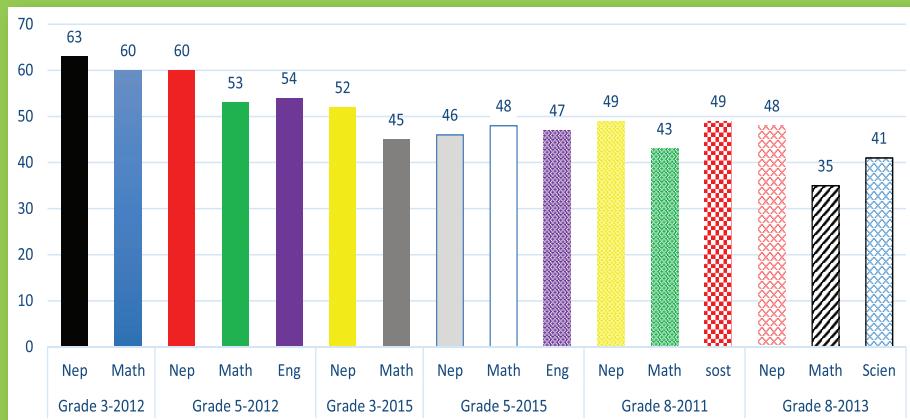


National Assessment of Student Achievement

A Glimpse of Results

Average achievement score by years and subjects



2016



Government of Nepal
Ministry of Education
Education Review Office
Sanothimi, Bhaktapur

Background

As envisioned in the School Sector Reform Plan (SSRP) 2009-2015, Education Review Office (ERO) has been established with the aim of carrying out independent performance audit of schools and institutions to promote the accountability under the Ministry of Education and assessing the level of student achievement in order to improve the quality of education. According to the Directives for the Management of Education Review Office 2010, ERO has been carrying out National Assessment of Student Achievement (NASA) in order to provide feedback to the system based on the empirical evidences. ERO prepared the following plan to carry out national assessment on student achievement.

Table 1. Execution of plan for National Assessment of Student Achievement

Year	2011	2012	2013	2015
Grade 8	✓✓		✓✓	
Grade 3 and 5		✓✓		✓✓

(✓✓ Accomplished)

Sample Size

As planned, ERO has already carried out six national assessments two times in each of the Grade 3, 5 and 8. The table below presents sample sizes including number of districts, schools and students in each national assessment.

Table 2. Sample for the National Assessment of Student Achievement

Year	Sample		
	No. of districts	No. of schools	No. of students
Grade 8 (2011)	25	1201	48,682
Grade 3 (2012)	28	1690	38,753
Grade 5 (2012)	28	1690	41,479
Grade 8 (2013)	28	1199	44,067
Grade 3 (2015)	23	1542	33,863
Grade 5 (2015)	23	1543	40,015

Selected Results of NASA

The following tables (tables 3 to 21) show the average achievement score in each subject and Grade in several forms of disaggregation. The results have been analyzed considering various strata of Ecological Regions- Mountain, Hill, Terai and Valley and Development Regions- Eastern, Central, Western, Mid Western, Far Western including Valley.

Table 3. Achievement by gender

Grade	Grade 3				Grade 5				Grade 8							
	2012		2015		2012		2015		2011		2013					
Year	N	M	N	M	N	M	E	N	M	E	N	M	Sos	N	M	Sc
National average	63	60	52	45	60	53	54	46	48	47	49	43	49	48	35	41
Girls	64	60	54	45	61	53	53	48	50	47	49	41	49	48	33	39
Boys	63	60	51	45	59	54	55	46	48	47	48	45	50	48	38	43

(E- English, M- Mathematics, N- Nepali, Sc-Science, So-Social Studies)

Table 4. Achievement by Ecological Zones

Eco Zone	Grade 3				Grade 5						Grade 8					
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
Mountain	61	60	45	39	61	56	51	41	42	37	49	41	48	47	21	32
Hill	60	55	51	42	57	49	49	46	45	40	50	38	47	39	29	38
Tarai	57	55	49	45	53	49	46	43	49	47	42	44	48	37	27	32
Valley	80	77	64	51	78	68	79	57	58	68	64	55	59	66	53	56

Table 5. Achievement by school locations

Location	Grade 3				Grade 5						Grade 8					
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
Urban	75	71	60	51	74	65	73	53	55	66	55	48	52	57	52	51
Rural	59	56	49	44	56	50	48	44	47	40	46	41	48	45	28	37

