

10+1 Indicators

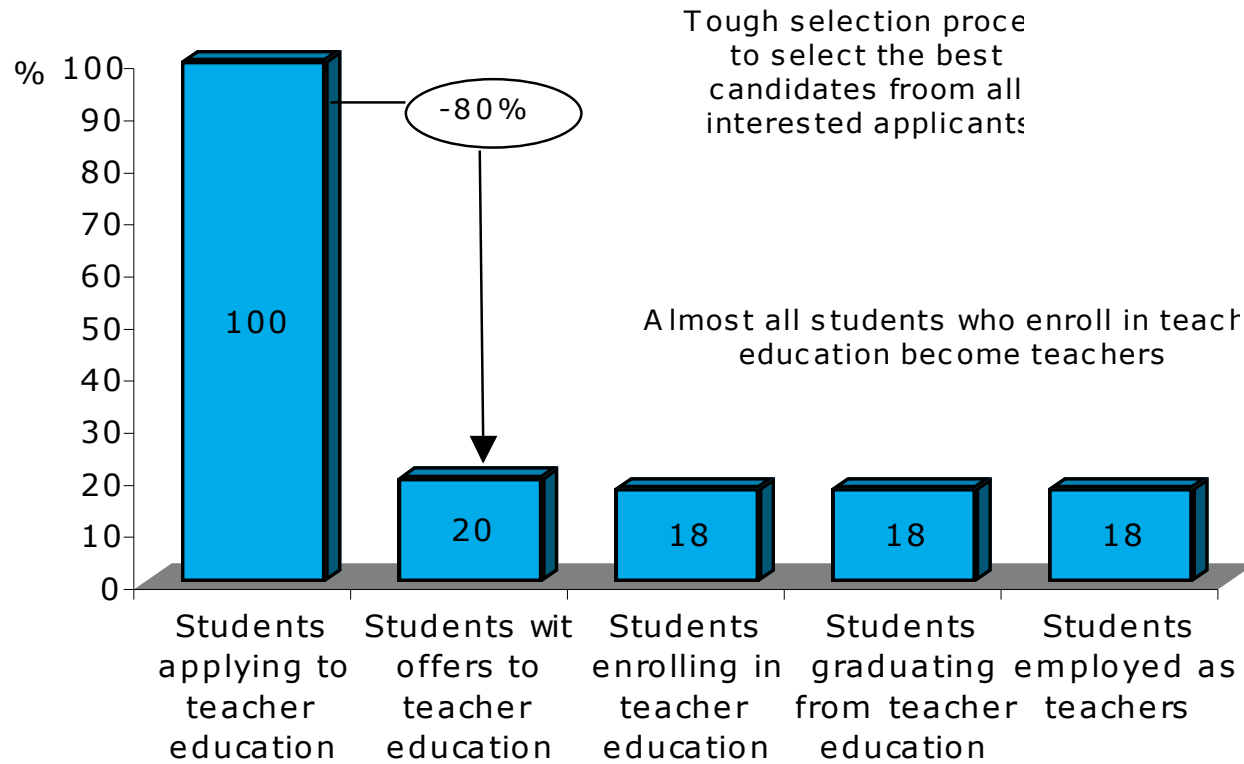
for measuring real teacher
shortage in Kyrgyzstan

