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Basic Information in China					
No. of Primary Schools	No. of Pupils	Enrollr rate	nent	Drop out rate	Promotio n rate
425,800	116,897, 400	98.6 5%	Boys 98.69 %	0.34%	97.9%
			Girls 98.61 %		
	Departmen	t of Educa	ation (2004)	China Educa	ation Annual Re

Medium of Instruction

- There are 55 ethnic minorities besides "Han" which is the major one. Chinese government take the education policy in which each of them is to use both Mandarin Chinese (language of Han) and their own language in school.
- The sample schools of 1st year is located around Beijing and that of 2nd year is around Hohhot (capital of Inner Mongolia). Both of these area use Han language (Chinese) even in urban and rural areas.

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Curriculum

- Math education in China has seen drastic change in the last decade. First of all, the policy "One curriculum many books" was introduced. Absorbing foreign experiences, especially that of Japan, the government makes the curriculum and the private corporations are entitled to write books. As a result, there are now 9 textbook companies, although during 1990s there was only one book which used to be published by People Education Press. On July 2001, New curriculum "Math Curriculum Standard(数学課 是推)" was made to replace the last curriculum "Math Education Curriculum (数字数字开算)". It is being tested until 2010 and since then will be supplied to the whole country. Among the 1st year samples, the urban school used books based on "Math Education Curriculum". About 2nd year, both urban and rural schools used the latter.

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Text Books in urban and rural areas

- Urban-9 years Compulsory Education, 6 years Primary Textbook "Mathematics" version 7 2002 Beijing Academy of Educational Science, **Basic Education, Mathematics Research**
- Rural 9 years Compulsory Education 6 years Primary Textbook "Mathematics" version 7 TB4 2003

People Education Press, Primary School Mathematics Section

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TB4 この両者の教科書の特徴があれば、簡単に記述する takuba, 2007/01/03



2-1 1st year survey

About Sample

- Sample schools were selected by their facilities, academic background of teachers, and area where pupils come from.
- The facility and quality of teachers in an urban school in Beijing is medium class and its pupils selected from Xuanwu District. This school is the key export-oriented school (対外重点開放校). A rural school is average school in Qianyuan-area in terms of school facilities and academic background of teachers and pupils come from Beidaran Village.

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How do pupils think of math?				
	1(agree)	2	3	4 (disagree)
I like Math.	102	31	6	5
	(70.8%)	(21.5%)	(4.2%)	(3.5%)
Math is	103	24	10	5
important for life	(72.5%)	(16.9%)	(7.0%)	(3.5%)
Studying	82	22	17	21
math is to enter	(57.7%)	(15.5%)	(11.8%)	(14.9%)
university				
	Int	ernational Workshop		

Result of Math Test (%)					
	Averag e	Boys	Girls	Maxim um	Minimu m
Beixian ge	78.03	75.68	81.30	98.73	17.72
Beidar an	66.10	67.12	65.31	98.59	8.45
All	72.38	70.48	70.64	98.73	8.45
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2

TB6 総数は何名か?百分率は小数第一位でよい。 takuba, 2007/01/03

Major Findings

- In urban school, 39.47% of pupils had "26~100" books, on the other hand, in rural, 36.62% of pupils had "0~10" books and there is a difference between them.
- 70.8% of pupils answered that "they like math". 72.5% said "Math is important for daily life", and 55.7% thought "Math is important to enter university".
 About these questionnaire items, no difference was seen in the result between urban and rural schools and it means the consciousness towards mathematics is high in China.
- The percentage of correct answer is 78.03% in urban and 66.10% in rural. The difference is 12%.

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2-2 Major Findings

- · Overview of the result
- Analysis of the Results from students' achievement test
- Analysis of the Results from students' responses to the interview

Overview of the result

	Average	male	female	Highest	Lowest
Urban area	64.9%	65%	64.4%	98.3%	6.8%
Rural area	59.7%	65%	54%	91.2%	4.2%
All	62.3%	65%	59.2%	-	-
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Analysis of the Results from students' achievement test

- The lowest achieved question was Q4-2, urban 6.8%, rural - 4.2%. Looking at pupils' answer, 52 pupils out of 59 in urban school answered "1/2m is 1/2 of 2m". About Q4-3, they had not learned mixed numbers, yet.
 Well performed questions upport
- Well performed questions were Q1(1),Q1(2),Q6(1),Q6(2).
 Urban - 98.3%,96.6%,100%, 98.3%, Rural - 89.6%,87.5%,89.6%,91.2
 It is because similar questions of these were often seen in text books.
- Q10 was the question which asked to make a question. Most of pupils made it from the angel of Algebra and few made it from the aspect of "Quantity of Fraction".

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Analysis of the Results from students' responses to the interview

- The average of top 5 in urban was 81.4 and its bottom 5 was 67.6 thus the difference between them was 13.8.
- The average of top 5 in rural was 73.2 and its bottom 5 was 55.2 thus the difference between them was 18.
- The difference in rural area is bigger than that of urban area. In both cases, the difference between poor-performing and good- performing students is below 20.

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TB7 この表はどこかに示すのか? takuba, 2007/01/03

スライド 14

TB8	今回の調査対象校に於ける生徒に占める漢民族と少数民族の割合。もし分からなければ、一般的な情報でも良
	د ۱ <u>۵</u>
	可能であれば、民族毎の成績。
	takuba, 2007/01/03

金6 学生名簿が手元にないため発表する際に加えます。 金,2007/01/06

スライド 17

- **TB10** 可能であれば、生徒の解答用紙から巣関したものをコピー takuba, 2007/01/03
- **TB11** このことに関連して、2つの教科書の特徴の記述が生きてくる。 また、なぜこのように結論付けるのか、もう少し説明が欲しい。 takuba, 2007/01/03
- **TB12** どのような解答が?%であったのか、解答の分布を示せ takuba, 2007/01/03
- **TB13** 18,19のスライドの辺りのデータ、記述がもう少し欲しい。 takuba,2007/01/03

3. Discussion -1-

- Students' experience in writing exams The speed of answering test 1 was slower then that of test 2.
- The explanation was not enough. For example, when being asked about the number of family members in multiple-choice question, many pupils selected the number, which corresponds with the number of real family members. About possession of facilities at home, some students skipped to answer it.

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3 . Discussion -2-

- Sample pupils G5 had not learned Fraction a lot. They only learned "Basic Concept of Fraction" at G4
- Urban school had 1405 pupils including 280 minorities. There were 4 classes in G5 and 252 pupils. Rural school had 877 pupils and 735 of them came from out of the district.
- The Percentage of correct answer of Q2 was less than 50% and it meant that concept of fraction for pupils was not clear. The performance of Q7 was also bad.
 TBIG
- Q10 was a question that asked to make a question. Most of pupils made it from the aspect of algebra and few made it using the concept of quantity of Fraction.

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TB15	少数民族と漢民族の成績の差はあるのか? takuba, 2007/01/03
TB16	何故なのか?生徒の解答を一部乗せ、もう少し分析すると面白い。 takuba, 2007/01/03
TB17	もう少し説明が必要 takuba, 2007/01/03

金5 生徒の回答用紙が手元にないため確認できませんでした。 金, 2007/01/06