



JSC «Information-Analytic Center» MES RK

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## Comparative analysis of the early childhood education and care systems in Kazakhstan and OECD countries

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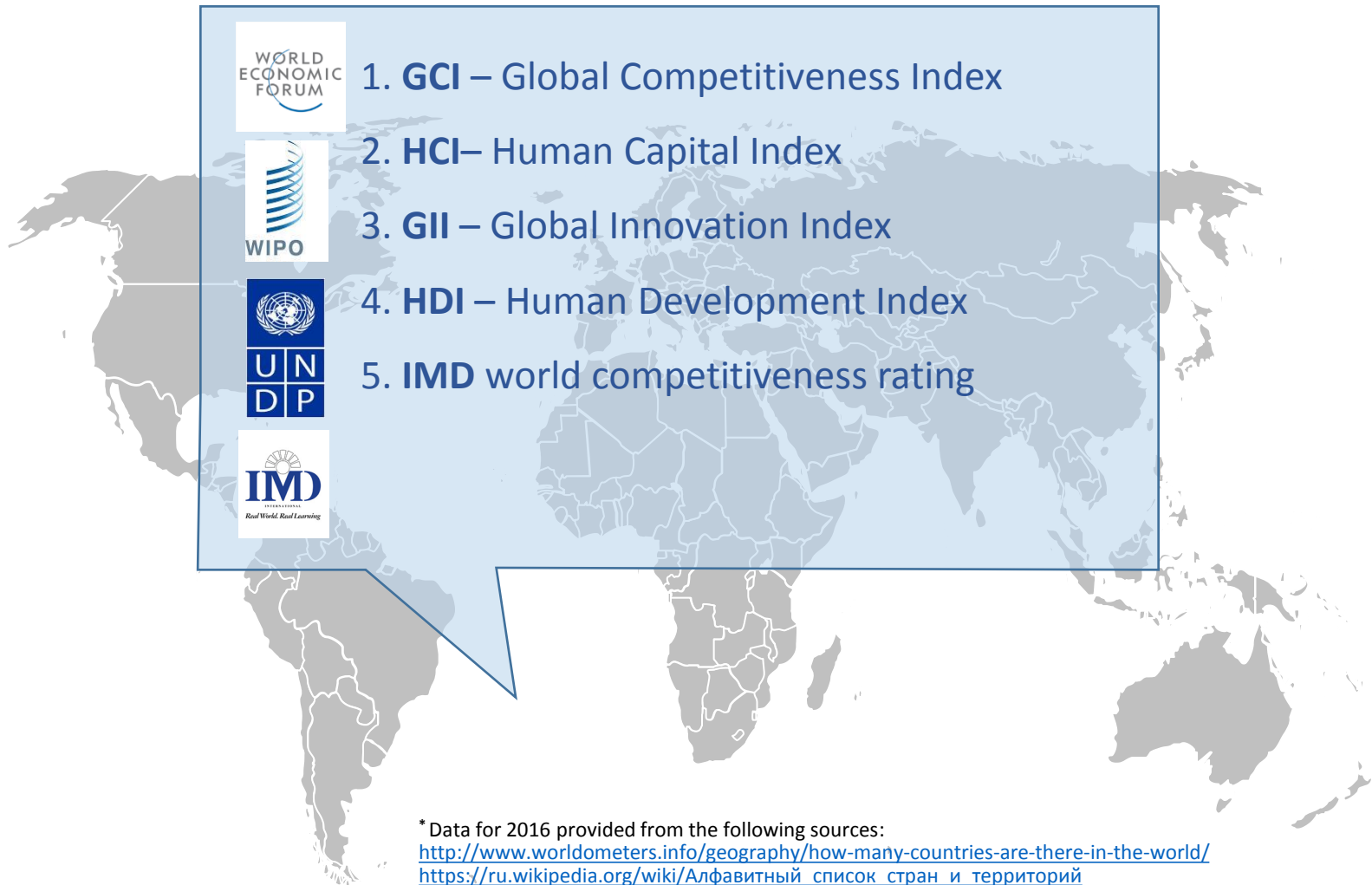
Head of the Administration for Early Childhood Education  
and Care of the DPSE MES RK Sharapat Sultangaziyeva

Astana • November 28<sup>th</sup>, 2016

# Overview of my report

- The world that aims to create qualified individuals:
  - Which countries are the leaders in quality human capital?
  - What are the benefits of the Organisation for Economic Co-operation and Development (OECD) for Kazakhstan?
- The status of early childhood education and care (ECEC)
  - The current goals of ECEC
  - 21<sup>st</sup> century – time for ECEC to turn into a genuine education level
  - 180 years of ECEC worldwide, 100 years of ECEC in Kazakhtan
- Global standards of early childhood education and care:
  - 10 standards of UNICEF
  - OECD indicators and mechanisms
- Comparative features of ECEC in Kazakhstan:
  - Where does our system stand within the world?
  - What are our plans for the future?

195 of the 252 world countries are UN members, who compare each other via human capital indices\*



The image features a world map in the background. A blue callout box is positioned over the map, containing five logos on the left and a corresponding list of indices on the right. The logos are for the World Economic Forum, WIPO, the United Nations, UNDP, and IMD. The list includes the GCI, HCI, GII, HDI, and IMD world competitiveness rating.

- 1. **GCI** – Global Competitiveness Index
- 2. **HCI**– Human Capital Index
- 3. **GII** – Global Innovation Index
- 4. **HDI** – Human Development Index
- 5. **IMD** world competitiveness rating

\* Data for 2016 provided from the following sources:  
<http://www.worldometers.info/geography/how-many-countries-are-there-in-the-world/>  
[https://ru.wikipedia.org/wiki/Алфавитный\\_список\\_стран\\_и\\_территорий](https://ru.wikipedia.org/wiki/Алфавитный_список_стран_и_территорий)

35 of OECD countries lead most of the ratings.  
They produce half of the GDP worldwide<sup>1</sup>

Foundations and standards of OECD will  
direct Kazakhstan to become one of the  
30 leading countries



