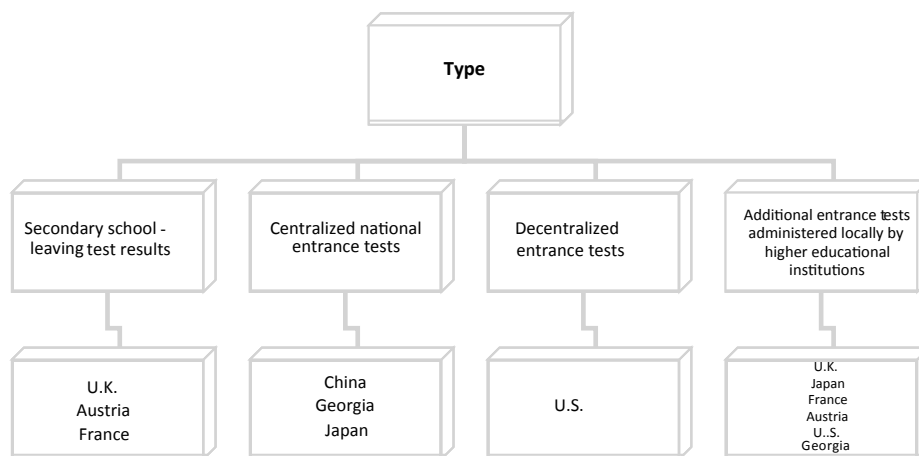
selectivity because of limited seats (Austria).

In East Asia and Eurasia the type was mainly the national entrance test in the absence of school-leaving nationally administered tests. A similar pattern emerged in a non-centralized country, the U.S. where according to (Alon et al, 2007) 94% of all institutions considered the SAT for undergraduate admissions in light of absence of national school-leaving examination. Using a single test or multiple testing was observed in centralized and decentralized countries, mainly attuned to either selectivity or availability. For instance, some Ivy League<sup>5</sup> institutions in the U.S. require either SAT or ACT scores without further testing, while further scrutiny is conducted for selectivity. To quote Harvard University: “The Admissions Committee continues to consider test results in light of students’ educational opportunities”, where the percentage of applicants admitted in 2008 was 7.7% only, <http://collegeapps.about.com/od/collegerankings/tp/most-selective-colleges.htm>. The reason of this low admission rate is that students are only admitted in case they scored very high in SAT or ACT tests. Other elite institutions in the U.S. require further testing of aptitude and ability of students (Douglass, 2007). Thus, within the type in the U.S., either a single test is considered, or multiple-testing. The general rule is that elite institutions relying on a single-test require very high scores for admissions, and also other elite institutions require multiple testing for selectivity. A similar pattern emerged in Russell group institutions in the U.K. where either a single test is required (A-level) but students are selected based on highest scores, or further testing as in Oxford. A difference was observed in elite institutions in Japan where in addition to the national test scores, further testing is required for selectivity as in Tokyo University of Science (private) (see <http://www.sut.ac.jp/en/admis/>) or Hokudai University (<http://www.hokudai.ac.jp/bureau/nyu/english/en/admissions01.html>).

In China reliance was on the national test score only without further testing. In another centralized country, i.e., Georgia, besides the national entrance test, further testing is required in many private higher educational institutions for placing students.

Within the type, diversity was pervasive in the countries studied as shown in Figure 1.

**Figure 1: Typology of test-type in seven countries**



<sup>5</sup> The term also has connotations of academic excellence, selectivity in admissions, and social elitism.