Table 6. Achievement by Development Regions

Development Regions	Grade 3				Grade 5						Grade 8					
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
East	54	52	53	46	52	45	39	46	47	46	43	33	46	36	25	32
Central	59	56	45	46	54	51	49	43	48	41	49	50	48	47	30	34
West	67	64	57	45	63	57	59	50	49	48	52	45	49	47	32	41
Mid-West	54	46	43	37	52	45	44	41	43	38	43	39	48	41	22	34
Far-West	59	58	45	40	58	51	49	37	45	38	42	37	48	38	29	32
Valley	80	77	64	51	77	68	79	57	58	68	64	55	59	66	53	56

Table 7. Achievement by school type

Type of School	Grade 3				Grade 5						Grade 8					
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
Community	57	54	46	41	54	49	66	43	45	38	46	39	46	42	26	34
Institutional	80	75	67	54	78	67	83	61	61	73	62	63	63	65	57	57

Table 8. Achievement by Ethnicity/caste

Caste/Ethnicity	Grade 3				Grade 5						Grade 8					
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
Brahmin/Chhetri	70	66	58	48	66	57	60	49	52	53	52	45	52	54	40	41
Janajati	64	61	54	47	62	52	54	49	49	47	49	41	48	49	36	45
Dalit	59	55	47	41	55	50	46	44	43	39	45	37	46	42	24	35
Madhesi	61	58	45	45	54	51	52	41	50	41	38	49	47	37	29	36
Others	60	54	51	46	51	53	44	48	50	50	45	40	47	47	37	39

Table 9. Students' involvement in household chores and their achievement

Duration per day	Grade 3				Grade 5						Grade 8					
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
Not Involved	60	55	49	45	56	47	52	43	48	50	45	46	51	48	39	43
< 1 hour	66	63	58	49	63	55	58	51	53	52	51	38	51	53	42	48
1 - 2 hours	68	65	57	47	63	58	57	50	51	50	51	37	48	51	35	42
2 - 4 hours	66	60	53	45	61	52	54	48	48	44	48	35	44	46	29	37
4 hours <	62	59	42	43	57	49	50	44	43	39	43			40	22	33

Table 10(a). Mother's education and children's achievement

Mother's education	Grade 3				Grade 5						Grade 8						
	2012		2015		2012			2015			2011			2013			
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc	
Illiterate	62	59	50	43	57	52	49	43	47	41	45	40	46	43	28	33	
Literate	64	61	54	46	58	53	53	48	48	45	49	43	50	49	33	38	
10 pass	72	68	58	48	69	59	70	49	51	54	52	47	51	50	42	40	
SLC pass	75	68	62	50	72	65	69	55	56	60	55	53	56	56	48	46	
Higher Secondary	74	73	60	50	73	67	72	53	52	60					64	57	53
Bachelor	80	80	57	50	83	74	89	50	54	62					64	59	59
Master	84	73	53	46	81	68	86	45	52	59					65	54	64

Table 10(b). Father's education and children's achievement

Father's education	Grade 3				Grade 5						Grade 8						
	2012		2015		2012			2015			2011			2013			
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc	
Illiterate	62	59	48	42	55	49	48	42	46	39	43	39	44	40	25	35	
Literate	63	60	53	46	58	51	51	47	48	43	47	40	48	47	30	41	
10 pass	71	67	56	47	68	58	65	47	48	48	49	42	49	47	34	46	
SLC	70	66	61	51	67	59	61	52	54	56	53	48	53	53	41	50	
Higher Secondary	72	73	61	50	69	63	66	51	52	57					60	52	59
Bachelor	78	75	60	52	76	69	77	53	53	61					63	56	62
Master	82	75	60	50	80	71	82	53	54	62					67	56	62

Table 11. Availability of textbook and achievement

Textbook availability	Grade 3				Grade 5						Grade 8					
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
Available	65	61			61	54	55	48	50	48	49	43	50	49	36	42
Not available	54	54			47	45	46	40	41	44	40	36	47	35	24	34

Table 12(a). Mother's occupation and children's achievement

Mother's occupation	Grade 3				Grade 5						Grade 8					
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
Service	77	74	67	51	76	65	76	55	57	61	53	50	54	62	54	53
Teaching	78	73	59	50	75	65	74	50	52	58	49	53	53	56	46	49
Business	75	71	61	51	71	63	66	54	55	59	52	46	53	56	46	48
Daily wage	65	65	53	43	64	60	60	47	44	46				48	30	40
Household	59	58	58	50	63	55	58	50	47	56				52	43	46
Work in other's home	60	65	55	38	60	52	54	45	52	49				52	34	47
Working abroad	67	61	48	45	58	56	55	43	50	50				46	35	42
Agriculture	61	58	53	50	57	51	49	46	47	42	47	40	47	45	29	37
Other			41					51	51	53	55	39	57			38