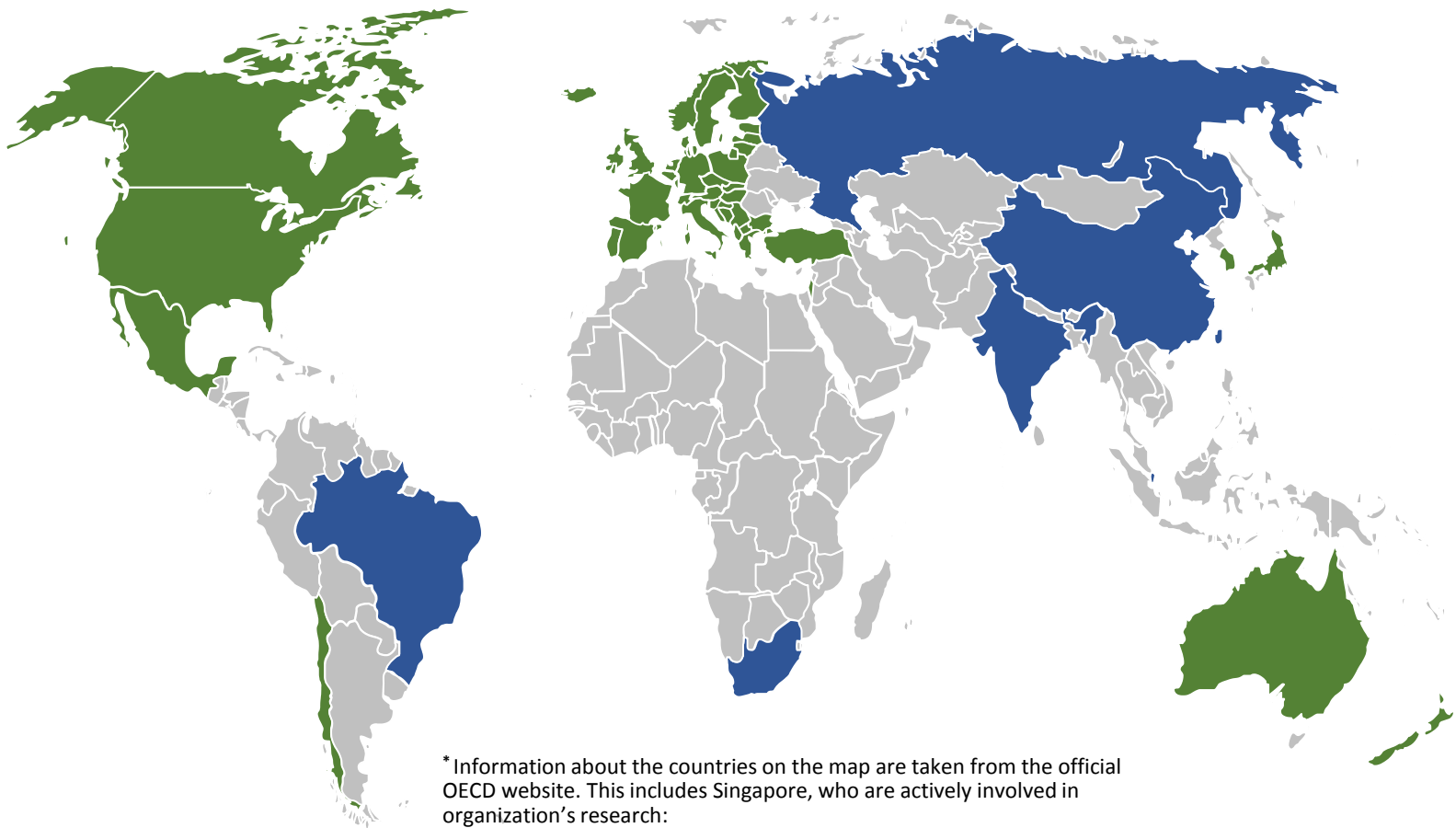
<sup>1</sup><http://www.oecd.org/dev/pgd/economydevelopingcountriessettoaccountforanearly60ofworldgdppby2030accordingtonewestimates.htm>

<sup>2</sup>Елбасы Н. Назарбаевтың «Қазақстан жолы - 2050: Бір мақсат, бір мүдде, бір болашақ» атты Қазақстан халқына жолдауынан (17.02.2014)

# Kazakhstan is considered an active partner of OECD along with other rapidly developing countries\*

► OECD member-states

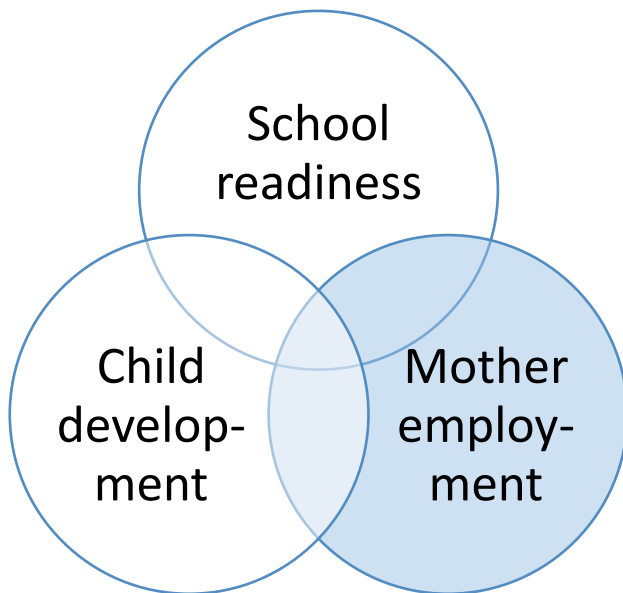
► Main partners



\* Information about the countries on the map are taken from the official OECD website. This includes Singapore, who are actively involved in organization's research:  
<https://www.oecd.org/about/membersandpartners/>

