

Affecting Factors in the Curriculum Development Capacity of Primary School Teachers in the Northern Mountainous Area of Vietnam



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ABSTRACT: Since the implementation of the General Education Program Year 2018, schools and teachers have the autonomy in choosing teaching content, and teaching methodologies suitable to the practical conditions of local and schools. To meet the renovation requirements of world education and Vietnamese educational, teachers need to have the capacity to develop curriculum. Curriculum development is a process that is carried out continuously with the aim of reviewing, updating, supplementing and developing to meet the needs of society, scientific achievements and technology as well as labor market requirements. The purpose of this study is to discover the factors affecting the curriculum development capacity of primary school teachers in the Northern mountainous area of Vietnam. The exploratory factor analysis (EFA) method was used on the basis of the survey results from 261 primary school teachers. Since then, four factors affecting the program development capacity of primary school teachers have been identified: physical facilities (45.710%); the direction and supervision of managers (9,940%); the ability to understand the general education program year 2018 (7.046%) and the capacity to design lessons (4.875%). This is the premise that suggests some recommendations to improve the program development capacity for teachers in the Northern mountainous areas of Vietnam.

KEYWORDS: curriculum, capacity, primary school teachers, affecting factors, curriculum development

1. INTRODUCTION

1.1. Curriculum development capacity

Education is considered an invaluable asset in human society and is most susceptible to changes occurring worldwide. Education administrators, through appropriate education policies, have been pushing schools to innovate educational programs to meet the needs of society. Innovations in educational curricula lie within "a matrix of cultural, political, economic, institutional and administrative variables" (Hairon et al., 2018).

The term educational curriculum was first used in Scotland in the 1820s. The concept of curriculum comes from the Latin "curere", which means "run". In the aspect of nouns, it refers to both "course" and "means". In education, the most obvious interpretation of this word is to see it as 'a course to learn' (Thijs & Van Den Akker, 2009), and Hilda Taba (1962) defined a curriculum as "a course to learn" (Taba, 1962).

In Arabic, the commonly used syllabus is manhaj, which means the bright path that people take in various areas of life. Meanwhile, the "educational curriculum" (manhaj al-dirāsah) in the Tarbiyah dictionary is a set of plans and means used by educational institutions as a reference in the realization goals of education (Bahri, 2017).

According to S. Nasution, an educational curriculum is a plan designed to promote the teaching and learning process under the direction and responsibility of schools or educational institutions and their teaching staff. Furthermore, Nasution explains that some educational curriculum theorists hold that the educational curriculum includes not only all planned activities but also events that occur under the supervision of school (Bahri, 2017).

This diversity of definitions reflects the fact that the term educational curriculum has a variety of characteristics (Morris, 1996):

(1) An educational program is not the same as a syllabus. A syllabus is just a list of things that need to be taught or tested. Curriculum will be a broader concept as it provides additional statements of goals and suggests teaching and assessment methods.

(2) The curriculum is not always achieved in practice because in the process of implementation, schools may face to difficulties or be affected by objective factors. Therefore, in the process of implementation, the educational managers and school teachers need to have flexible development or time adjustment. Researching curriculum is also interesting in what actually goes on

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in the classroom and what students learn in school. The things that actually happen in schools and dual classrooms when so-called educational programs are done.

(3) There is no unique educational curriculum because the educational curriculum exists at many levels: national-level curriculum, school-level curriculum, and subject-level curriculum; Even when implementing the subject curriculum in each class, based on the characteristics of different students, teachers also need to flexibly adjust accordingly.

Curriculum development describes the creation of educational curriculum frameworks (Nakpodia, 2010; Taba, 1962), and educational plans (Taba, 1962). Curriculum development at the subject level is different across all levels of education, and teaching methods, textbooks, and other instructional materials are suggested to represent aspects of curriculum development (Nakpodia, 2010). It involves the selection and organization of content and teaching experiences; developing educational curriculums, manuals and resources; defining evaluated criteria and implementing testing in educational institutions, and considering testing ready-to-implement materials (Taba, 1962).