7th Central Asia Forum on Education, September 17, 2009

The Impact of Teacher Shortage on the Quality of Education in Kyrgyzstan

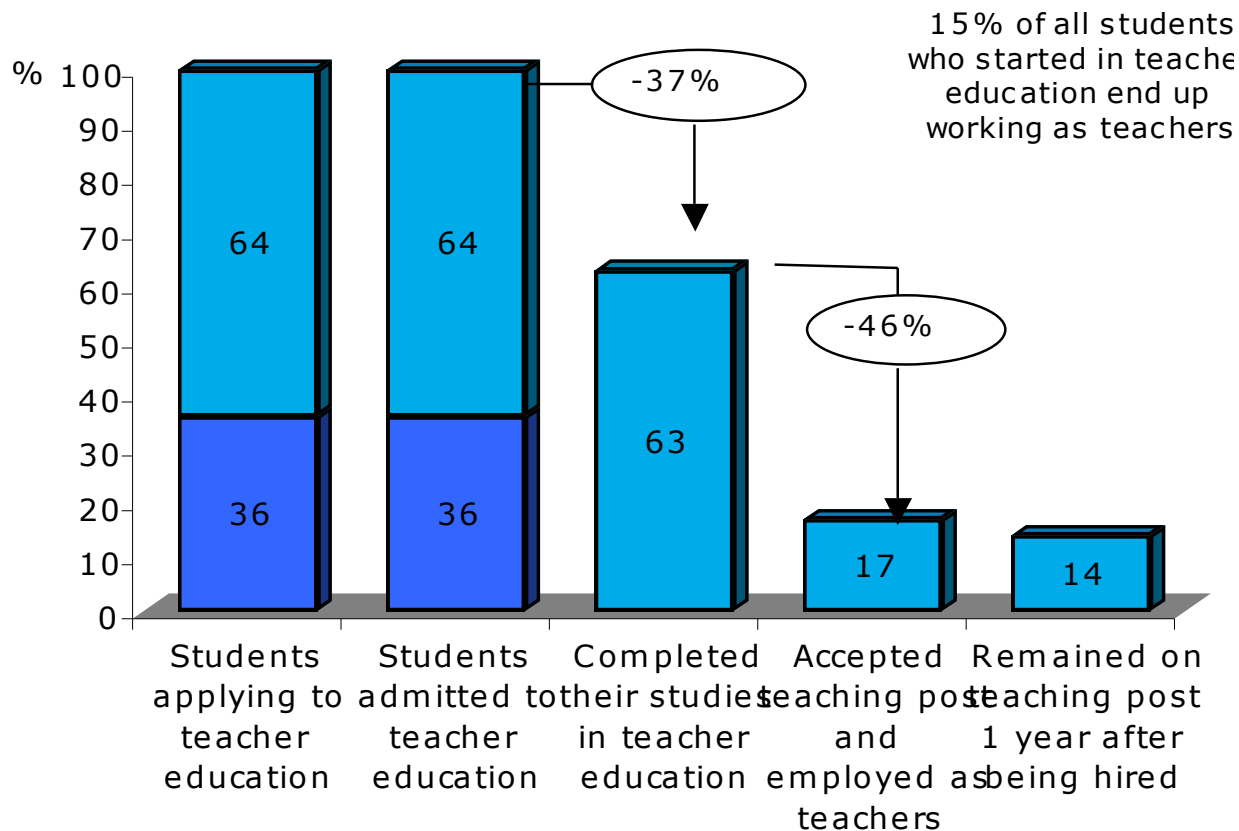
Recruitment into Teaching in Singapore (2007 McKinsey Report)

Singapore: Recruitment into teaching



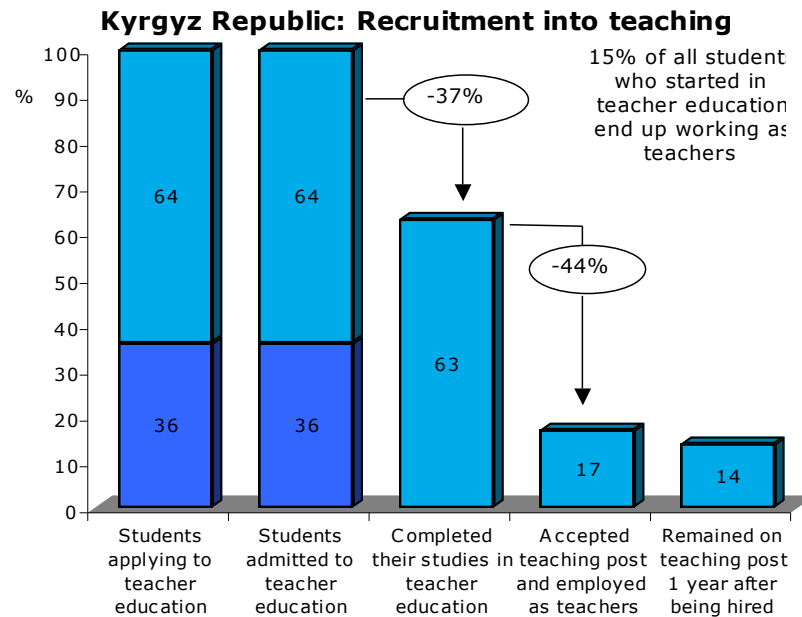
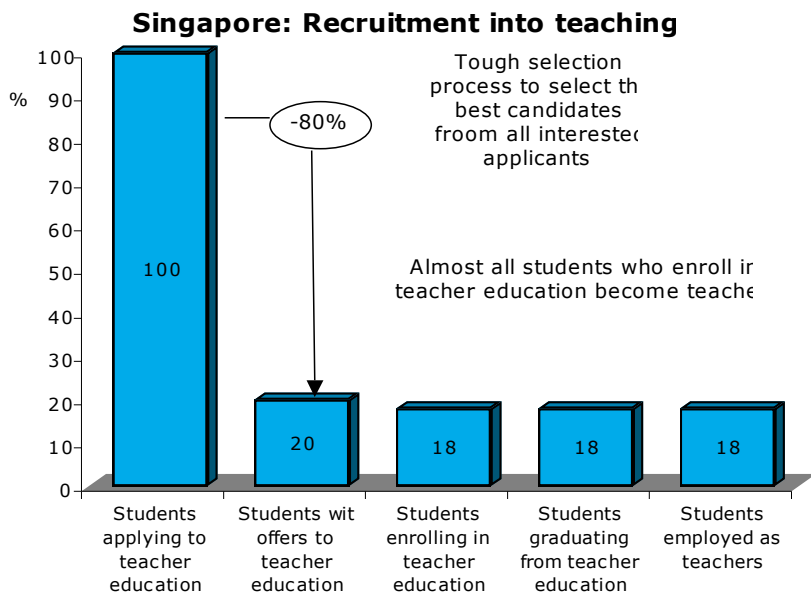
Recruitment into Teaching in Kyrgyzstan (Own Study)