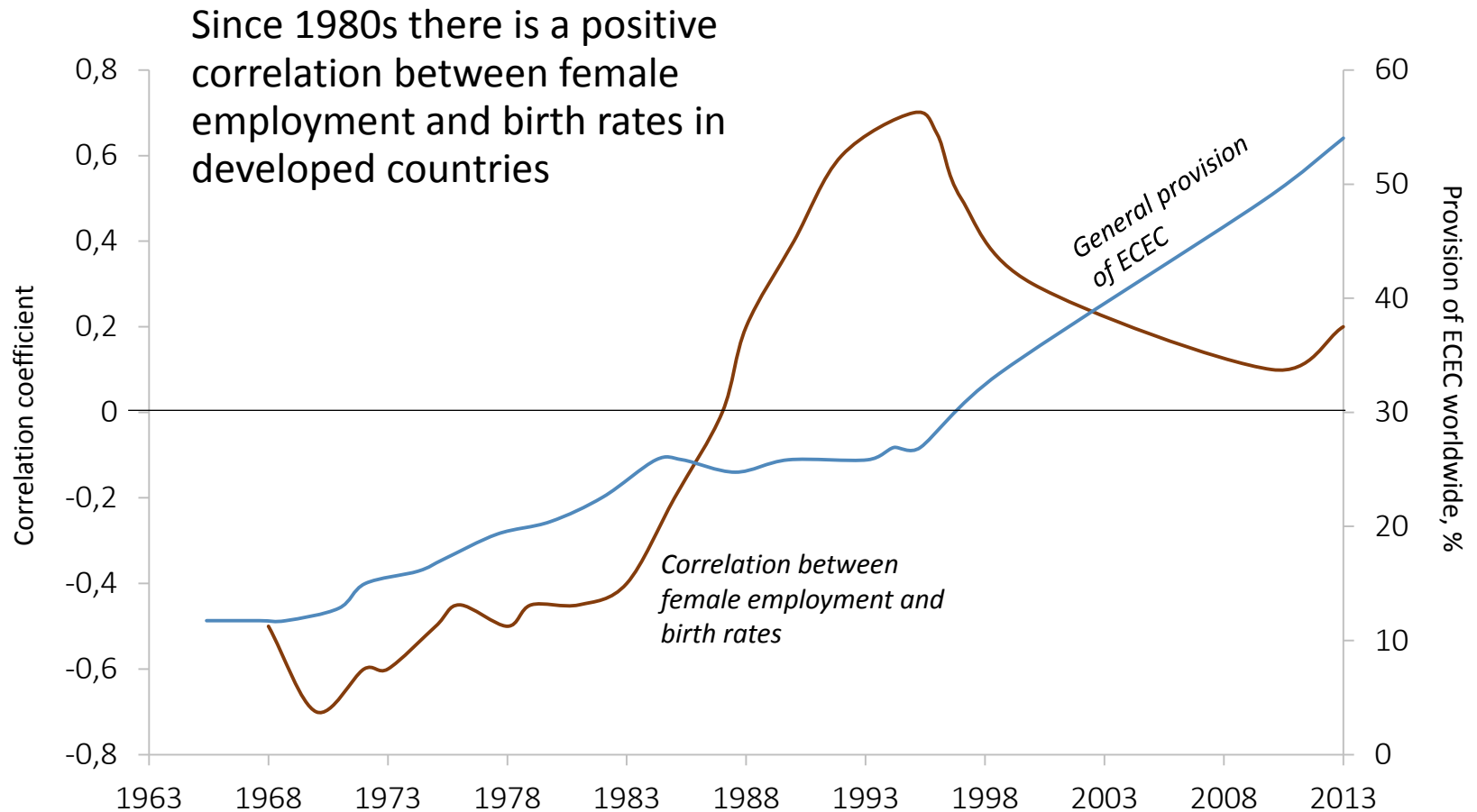
# The classic goal of ECEC is to ensure female employment

Current principles and goals of ECEC



- The goal of the ECEC program is the development of social and emotional skills to prepare children for school and social life
- Increasing rate of mother employment is not necessarily the result of ECEC, but it is currently being adopted as one of the goals
- Since 1980s female employment causes increase in birth rates

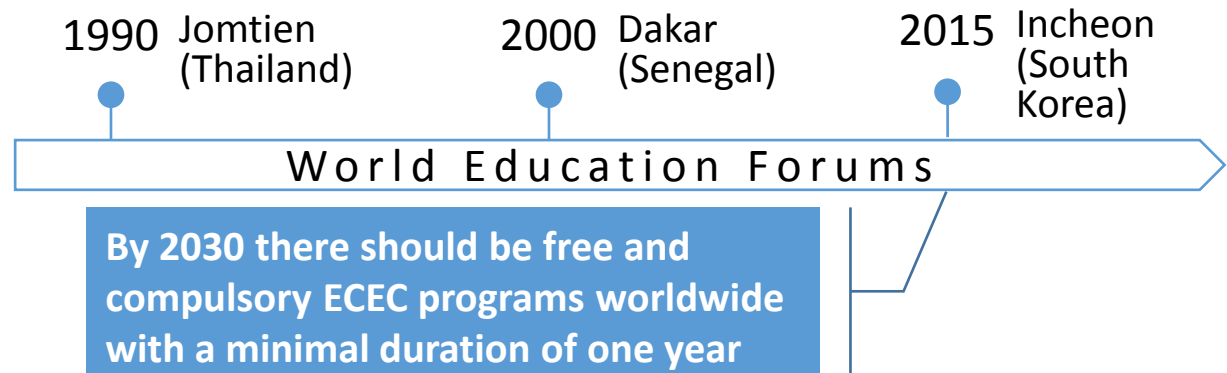
# The rise of ECEC in the world leads to increase in female employment and birth rates



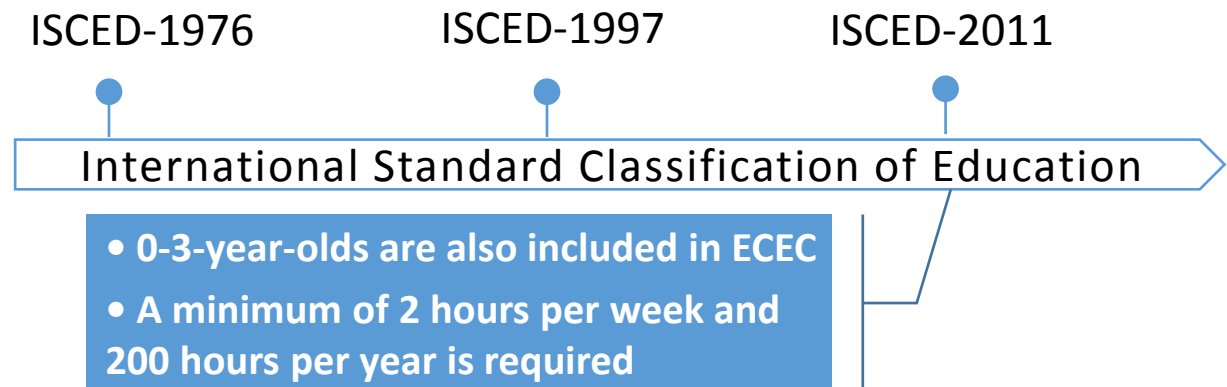
Sources: ECEC coverage of 1-6 year olds: World Bank; Adsera, A. (2003). Changing fertility rates in developed countries. The impact of labor market institutions. doi:10.1007/s00148-003-0166-x

