A Comparative Study of Early Childhood Education and Care in Selected High-Performing Countries

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Presentation Overview

Part I: Why Now: Study Rationale
Part II: Goals, Design, Products
Part III: Preliminary Findings
Part IV: Building Blocks: Integrating the Findings
Part V: Using the Building Blocks: Lessons for ECEC Globally
Part I
Why Now: Study Rationale
Around-the-Globe Trends

- Globalization
- Environment
- Technology
- Gender Roles
- Economic and Societal Changes
Around-the-Globe Trends

**Globalization**
- Ease of transport and prevalence of inter-connected economies

**Technology**
- Instant communication, handheld technology, and online learning

**Economic and societal changes**
- Greater mobility within/across countries, inter-ethnic interactions

**Gender roles**
- Women and girls taking on diverse leadership roles

**Environment**
- Global concerns for the earth
In-the-Lab Trends

- Neuroscience
- Evaluation
- Econometric
- Implementation
- Systems
In-the-Lab Trends

**Neuroscience**
- The early years are THE formative period of development
  - Young children’s brains grow to 80% of adult size by age 3 and to 90% by age 5
  - Young children grow faster and learn more in their early years than in any other period of life

**Evaluation Science**
- High-quality early childhood care and intervention can prevent negative effects from taking hold and have powerful benefits
- Strongest effects of high-quality care are found for children from families with the fewest resources and who are under the greatest stress

**Econometric Science**
- Investments in high-quality programs produce economic results
- These savings are due to a reduction in social costs for incarceration, welfare dependence, teen pregnancy, special education, and reduced grade retentions
In-the-Lab Trends

**Implementation Science**

- Implementation science strives to integrate research into policy and practice

**Systems Science**

- Contends that if you separate the parts from the whole, you are reducing the ability to achieve goals
- Applies to early childhood because there are so many moving parts that must be considered together
On-the-Ground Trends

- Increased Investment
- Growing Public Will
- Plentiful Efforts
- Functional Theories of Change
- Viable Practice Models from Which to Learn
On-the-Ground Trends

**Increased investment**
- Many of the 116 countries with data increased their commitment to education – 38 by 1% or more of GNP between 1999 and 2012 (UNESCO, 2015)

**Growing public will**
- Political and business leaders all extoll the benefits of ECE
- ECEC is routinely reported in the press (Gardiner & Gustafsson-Wright, 2016)

**Plentiful efforts**
- Much invention and experimentation, particularly for younger children (UNICEF, 2016)

**Viable Models of Practice**
- Development of national early learning frameworks helps support ECEC quality and equity in countries worldwide

**New research and functional theories of change**
- Methodologies for planning and evaluation promote social change in ECE, along with new theoretical models (Kagan et al., 2016)

In-the-Field Challenges

- Quality
- Equity
- Inclusivity
- Sustainability
- Efficiency
The Quality Challenge

• *Services for young children are not of high quality*

• *Innocenti Report Card (UNICEF, 2008)*
  
  • Out of 25 OECD countries surveyed, only 3 meet all 4 benchmarks pertaining to quality (Sweden, Iceland, and Denmark)
  
  • Only 2 countries meet 3 of the quality benchmarks (Finland and France)
    
    • *Benchmarks for minimum level of staff training, minimum proportion of staff with higher level education, minimum staff-to-children ratio, and minimum level of public funding*

The Quality Challenge

Presence of well-defined quality* guidelines to cover basic ECEC needs

- Quality is assessed according to: student-teacher ratio, average teacher wages, curriculum guidelines, teacher training, health and safety guidelines, date collection mechanisms, linkages, and parental involvement

The Equity/Inclusivity Challenge

• **Different kinds of inequities by:**

  • Wealth
    • Children living in the poorest households are up to 10x less likely to attend ECEC than those in the richest (UNICEF, 2016)

  • Geographic region
    • Only 1 in 5 children in developing countries were participating in pre-primary education in 2011 (Global Partnership for Education, 2013)

  • Urban/rural residence
    • In two-thirds of OECD countries surveyed, enrollment in pre-primary education was lower in rural settings than in cities (OECD, 2017)

Equity/Inclusivity

- Inequities by geographic region

Gross enrollment in pre-primary education by region, 2014

The Efficiency/Sustainability Challenge

- **Conflicting expectations, misaligned system requirements, and programmatic firewalls can create barriers to an efficient ECEC system**
  - Results in service duplications and the diversion of funds from direct services
  - Lack of coordination across levels of government means investments are not operating as efficiently or effectively as possible

- **Countries without sustained funding and governance are characterized by:**
  - Fewer positive gains for children
  - More difficulty in establishing equitably distributed and inclusive programs
  - Lower levels of quality
  - More difficulty in implementing all infrastructure gears (Bertram, 2016)

All Children are Competent Learners

Services that Promote High QUALITY Pedagogy and Learning

All Children are Equal Rights Bearers

INCLUSIVE Services that Distribute a Range of Services EQUITABLY

All Children Live in Complex Contexts

Services that are EFFICIENT, ORGANIZED, and SUSTAINED
Why this Study, Now?

