Transition from Secondary Education to Higher Education in India

Jandhyala B G Tilak
National University of Educational Planning & Administration
New Delhi, India
• Education in India
• Transition to Higher Education
• Admission Policies and Procedures
  – Entrance tests
  – Reservations
• Impact on Secondary Education
• Concluding observations
EDUCATIONAL STRUCTURE IN INDIA

<table>
<thead>
<tr>
<th>Enrolments (Mlns)</th>
<th>GER (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher</td>
<td>26.7</td>
</tr>
<tr>
<td>Higher Secy</td>
<td>19.4</td>
</tr>
<tr>
<td>Secondary</td>
<td>31.8</td>
</tr>
<tr>
<td>Upper Primary</td>
<td>62.1</td>
</tr>
<tr>
<td>Primary</td>
<td>135.3</td>
</tr>
</tbody>
</table>
Growth of Enrolments in Secondary and Higher Education in India

![Bar chart showing growth in enrolments from 1980/81 to 2010/11 for both secondary education (Grades 9-12) and higher education.](chart_image)

- Enrolment in Higher Education
- Enrolment in Secondary Education (Grades 9-12)
Gross Enrolment Ratio in Secondary and Higher Education

<table>
<thead>
<tr>
<th>Education Level</th>
<th>2004-05</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary</td>
<td>57.7</td>
<td>62.7</td>
<td>65.0</td>
</tr>
<tr>
<td>Higher Secondary</td>
<td>27.8</td>
<td>35.9</td>
<td>39.3</td>
</tr>
<tr>
<td>Higher</td>
<td>10.0</td>
<td>15.0</td>
<td>18.8</td>
</tr>
</tbody>
</table>
## Growth of Higher Education in India

<table>
<thead>
<tr>
<th>Year</th>
<th>Colleges</th>
<th>Univs</th>
<th>Enrolment (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947-48</td>
<td>516</td>
<td>20</td>
<td>0.2</td>
</tr>
<tr>
<td>1970-71</td>
<td>3,277</td>
<td>93</td>
<td>2.0</td>
</tr>
<tr>
<td>1990-91</td>
<td>6,627</td>
<td>184</td>
<td>4.4</td>
</tr>
<tr>
<td>2000-01</td>
<td>10,152</td>
<td>254</td>
<td>8.6</td>
</tr>
<tr>
<td>2010-11</td>
<td>31,324</td>
<td>600</td>
<td>14.6</td>
</tr>
<tr>
<td>2011-12</td>
<td>34,000</td>
<td>621</td>
<td>20.3</td>
</tr>
</tbody>
</table>

**Gross Enrolment Ratio (2013-14): 19.4 per cent**
Higher Education

• Targets for expansion in XI and XII Five Year Plans
  – Expansion, Excellence and Equity
  – Gross Enrolment ratio to reach 15% by 2012
  – and 30% by 2020
Transition Rate

• Data problems
  – No data on enrolments in first year entrants in higher education

• No reliable estimates on transition rates

• Two Types of Transition Rates
  – Transition Rate, based on enrolments in Grade XII and enrolments in the first year of higher education.
  – Eligible Transition Rate (also called eligible enrolment ratio), based on pass-outs in Grade XII (Higher Secondary Graduates) and enrolments in the first year of higher education.
Secondary Education Examinations

• Secondary/Higher Education
  – Board Examinations
    • 2 Central Boards, 32 State Boards
    • Wide variations across boards
    • No equalising formula
  – Importance of Scores in Board Examinations
    • Secondary (X) Board Exam: for channelling the students to different streams -- students eligibility for admission in higher Secondary in Humanities, commerce and professional (Engg, medicine) fields of study
    • Higher secondary (XII) Board Exam: eligibility for admission in higher education
Pass Percentage in Higher Secondary Board Examinations (%)
Transition Rates to Higher Education

Transition Rates to Secondary Education

based on enrolments in Grade XII and estimated enrolments in first year of undergraduate education
Eligible Enrolment Ratio in First Yr Higher Education

- Based on pass-outs Grade XII and estimated enrolments in first year of undergraduate education.
Eligible Enrolment Rates in Higher Education, by Discipline