In the 21<sup>st</sup> century ECEC is gaining more features of a genuine education

## universal provision



## typical cohort



## minimal study load



# ECEC in Kazakhstan – education level with a 100-year-old history



**2017**

**2010**

**An official program**  
“Balapan” that covers  
**1-3 year-olds** was  
adopted

**1999**

Kazakhstan  
introduced  
**one-year universal  
pre-school  
education**



Friedrich Wilhelm  
August Fröbel

**1837**

World's first  
kindergarten



Nazipa Segizbaykyzy  
Kulzhanova

**1917**

Kazakhstan's first  
kindergarten

# 10 standards of UNICEF for a comprehensive development of ECEC\*



A minimum entitlement to a one-year paid parental leave at 50% of the salary



A national ECEC funding plan with priority for disadvantaged children



A minimum level of child care provision for 25% of underthrees



A minimum level of access to ECEC of 15 hours per week for 80% of the four-year-olds



A minimum level of specialized training for 80% of ECEC staff

\* Source: UNICEF. (2008). The child care transition: A league table of early childhood education and care in economically advanced countries. Italy: UNICEF Innocenti Research Centre

# 10 standards of UNICEF for a comprehensive development of ECEC (cont.)\*



A minimum of 50% of ECEC staff with higher level education and training in early childhood studies or a related field



Ratio of four-to-five year-olds to trained staff should not be greater than 15 to 1, and the group size should not exceed 24.



The level of public spending on ECEC should not be less than 1 % of GDP



A child poverty rate of less than 10%



Provision of medical services:

- infant mortality is less than 4 per 1,000 live births;
- proportion of babies born below 2,500 grams is less than 6%
- immunization rate of 12-23 month-olds is higher than 95%

\* Source : UNICEF. (2008). The child care transition: A league table of early childhood education and care in economically advanced countries. Italy: UNICEF Innocenti Research Centre

# Completion rate of UNICEF standards\*

	Paternal leave	A national plan	Coverage of 0-3-year-olds	Coverage of 4-year-olds	Trained staff	Staff with higher education	Staff-to-children ratio	Funding of ECEC	Child poverty	Access to medical care
Sweden	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Iceland		✓	✓	✓	✓	✓	✓	✓	✓	✓
Denmark	✓	✓	✓	✓		✓	✓	✓	✓	✓
Finland	✓	✓	✓		✓		✓	✓	✓	✓
France	✓	✓	✓	✓	✓	✓				
Norway	✓	✓	✓	✓			✓	✓	✓	✓
Belgium		✓	✓	✓		✓				✓
Hungary		✓	✓	✓	✓	✓	✓			
New Zealand		✓	✓	✓	✓	✓	✓	✓		
Slovenia	✓	✓	✓		✓	✓	✓	✓		✓
Austria	✓	✓		✓	✓		✓		✓	
The Netherlands		✓	✓		✓	✓			✓	
United Kingdom		✓	✓	✓	✓	✓	✓		✓	

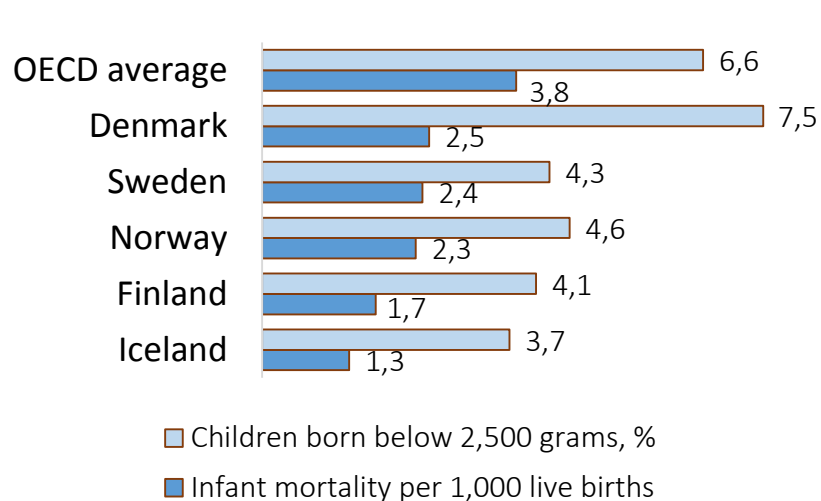
\* Note: Country-specific data is given for 2013. «National plan», «Trained staff» and «Staff with higher education» indices are provided as they were in 2008 edition of UNESCO report

# Completion rate of UNICEF standards (cont)\*

	Paternal leave	A national plan	Coverage of 0-3-year-olds	Coverage of 4-year-olds	Trained staff	Staff with higher education	Staff-to-children ratio	Funding of ECEC	Child poverty	Access to medical care
Germany	✓	✓	✓	✓		✓	✓		✓	
Italy		✓		✓	✓	✓	✓			
Japan	✓	✓	✓	✓	✓		✓			✓
Portugal		✓	✓	✓	✓	✓				
South Korea		✓	✓	✓	✓	✓				✓
Mexico		✓		✓	✓	✓				
Spain			✓	✓	✓	✓	✓			
Switzerland			✓		✓				✓	
USA			✓			✓	✓			
Australia			✓	✓		✓	✓			
Canada	✓					✓				
Ireland			✓	✓		✓			✓	✓

