

Royal Education Council

Rationalization of School Curriculum & Instructional Time Allocation

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Rationalization of School Curriculum

Background

The conventional teacher centred and rote learning form of education has served us well through ages. As the education system in Bhutan embraces the 21st Century education framework and principles, it warrants a paradigm shift in curriculum design and development, including the pedagogy, commensurate the competency based learning. An approach, which underscores that learning in the 21st century, is for the development of competencies through active engagement of learners in learning experiences, guided by formation and utilisation of “working knowledge”. This empowers learners to take responsibilities of their learning and develop “portable skills or soft skills,” such as critical thinking, creativity, communication and collaboration, vital for all as individuals with unique talent and competencies. The current culture of curriculum design and practices in schools, however, do not render condition to facilitate realisation of the national aspiration of nurturing “nationally rooted and globally competent” citizen.

Amongst others, it has always been a concern for REC on the extent, relevancy and quality of the curriculum in all subjects. Thus, in order to facilitate quality learning for 21st Century education, REC has initiated major curriculum reform in all subjects.

Rationale

The Bhutan Education Blueprint 2014-2024 indicated that the existing curriculum was ‘heavy’. This was echoed as one of the major pointers in the National School Curriculum Conference 2016 that the curriculum was ‘vast’. These findings led to the need for curriculum “thinning” [Resolution 3.1.10 (IV)]. In response to these findings, REC started the rationalization of the existing curriculum by reviewing and screening out the obsolete and irrelevant content, and updating them with the most recent information and also rectifying errors in the textbooks. Therefore, some portions of the syllabi from several subjects, for instance, have been dropped. The rationalization or thinning of curriculum is one of the important considerations made while developing new textbooks based on new curriculum frameworks.

The curriculum rationalization process also aligns very well with Resolution 13 of the National Education Conference 2018 of “Doing away with the Saturday classes”. The para 13.4 of the resolution requires ‘REC to work on curriculum thinning and review of time allocation for each subject’. This resolution has further facilitated REC to expedite the curriculum rationalization and review the time and period allocation for each subject.

Rationalization of the school curricula is based on the following strategies:

- i. Review the goals and outcomes of each subject to identify topics, chapters, learning activities, exercises and assessment.
- ii. Develop rationalized syllabus for each subjects ensuring conceptual linkages and progression within the chapter or topic in the textbooks.
- iii. Minimize lexical density in text by reducing heavy textual materials from the textbooks.
- iv. Remove topics, learning activities or assessment items, which are redundant, overlapping irrelevant or inappropriate.

- v. Delete irrelevant or inappropriate illustrations or diagrams, and examples from the text.
- vi. Update and align the content width and depth with the teaching time available for each subject.
- vii. The revised syllabi for each subject are categorised and compiled under four subject classifications, namely STEM, Social Sciences, Language, and TVET & Commercial Studies.

The review of the instructional time allocation is based on the following criteria:

- i. Maintain the instructional time requirement at the international standard.
- ii. Maintain gradual increase of instructional time across most of the key stages.
- iii. Reduce the instructional time for each subject across the grades based on the doing away of the Saturday classes.
- iv. Allocate time for personal development learning areas, such as HPE, Arts Education, Values Education, CGC, TVET Program (clubs and PVOP).
- v. Non-curricular activities and programmes are to be conducted outside the instructional hours.
- vi. Calculate 150 actual curricular instructional days (excluding examination days in June and November months) in an academic year based on 5 working days per week.
- vii. Calculation of instructional time is based on 8 periods a day of 40 minutes each.

Conclusion

Instructional time refers to the actual contact time in the classroom. This is the minimum time available for the delivery of the curriculum including assessment. Instructional Time equals to number of days multiplied by number of periods per day times duration of one period (180 x 8 x 40). The rationalization of the curriculum is based on 150 days of the actual instructional time.

