NON-COGNITIVE SKILLS

COUNTRY RESEARCH STUDY - INDIA
Presentation Agenda

• Background
• Landscape
• Definition Equivalence
• Implementation
• Snapshots of Research
Background

- Historical — Brahminic, colonialist, missionary, post-independence

- Socio-Cultural — caste system, patriarchy

- Economic — population, demographic structure, inclusive growth (12th Five Year Plans — shifting focus to inclusion, equity, quality, learning outcomes and skills)
Population 1.27 billion (approx.)
- 0-25 years 50%
- Below age of 35 years 65%

1.3 million schools
- 25% private and rising at 10% annually (Aser 2012)

GER – 96% at primary level; 59% at secondary;
## Definition Equivalence

<table>
<thead>
<tr>
<th>Domains</th>
<th>Examples of key characteristics</th>
<th>CBSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical and innovative thinking</td>
<td>Creativity, entrepreneurship, resourcefulness, application skills, reflective thinking, reasoned decision-making</td>
<td>Thinking Skills – self-awareness, problem-solving, critical thinking, dealing with stress, creative thinking</td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td>Presentation and communication skills, leadership, organizational skills, teamwork, collaboration, initiative, sociability, collegiality</td>
<td>Social Skills – interpersonal relationships, effective communication, empathy etc.</td>
</tr>
<tr>
<td>Intrapersonal skills</td>
<td>Self-discipline, enthusiasm, perseverance, self-motivation, compassion, integrity, commitment</td>
<td>Emotional skills – managing feelings/emotions, dealing with stress etc.</td>
</tr>
<tr>
<td>Global citizenship</td>
<td>Awareness, tolerance, openness, respect for diversity, intercultural understanding, ability to resolve conflicts, civic/political participation, conflict resolution, respect for the environment</td>
<td>Affiliation with organisations like National Cadet Corps, Red Cross, Scouts and Guides etc. as part of school co-curricular activities is encouraged</td>
</tr>
<tr>
<td>Optional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical and psychological health</td>
<td>Healthy lifestyle, healthy feeding, physical fitness, empathy, self-respect</td>
<td>Yoga and Health programs; Nutrition programs at elementary stage</td>
</tr>
</tbody>
</table>
Implementation

- Central Board of Secondary Education (CBSE) – Continuous and Comprehensive Evaluation (CCE)

- CCE
  - Formative assessment – assesses non-cognitive skills
  - Summative assessment

- Impact
  - 12,300 CBSE schools
  - Mandate for all state government schools – maximum impact
State Level Implementation

- All states have to adopt CCE by mandate
- States have stepped up implementation in schools making good progress (Himachal, Gujarat, Kerala, Jharkhand, Goa)
- Implementation and teacher training in process
Snapshots of our Research
Rationale for Non-Cognitive Skills Integration (Teachers)

Rational Behind Integrating Non-cognitive Skills (% Respondents)

- Response to employer demands: 19%
- Excessive pressure on students: 48%
- Declining student learning achievement: 32%
- Boosting economic development: 16%
- Meeting social demand: 48%
- Increased international competition: 54%
Rationale for Non-Cognitive Skills Integration (Policy)

Rational Behind the Introduction of Non-cognitive Skills (Number of Respondents)

- Response to employers' demand: 7
- Excessive pressure on students: 11
- Declining students' learning achievement: 8
- Boosting economic development: 9
- Meeting social demand: 14
- Increased internation competition: 13
Clarity of Learning Objectives for Non-Cognitive Skills

- 55% Completely agree
- 26% Somewhat agree
- 10% Somewhat disagree
- 6% Completely disagree
- 3% Do not know
Changes Made For Integration into Curriculum

Changes to Integrate Non-cognitive Skills

- Advocated to stakeholders: 9
- Reformed student assessment system: 12
- Conducted in-service teacher training: 12
- Reformed pre-service teacher training: 10
- Developed teaching guides for teachers: 11
- Revised textbooks: 10
- Reformed the curriculum: 8
Challenges In Integrating Non-Cognitive Skills

Major Challenges in Integrating Non-cognitive Skills in the Curriculum

- Introduction of relevant assessment: 10
- Introduction/increase of experts: 6
- Introduction/increase of group activities: 10
- Textbooks revised: 7
- Use of ICT increased: 8
- Total lesson hours decreased: 2
- Subjects modified to include such skills: 6
- Subjects were merged/integrated: 8
- New subjects introduced: 8
Challenges in Implementing Non-Cognitive Skills

Challenges in Implementing Non-cognitive Skills (Number of Respondents)

- Resistance from the student: 4
- Lack of understanding among parents: 9
- Insufficient teaching/learning materials: 10
- Lack of time conducting related activities: 9
- Lack of training among teachers: 5
- Lack of capacity among teachers: 4
- Lack of understanding among teachers: 6
## Integration of Non-cognitive skills in regular subjects

<table>
<thead>
<tr>
<th>Subject</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>Data handling, critical thinking, problem solving, conceptualisation, build logical outlook, thinking skills by integrating with other subjects, logical reasoning</td>
</tr>
<tr>
<td>Natural Science</td>
<td>Project based learning, excursion, exhibition, group activity, environment sensitivity, experiments, surveys, interviews</td>
</tr>
<tr>
<td>Social Science</td>
<td>Exhibition, spatial intelligence, sensitisation to the world, relating issues, role plays, heritage walks</td>
</tr>
<tr>
<td>National Language</td>
<td>Group activities related to expression, love for country, debates</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>Conducting cultural activities related to other nationalities, respect other / inter-cultural view, conversation</td>
</tr>
<tr>
<td>Moral / social studies</td>
<td>Workshop on moral values, group discussion, personality development, moral character, role play, talks, trips and tours, film shows, story telling</td>
</tr>
<tr>
<td>Arts – creative arts, music, drama</td>
<td>Singing, dramatisation, solo and group activities, exhibition, creativity, aesthetic skills, performances in groups and as individuals</td>
</tr>
<tr>
<td>Others</td>
<td>Student Council, Class charter activities, integration of various activities under co-scholastic activities to strengthen the scholastic through different clubs and houses and formative assessment, use of ICT, leadership and visual performing arts, scientific and literary activities</td>
</tr>
</tbody>
</table>
THANK YOU