



Practices of Curriculum Differentiation in Community Schools of Nepal

Chandra Bahadur Shrestha¹

Abstract

The curriculum differentiation practice implies a separate type of design used to secure social justice and inclusion in the school. It has different dimensions i.e. content, methods and strategies, environment, output, and teacher. Nepalese community schools have some practice of integrated curriculum approach except the well-defined practice of differentiated curriculum. This study explores the status of the usage of differentiated practices of the curriculum in the deaf and community secondary schools along with the challenges and the coping strategies. Qualitative design and case study approach entail in this study in which the deaf and community secondary schools are selected purposively and similar numbers of teachers. The respondents along with the observation checklist are the information generation tools. Thematic analysis and the theoretical backup support to justify the information and its validation. There are no well-defined and mentioned differentiated curriculum practices in community schools except the integrated approach. Lacking a defined practice and the proper training for the teachers are some challenges of its practices and to cope with the challenges the well-defined design of curriculum differentiation should be stated by the authorized body along with the proper training for the sign language teachers and the normal language teachers. If there would be adding technology to the defined practice of differentiation, it would be easier to ensure social justice, inclusion, and 21st-century skills in the learners.

Keywords: constructivism, curriculum differentiation practice, MKO, STEAM, ZPD

Introduction

Curriculum differentiation is a technique of providing opportunities for the children according to their needs and interests. There are various types of learners in the classroom from their diverse socio-cultural backgrounds. They have different needs, interests, learning capacities, attitudes, and aptitudes as well. There are gifted and talented learners who are above average, average learners, and below average learners in the classroom (Ronksley-Pavia, 2010). The practice of curriculum for them can be used differently to their need and interests. In the case of gifted and talented students, we can use the Maker curriculum differentiation practice, parallel curriculum practice, curriculum narrowing practice, integrated curriculum practice, grid curriculum practice, the three-stage Purdue practice, the enrichment triad practice, and

¹ Mr. Shrestha is an Associate Professor, Tribhuvan University, Mahendra Ratna Campus, Tahachal, Nepal, Email: chandrashrestha473@yahoo.com

autonomous learning practice (Göksu & Gelişli, 2023). A gifted and talented individual is characterized by their ability to learn at a quicker pace than their peers. Such students often exhibit heightened creativity, possess leadership qualities, and demonstrate artistic abilities. They typically achieve superior academic performance, can conceptualize abstract ideas, prefer to work independently within their areas of interest, and consistently perform at an elevated level (MEB, 2020); (Göksu & Gelişli, 2023). For the average and below-average students, we can use other practices of curriculum differentiation (Riemenschneider, 2022). Some of those practices are the Williams practice, Maker's practice for curriculum differentiation, and the Kaplan practice (Ronksley-Pavia, 2010). Using different practices of differentiation teachers can provide diverse learning environments and support to the learners for their knowledge development process.

In the Nepalese context, there are several practice of curriculum differentiation practices but they have not exact and formal design. It seems like the contextual practice of the differentiation i.e. practice for deaf children, practice for slow learners, practices for average students, practices for gifted and talented students, and so on. In recent years there has been a practice of integrated curriculum at the basic level. It is one of the real differentiated practices of the curriculum. The integrated curriculum of Nepal consists of six primary learning domains, which encompass language and literacy, mathematics, science and technology, social studies, health, and physical development, as well as creative arts (Curriculum Development Center, 2019a); (Kunwar et al., 2024). Except for integrated curriculum, there are brail scripts and symbolic language used in the special needs education students in their separate schools (special need schools or the deaf schools). Similarly, there is normal practice of curriculum differentiation in the general schools of Nepal. The major dimensions of curriculum differentiation i.e. content, strategy and materials, environment, output, and the teachers are contextualized in school education. Each dimension of differentiation is useful in the contextual endeavor (Reis & Renzulli, 2018). In this regard, the practices of curriculum and the status of its practices are explored in the study.

Curriculum-differentiation practices are by the needs and interests of learners. No fit a single practice of curriculum in the diverse classroom. In the Nepalese context, there are multicultural and multilingual backgrounds students in a single classroom. In this regard, which practice of curriculum differentiated is appropriate in the classroom? This is the exploring part of the study. Similarly, probing some challenges and their solutions is also the searching aspect of this study.