• **It’s a new era**
  - Unprecedented global changes and ECEC investments make this the perfect time
  - Major challenge to optimize ECEC performance
    - International benchmarking assessments show wide inter- and intra-country variation in student performance
  - Need for fresh thinking
    - Pay more attention to quality, equity/inclusivity, and sustainability/efficiency
Three Areas of Focus

- Quality
- Equity/Inclusivity
- Efficiency, Organization, and Sustainability
Part II

Goals, Design, Products
Study Goals

Study Design

Study Products
Study Goal: To Improve ECEC

1. Learn from Best Countries
2. Use State of the Art Theories and Knowledge
3. Produce a Quality Study
4. Create Useful Products for Diverse Audiences
Goal 1: Learn from Best Countries

- Sought countries demonstrating academic excellence, geographical/cultural diversity, an ingenuity in ECEC systems
- Two data sets: (i) PISA, (ii) Economist Intelligence Unit Report

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Goal 2: Use State of the Art Theories and Knowledge

Theory of Change
- Inputs
- Outputs
- Outcomes

Systems Thinking
- Programs
- Infrastructure

Programs + Infrastructure = System
Systemic Goals

D

QUALITY
EQUITY/INCLUSIVITY
SUSTAINABILITY/DURABILITY

Family Goals

E

MEANINGFULLY INVOLVED
ORGANIZATIONALLY SUPPORTED

CHILD AND FAMILY WELL BEING

F

Infrastructure/Sub-systems

B

ENGAGEMENT WITH FAMILY, COMMUNITY, CITIZENS
TRANSPARENCY VIA DATA-DRIVEN IMPROVEMENT
SUSTAINABILITY/EQUITY VIA DIVERSE FINANCING MECHANISMS
EFFICIENCY VIA GOVERNANCE
QUALITY VIA PROGRAM REGULATION AND INSPECTION
CAPACITY VIA PROFESSIONAL DEVELOPMENT
ALIGNMENT VIA TRANSITIONS/LINKAGES

Effective ECD System

C

TEMPORAL

SOCIO-CULTURAL

TEMPORAL

TEMPORAL

Boundary Spanning Efforts and Programs

A

Edu
Hlth/Ntr
SP/W

Prog A
Prog B
Prog C
Prog D

SUSTAINABILITY/DURABILITY

MEANINGFULLY INVOLVED
ORGANIZATIONALLY SUPPORTED

TEMPORAL

POLITICAL, ECONOMIC, ENVIRONMENTAL

TEMPORAL

VALUES, BELIEFS, HERITAGES, RELIGIONS

TEMPORAL

TEMPORAL

TEMPORAL

TEMPORAL
The ECEC System

**Family Support and Home Visiting**

**Early Childhood Education and Care**

**Health, Nutrition, and Mental Health**

**Protective Services**

**Transition and Primary**

Thinking About the ECEC System

Systems

= Services + Infrastructure

\[ 8 - 1 = 0 \]
Gears: Need to work in all areas to move the infrastructure

- **Engagement** with Family, Community, Citizens
- **Efficiency** via Governance
- **Transparency** via Data-Driven Improvement
- **Capacity** via Professional Development
- **Sustainability/Equity** via Diverse Financing Mechanisms
- **Quality** via Program Regulation and Inspection
- **Alignment** via Transitions/Linkages

**Quality** via Program Regulation and Inspection
1. **Engagement with Family, Community, Citizens**
   - Major commitment to family/community engagement in programs, governance
   - Helps keep programs responsive to community needs and builds constituencies for young children

2. **Transparency via Data-Driven Improvement**
   - Data collection on program quality and services
   - Data collection on staff and their preparation/adequacy for roles
   - Data collection on children and families regarding their access to services and the outcomes of their participation
3. **Sustainability/Equity via Diverse Financing Mechanisms**
   - Too much focus on quantity, not quality
   - Need consistency in funding
   - Need to blend public and private funds inventively

