National Assessment of Student Achievement A Glimpse of Results 2015

Average achievement score by years and subjects





Covernment of Nepal
Ministry of Education
Education Review Office
Sanothini, Bhaktapur

Background

As envisioned in the School Sector Reform Plan (SSRP) 2009-2015, Education Review Office (ERO), under the Ministry of Education, has been established with the aim of carrying out independent performance audit of schools and institutions under the Ministry of Education, and assessing the level of student achievement in order to promote the accountability of the institutions and 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. The MOE has approved the follwoing roadmap to carry out national assessment on student achievement.

Table 1. Execution of plan forNational Assessment of Student Achievement

Years	2011	2012	2013	2014
Grade 8	$\sqrt{}$		$\sqrt{}$	
Grade 3 and 5		VV		V

 $(\forall \forall Accomplished; \forall on process)$

As planned, ERO has already carried out four national assessments for grade III, V and VIII. The table below presents sample sizes including number of districts, schools and students.

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	48682
Grade 3 (2012)	28	1690	38735
Grade 5 (2012)	28	1690	41479
Grade 8 (2013)	28	1199	44067

Selected Results of NASA

The following tables (tables 3 to 18) show the achievement score for these grades in disaggregated form. Based on the sampling procedure, three ecological belts were defined as Mountain, Hill and Tarai. However, in the study Kathmandu Valley was taken as a separate strata.

Table 3. Achievement by gender

Grades/	Gra	de 3	Grade 5			Grade 8						
Years/	20	12	2012				2011			2013		
Subjects	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc	
National average	63	60	60	53	54	49	43	49	48	35	41	
Girls	64	60	61	53	53	49	41	49	48	33	43	
Boys	63	60	59	54	55	48	45	50	48	38	39	

(Eng- English, Math- Mathematics, Nep- Nepali, Sc-Science, Sost-Social Studies)

Table 4.Achievement by ecological belts

			_								
	Gra	de 3	Grad	e 5				Gra	de 8		
Ecological zone	20	12	2012				2011			2013	
	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc
Mountain	61	60	61	56	51	49	41	48	47	21	32
Hill	60	55	57	49	49	50	38	47	39	29	38
Valley	80	77	78	68	79	64	55	59	66	53	56
Tarai	57	55	53	49	46	42	44	48	37	27	32

Table 5. Achievement by school location

	Gra	de 3	(Grade	5			Gra	de 8		
Location 2012	12		2012		2011			2013			
Nep		Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc
Urban	75	71	74	65	73	55	48	52	57	52	51
Rural	59	56	56	50	48	46	41	48	45	28	37

Table 6. Achievement by development region

	Gra	de 3	(Grade	5			Gra	de 8		
Dev. region	20)12		2012			2011			2013	
	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc
East	54	52	52	45	39	43	33	46	36	25	32
Central	59	56	54	51	49	49	50	48	47	30	34
West	67	64	63	57	59	52	45	49	47	32	41
Mid-West	54	46	52	45	44	43	39	48	41	22	34
Far-West	59	58	58	51	49	42	37	48	38	29	32

Table 7. Achievement by school type

	Gra	de 3	(Grade	5			Gra	de 8		
Type of School	20	12	2012				2011		2013		
			Nep Math Eng			Nep Math Sost			Nep	Math	Sc
Community	57	54	54	49	66	46	39	46	42	26	34
Institutional	80	75	78	67	83	62	63	63	65	57	57

Table 8. Achievement by ethnicity/caste

	Gra	de 3	Grad	e 5				Gra	de 8		
Caste/ ethnicity	20	12	2012				2011		2013		
	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc
Brahmin/ Chhetri	70	66	66	57	60	52	45	52	54	40	41
Janajati	64	61	62	51	54	49	41	48	49	36	45
Dalit	59	55	55	50	46	45	37	46	42	24	35
Madhesi	61	58	54	52	52	38	49	47	37	29	36
Other	60	54	51	53	44	45	40	47	47	37	39

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

W. 1	Gra	de 3	(Grade	5			Gra	de 8		
Work involve-ment	20	12		2012			2011		20	13	
ment	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc
Not Involved	60	55	56	47	52	45	46	51	48	39	43
< 1 hour	66	63	63	55	58	51	38	51	53	42	48
1 - 2 hours	68	65	63	58	57	51	37	48	51	35	42
2 - 4 hours	66	60	61	52	54	48	35	44	46	29	37
4 hours	62	59	57	49	50	43			40	22	33

