

# **What Teaching and Learning Policies and Practices Make a Difference: Lessons from China**

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# Snapshot of PISA Performance

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**Table 1. PISA Performance: Mean Score in PISA 2012**

	Mathematics	Reading	Science
Shanghai-China	613	570	580
Finland	519	524	545
Japan	536	538	547
Korea	554	536	538
Singapore	573	542	551
OECD Average	494	496	501

Source: OECD, 2014

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# How much time do teachers spend teaching?

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**Table 2. Number of teaching hours per year**

	Primary level	Lower secondary level
<b>China</b>	492	430
<b>Finland</b>	680	595
<b>Japan</b>	731	602
<b>Korea</b>	812	621
<b>OECD average</b>	790	709

Source: OECD, 2013: 402

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# How big are classes and what is student-teacher ratio?

**Table 3. Average class size and ratio of students to teaching staff**

	Average class size		Ratio of students to teaching staff	
	Primary education	Lower secondary education	Primary education	Lower secondary education
<b>China</b>	38.0	52.9	17.1	14.6
<b>Finland</b>	19.4	20.3	13.7	9.3
<b>Japan</b>	27.9	32.7	18.1	14.2
<b>Korea</b>	26.3	34.0	19.6	18.8
<b>OECD average</b>	21.2	23.3	14.4	13.3

Source: OECD, 2013

# How much time do students spend on each subject in classroom?

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**Table 4. Instruction time per subject in primary education**

	Reading, writing and literature	Mathematics	Science
China	20-22	13-15	7-9
Finland	24	16	11
Japan	23	17	8
Korea	23	14	7
OECD average	26	17	7

Source: OECD, 2013; the Ministry of Education of the People's Republic of China, 2014.

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# How much time do students spend on each subject in classroom?

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**Table 5. Instruction time per subject in lower secondary education**

	Reading, writing and literature	Mathematics	Science
China	20-22	13-15	7-9
Finland	12	12	19
Japan	11	12	11
Korea	12	11	14
OECD average	16	13	12

Source: OECD, 2013; the Ministry of Education of the People's Republic of China, 2014.

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# How much time do students spend on each subject in classroom in China?

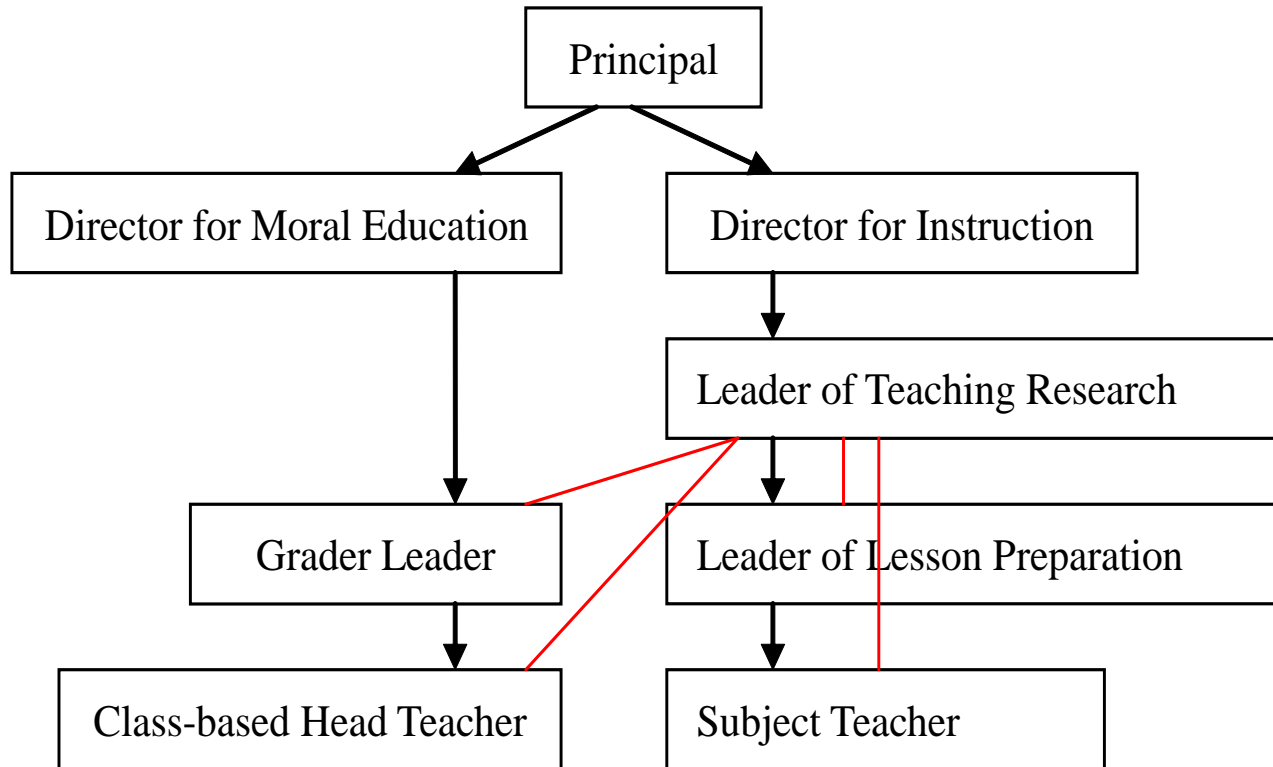
**Table 6. Subjects and Instruction Time in Primary and Lower Secondary Education**