4. **Efficiency via Governance**
   - Horizontal debate: Which ministry (e.g., health, education)
   - Vertical debate: Which level (e.g. local, regional)
   - Governance brings clarity on who does what, for whom, when, and with what authority and accountability
5. **Quality via Program Regulation and Inspection**

- Conducted regularly by professionals
- Information from inspections needs to be used for quality improvement

6. **Capacity via Professional Development**

- Pre-service and In-service
- Consistent requirements for all teachers

7. **Alignment via Transitions/Linkages**

- From home to pre-primary to primary
- Among health, education, social services
Goal 3: Produce a Quality Study

Clear Research Questions
- **What's**: What ECEC policies and systems frameworks are in place?
- **How's**: How is ECEC system effectiveness similar or different?
- **Why's**: Why do countries vary in their commitments to ECEC?

Thorough Document Review
- 16 Prior ECEC Systems Studies = Compendium
- Laws, policies, ECEC frameworks, curriculum, country data

Solid Data and Analysis
- Common and piloted protocol
- Common informant types
- Validated analysis process
Goal 3: Produce a Quality Study

Memos
- NY Team drafts regular memos to co-PIs with Action Requests

Feedback grid
- Action Request responses are compiled in a grid and shared with the group

Skype agenda
- NY Team designs an agenda for the Skype call to address outstanding questions

Skype call
- NY Team and all co-PIs join a monthly call to iron out thorny issues and come to agreement

Virtual processes

Meeting 1 (June, 2016)
- Preliminary compendium analysis
- Study design and parameters
- Case study outline
- Data collection procedures (interview sample and questions)
- Writing and review process

Meeting 2 (April, 2017)
- Secondary compendium analysis
- Country summaries
- Building block development
- Transcendent theme development
- Products and dissemination discussion
Goal 4: Create Useful Products for Diverse Audiences

Case Studies

Book I: 
Reconceptualizing Quality: Building Blocks for Effective ECEC Systems

- Provides necessary elements to build a quality ECEC system
- Framed around essential building blocks for future ECEC systems

Book II: 
Reconceptualizing Quality: Six High-Performing Countries Leading by Example

- Provides narrative stories about ECEC systems in six high-performing countries
- Summarizes the practice and policy implications derived from the stories

Diverse Policy Materials

- NCEE-hosted webpage
- Direct press/policymaker outreach
- Branded, cross-platform social media campaign
Part III

Preliminary Findings
Case Studies

Australia

England

Finland

Hong Kong

Republic of Korea

Singapore

Integrated Analysis: 15 Essential Building Blocks
Australia

Collette Tayler, Ph.D. University of Melbourne

• **Summary:**
  - Sizeable, diverse nation with mixed market economy
  - Federal system places majority of responsibility on states for education
  - Increasing government interest and investment in ECEC at all levels

• **Key findings:**
  - National reform agenda established National Quality Framework (NQF) and Australian Children’s Education and Care Quality Authority (ACECQA)
  - Strong and well-implemented framework provides a pedagogical framework that transcends states and territories
England

Kathy Sylva, Ph.D. University of Oxford

• **Summary:**
  - Mixed public-private system provides near-universal provision
  - Increasing public investment in ECEC targets access and quality for three-year-olds

• **Key findings:**
  - Strong emphasis on parent and community involvement in ECEC
  - First-rate inspection system provides program accountability to parents, policymakers, and the public
  - Data rigorously collected and used extensively as tools for pedagogical and program improvement
Finland

Kristiina Kumpulainen, Ph.D.
University of Helsinki

• **Summary:**
  • Consistently the highest-achieving European nation on PISA
  • Right to equitable and quality ECEC is a cultural imperative
  • Pre-primary education is a compulsory requirement and statutory duty for all Finnish municipalities

• **Key findings:**
  • Centralized national core curriculum for basic education leaves room for local and regional specificities
  • Pre-primary education curriculum focuses on child individuality, active learning, and initiative
  • Opportunities for PD contribute significantly to program quality
Hong Kong

Nirmala Rao, Ph.D. University of Hong Kong

• **Summary:**
  • High-achieving, densely populated, competitive society
  • Underlying Confucian ideology emphasizes education and success
  • Since mid-1990s, increasing focus on high quality ECEC

• **Key findings:**
  • Successful mix-market delivery system: considerable centralization despite significant private provision
  • Responsive policy-making, good governance, educated and entrepreneurial population
Republic of Korea

Mugyeong Moon, Ph.D. Korea Institute of Child Care and Education

• **Summary:**
  • Overcame inauspicious beginnings to produce one of the most educated and skilled workforces in the world
  • Extremely efficient ECEC system
    • Education spending is half of U.S., as a proportion of GDP
    • Enrollment rates for preschool education exceed 95%