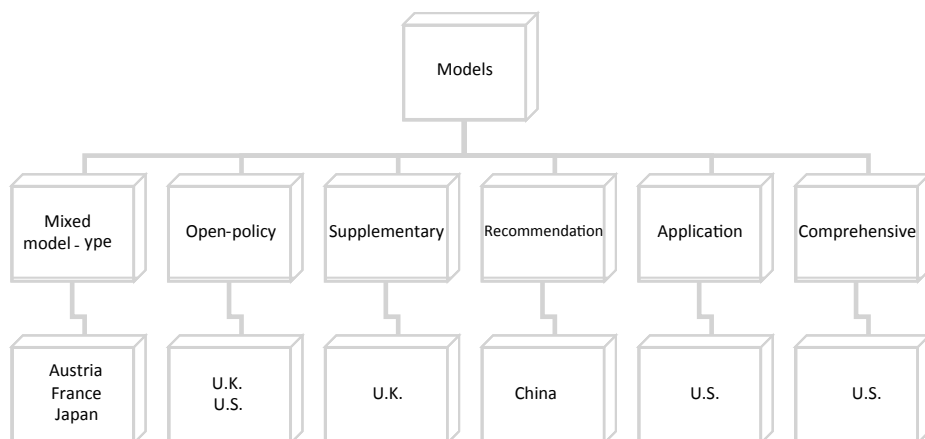
## 2. Models

Five models and one mixed model-type requirement were identified. In three centralized countries (Japan, Austria and France), the mixed model-type requirement was dominant. This mixed model-type is mainly employed by elite institutions in Japan and France for selectivity whereas in Austria's Fachhochschule for securing seats. Two decentralized countries (U.K. and the U.S.) adopted an open-policy admissions where retention overshadowed admissions, i.e., all students are admitted as is the case of two-year community colleges in the U.S. and the Open University in the U.K. where students undergo a period of 'trial', either they pass their courses, or discontinue their education due to failure.

The remaining four models are: the supplementary model in the U.K, the application model and the comprehensive model in the U.S. and the recommendation model in China. In the U.K. the supplementary model is not widespread, and is used particularly in England and Wales where an interview only is required besides A-level, and is mostly employed in elite institutions. The application model in the U.S. follows a rolling admission, i.e., there are no set deadlines for applying unlike the rest of countries where admission has set dates. In this model, admissions relies on the application itself which requests students' high school record, SAT or ACT scores, extracurricular activities, applicants' essays, interview and letters of recommendation. This model corresponds to the mixed-model type requirement only when test scores are presented and is unique since it is limited to a few institutions which are members of not-for-profit association known as the Common Application, Inc. The third model is the comprehensive one which is used by many elite institutions in the U.S. The fourth model is the recommendation model which relies on a letter of recommendation and used exclusively in China on a very low scale. It is worth noting that the U.S. has the highest diversity of undergraduate admission models.

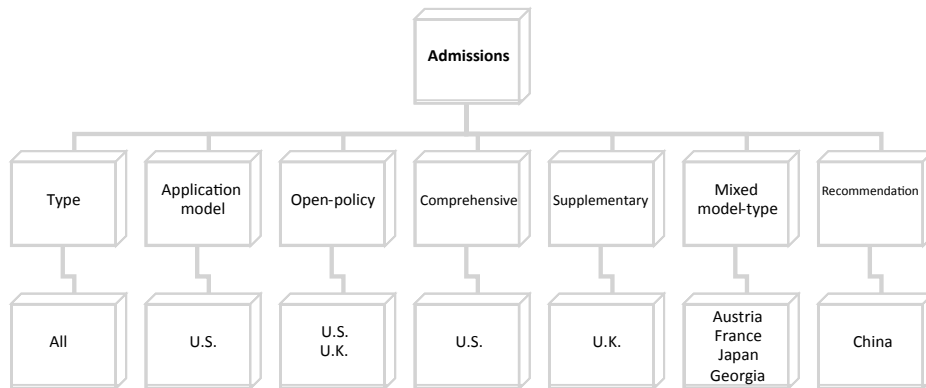
In brief, adding to Helm's "type" and "model" typology of admissions, this paper identified 'kinds' of types and models that are used in the seven countries selected for the study (see figures 1 and 2).