- **Arts**: 24.8, 24.2, 26.1
- **Commerce**: 8.5, 8.7, 8.3
- **Science**: 8.9, 9.7, 9.2
- **Engineering/Technology/Architecture**: 6.0, 5.8, 6.5
- **Medicine**: 0.8, 0.7, 1.0
- **Agriculture and allied courses**: 0.2, 0.3, 0.2
- **Management**: 0.5, 0.7, 0.7
- **Education/Teacher Training**: 2.1, 2.2, 2.4
- **Law**: 0.6, 0.7, 0.8
- **Others**: 0.7, 0.7, 0.8
- **Post-school Diploma**: 8.7, 8.1, 6.5

Categories include Arts, Commerce, Science, Engineering/Technology/Architecture, Medicine, Agriculture and allied courses, Management, Education/Teacher Training, Law, Others, and Post-school Diploma.
Criteria for Admission in Higher Education

• Merit
  – Examination scores in the Higher Secondary Board examination
  – Score/rank in the entrance examination, if any

• Quota (reservations)
  – Constitutional
  – Others
Basis for Admission in Higher Education: Merit

• General Higher Education
  – First (Bachelors) Degree (General)
    • Generally no entrance tests
    • Admission based on marks in Higher Secondary Board Examination
  • (Higher Secondary Boards)
    – 2 central (Central Board of Secondary Education; and Council for Indian School Certificate Examination)
    – 32 state government boards
  – Second (Master’s) Degree (General)
    • Marks at Bachelor’s level
    • Mostly university based entrance test
    • Interviews
Admission to Higher Professional Education: Entrance Tests

1. National
   • Engineering & Technology
     – Joint Entrance Examination (JEE)
   • Medicine
     • All India Pre-Medical Entrance Test (AIPMT)
   • MBA
     – Management Aptitude Test (MAT)

2. State Level
   – State level common entrance tests

3. University level entrance tests
Basis for Admission in Higher Education: Reservations

- Proportion of seats reserved for (proportionate to population)
  - Scheduled Castes 15%
  - Scheduled Tribes 7.5%
  - Other Backward Communities 27%
  - Total constitutional reservation 49.5%
  - Others
    - Physically challenged 3.0%
    - Domicile basis varies 50-85%

- Lower cut-offs for admission in entrance tests for the above less advantaged

- Additional Support in terms of extra teaching
  - Resource support in the form of special educators and rehabilitation professionals (for physically challenged)
Reservations: Concerns

• Reservations
  – Increasing size of quota
  – Addition of more and more caste groups
  – Indefinite continuation
  – Provision in private institutions
  – Vote bank politics
Impact of Admission Policies on Secondary Education

- Entrance tests
  - Students prepare for entrance tests (e.g., in professional education) from Grade VI onwards (if not earlier), as CEE (e.g., JEE) is too tough
    - Preparation for multiple tests
    - Normally students take 4-5 tests in 1-2 months
  - Neglect of main course of study at higher secondary level
  - Extra coaching
  - Added stress, performance in Degree courses
  - Extra financial burden on parents
  - Widening inequalities
Impact of Admission Policies on Secondary Education

• Reservations
  – Seeds of discontent
  – Growth in class tensions
  – Admission in private institutions
  – Emigration to foreign countries for studies
  – De-motivation of students
Need for a Single Common Entrance Test

• Recent proposals
  – One common entrance for all professional education (Medicine, Engineering..)
  – One common entrance for each discipline separately (medicine, engineering..)
  – Still they are under discussion

• Issues involved
  • State autonomy/ university autonomy
  • Entrance examination as a source of revenue
  • Entrance examination as a powerful control mechanism
Problems and Issues

- Low employment of secondary graduates and Low transition rates
- Low quality of higher secondary graduates
- Varying quality of various state level board examinations and their grading systems
- State level quotas (domicile) and restriction on flow of students
- High fees in public and higher in private institutions
- Frequent changes and confusion
- Lack transparency
- Lack of Predictive validity of the criteria for admission
What is needed?

• Improve the quality of higher secondary education
• Raise transition rates
• Skill development at Higher Secondary level
• Expand higher education
  – Public
  – Private?
• Single common entrance test
• Ensure Transparency
• Ensure Predictability
Thank you