Instructional days are the total number of days within which the curricular activities are conducted. Within these days, a maximum of 5.33 hours (320 minutes) are available for actual classroom instruction per day. This calculation is based on 8 periods a day of 40 minutes each. The average instructional time in the OECD countries ranges from 799 to 915 hours per year. This includes all the educational activities that happen in the school in a day. However, the calculation of instructional time for the rationalized curriculum is based on the actual contact time for curriculum delivery, which has resulted in more instructional time than in OECD countries.

Lastly, it must be noted that the instructional time and days are suggested guide. Thus, it is envisaged that schools will make adjustment in instructional time as deemed applicable.

Instructional Days and Time 2019

SI No	Month	No of Days	No of Saturdays & Sundays	No of Holidays	Net Instructional Days	Instructional Time Minutes 40 x 8 x Net instructional days	Instructional Time (Hours)	Remarks
1	January	31	0	31	0	0	0	
2	February	28	8	5	15	4800	80	
3	March	31	10	0	21	6720	112	
4	April	30	8	1	21	6720	112	
5	May	31	8	1	22	7040	117.33	
6	June	30	10	1	19	6080	101.33	
7	July	31	0	31	0	0	0	
8	August	31	9	0	22	7040	117.33	
9	September	30	9	1	20	6400	106.67	
10	October	31	8	1	22	7040	117.33	
11	November	30	9	3	18	5760	96	
12	December	31	0	0	0	0	0	<i>Board examinations time</i>
Total		365	79	75	180	57,600	960	<i>Including examinations time</i>
					150	48,000	800	<i>Excluding 30 days examinations (mid term and annual)</i>

Note

- The maximum number of instructional days available including examinations time is **180 days**.
- The maximum number of instructional days available for curriculum delivery excluding examination is **150 days**.
- The rationalization of the curriculum is based on **150 days** of the actual instructional time.
- Instructional days are the total number of days within which the curricular activities are conducted. Within these days, a maximum of **5.33 hours** (320 minutes) are available for actual classroom instruction per day. This calculation is based on **8 periods a day of 40 minutes each**.
- Instructional time refers to the actual contact time in the classroom.
- This is the minimum time available for the delivery of the curriculum including assessment. Instructional Time equals to the Number of days X Number of periods per day X duration of one period (180 x 8 x 40).
- The average instructional time in the OECD countries ranges from **799 to 915** hours per year. This includes all the educational activities that are conducted in the school in a day. However, our instructional time calculation is based on the actual contact time for curriculum delivery, which has resulted in more instructional time than in OECD countries.

15	Values Education	Time (minutes per week)	40	40	40	40	40	40	40	40	40	40	40	40	
		Period per week (40 mins)	1	1	1	1	1	1	1	1	1	1	1	1	1
		Time Per Year (Hrs)	20	20	20	20	20	20	20	20	20	20	20	20	20
16	Arts Education	Time (minutes per week)	40	40	40	40	40	40	40	40	40	40	40		
		Period per week (40 mins)	1	1	1	1	1	1	1	1	1	1	1		
		Time Per Year (Hrs)	20	20	20	20	20	20	20	20	20	20	20		
17	Library	Time (minutes per week)	40	40	40	40	40	40	40	40	40	40	40	40	
		Period per week (40 mins)	1	1	1	1	1	1	1	1	1	1	1	1	
		Time Per Year (Hrs)	20	20	20	20	20	20	20	20	20	20	20	20	
18	TVET Programme	Time (minutes per week)					40	40	40	40	40	40	40	40	
		Period per week (40 mins)					1	1	1	1	1	1	1	1	
		Time Per Year (Hrs)					20	20	20	20	20	20	20	20	
19	CGC & Life Skills	Time (minutes per week)							40	40	40	40	40	40	
		Period per week (40 mins)							1	1	1	1	1	1	
		Time Per Year (Hrs)							20	20	20	20	20	20	
	No of Periods of 40 minutes (Per week)		24	24	27	27	37	37	37	40	40	40	40	40	
	Time in Hours (Per week)		16	16	18	18	24.6	24.6	24.6	26.6	26.6	26.6	26.6	26.6	
	Time in minutes (Per week)		960	960	1080	1080	1480	1480	1480	1600	1600	1600	1600	1600	