Since the 1920s, the model of Tyler (1950) and Taba (1962) has greatly influenced the development of educational curricula. Developing educational curricula based on researching how to use local capacities and resources, as a driving force and inspiration for the educational curricula, and looking for methods and forms of organization, make the student's learning experience meaningful, richer in geography, history, culture, and personal experiences (Laeen et al., 2019).

Educational curricula development is focused on the improvement and innovation of education. This process needs to be frequent, and ongoing, and can be challenging – especially as far as the development of a general national curriculum is concerned, beyond the specific local context. - desires and ideals are combined in a cyclical process of design, implementation, and evaluation to achieve concrete results in practice (Thijs & Van Den Akker, 2009).

The involvement of teachers in the development of educational curricula, and the challenges that teachers face are factors that greatly affect the capacity of teachers to develop the curriculum. (Alsubaie, 2016; Muchenje & Heeralal, 2016).

The General Education Curriculum year 2018 is designed in an open way, transferring from a content-based curriculum to a competency-based curriculum. The main purpose of the competency-based curriculum is to help learners use the knowledge and skills they have learned to solve real-life problems (Rwigema & Andala, 2022).

Thus, the capacity of teachers to develop the program is affected by many factors and it is necessary to clearly determine which factors are those and how much each factor influence on teachers in the Northern mountainous areas of Vietnam?

1.2. The primary school teacher in the Northern mountainous areas of Vietnam

The resolution 138/NQ-CP dated October 25, year 2022 on the National Master Plan for the 2021-2030 period clearly states that the spatial organization of the development of the Northern midland and mountainous region, including 14 provinces: Ha Giang, Cao Bang, Lang Son, Bac Giang, Phu Tho, Thai Nguyen, Bac Kan, Tuyen Quang, Lao Cai, Yen Bai, Lai Chau, Son La, Dien Bien and Hoa Binh. The northern midland and mountainous region divided into two sub-regions Northeast and Northwest.

Of the total number of primary school teachers in the Northern mountainous areas of Vietnam, over 40% of them are teachers from ethnic minorities. Ethnic minority teachers who know the ethnic language and understand the psycho-physiology of ethnic minorities are favorable conditions for the implementation of new programs and textbooks. However, when implementing educational reform, not only ethnic minority teachers but also all primary school teachers face difficulties in teaching methods. The transfer from the traditional teaching methodology to competency-based learning and teaching; promoting positivity, initiative, and creativity; fostering learners' self-study methods, cooperation skills, teamwork, and thinking ability... is a very difficult problem for teachers.

The team of ethnic minority primary school professors, besides their strengths, also have limitations in pedagogical competence such as the ability to use Vietnamese in teaching (speaking Vietnamese clearly, expressing Vietnamese fluently in Vietnamese); the ability to exploit textbooks and other resources and transmit content to students. So, there are both advantages and disadvantages when implementing the new programs and textbooks at primary schools in the Northern mountainous area: [12].

2. MATERIALS AND METHODS

2.1. Research subjects

The authors researched domestic and foreign scientific documents to design a questionnaire to survey the factors affecting the curriculum development capacity of Vietnamese primary school teachers. Survey questions were sent to primary school teachers in the Northern mountainous area of Vietnam through social networks such as Facebook, Zalo during the period from July 1st, 2022 to August 22nd, 2022. The number of survey participants is 350 people, the response rate is 89.4% (313 responses), 52 answers are invalid due to choosing only one option. The final data after filtering to analyze is 261 votes (accounting for 83.4%) – This rate is assessed as satisfactory according to Comrey [13].