• **Key findings:**
  • The recently established Nuri (“World”) Curriculum emphasizes holistic development and responsible citizenship
  • Robust commitment to research; government-funded institutes support knowledge development in ECEC
Singapore

Rebecca Bull, Ph.D. National Institute of Education

• **Summary:**
  • Consistently high-achieving on international benchmark exams
  • Diverse education landscape, rapid expansion in private sector
  • Spirit of innovation and experimentation within ECEC

• **Key findings:**
  • Centralized curriculum spans from birth through the early years of school to foster effective transitions
  • Early Childhood Development Agency established to ensure access to affordable and quality ECEC
  • Consolidated approach to governance within the public sector
Part IV

Building Blocks: Integrating the Findings
### I. Strong, Stable Policy Foundations

| I.1. Supportive, Stable, and Aligned Social Context |
| I.2. Policy Strategies Documents that are Incrementally and Consistently Implemented |
| I.3. Organized and Supportive Constituents |

### II. Knowledgeable and Supported Teachers/Families

| II.1. An Approach to Develop and Maintain a Well-Trained, Compensated, Respected Workforce |
| II.2. An Approach to Develop and Maintain Policy and Pedagogical Leadership |
| II.3. Engaged and Knowledgeable Families and Communities |

### III. Comprehensive Services, Coordinating Mechanisms

| III.1. Diverse Array of Comprehensive ECEC Services |
| III.2. Sufficient Funding for Baseline Services And Targeted Populations |
| III.3. Coordinating Mechanisms |

### IV. Data to Drive Improvement

| IV.1. Effective Production and Use of Child Data |
| IV.2. Effective Monitoring System that Collects and Uses Program Data |
| IV.3. Effective Production and Use of Research |

### V. Informed, Individualized, and Continuous Pedagogy

| V.1. Clear Articulation and Implementation of Child-Centered Pedagogy |
| V.2. Commitment to Individualization for All Children |
| V.3. Continuity in Children’s Experiences |
I. Strong, Stable Policy Foundations

- **Context matters**
- Effective ECEC systems have clearly articulated policies supported by organized constituencies
- Countries that provide effective services are bolstered by contexts that are durable and supportive of families
II. Knowledgeable and Supported Teachers and Families

- **People matter**
- Effective ECEC systems are conditioned upon the people who create, support, and work within them
- Leadership of the system/programs are central to success, as well as a well-qualified and compensated workforce
The Building Blocks

III. Comprehensive Services and Coordinating Mechanisms

- **Services and structures matter**
- Effective ECEC systems pay attention to the ways in which services are organized, governed, and delivered
- Delivery is not haphazard, but planned and orchestrated
IV. Data to Drive Improvement

- **Data and its use matter**
- Effective ECEC systems accord much weight to the collection and effective use of different kinds of monitoring data
V. Informed, Individualized and Continuous Pedagogy

- **Pedagogy matters**
- Effective ECEC systems accord importance to individualization, and addresses the importance of continuity and transitions
Part V

Using the Building Blocks: Lessons for ECEC Globally
Lessons We Should Learn

- Focus on People: Families, Teachers, Constituents
- Diverse Services: Not One Focal Strategy
- Focus on Infrastructure: Data and Monitoring
- Respect the Culture: No Uniform Pedagogy
- Efforts Evolve Over Time: Not One Shot Deals

What We Should Learn:
Using the Building Blocks: Lessons We Should Learn

I. Strong, Stable Policy Foundations

II. Knowledgeable and Supported Teachers and Families

III. Comprehensive Services, Coordinating Mechanisms

IV. Data to Drive Improvement

V. Informed, Individualized, and Continuous Pedagogy

Efforts Evolve Over Time: Not One Shot Deals

Focus on People: Families, Teachers, Constituents

Diverse Services: Not One Focal Strategy

Focus on Infrastructure: Data and Monitoring

Respect the Culture: No Uniform Pedagogy
No Matter What the Strategy, Need to Change the THINKING

**FROM:**
Thinking about *individual* programs and services

**TO:**
Thinking about ECEC *systems*
Think Different

• *Steve Jobs to John Sculley:*
  • “Do you want to spend the rest of your life selling water, or do you want a chance to change the world?”

• *They did revolutionize six industries:*
  • Personal computers, animated movies, music, phones, tablet computing, and digital publishing
“The people who are crazy enough to think they can change the world are the ones who do.”

Apple’s “Think Different” Commercial 1997
Foreword to Walter Isaacson’s book, Steve Jobs