This is a short piece of study. It is useful to the stakeholders of curriculum-differentiated practice in Nepal i.e. teachers, students, administrative persons, and so on. Similarly, researchers can use this paper to get some information regarding the practices of curriculum differentiation and their practice in the Nepalese context. Finally, the reader or the interested persons who have an interest in inclusion, curriculum differentiation, diversity, and practices of curriculum differentiation are concerned with this study. Main objectives of this article are to explore and evaluate the implementation of curriculum differentiation practices in the school, identifying challenges and proposing solutions.

Constructivism, as an educational theory, posits that educators should prioritize their students' existing knowledge and facilitate opportunities for them to apply that knowledge in practical contexts (Amineh & Asl, 2015). Teachers may be more knowledgeable than others (MKO) and they can use their efforts in the knowledge construction process of the learners who come from diverse socio-cultural backgrounds and have varied knowledge. The basis of this theory is the society and social interaction. This theory highlights the significance of cultural and contextual factors in comprehending societal events and in the formation of knowledge derived from this comprehension (Kim, 2001). Though it focuses on the knowledge construction process of the learners, the backgrounds of the learners, the learner environment, teachers' efforts, and the level of learners are some major factors in the learning process. Various practices of curriculum differentiation are also affecting dimensions in the process of knowledge construction. Through the efforts of the teachers, learners can construct their knowledge in that process the practice of differentiation plays a pivotal role that making the learning process easier. From this process, the level of the learner's zone of proximal development (ZPD) has been increased.

Curriculum differentiation practices are useful in providing need-based education. Similarly, it is helpful to provide inclusive education. In case of the gifted children, they should be used with their needs and the level of creativity-based practice of differentiation. Without using appropriate curriculum practices, they can't have benefited from the instructional process. The primary reason necessitating a distinct educational approach for gifted students is the inadequacy of the standard curriculum which creates a challenge. Differentiating the curriculum to align with the unique characteristics of these learners has been widely recognized as an effective instructional strategy for gifted individuals (Tomlinson, 2021). Through the appropriate practice of differentiated curriculum, their level of knowledge and creativity can be addressed. Similarly, for the below-average and average learners differentiated curriculum practices should be used but whichever is more appropriate regarding their learnability and the nature of the content. So, not a single practice of differentiated curriculum is fit for all the learners of a classroom.

There are different practices of curriculum differentiation including some models i.e. Maker curriculum differentiation model, the grid curriculum model, the three-stage Purdue practice, the enrichment triad model, and the autonomous learning model, etc.(Göksu & Gelişli, 2023). Most of these practices are useful to the gifted and talented learners. Though these practices are useful to gifted learners, other practices can be used easily for below-average and average learners such as the multiple menu practice of differentiation. The multiple-menu practice offers curriculum developers a collection of practical planning resources or menus designed to assist in the integration of authentic knowledge with instructional methods. By utilizing this practice, educators can infuse their creative insights into the materials that have been developed. To initiate the process of generating topics for artistic modification, teachers may collaborate with peers in a small-group brainstorming environment. The instructional products menu focuses on the results of the learning experiences that the educator facilitates (Renzulli, 2021). So it is useful to the learners of a class in which the learners have varied abilities. Sometimes the CLEAR practice of differentiated curriculum can be used for varied learners. CLEAR Curriculum unit activities are informed by and adjusted according to ongoing, formative assessment of students. The CLEAR curriculum practice identifies five foundational

elements, i.e. continual formative assessments, clear learning goals, data-driven learning experiences, authentic products, and rich curriculum that encourage engagement and promote achievement for diverse background learners (Azano et al., 2017). This practice may be best for the gifted and the talented learners as well.

The integrated practice of curriculum is also useful in the context of Nepal. Integrated curriculum practice represents an educational methodology that encourages interdisciplinary learning by linking different subject areas within a unified framework. This practice highlights the synthesis of knowledge, skills, and concepts across various disciplines, enabling students to gain a comprehensive understanding of real-world challenges while promoting critical thinking, problem-solving abilities, and creativity (Burke & Lehane, 2023; Drake & Reid, 2018);(Kunwar et al., 2024). The practice of an integrated curriculum promotes the ability of students to link various fields of knowledge, thereby enhancing their comprehension of the material and its significance in real-world situations. This practice is better for the basic level students whereas the STEAM practice is more effective in the secondary level and it is a paradigm-shifting practice (Bertrand, 2019). The shifting paradigm is aligned with the 21st-century skills for learners in any discipline. Differentiation of curriculum also grasps the 21st century hard and soft skills for the learners with varied abilities. In the case of the integrated curriculum, there are some challenges i.e. the adoption of its practices, a problem to enhance student engagement, boost motivation, and lead to better academic performance, etc. Though there are some challenges in the implementation of different practices of differentiated curriculum, coping with such challenges is from the concern level.