Table 10. Socio-economic Factors and Achievement
Table 10.1.Mother's education and children's achievement

	Gra	de 3	Grad	e 5				Gra	de 8		
Mother's education	2012		2012				2011			2013	
	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc
Illiterate	62	59	58	52	49	45	40	46	43	28	35
Literate	64	61	59	53	53	49	43	50	49	33	41
10 pass	72	68	70	59	70	52	47	51	50	42	46
SLC pass	75	68	73	65	69	55	53	56	56	48	50
Higher ed.	77	75	59	69	77	50	47	57	64	57	59

Table 10.2. Father's education and children's achievement

	Gra	de 3	(Grade :	5	Grade 8					
Father's education	2012		2012				2011		2013		
caucation	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc
Illiterate	62	59	55	49	48	43	39	44	40	25	33
Literate	63	60	58	51	51	47	40	48	47	30	38
10 pass	71	67	68	58	65	49	42	49	47	34	40
SLC	70	66	67	59	61	53	48	53	53	41	46
Higher ed.	75	74	61	66	74	53	50	55	61	55	57

Table 10.3. Mother's occupation and children's achievement

	Gra	de 3	(Grade	5			Gra	de 8		
Mother's occupation	20	12		2012			2011			2013	
	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc
Service	77	74	76	65	76	53	50	54	62	54	53
Teaching	78	73	75	65	74	49	53	53	56	46	49
Business	75	71	71	63	66	52	46	53	56	46	48
Daily wage	65	65	64	60	60				48	30	40
Household	59	58	63	55	58				52	43	46
Work in other's home	60	65	60	52	54				52	34	47
Working abroad	67	61	58	56	55				46	35	42
Agriculture	61	58	57	51	49	47	40	47	45	29	37
Other						55	39	57			38

Table 10.4. Father's occupation and children's achievement

	Gra	de 3	(Grade	5	Grade 8						
Father's occupation	20	2012		2012			2011			2013		
occupation	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc	
Service	80	76	73	63	72	53	45	52	57	48	49	
Teaching	61	76	70	63	68	52	50	53	53	41	48	
Business	75	72	68	60	65	49	46	51	55	43	47	
Dailywage	65	65	64	56	53				50	32	39	
Household	67	63	51	47	45				36	23	31	
Work in other's home	60	67	56	49	50				50	31	47	
Working abroad	60	57	61	53	55				47	34	42	
Agriculture	63	60	55	50	46	45	40	46	43	26	35	
Other						54	45	51			37	

Table 11. Students' age and achievement

	Gra	de 3	(Grade	5			Gra	de 8		
Age/years	2012		2012			2011			2013		
	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Scn
up to 7	56	52	-								
8 years	61	56	-								
9 years	64	61	53	49	45						
10 years	64	61	57	53	52						
11 years	62	59	63	56	58						
12 years	60	58	62	53	56						
13 years	57	55	58	52	50	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 12. Available support to study and achievement

<u> </u>	Grade 3			Grade 5			Grade 8					
Support	Support 2012		2012			2011			2013			
110111	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc	
Tuition	67	63	63	58	61	52	48	51	51	38	48	
Siblings	65	61	62	55	56	50	42	50	50	35	44	
Mother	66	61	59	56	57	50	45	49	48	34	42	
Father	60	58	57	52	52	47	42	49	47	35	42	
Teacher	66	61	59	50	48	48	43	48	44	33	40	
No one	60	59	63	54	53	48	42	49	53	36	45	

Table 13. Availability of textbook and achievement

Tr. 41 1	Grade 3		Grade 5			Grade 8						
Textbook availability		2012		2012			2011			2013		
availability	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc	
Available	65	61	61	54	55	49	43	50	49	36	42	
Not available	54	54	47	45	46	40	36	47	35	24	34	

Table 14. Achievement by types of contents

Sub	Grade	Year	Reading	Writing	Grammar	Vocabulary		
	8	2011	56	48	51	43		
N	8	2013	46	46	49	55		
Nep	5	2012	56	58	64	70		
	5	2012	64	54	65	60		
Eng	5	2012	50	49	57	58		
Sub	Grade	Year	Biology	Writing	Physics	Astro & Geo		
Scien	8	2013	34	43	43	43		
Sub	Grade	Year	Geography	Civic	Economics	History	Politics	
Social	8	2011	57	51	58	50	46	
Sub	Grade	Year	Algebra	Geometry	Arithmetic	Numeracy	Sets	Statistics
	8	2011	48	37	49		38	48
Math	8	2013	27	34	37		37	38
iviath	5	2012	49	57	54	44		
	3	2012	40	60	61	54		