Kyrgyz Republic: Recruitment into teaching



Teacher Quality and Student Outcomes

(2007 McKinsey Report & Own Study)



Source: Gita Steiner-Khamsi et al. (2007)

The UNICEF Study on Teacher Shortage in Kyrgyzstan

Province	Total Number of Schools in the Province	Number of Schools with Teacher Shortages	Percentage of Schools with Teacher Shortages	Ranking
Talas	116	86	74.1	1
Osh	56	40	71.4	2
Bishkek	123	81	65.8	3
Chui Province	325	212	65.2	4
Jalal-Abat	470	295	62.7	5
Batken	225	141	62.6	6
Issyk-Kul	196	95	48.4	7
Osh Province	521	242	46.4	8
Naryn	136	37	27.2	9
Kyrgyz Republic	2,168	1,229	56.6	

Coping Strategies at School-Level

Redistribution of Vacant Hours (PISA 2006):

- **62% of schools report vacancies in science**
- **Almost all of these schools (59% countrywide) redistribute the vacant hours among teachers (“additional hours”) or hire non-qualified teachers**
- **Despite redistribution strategy: One quarter of the vacancies in science remain unfilled**

The Redistribution Strategy Masks Teacher Shortage

Which other school-level coping strategies mask or hide teacher shortage?

Common Coping or Survival Strategies of Schools



“+1 Strategy”

Main indicator for teacher shortage= officially reported vacancies

+1 Strategy = cancelled lessons or subjects

Examples:

- **English were not taught in 4 of the 5 visited schools in Jalal-Abat province**
- **Russian and physics were only taught in a few classes**

Ten (Hidden) Teacher Shortage Indicators

Group A Indicators:

Hiring of Para-Teachers (non-qualified teachers)

1. Professionals (accountant, tailor, economist) without pedagogical training/specialization
2. Teachers who teach other subjects for which they do not have a specialization (Kyrgyz language and literature teacher who teaches history)
3. University students (mostly correspondence students) who teach

Ten (Hidden) Teacher Shortage Indicators

Group B Indicators:

Qualified Teachers who teach beyond retirement age, teaching load, or class/group size

- 4. Teachers at retirement age**
- 5. Teachers hired from another school**
- 6. Teachers who teach more than 24-27 hours**
- 7. Teachers who do not split the class into groups despite the entitlement to do so**

Ten (Hidden) Teacher Shortage Indicators

Group C Indicators:

Mismatch between what is taught on paper and what is taught in practice

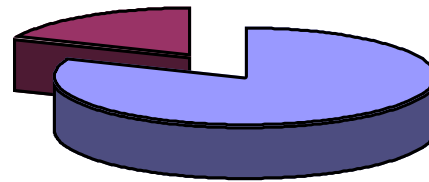
- 8. Teachers with prolonged absences or absenteeism**
- 9. Teachers who teach for a shorter duration than officially prescribed**
- 10. Teachers that are listed in the lesson plan without holding the actual lessons (ghost lessons)**

Indicator 1: Professionals Who Teach

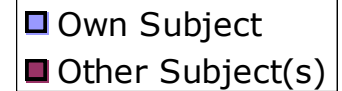
- A non-issue for Kyrgyz principals and teachers
- Not measurable: only educational degree is recorded (not specialization)
- Pedagogical specialization has no impact on salary
- Very common