Subject	Grade	As a percentage of total instruction time
Ethics and Morals	Grade 1 and up	7-9%
History and Geography	Grade 6-9	3-4%
Science	Grade 3 and up	7-9%
Reading, Writing and Literature		20-22%
Mathematics		13-15%
Foreign Languages	Grade 2 and up	6-8%
Physical Education		10-11%
Arts		9-11%

Note: Science for Grade 3 and up are Physics, Chemistry and Biology.

# Structure of Teaching Staff in Schools

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# To what levels have teachers studied?

**Table 7. Educational attainment of school teachers**  
As a percentage of total

	<b>Primary level</b>		<b>Lower secondary level</b>	
	<b>Bachelor</b>	<b>Short-cycle Tertiary Education</b>	<b>Bachelor</b>	<b>Short-cycle Tertiary Education</b>
<b>2011</b>	28.28	53.58	67.36	68.21
<b>2003</b>	3.07	37.43	23.68	30.70

Source: Department of Development and Planning, the Ministry of Education of the People's Republic of China, 2013: 136; Department of Development and Planning, the Ministry of Education of the People's Republic of China, 2004: 136.



# What do students learn in China and How?

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**Table 8. Timetable of G5 Students at a Primary School in Beijing**

Monday	Tuesday	Wednesday	Thursday	Friday
Assembly	Maths	Maths	PE	Maths
Maths	PE	IT	Maths	English
English	English	PE	TR	PE
PE	Chinese	Science	TR	Music
Arts	Selective	Chinese	Chinese	Chinese
Chinese	Selective	Labor	Morals	Peking Opera
Chinese	Maths	English	Science	Chinese

TR: Thematic Research

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# What do teachers do at school?

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- ▶ **Teaching**
- ▶ **Pedagogical study**
- ▶ **Lesson preparation**
- ▶ **Review students' homework**
- ▶ **Review test papers**



# **School-based Pedagogical Study**

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## **Pedagogical Research Institution**

- ▶ Training of all the teachers: 8 times per year
- ▶ Training of Master teachers: 8 times per year

## **Pedagogical Study Activity**

- ▶ District-level pedagogical study activity: Half day per week
- ▶ School-level pedagogical study activity: Half day per week



# Monitoring of Student Learning Progress

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- ▶ **Module test**

- ▶ Test development: district pedagogical research institutions
- ▶ Test administration: subject teachers
- ▶ Quality Analysis: teachers
- ▶ Results: teachers' advice to students and parents



- ▶ **Mid-term test**

- ▶ Test development: schools
- ▶ Test administration: schools
- ▶ Quality analysis: school director for instruction
- ▶ Results: schools' advice to teachers



# Monitoring of Student Learning Progress (Cont')

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## ▶ **End-of-term test**

- ▶ Test development: district pedagogical research institutions
- ▶ Quality analysis: school-level and district level
- ▶ Results: advice to schools (from district) and teachers (from school)

## ▶ **Survey test**

- ▶ Test development: municipal pedagogical research institutions
- ▶ Timing: 2<sup>nd</sup> term of Grade 5 at primary level



# A System Centered Around Student Learning

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- ▶ Family/Parents
- ▶ Education Authority
- ▶ School Principals
- ▶ Teachers

A common incentive: students' learning performance