**Figure 2: Typology of models of undergraduate admissions**

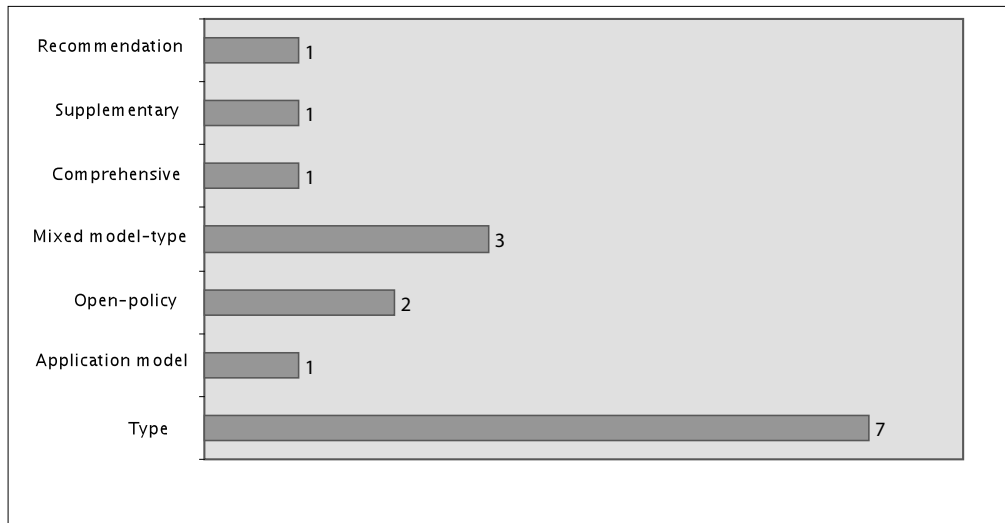


In the countries studied, both centralized and decentralized, the dominant factor for undergraduate admissions was the type (see figures 3 & 4). It is worth noting that diversification of undergraduate admissions including both types and models was higher in decentralized countries than in centralized ones with the U.S. scoring the highest diversity (see figure 5).

**Figure 3: Typology of admissions**

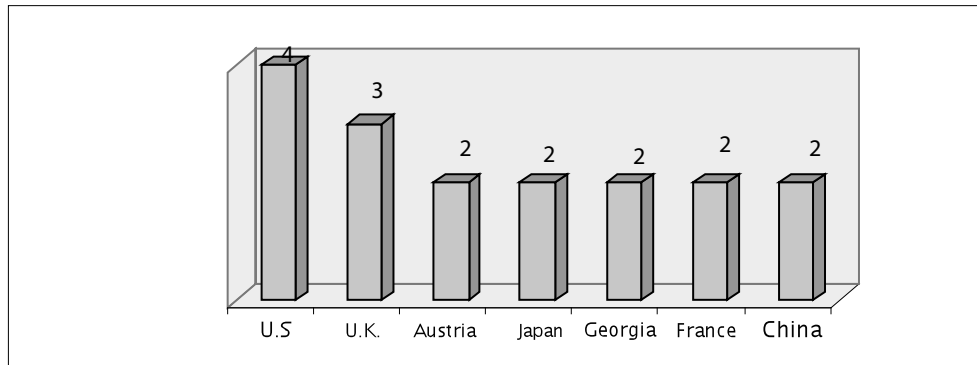


**Figure 4. Distribution of admission kinds synthesized from the seven countries**





**Figure 5: Diversification of admissions typology synthesized from the seven countries**



### 3. Equity of Access

In all studied countries, opportunities for access were evident in most higher education institutions. In geographical terms, higher education is made accessible to remote areas in Japan and China and more seats are allocated in Austria. Despite these developments, two pertinent issues are worth discussing in a comparative perspective. The first concerns whether or not types and models in undergraduate admissions in the seven countries offer additional opportunities targeting what is described in the U.K. as the underserved or the underrepresented in U.S. parlance, or minority groups as in China and France, and females and the economically disadvantaged as in Austria. The second issue is whether equity measures, such as lowering cut-off scores and remediation in test-type sacrifice quality on the altar of justice.