Materials and Methods

This study implies a qualitative design and case study approach and the schools are selected purposively. One of them is a special needs school (Bahira aawasiya vidhyalaya) and the rest of them are community secondary schools. Without selecting these two types of schools, the aims of this study are not achieved. Observation checklists are the information generation tools and the teachers (each from one) are the supporting respondents of this study which are also chosen purposively. By thematic analysis and theoretical support, the generative information is verified.

Results and Discussion

There are uses for some differentiated practices of curriculum in the community schools of Nepal. At the basic level (especially grades 1-3) the integrated practice of differentiation is used in which the practice is used as an approach. This approach focuses on the synthesis of varied content that supports to problem-solving, critical thinking, and creative thinking of the learners. Similarly, at the secondary level, there are some contextual practices used. Some of the practices used at the secondary level, their challenges, and the measures of coping with the challenges are detailed below.

Practices of Curriculum Differentiation

Curriculum-differentiated practices are not the same in normal schools and special education schools because of the nature of the learners. In the special needs education schools (Bahira aawasiya vidhyalaya), students use their sign language and the teachers have a similar practice. In community schools, there are various practices of curriculum differentiation have been used. In the deaf school, there is limited practices of differentiation are used whereas in the

community schools, teachers have used various practices of it. Sometimes differentiated curriculum and its practices ensure inclusion in the education system. For inclusive education, there can be used a comprehensive curriculum that provides a wide range of content, materials, concepts, and assessment techniques. It implies the active incorporation of ideas that extend and improve the norm, both in individual articles and in the course as a whole which makes the content delivery process inclusive (Puri et al., 2024). Though it is also a technique of inclusion the special varied knowledge and skills of the learners (especially the deaf children) cannot be taken for granted rather than the normal children.

The practice of a practice of curriculum differentiation in the deaf school is not unique but it is traditional. The evidence from the deaf school shows that teachers have completely used sign language to deliver their content and the students have used sign language to construct their knowledge process. The content and the assessment system are similar to those of community schools. Only the content, strategies, and learning environment are practiced in a differentiated manner. In this regard, some pieces of evidence from the field are below.

Evidence from a deaf school teacher's experience

There is no exact defined practice of curriculum differentiation used in our school. We have practiced in various dimensions of differentiation i.e. content, methods and strategies, environment, and the teacher. We have no different policy of curriculum differentiation in the school except the sign language. So, we are using a flexible practice (managed by the subject teacher) and a classic practice in the practice of curriculum differentiation. In flexible practice, a teacher can use any of the appropriate instructional techniques to deliver the content and assessment system. Similarly, the teacher used the traditional or the classic practice in the instructional process in which he/she managed the learning environment for the differently abled children, and chose the appropriate content, methods, and assessment system. There is no boundary of using any dimensions of curriculum differentiation in the classroom.

This evidence explores the flexible and classic practice of curriculum differentiation in the instructional process of deaf schools. Students have used the teachers as resource persons and they have widened their area of learning which can be mastered by learners i.e. zone of proximal development (ZPD). As an MKO (more knowledgeable than others) the teacher selects the content as per the needs and interests of the deaf learners. Similarly, he/she managed the learning environment and practiced the learning methods along with the strategies with his/her sign language. Though the summative assessment system is similar to the community school children, the formative assessment system and the output of the students reflect the quiet curriculum differentiation practice in deaf schools.

The evidence from the community school teacher's experience

We have used a classic-tech practice of differentiation in the school (which is not named by any institution but they gave a name for the classic techniques with simple modern technology). In the classic technology practice of differentiation, the teacher has managed the learning environment according to the content and he/she can choose appropriate methods and strategies to deliver the content. Similarly, he/she can practice in the formative assessment system and provide regular feedback. On the other hand, we have used a need-based practice of differentiation because if the learners have a desire to

learn from the group discussion, constructive approach, problem-solving technique, or student-centered methods, we have managed such techniques and we deliver the content. It depends on the content, teacher's efficiency, availability of materials, and the nature along with the number of students in the classroom.