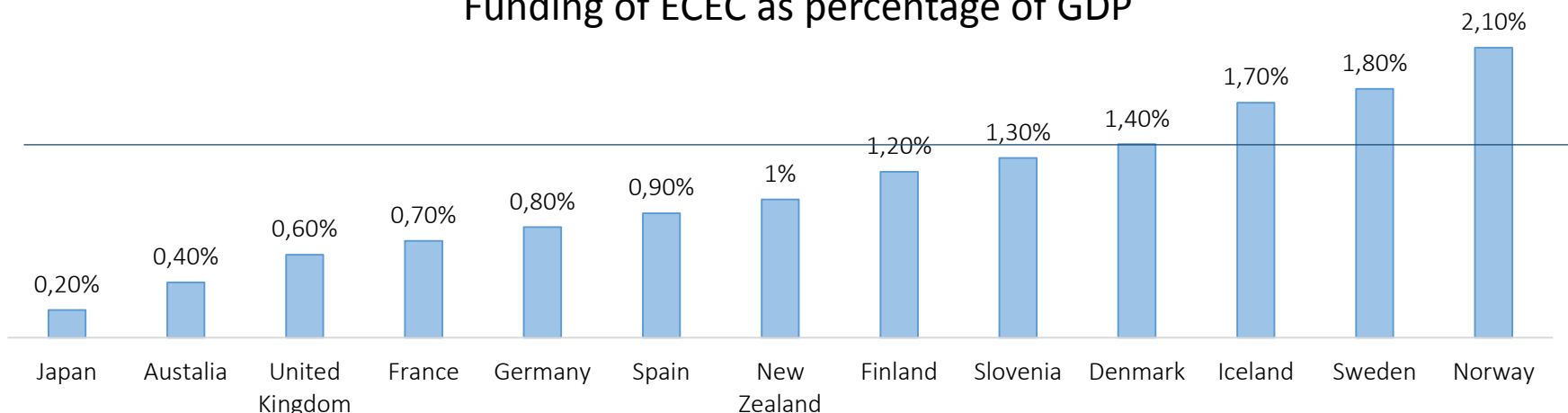
\* Note: Country-specific data is given for 2013. «National plan», «Trained staff» and «Staff with higher education» indices are provided as they were in 2008 edition of UNESCO report

# Scandinavian countries achieved most of the UNICEF standards (8 to 10)\*



Staff-to-children ratio	
Iceland	1:6
Sweden	1:6
Denmark	1:7
Finland	1:10
Norway	1:11
OECD average	1:14

## Funding of ECEC as percentage of GDP



Sources: OECD. (2015). Education at a Glance 2015; OECD. Family Database. Chart PF4.2.A.  
 Child-to-staff ratios in pre-primary education services, 2013; OECD. (2015). Factbook 2015-2016