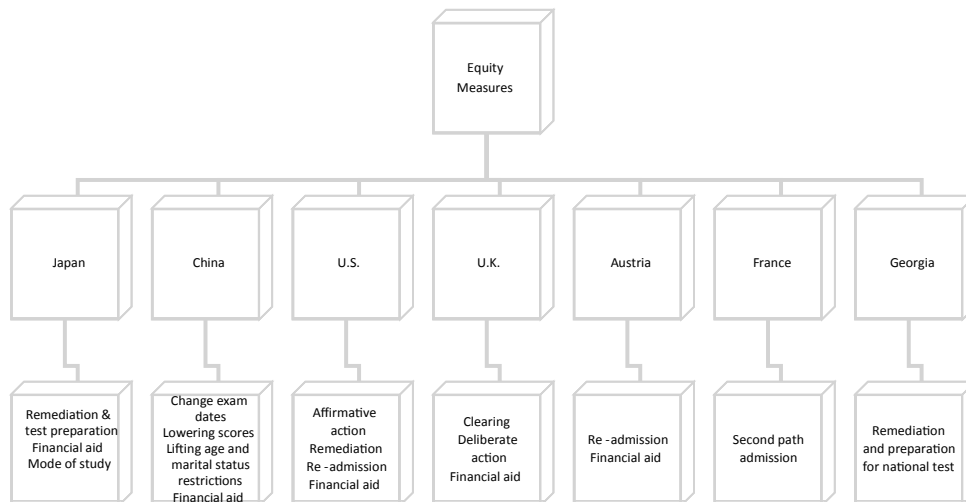
Equity measures were evident in undergraduate admissions, although with different weights given in each country. In Georgia, equity measures concerned remediation in the newly growing though with a quick pace private sector where low grade students in the national exams can take remedial courses and ultimately find a place in private higher education as is the case of the Georgian American University (see <http://gau.caucasus.net/eng/admissiondoc.php>). In the public sector, free classes are provided by the government to prepare students in minority regions for the national entrance exam (Helms, 2008), although minority access to higher education under the former Soviet Union was not an issue of concern. Turning to financial aid, in the private sector there is mentioning of finances to students such as the Georgian American University but not in other institutions such as the International Black Sea University <http://www.ibsu.edu.ge/index.php/Student-Affairs/Admission-and-Tuition.html>. Thus, access to the private sector in Georgia is limited to financially capable individuals. In Austria, equity measures were mainly giving students another chance to enter the Fachhochschule, or transfer to state universities in the same major. Moreover, gender equity was observed in the conditional financing of the Fachhochschule where money is given by the government based on recruitment of females. In the public sector, financial aid is allotted to poor students.

In France, a distinguishing feature is the reaching out of elite institutions to embrace minorities through creating cooperative links with schools in remote areas populated by immigrants and socially disadvantaged groups. In Japan equity measures taken concerned the preparation

for the national entrance test and the establishment of Juku to accommodate for the ronins; hence providing additional opportunities to have students enroll in higher education based on achievement and merit. A similar pattern emerged in Georgia and the U.S. where one equity measure was remediation in the U.S. and Georgia in the private sector. Another characteristic is shared between Georgia and Japan, i.e., establishing preparatory schools for the national entrance test. The difference with Japan however, lies in that preparation in Japan was attuned to success while in Georgia it was for curbing corruption. With the exception of Georgia, a common feature in the countries studied was the financial aid allocations to students as one of the equity measures provided. In Japan financial aid was attuned to high achievers, in the U.S. for high achievers and minority groups and needy individuals, in the U.K. for the underserved and for high achievers in elite institutions, and in Austria for the needy in general. In China, financial aid packages including loans were provided to the needy and minority groups as well. From another perspective, the only country which provided the opportunity for appeal against a possible unfair decision in undergraduate admissions within Affirmative Action was the U.S.