Table 15. Achievement by types of items

				JI	-	_						
	Grade 3		Grade 5			Grade 8						
Type of questions		2012		2012			2011			2013		
questions	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc	
Objective	71	66	66	62	52	58	60	69	58	47	50	
Subjective	51	54	55	44	31	40	25	36	45	30	32	

Table 16. Achievement by levels of cognitive domain

	Grade 3		Grade 5			Grade 8						
Cognitive domain	20	12	2012			2011			2013			
	Nep	Math	Nep	Math	Eng	Nep	Math	Sost	Nep	Math	Sc	
Knowledge	72	59	71	65	64	74	68	52	57	46	49	
Comprehension	65	64	63	59	50	54	55	66	56	42	49	
Application	56	53	61	52	49	46	38	40	45	35	32	
Higher Ability	37		47	40	35	42	21	34	48	25	23	

Table 17:Achievement by district in NASA 2011

District –		Grade 8 (2011)	
District	Nepali	Math	Social
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 18. Achievement by district in NASA 2012

Table18. Acmie		3 (2012)	I	rade 5 (201	2)
District	Nepali	Math	Nepali	Math	English
Achham	50	51	53	44	44
Baglung	68	62	62	49	60
Baitadi	68	63	58	58	56
Bardiya	52	41	55	42	50
Bhaktapur	80	77	81	69	76
Chitwan	63	53	63	51	51
Darchula	59	66	64	55	49
Dhankuta	55	59	57	45	39
Dolakha	61	52	57	56	56
Humla	61	70	57	60	48
Jumla	54	40	49	47	33
Kailali	60	55	58	47	47
Kapilbastu	56	62	53	55	49
Kaski	77	70	73	64	72
Kathmandu	81	79	78	71	80
Khotang	51	47	52	41	29
Lalitpur	78	72	73	60	77
Mahottari	52	48	41	43	37
Makwanpur	57	63	57	54	51
Manang	64	67	58	51	39
Myagdi	62	55	60	55	47
Parsa	63	73	58	58	55
Rolpa	57	40	57	44	40
Salyan	52	50	46	45	45
Saptari	48	49	37	47	37
Sindhuli	60	50	48	45	47
Solukhumbu	69	70	71	59	57
Udayapur	53	46	51	37	39

Table 19. Achievement by district in NASA 2013 for grade 8

S.No.	Districts	Nepali	Math	Science
1	Arghakhachi	50	31	44
2	Bajura	36	27	29
3	Bhaktapur	62	59	53
4	Dadeldhura	40	30	36
5	Dailekh	41	30	36
6	Dang	35	24	32
7	Dhanusa	39	28	24
8	Dolpa	43	12	42
9	Gulmi	56	32	44
10	Kathmandu	68	51	59
11	Kavrepalanchok	51	33	38
12	Lalitpur	65	54	51
13	Lamjung	46	32	47
14	Mugu	29	15	25
15	Nuwakot	54	33	38
16	Okhaldhuga	44	29	36
17	Palpa	48	39	43
18	Panchathar	36	18	30
19	Parbat	52	38	43
20	Rasuwa	56	18	45
21	Rukum	47	24	41
22	Rupandehi	41	28	35
23	Sarlahi	37	28	32
24	Siraha	30	28	35
25	Sunsari	34	29	30
26	Surkhet	43	17	31
27	Taplejung	40	21	31
28	Terhathum	51	14	34
	Total	48	35	41

Conclusion

Three studies completed so far revealed that average score of students' learning achievement in grade three and five ranged from 53 to 63 % whereas in grade eight it was 35 to 49%. The data also show that the achievements of students in various subjects had not been improving over the years. This level of achievement of Nepali students is considered low in comparison to the international standard. Similarly, a wide gap in achievement among and between rural-urban, community-institutional, developmental regions, ecological belts is not a good sign for equality. The wide variation in achievement persisting continuously among and between caste/ethnicity and social groups also is not the positive indication for the system. So, it is an imperative to improve the performance of entire education system in order to raise the achievement of students to the expected level.







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