# Scandinavian countries achieved most of the UNICEF standards (cont)\*

## Parental leave



### Denmark

- 50 weeks
- At 54% of the salary

### Sweden

- 60 weeks
- At 63% of the salary

### Norway

- 91 weeks
- At 50% of the salary

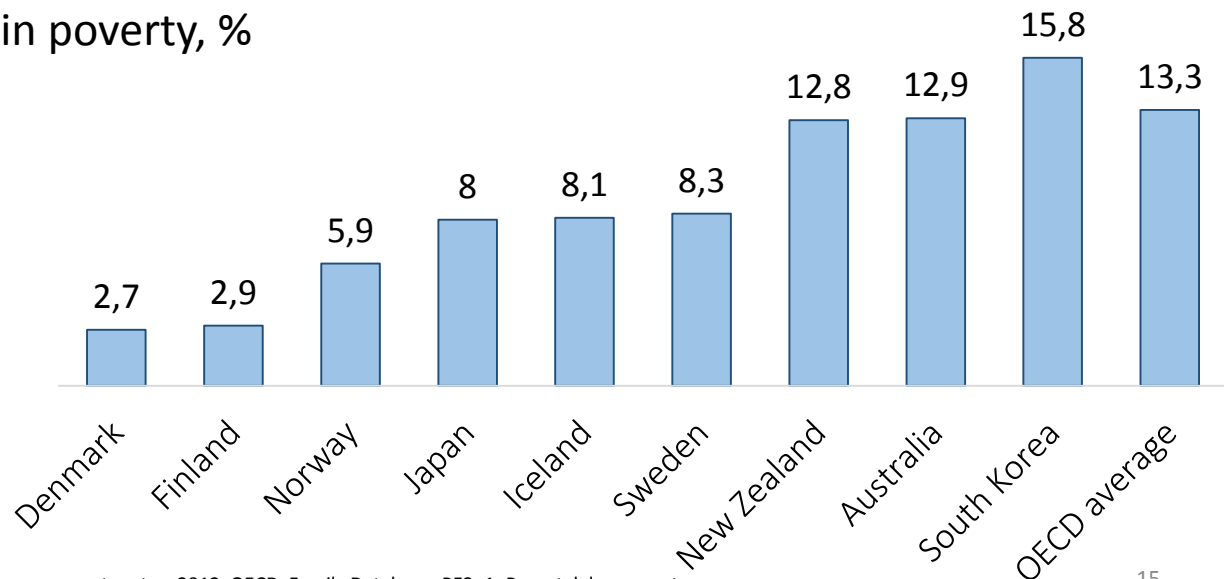
### Finland

- 161 weeks
- Depends on income level

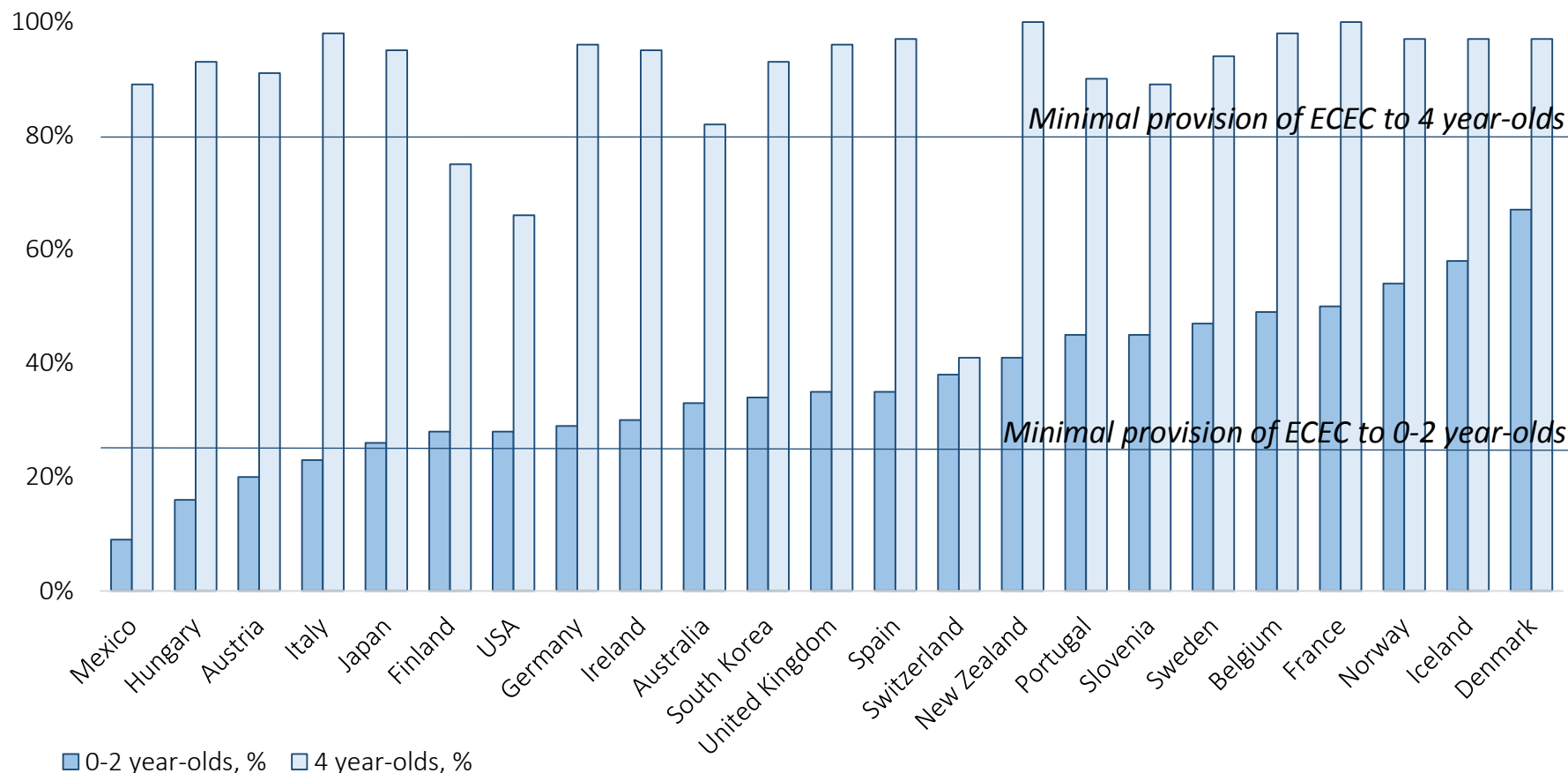
## 0-17 year-olds who live in poverty, %

### OECD information:

«Children who live in homes with income level below the national average level»



# Most of OECD countries achieved the minimum level of ECEC provision to 0-3 and 4-year-olds\*



\* Sources: OECD. Family Database. PF3\_2\_Enrolment\_childcare\_preschool, 2013; OECD. (2015). Education at a Glance 2015



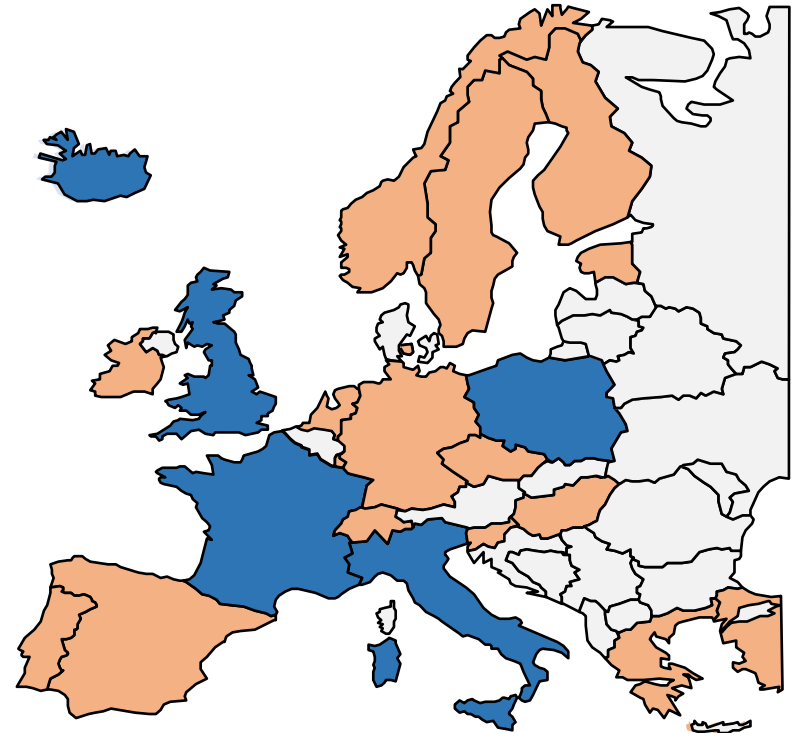
# Specialized higher education is a requirement for teachers in most of OECD countries\*



Bachelor degree is a requirement for ECEC teachers in 21 OECD countries (Finland, Norway, Sweden, etc.)



Master's degree is a requirement in France, Iceland, Italy and Poland



- ▶ European countries with a bachelor degree requirement
- ▶ European countries with a master's degree requirement

\* Source: OECD. (2014). Education at a glance 2014. Paris.