Table 12(b). Father's occupation and children's achievement

Father's Occupation	Grade 3				Grade 5				Grade 8							
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
Service	80	76	80	53	73	63	72	54	56	59	53	45	52	57	48	49
Teaching	61	76	61	52	70	63	68	50	55	48	52	50	53	53	41	48
Business	75	72	75	54	68	60	65	53	55	47	49	46	51	55	43	47
Daily wage	65	65	65	47	64	56	53	49	49	39				50	32	39
Household	67	63	67	41	51	47	45	42	43					36	23	31
Work in other's home	60	67	60	41	56	49	50	44	45					50	31	47
Working abroad	60	57	60	47	61	53	55	48	50					47	34	42
Agriculture	63	60	63	44	55	50	46	44	46		45	40	46	43	26	35
Other								52	51		54	45	51			37

Table 13. Students' age and achievement

Age/year	Grade 3				Grade 5				Grade 8							
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
Up to 7	56	52	44	41												
8 years	61	56	49	45												
9 years	64	61	55	46	53	49	45	43	44	44						
10 years	64	61	55	47	57	53	52	45	47	45						
11 years	62	59	54	46	63	56	58	49	51	51						
12 years	60	58	50	44	62	53	56	49	50	49						
13 years	57	55	49	43	58	52	50	46	48	44	54	49	-	53	42	47
14 years					57	50	45				52	47	53	52	40	45
15 years					48	46	40				46	40	52	46	30	37
16 years					45	39					43	36	44	40	24	32
17 & above					47	43					40	33	42	34	22	29

Table 14. Available support to study and achievement

Support Available	Grade 3				Grade 5								Grade 8						
	2012		2015		2012				2015				2011			2013			
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc			
Tuition	67	63	49	44	63	58	61	43	43	42	52	48	51	51	38	48			
Siblings	65	61	56	47	62	55	56	49	50	50	50	42	50	50	35	44			
Mother	66	61	56	46	59	56	57	49	51	53	50	45	49	48	34	42			
Father	60	58	51	46	57	52	52	46	49	48	47	42	49	47	35	42			
Teacher	66	61	51	49	59	50	48	44	53	43	48	43	48	44	33	40			
No one	60	59	54	47	63	54	53	49	52	50	48	42	49	53	36	45			

Table 15. Achievement by content areas

Subject	Grade	Year	Reading	Writing	Grammar	Vocabulary		
Nepali	8	2011	56	48	51	43		
	8	2013	46	46	49	55		
	5	2012	56	58	64	70		
	5	2015	39	33	38	53		
	3	2012	64	54	65	60		
	3	2015	50	41	57	75		
English	5	2012	50	49	57	58		
	5	2015	46	40	53	62		
Science	8	2013	Biology 34	Chemistry 43	Physics 43	Astro & Geo 43		
Social Studies	8	2011	Geography	Civics	Economics	History	Political Science	
			57	51	58	50	46	
Maths			Algebra	Geometry	Arithmetic	Numeracy	Sets	Statistics
	8	2011	48	37	49		38	48
	8	2013	27	34	37		37	38
	5	2012	49	57	54	44		
	5	2015	46	49	51	47		
	3	2012	40	60	61	54		
	3	2015	57	51	45	49		

Table 16. Achievement by type of items

Type of Items	Grade 3				Grade 5								Grade 8						
	2012		2015		2012				2015				2011			2013			
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc			
Objective	71	66	63	54	66	62	52	55	57	54	58	60	69	58	47	50			
Subjective	51	54	48	35	55	44	31	33	35	40	40	25	36	45	30	32			

Table 17. Achievement by levels of cognitive domain

Cognitive Domain	Grade 3				Grade 5						Grade 8					
	2012		2015		2012			2015			2011			2013		
	N	M	N	M	N	M	E	N	M	E	N	M	So	N	M	Sc
Knowledge	72	59	63	56	71	65	64	65	57	56	74	68	52	57	46	49
Comprehension	65	64	72	45	63	59	50	48	52	42	54	55	66	56	42	49
Application	56	53	65	36	61	52	49	32	37	53	46	38	40	45	35	32
Higher Ability	37		56	36	47	40	35	31	37	39	42	21	34	48	25	23