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Table 2.1. Survey object information

		Number	Percentage
Gender	Male	19	7.3
	Females	242	92.7
Academic level	College	209	80.1
	Graduate	51	19.5
	Post-Graduate	1	0.4
Age	Under 30 years old	94	36.0
	From 30 to 40 years old	37	14.2
	From 40 to 50 years old	119	45.6
	Above 50 years old	11	4.2
Work place	Mountain areas	70	26.8
	Countryside	131	50.2
	District and town centers	45	17.2
	Big city center	15	5.7
Working seniority	Under 5 years	104	39.8
	From 5 to 10 years	21	8.0
	From 10 to 20 years	25	9.6
	Above 20 years	111	42.5
Total		261	100

According to the survey results, 242 female teachers responded to the survey questions (accounting for 92.7%), 19 male teachers responded (accounting for 7.3%). The number of teachers at the college level is 209 people (80.1%), the university level is 51 people (19.5%), and the master level is 1 person (accounting for 0.4%). In terms of age, teachers under the age of 30 accounted for 36%, from 30 to 40 years old accounted for 14.2%, from 40 to 50 years old accounted for 45.6%, the rest were over 50 years old. Regarding the working area, according to the survey results, the survey subjects are diversely distributed in different regions: the most are teachers working in rural areas (accounting for 50.2%); the second is mountainous (accounting for 26.8%); third is the district and town centers (accounting for 17.2%); at least in central areas, big cities (5.7%). In terms of seniority, teachers with more than 20 years of the service account for the highest percentage (42.5%); the second is teachers with less than 5 years of seniority (accounting for 39.8%); seniority from 10 to 20 years (accounting for 9.6%), the rest are teachers with professional experience from 5 to 10 years.

2.2. Survey tools

Survey questions were designed on a Likert scale (1 = Disagree, 2 = Tend to disagree, 3 = Neutral, 4 = Tend to agree, 5 = Totally Agree) was used for each question.

Table 2.2. Survey questions (n = 23)

Q1	Teachers can identify the main content of each subject program they teach.
Q2	Teachers can identify the basic changes of the subject program year 2018 compared to the program year 2006
Q3	Teachers can identify the basic orientations of teaching prescribed in the general education curriculum.
Q4	Teachers can use appropriate teaching methods and forms in teaching according to the program year 2018.
Q5	Teachers can design lesson plans according to topics integrated in teaching at primary schools.
Q6	Teachers can develop a STEM-oriented lesson plan.
Q7	Teachers can build lesson plans based on experience activities.
Q8	Teachers can build a variety of assessment plans and tools in each lesson.
Q9	Teachers can use digital technology in the teaching process.
Q10	School managers are interested in directing the implementation of teaching content at schools.
Q11	School managers guide professional groups and teachers to analyze subject programs and propose integrated, experiential, STEM teaching plans.
Q12	School managers organize professional training courses for teachers.

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Q13	School managers lead professional groups to guide teachers in using methods and forms in the direction of developing students' ability and quality.
Q14	School managers lead professional groups and teachers to assess and evaluate in the direction of developing students' ability and quality.
Q15	Teachers want to design lessons in the direction of developing students' ability and quality.
Q16	Teachers have the plan to participate in developing curriculum at the subject level and at the lesson level.
Q17	The school ensures classrooms and facilities for teachers to implement ideas in teaching.
Q18	The school ensures facilities for teachers to teach according to the new curriculum and textbooks.
Q19	The school ensures physical facilities and technological equipment to carry out the specific contents of the school.
Q20	Carers and other social forces actively support the school's facilities to serve teaching activities.
Q21	When teachers meet difficulties in implementing the new program, they always will be got someone to support them.
Q22	When having difficulties in implementing a new program, teachers know who to ask for help.
Q23	The school has a policy to encourage and reward teachers with achievements in teaching innovation.

2.3. Research Methods

The Exploratory Factor Analysis (EFA) method was used to analyze the data. EFA is a quantitative analysis method used to reduce a set of many interdependent measures into a smaller set of variables (called factors) but still retain most of the information content of the initial variable set (Hair, 2009).