# OECD: Completion of teacher training does not guarantee entry into ECEC\*



In OECD countries, education graduates can enter the ECEC field via 3 paths

Passing competitive examination

- South Korea
- Japan

Gaining a license for teaching practice

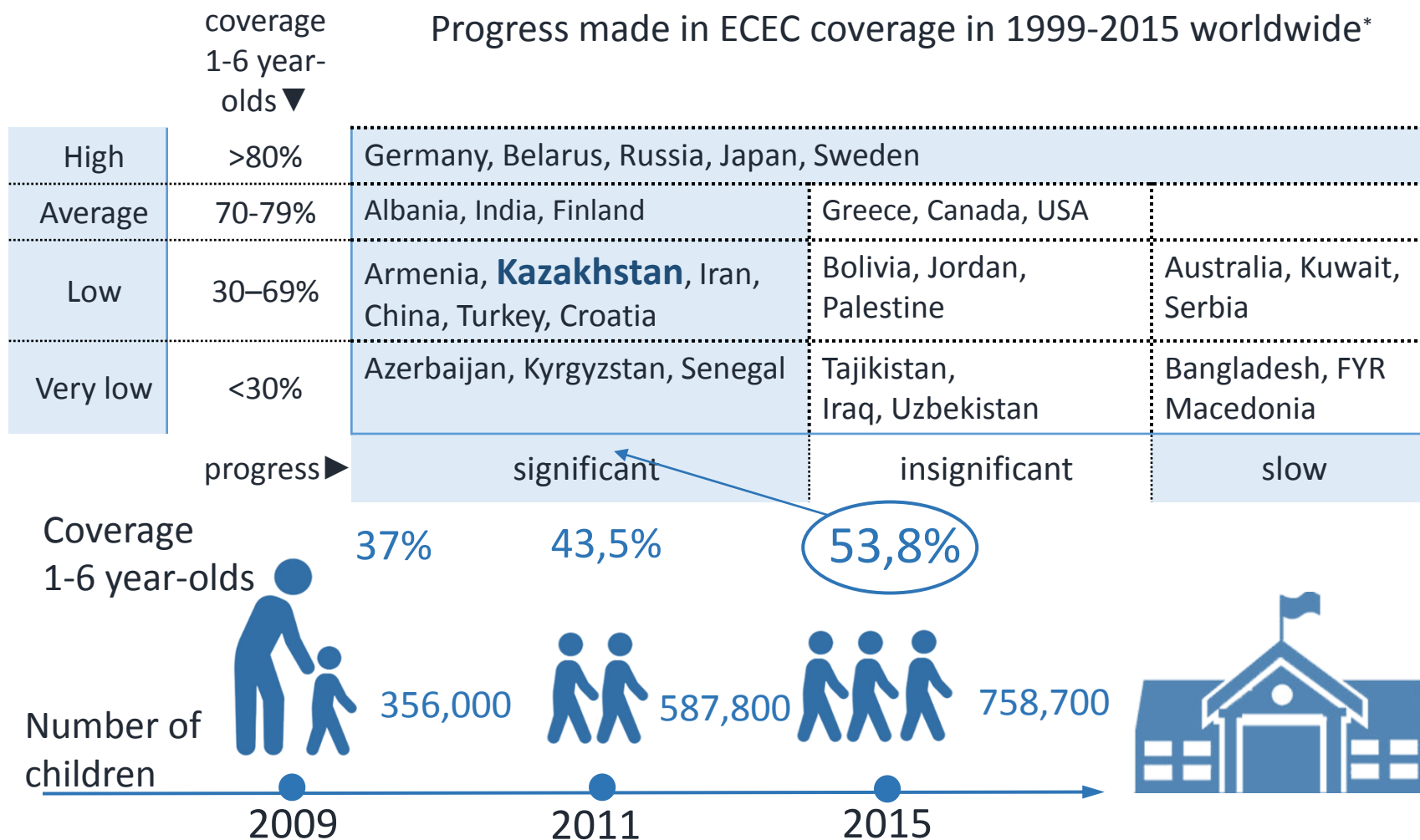
- Australia
- New Zealand
- Japan

Completing induction programs (1-2 years)



- New Zealand
- South Korea
- Japan

\*Source: OECD. (2014). Education at a Glance 2014

# Kazakhstan's progress in ECEC in 21<sup>st</sup> century is significant, but there is still room for improvement



# Some of the ECEC indicators in Kazakhstan as compared to the OECD average\*

	Indicator	 OECD	 Kazakhstan	
Funding	• GDP ratio	0,7%	0,6%	
Infra-structure	• Coverage of 3–5 year-olds	86,5%	81,6% (3–6 year-olds)	conditions input
	• Coverage of 0–3 year-olds	32,6%	16,6% (1–3 year-olds)	
Teachers	• Staff-to-child ratio	1:7 (2 year-olds), 1:18 (3-4 year-olds)	1:26 (1-6 year-olds)	
Content	• Childcare program	integrated program	integrated program (from 2016)	result output
	• Influence of ECEC on PISA (2012)	66 points↑	32 points↑	
	• Children achievement assessment	national monitoring	national monitoring (from 2017)	

\* OECD data is provided for 2014, data for Kazakhstan is provided for 2015

# OECD and Kazakhstan: teaching profession indicators

No	Indicator	OECD	Kazakhstan
1	Staff education	Bachelor degree requirement in 21 OECD countries, master's degree in 4 countries	35% of educators have a specialized training (15,3% have a higher education, and 19,6% have a VET education) <sup>1</sup>
2	Average salary	80% of OECD average <sup>2</sup>	41% of national average <sup>3</sup>
3	Difference with the salary of a primary school teacher, %	98%	80%
4	Career-based salary increase	60%	30%
5	Induction program	19 OECD countries (compulsory in 13 countries, and at the discretion of kindergarten in 6 countries)	Not regulated

<sup>1</sup> In 2015/16 99,4% of 80,857 ECEC teachers have teacher's education, among them 61% have a higher education, and 38,3% have a VET education.

<sup>2</sup> OECD (2014), Indicator D3: How much are teachers paid? <sup>3</sup> Data of Statistics Committee of the Ministry of National Economy for 2015

OECD studies are unique compared to other organizations due to provision of an arsenal of policy and practice mechanisms