Indicator 2: Teachers who teach subjects for which they were not trained

Other Subject(s)
19%



Own Subject
81%



Indicator 3: University Students That Teach

Educational Background	BK 1	BK 2	BK 3	BK 4	BK 5	JA 1	JA 2	JA 3	JA 4	JA 5		Total
Higher education specialist diploma	51	17	18	23	16	10	21	31	34	4		225 69%
Incomplete higher education (university students)	7 10%	4 17%	10 30%	3 9%	2 9%	2 13%	2 8%	3 8%	7 14%	2 15%		42 13%
Vocational-technical education (including ped uchilishe)	7	2	3	6	5	4	2	5	10	6		50 15%
General secondary school	2	0	2	3	0	0	0	1	1	1		10 3%
Total number of teachers	67	23	33	35	23	16	25	40	52	13		327 100%

Indicator 4: Retired Teachers Who Teach

School	Teachers (total)	Retired Teachers	Percentage of Retired Teachers (%)
BK 1	67	7	10.4
BK 2	23	1	4.3
BK 3	30	2	6.7
BK 4	33	1	3.0
BK 5	23	7	30.4
JA 1	16	2	12.5
JA 2	25	2	8.0
JA 3	40	4	10.0
JA 4	52	7	13.5
JA 5	13	0	0.0

Indicator 5:

Teachers Hired from Another School

1 *stavka* in Kyrgyzstan (normative teaching load):
16 hours for primary school teacher (grades 1-4)
18 hours for teachers in grades 5-11

Maximum amount of permitted teaching hours (max. *stavka*):

- ?
- 40 hours per week (Labor Code)?
- 1.5 *stavka* (24-27 hours/week) PER SCHOOL?

Impact of hiring teachers from other school:

Excessive teaching loads (over 40 hours/week)

Indicator 6: Teachers who teach more than 24-27 hours/week

School	Lowest Teaching Load per Week	Highest Teaching Load per Week
BK 1	12	36
BK 2	9	35
BK 3	10	38
BK 4	15	43
BK 5	17	36
JA 1	23	37
JA 2	10	36
JA 3	8	46
JA 4	12	50
JA 5	7	35

Indicators 7-10: Anecdotal Evidence

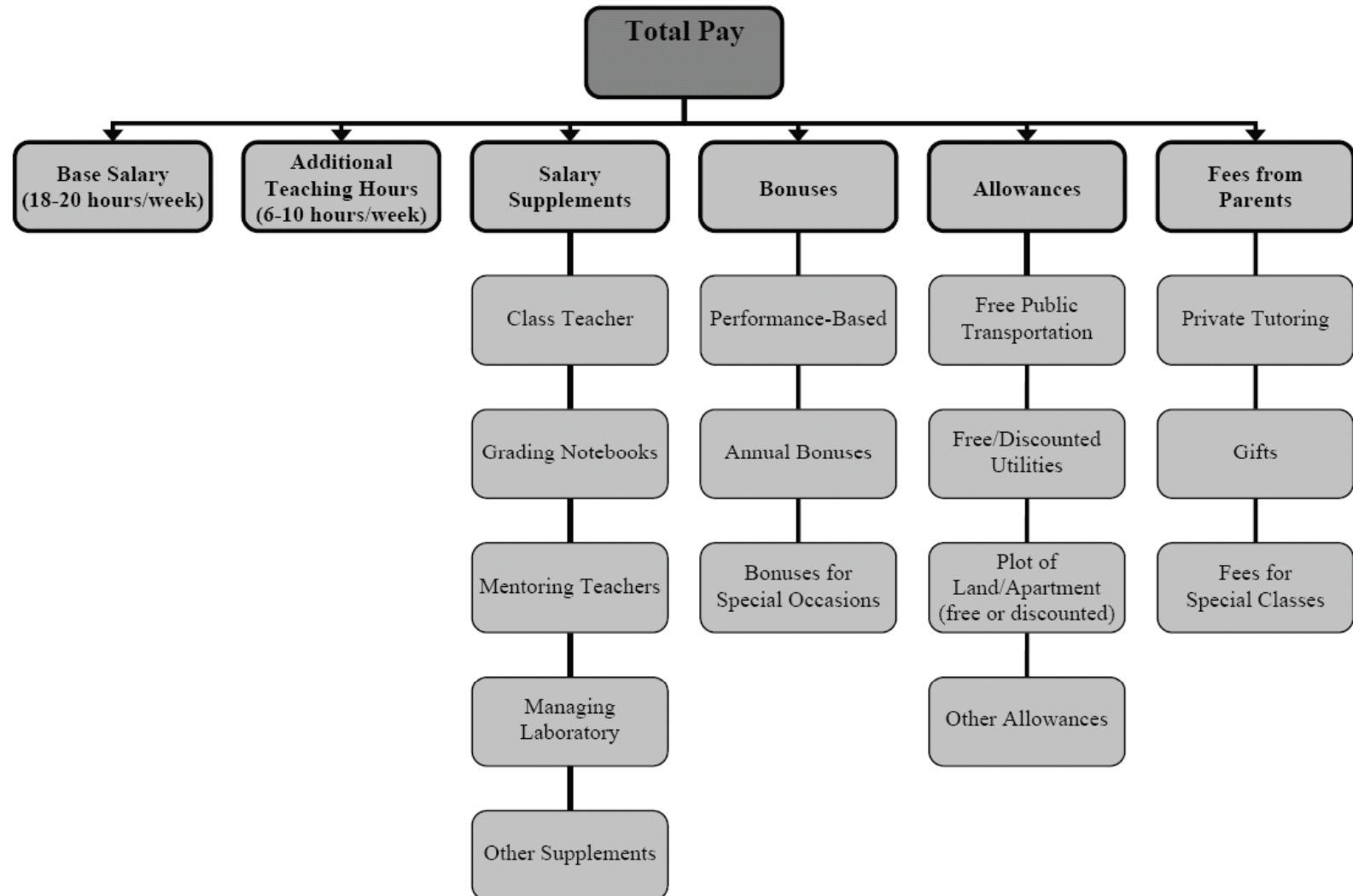
Indicator 7: Number of teachers who do not split the class (foreign languages, informatics)