In the comparative analysis, equity of access relating to test-type appeared in three countries; namely, China, the U.S. and the U.K. through lowering cut-off scores of tests but only for certain groups and only in less prestigious institutions, specifically in the U.S. and the U.K. Demographic equity measures were found in China which was the only country studied which seemed to have restricted access in the past to single marital status. Lifting age and marital status restrictions together with changing national exam dates provided equity of access to peasants, married students and older students in China; hence established a broader platform of diversity of access based on age, marital status, social class, and gender. Figure 6 summarizes the various equity measures adopted in the seven countries in relation to undergraduate admissions.

**Figure 6: Typology of equity measures in the seven countries**



Turning to quality, with the exception of Georgia, all countries studied had quality assurance mechanisms mostly addressing the institution's performance and adherence to quality standards whose detailed discussion is marginal in this study. Only three countries seem to have been concerned with quality of undergraduate admissions related to the test-type, i.e., the U.S., Japan, and Georgia. In the U.S. the concern is over the trustworthiness of SAT and ACT, their predictive validity on students' performance in higher education, and their possible discrimination against minority groups. These concerns had implications on many institutions which started to move away from the test-type to the comprehensive model. In Japan, one quality measure related to the test-type was evident in narrowing the gap between the content of the national entrance test and the school curriculum through establishing Juku schools for preparation. In Georgia quality issues concentrated on curbing cheating in entrance exams and bribery and established measures such as installing surveillance camera in exam halls to control the exam environment (World Education News and Reviews <http://www.wes.org/eWENR/05dec/feature.htm>). The aim of these measures in the three countries was to promote or strengthen equal opportunities for access in higher education based on the test-type. However, in the seven countries studied, no evidence existed with regard to assuring quality of models used and their prediction of students' success and performance in higher education.

## V. Overall Summary

From the above, it appears that undergraduate admissions are not static; they keep evolving in line with labor market demands and emerging social and political circumstances. This paper has shown patterns of change in undergraduate admissions, particularly in centralized countries (France, Austria and Japan) which started to move towards more diversity in their undergraduate systems, though such measures served three purposes, selectivity in Japan, availability in Austria, and alternative routes in France.

Ensuring equity of access in relation to quality was more attuned to the test-type while non-existent for models. Perhaps, this represented a double role of quality; one concerned with the institution as a whole through which admitted students benefit from quality education, where the other was limited to the test-type and in three countries only.

There remain issues worth considering in the countries studied which might have implications on undergraduate admissions in Arab higher education institutions. Among these issues is the concern over the predictive validity of entrance tests whether in centralized or decentralized countries. Do entrance tests predict students' success and performance in higher education? In the U.S. there is growing concern regarding the validity and reliability of SAT or ACT scores and also regarding their predictive validity. Further, does the national entrance test in Georgia assure assessment of the students' knowledge and abilities in pursuing specific majors in light of rampant corruption which is also a characteristic of many other developing nations? Moreover, are entrance tests reflective of the school curriculum?

The above have implications on higher educational institutions in Arab states, where there is a distinct paucity of evidence with regards to the continuity between school-leaving exams and the curricula requirements of higher education. Moreover, it is known that many higher educational institutions that model after the American system in Arab states, particularly in Lebanon consider SAT scores and TOEFL. Are there measures of predictive validity of SAT or TOEFL in these institutions? Further, are these same institutions considering models rather than types, or a combination of both? From the preceding presentation, there seems to be a trend of change

and reform in higher education with a tendency leaning towards granting autonomy to public higher educational institutions. This issue raises the concern regarding the need to grant public higher educational institutions in Arab states, considerable autonomy in running their academic affairs away from political intervention.

We have seen that undergraduate admissions in many of the countries studied consider equity of access measures to increase diversity and widen the participation of the underprivileged groups. In light of this, one might ask about the equity measures used in Arab higher education. These questions are left to policymakers and researchers in Arab states. Overall, undergraduate admissions between equity of access and quality remain important issues for further exploration in Arab higher educational landscape.

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