The process of knowledge construction in community secondary schools is based on the previous knowledge and skills of the learners. The teachers have played the role of more knowledgeable than they and students have expanded the range of knowledge space or the zone of proximal development (ZPD). In community schools, the practice of curriculum differentiation is used by the needs and interests of the learners and teachers have merged the traditional techniques with the technology. This practice of curriculum differentiation is flexible and sometimes autonomous inside a defined structure of the curriculum development center (CDC) which has already defined the content, methods, and assessment system in all the subject matter of the school (NCF, 2076 BS).

Challenges of Curriculum Differentiation Practices

There are some problems with the implementation of differentiated curriculum practices in the schools. There is a lack of a well-defined practice of curriculum differentiation and even there is the problem of training to implement the defined differentiated practice of curriculum. These problems are explored below.

The problem of defined practice

Curriculum-differentiated practices imply how the content, instruction, and learning process can be tailored to fully meet the needs and interests of the learners (Ronksley-Pavia, 2010). According to Tomlinson (1995) to accommodate the needs of students across many different levels of academic achievement, teachers across the country have implemented within-classroom strategies referred to as differentiated instruction which plays a vital role in the practice (Renzulli, 2021). Most of the differentiated practices are designed concerning the gifted and talented learners in the world (Tomlinson, 1995). Though the practices of differentiated design focus on above-average learners, the dimensions of it determined to design a practice for all levels of learners. The major dimensions of curriculum practices are content, methods and strategy, learning environment or the classroom, assessment, and the teacher which may be supportive of framing any kind of practice (Renzulli, 2021). In the case of Nepalese community schools, there is wide practice on the different dimensions of differentiation but the practice is not well defined by the authoritative agency i.e. CDC (Curriculum Development Center). However, in the practice of STEAM (Science, Technology, Engineering, Art, and Mathematics) in community schools, this integrated practice does not reflect the spirit of social justice and inclusion (Xanthoudaki, 2017). In the deaf schools or the community schools of Nepal, there is a problem with well-defined differentiated practice of curriculum. So, the teachers have practiced on various dimensions but such practice is under the traditional or the flexible practice or sometimes it is known as the classic-technology practice. Technology supports the content along with the dimensions of differentiation but it is too difficult to use in the deaf school rather than the community school. The evidence from the selective schools has shown the reality of this problem.

Lack of training

There is a lack of training for the teachers to use the curriculum-differentiated practices. In the deaf school, there is only sign language as a means of using flexible or traditional practice but in the community school, there is additional use of technology that supports to implementation of the practice of differentiation i.e. classic-tech, and flexible practice. Some of the pieces of evidence regarding the training from the field are

Response of a subject teacher from the deaf school

We have to lack of appropriate training in the practices of curriculum differentiation and its usage. We have just tried to implement the curriculum given by the guidance of the CDC and we use our sign language for to content delivery process in which we manage the learning environment, methods of instruction, and formative assessment. Practicing within these dimensions may prepare a flexible practice but not be named by any authorized body of the government.

The response from a community school (teacher's experience)

There is lacking of proper training for the uses of the curriculum differentiation practice and also lack of clear guidelines towards it. We have used teacher's guides to implement the curriculum in which the content, methods, strategies, and assessment systems are practiced in the classroom which are the dimensions of curriculum differentiation. We have additionally used ICT (Information and communication technology) to deliver the content. It seems a flexible, autonomous, or classic-technology practice but it is not named by any authorized body of the nation.

This set of evidence has shown that there is lacking of special training in the practices of curriculum differentiation in Nepal. Learners have constructed their knowledge with the help of subject teachers and the teachers have practiced on the various dimensions of curriculum differentiation there is a practice prepared i.e. *flexible practice* or the *classic technology practice*. So, the basic training for the teachers would be supportive of practicing the differentiated curriculum in the schools.

Measures to Coping with the Challenges

In the case of inclusion and social justice, the practices of curriculum differentiation are essential. For developing and using any preferable practice of differentiation some measures should be implemented to cope with the challenges. Some of the measures are below.

Clearly defined differentiated practices

There should be a clearly defined practice of curriculum differentiation in the school. However, there is an integrated practice (approach) in the basic level grades 1-3, the secondary level of community, and the deaf schools have faced the problem of well-defined practices in the case of curriculum differentiation. The information from the field has shown that there is a lack of clearly defined differentiated practices which the teachers can't practice and they have to manage themselves and so-called practices i.e. flexible practice, classic-tech practice, etc.