Indicator 8: Number of teachers with prolonged absences or absenteeism

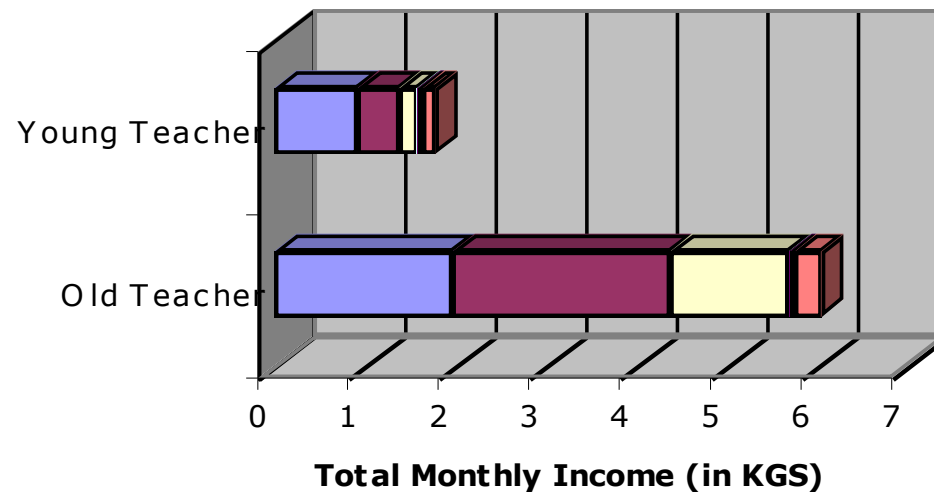
Indicator 9: Number of teachers who shorten the instructional time

Indicator 10: Number of teachers who do not show up in class

Exploring Some of the Reasons for Teacher Shortage in the Region ...



Exploring Some of the Reasons for Teacher Shortage in the Region ...



	Old Teacher	Young Teacher
■ Class Teacher (15%)	295	137
■ Notebook Checking	50	50
■ Rural Area Supplement	15	15
■ Teaching Experience	1,311	200
■ Additional Hours	2,403	458
■ Base Salary (1 Stavka)	1,966	916

Recommendations that Impact the Quality of Education

1. Correct baseline data on real teacher shortage: 10+1 indicators (not 1 indicator)
2. Reform of teacher education:
 1. Multi-subject teaching
 2. Targeting correspondence students
 3. Certificate courses for non-specialists (professionals as well as teachers who teach another subject)
3. Teacher Salary Reform (nominal level & structure of teacher salary)
4. Regional study on the “crisis of the pedagogical cadre” using 10+1 indicators