Table 18: Achievement by district in NASA 2011

District	Grade 8 (2011)		
	Nepali	Mathematics	Social Studies
Bajhang	43	46	47
Banke	42	45	55
Bara	40	51	49
Bhaktapur	69	61	57
Bhojpur	40	18	38
Dhading	60	43	45
Doti	42	39	51
Gorkha	57	51	53
Ilam	42	30	46
Jajarkot	38	35	41
Jhapa	46	40	51
Kalikot	46	53	45
Kanchanpur	42	32	46
Kathmandu	63	55	61
Lalitpur	64	52	51
Morang	39	34	45
Mustang	70	45	48
Nawalparasi	43	45	47
Pyuthan	47	29	46
Ramechhap	46	42	50
Rautahat	45	66	47
Sankhuwasabha	50	32	44
Sindhupalchok	51	38	54
Syangja	50	39	51
Tanahun	57	47	48

Table 19. Achievement by district in NASA 2012

District	Grade 3 (2012)		Grade 5 (2012)		
	Nepali	Maths	Nepali	Maths	English
Bhaktapur	80	77	81	69	76
Kathmandu	81	79	78	71	80
Lalitpur	78	72	73	60	77
Kaski	77	70	73	64	72
Solukhumbu	69	70	71	59	57
Darchula	59	66	64	55	49
Chitwan	63	53	63	51	51
Baglung	68	62	62	49	60
Myagdi	62	55	60	55	47
Manang	64	67	58	51	39
Baitadi	68	63	58	58	56
Parsa	63	73	58	58	55
Kailali	60	55	58	47	47
Dhankuta	55	59	57	45	39
Dolakha	61	52	57	56	56
Humla	61	70	57	60	48
Makwanpur	57	63	57	54	51
Rolpa	57	40	57	44	40
Bardiya	52	41	55	42	50
Achham	50	51	53	44	44
Kapilbastu	56	62	53	55	49
Khotang	51	47	52	41	29
Udayapur	53	46	51	37	39
Jumla	54	40	49	47	33
Sindhuli	60	50	48	45	47
Salyan	52	50	46	45	45
Mahottari	52	48	41	43	37
Saptari	48	49	37	47	37

Table 20. Achievement by district in NASA 2013 for Grade 8

District	Districts	Nepali	Maths	Science
1	Bhaktapur	62	59	53
2	Lalitpur	65	54	51
3	Kathmandu	68	51	59
4	Palpa	48	39	43
5	Parbat	52	38	43
6	Kavrepalanchok	51	33	38
7	Nuwakot	54	33	38
8	Gulmi	56	32	44
9	Lamjung	46	32	47
10	Arghakhachi	50	31	44
11	Dailekh	41	30	36
12	Dadeldhura	40	30	36
13	Okhaldhuga	44	29	36
14	Sunsari	34	29	30
15	Sarlahi	37	28	32
16	Rupandehi	41	28	35
17	Siraha	30	28	35
18	Dhanusa	39	28	24
19	Bajura	36	27	29
20	Rukum	47	24	41
21	Dang	35	24	32
22	Taplejung	40	21	31
23	Rasuwa	56	18	45
24	Panchthar	36	18	30
25	Surkhet	43	17	31
26	Mugu	29	15	25
27	Terhathum	51	14	34
28	Dolpa	43	12	42
	Total	48	35	41

Table 21. Achievement by district in NASA 2015

District	Grade 3 (2015)		Grade 5 (2015)		
	Nepali	Maths	Nepali	Maths	English
Illam	62	52	51	54	48
Jhapa	64	59	58	57	61
Morang	47	39	36	45	47
Sankhuwasabha	49	35	49	38	35
Bhojpur	38	31	36	36	26
Ramechhap	50	47	47	43	42
Lalitpur	60	45	60	53	64
Bhaktapur	65	48	58	50	69
Kathmandu	66	56	56	60	70
Dhading	54	44	55	48	47
Rautahat	33	43	37	43	36
Bara	46	48	36	54	38
Tanahu	58	45	50	48	45
Syangja	56	47	45	51	44
Mustang	80	49	59	60	42
Nawalparasi	55	43	55	49	54
Pyuthan	44	27	46	38	33
Banke	42	39	42	46	45
Jajarkot	45	38	34	41	33
Kalikot	41	45	41	49	35
Bajhang	43	37	34	41	39
Doti	42	38	39	44	34
Kanchanpur	52	45	40	48	42

Conclusion

Four studies completed so far revealed that average score of students' learning achievement in Grade 3 and 5 ranges from 45 to 63 % whereas in Grade 8 it is 35 to 49%. The achievements of students in various subjects have not been improving over the years. In most of the cases, the level of achievement of Nepali students is considered low in comparison to the international standards. Similarly, a wide gap in achievement is also observed among and between rural-urban, community-institutional, Development Regions and Ecological belts. The wide variation in achievement persisting continuously among and between caste/ethnicity and social groups also is not the positive indication for the system. Therefore, there is an urgent need of improving the performance of entire education system in order to raise the achievement of students to the expected level.



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