COUNCIL  
OF EUROPE

CONSEIL  
DE L'EUROPE

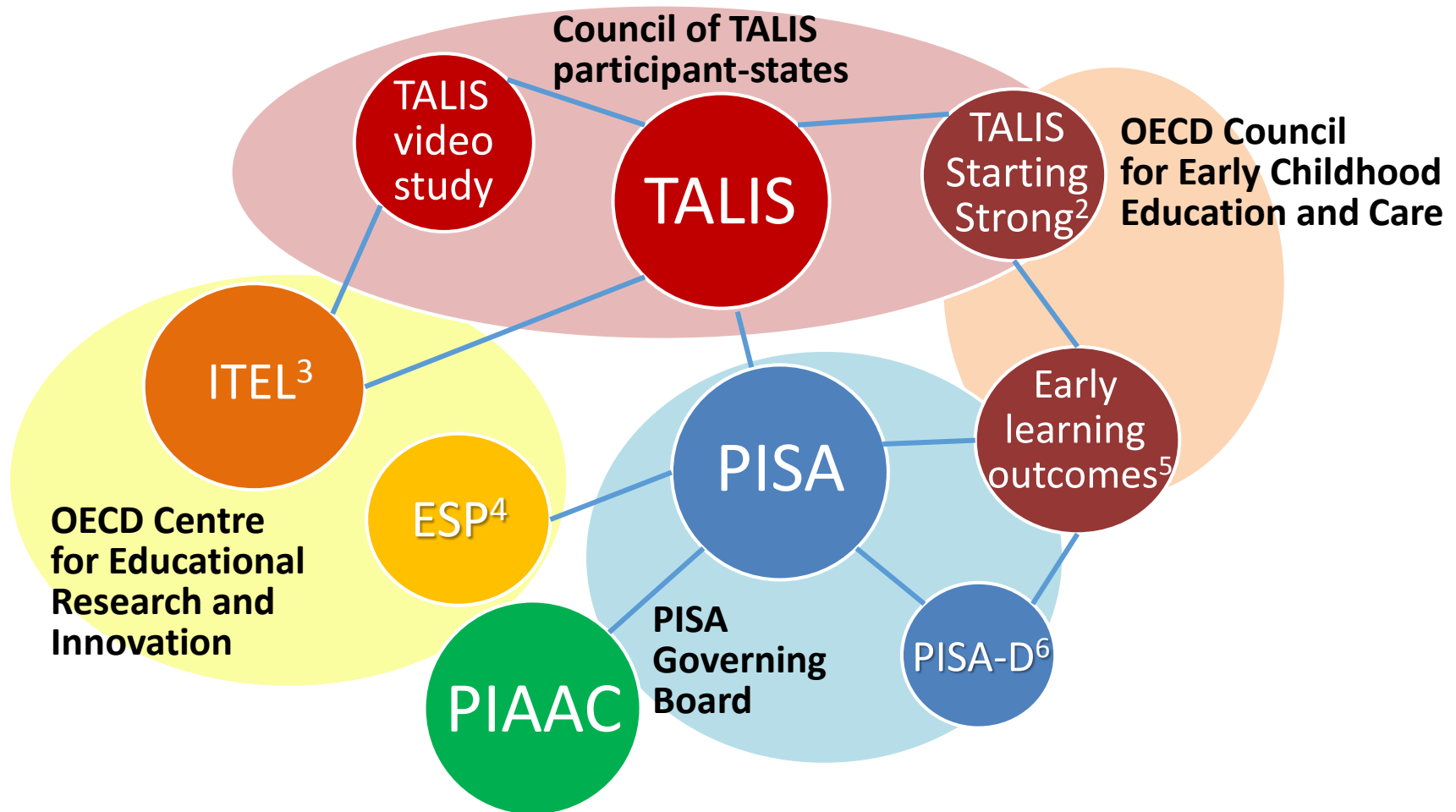


THE WORLD BANK

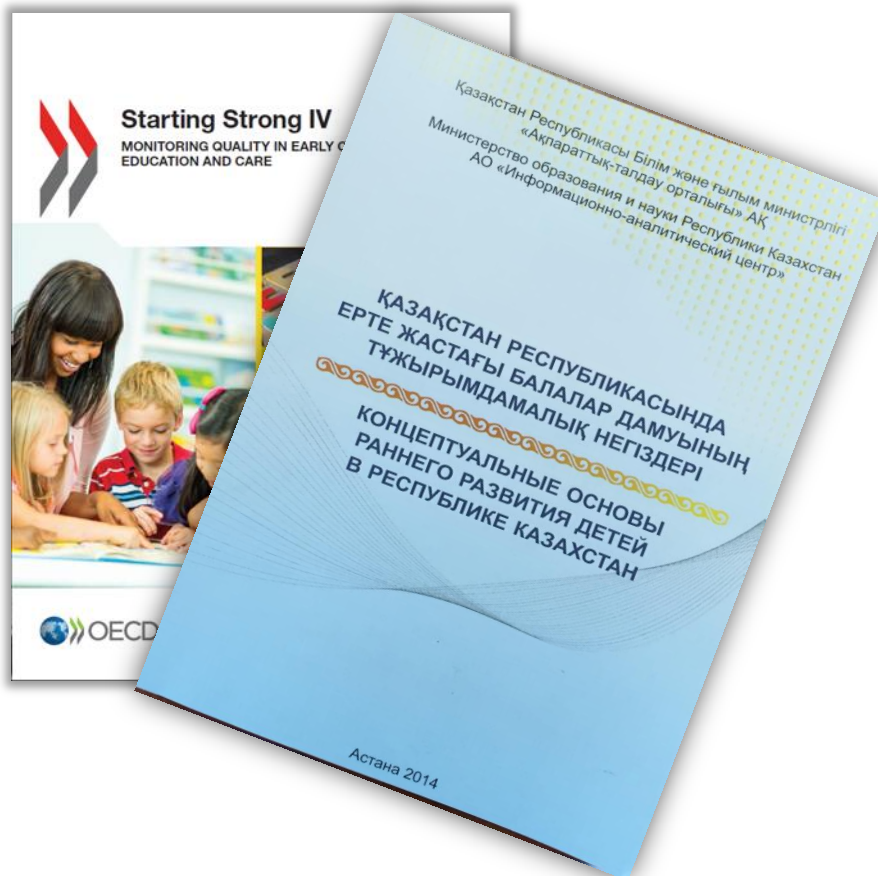


International Association  
for the Evaluation of  
Educational Achievement

# Pre-school children studies of OECD rely on major quality studies of PISA and TALIS



# Studies conducted/coordinated by JSC «IAC»



- Conducting OECD studies for Early Childhood and Education Care (2014-2015)
- Development of «Conceptual Framework for Early Childhood Development in Kazakhstan» (2014)
- Quality assessment of preparation to school of graduates of pre-school organization (2015)



# Performance of ECEC within the State Program of Education and Science Development

Goal: ensuring availability of ECEC for all



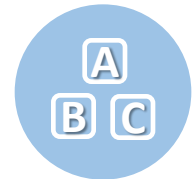
Universal ECEC



High standard for the educator's status and qualification



Collaboration between the state and private sector



Assessment of educational achievements

**100%** of 3-6 year olds are covered by the upgraded ECEC content  
Securing enough space in pre-school organizations by 2019

**50%** of ECEC to staff to have a specialized training  
Preparing ECEC teachers for transition to **independent certification system**

**35%** of the provided space as a responsibility of private pre-school organizations

**80%** of 5-6 year-olds have the education and skills required for their age at a high and average levels

***Thank you for attention!***

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