Note: 3 periods for practical for both 11 and 12 (Biology, Chemistry, Physics; Geography, Arts, Accountancy-Commerce)

Subject-wise Instructional Time 2019

Subjects/Class		PP	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Dzongkha	Time (minutes per week)	280	280	320	320	280	280	280	240	240	200	200	240	240
	Time Per Year (Hrs)	140	140	160	160	140	140	140	120	120	100	100	120	120
English	Time (minutes per week)	280	280	320	320	280	280	280	240	240	200	200	240	240
	Time Per Year (Hrs)	140	140	160	160	140	140	140	120	120	100	100	120	120
Maths	Time (minutes per week)	240	240	280	280	280	280	280	240	240	200	200	240	240
	Time Per Year (Hrs)	120	120	140	140	140	140	140	120	120	100	100	120	120
Science	Time (minutes per week)					240	240	240	280	280				
	Time Per Year (Hrs)					120	120	120						
Social Studies	Time (minutes per week)					160	160	160						
History	Time (minutes per week)								160	160	120	120	240	240
	Time Per Year (Hrs)								80	80	60	60	120	120
Geography	Time (minutes per week)								160	160	120	120	240	240
	Time Per Year (Hrs)								80	80	60	60	120	120
Biology	Time (minutes per week)										120	120	240	240
	Time Per Year (Hrs)										60	60	120	120
Physics	Time (minutes per week)										120	120	240	240
	Time Per Year (Hrs)										60	60	120	120
Chemistry	Time (minutes per week)										120	120	240	240
	Time Per Year (Hrs)										60	60	120	120
ICT Literacy	Time (minutes per week)					40	40	40	40	40	40	40		
	Time Per Year (Hrs)					20	20	20	20	20	20	20		
Economics/AgFS/TVET/ES/Buddhist Studies/Arts Education	Time (minutes per week)										120	120	240	240
	Time Per Year (Hrs)										60	60	120	120
Accountancy/Commerce/ HPE/ Rigzhung/Business Maths/ Computer Studies/Media Studies	Time (minutes per week)												240	240
	Time Per Year (Hrs)												120	120
HPE	Time (minutes per week)	40	40	40	40	40	40	40	40	40	40	40		
	Time Per Year (Hrs)	20	20	20	20	20	20	20	20	20	20	20		
Values Education	Time (minutes per week)	40	40	40	40	40	40	40	40	40	40	40	40	40
	Time Per Year (Hrs)	20	20	20	20	20	20	20	20	20	20	20	20	20
Arts Education	Time (minutes per week)	40	40	40	40	40	40	40	40	40	40	40		
	Time Per Year (Hrs)	20	20	20	20	20	20	20	20	20	20	20		
Library	Time Per Year (Hrs)	20	20	20	20	20	20	20	20	20	20	20	20	20
TVET Programme	Time (minutes per week)					40	40	40	40	40	40	40	40	40
	Time Per Year (Hrs)					20	20	20	20	20	20	20	20	20
CGC & Life Skills	Time (minutes per week)								40	40	40	40	40	40
	Time Per Year (Hrs)								20	20	20	20	20	20
Time in Hours (Per week)		16	16	18	18	24.6	24.6	24.6	26.6	26.6	26.6	26.6	26.6	26.6
Time in minutes (Per week)		960	960	1080	1080	1480	1480	1480	1600	1600	1600	1600	1600	1600

Note: 3 periods for practical for both 11 and 12 (Biology, Chemistry, Physics; Geography, Arts, Accountancy-Commerce)

Time and period Allocation for Rigzhung Stream

SI No	Subject/Class	XI	XII
1	English	6	6
2	Dzongkha	6	6
3	Chhenjug	6	6
4	Dagyig Ngagdon Sumtag	6	6
5	Nyengag	6	6
6	Elective (Astrology, History, Music, Driglam)	6	6
7	Library	1	1
8	TVET Club	1	1
9	CGC & Life Skills	1	1
10	Values Education	1	1
	No of Periods of 40 minutes (Per week)	40	40
	Time in Hours (Per week)	26.6	26.6
	Time in minutes (Per week)	1600	1600