3. RESULTS AND DISCUSSION

EFA was performed on 23 questions with 25 Varimax rotations, processed from SPSS software, allowing to extract of characteristic values for each factor. The Kaiser-Meyer-Olkin measurement verified the suitability of sampling for analysis with a value of 0.934, which is higher than Kaiser's recommendation with 0.6, and Kim (Kim & Mueller, 1978) with 0.5, also higher than Netemeyer's suggestion (Netemeyer et al., 2003) in the range of 0.6 – 0.7 is sufficient for EFA output analysis.

Table 3.1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin		.934
Bartlett Test	Chi-Square	4017.222
	df	253
	Sig.	.000

Bartlett's test gives the result that $\chi^2(253) = 4017,222$, $p < 0.000$. It indicates that the correlation between question items is large enough to conduct exploratory factor analysis [18].

Table 3.2. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	10.513	45.710	45.710	10.513	45.710	45.710	4.570
2	2.286	9.940	55.650	2.286	9.940	55.650	4.235
3	1.621	7.046	62.696	1.621	7.046	62.696	3.779
4	1.121	4.875	67.571	1.121	4.875	67.571	2.957
5	.806	3.503	71.074				

In the above data table, we can see that there are 4 factors affecting the program development capacity of primary school teachers, which were established by 23 questions with initial characteristic values greater than 1. On the other hand, 23 questions have the value of contributing 67.571% on factors affecting program development capacity, the remaining 32.429% are other factors. The percentages explaining the influencing factors are as follows: factor 1 (45,710%), factor 2 (9,940%), factor 3 (7.046%) and factor 4 (4.875%).

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Table 3.3. Rotation factor matrix table

	Factors			
	1	2	3	4
Q19	.834			
Q18	.780			
Q20	.761			
Q17	.759			
Q21	.752			
Q23	.623			
Q22	.615			
Q13		.791		
Q12		.787		
Q14		.745		
Q15		.739		
Q10		.699		
Q11		.616		
Q02			.819	
Q01			.767	
Q03			.761	
Q04			.745	
Q05			.650	
Q06				.714
Q08				.684

The naming of factors is based on rotation runs of squared I from the school year 2020-2021, the Ministry of Education and Training of Vietnam implemented the new General Education curriculum. In order to be able to assess the affecting factors to implement of the new curriculum, it is necessary to study much content and many different aspects. Among them, the study discovered affecting factors the program development capacity of primary school teachers, in our opinion, is necessary and important. Based on the factors identified from the results of the data analysis, some recommendations are made as follows for the successful implementation of the new curriculum: Firstly, it is necessary to equip enough facilities to facilitate the implementation of the new program. In order to teach and develop the quality of teaching and learning, it is necessary to be fully equipped with teaching aids and equipment so that students can directly manipulate learning materials and tools. Then, learners will be excited and actively participate in learning activities. In addition, fully equipped facilities will help teachers promote creative ideas in the design of teaching activities to suit local conditions, school conditions, and the capacity of students, teacher and student characteristics. Second, local educational management agencies need to organize training courses and professional meetings to help teachers fully understand the new program. On that basis, new trust and confidence will be created and teachers will be excitement to implement the new program. Third, primary school teachers need to equip themselves with a knowledge system about the new general education program. Through self-study, the LMS system or professional exchange in the school, and professional meetings between the schools or cluster of schools to have a complete understanding of the subject program. Fourth, teachers need to regularly learn and exchange experiences to improve the capacity of designing lessons/topics to meet the needs of teaching in the direction of developing students' quality and capacity.

4. CONCLUSION

This study aims to find out the factors affecting the program development capacity of primary school teachers. 23 questions were proposed based on previous studies and communicated to participants through social nets. Based on the survey results using the exploratory factor analysis method, we found that there are 4 main factors affecting the teacher's program development capacity including facilities (45.710%); the direction and supervision of managers (9,940%); ability to understand general education program 2018 (7.046%) and capacity to design lessons (4.875). These findings can be used as a reference in other researchs. The research results are also the basis for educational institutions to propose training programs and develop school development strategies in the direction of fostering program development capacity for primary school teachers in the Northern mountainous region. Vietnam.

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