Proper training

Training is one of the major solutions for developing and using a differentiated practice in the Nepalese context. For the short-term solution, it can provide an idea for the practice of

differentiation to the subject teachers. Similarly, they have practice on the various dimensions of differentiated curriculum, they can develop a creative practice that makes the content delivery process easy and ensures inclusion as well as social justice. For the deaf school and the community school teachers, it may differ but the proper training is essential to use the practices of differentiated curricula.

Findings

There is more practice of curriculum differentiation dimensions in the schools (both in the deaf and community schools) but the practice is not clearly defined in the Nepalese context. An integrated curriculum practice or approach such as STEAM (Science, Technology, Engineering, Arts, and Mathematics) is used in schools before STEM (Science, Technology, Engineering, Mathematics) to STEAM but it does not fulfill the aims and spirit of the differentiated curricula in terms of social justice and inclusion as well (Radziwill et al., 2015). There are some practices of so-called practices in the schools i.e. flexible practices and classical-technical practices but such practices are not defined and cleared by the authorized agency. Similarly, the lack of a well-defined design and poor training for the teachers are some challenges in using the practices. To cope with the challenges, there should be well and clearly defined practices by the authoritative agency i.e. CDC, and should be provided proper training to the teachers.

Conclusion

There is enough practice of curricular differentiation dimensions in the schools but not clear and well-defined exact practice of it. For social justice along with inclusion, a modern defined practice of curriculum differentiation should be developed, defined, and used in the school except STEAM and the teachers should be trained towards the development of differentiated practices and their uses. Such newly developed and defined practices of differentiation help the knowledge construction process and secure social justice for the learners.

This study provides a preliminary exploration of curriculum differentiation practices in Nepalese schools. While it doesn't cover all aspects of differentiation, it offers insights into common practices and challenges faced by teachers and students. This information can be valuable for policymakers seeking to inform educational policies and researchers aiming to conduct further research on differentiation.

Potential areas for future research include:

- Developing and implementing effective curriculum differentiation practices
- Exploring the use of the STEAM approach as a differentiated practice
- Investigating the effectiveness of integrated curriculum approaches
- Incorporating 21st-century skills into differentiated curriculum practices
- Examining how curriculum differentiation can promote inclusive education

References

Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of social sciences, literature and languages*, 1(1), 9-16.

- Azano, A. P., Missett, T. C., Tackett, M. E., & Callahan, C. M. (2017). The CLEAR curriculum practice. In *Fundamentals of gifted education* (pp. 293-309). Routledge.
- Bertrand, M. G. (2019). *STEAM education in Ontario, Canada: A case study on the curriculum and instructional practices of four K-8 STEAM programs* The University of Western Ontario (Canada)]Global.
- Curriculum Development Center (CDC, 2076). *National Curriculum Framework for School Education*. The Author.
- Göksu, D. Y., & Gelişli, Y. (2023). Differentiation Practices for the Curriculum of Gifted and Talented Individuals: A Literature Review. *International Journal of Educational Research Review*, 8(2), 268-279.
- Kim, B. (2001). Social constructivism. *Emerging perspectives on learning, teaching, and technology*, 1(1), 16.
- Kunwar, R., Laxmi, G., Acharya, N., & Adhikari, S. (2024). Brief overview of the integrated curriculum in Nepal: Key features, impacts, and challenges. *Journal of Research in Instructional*, 4(1), 155-169.
- Puri, P. K., Mahat, B. M., & Khati, D. J. (2024). Unlocking Potential: A Comprehensive Analysis of Inclusive Education Policies for Children with Disabilities in Nepal. *Education Journal*, 13(2), 148-160.
- Radziwill, N. M., Benton, M. C., & Moellers, C. (2015). From STEM to STEAM: Reframing what it means to learn. *The STEAM Journal*, 2(1), 3.
- Reis, S. M., & Renzulli, J. S. (2018). The five dimensions of differentiation. *International Journal for Talent Development and Creativity*, 6, 87-94.
- Renzulli, J. S. (2021). The Multiple Menu Practice for Developing Differentiated Curriculum 16. In *Reflections on Gifted Education* (pp. 211-247). Routledge.
- Riemenschneider, E. (2022). *Developing a Curriculum Practice for Differentiating Instruction for All Learners*.
- Ronksley-Pavia, M. (2010). Curriculum Differentiation: A Practical approach, *Mindscape*, 30 (2). *Curriculum Differentiation*, 4-11.
- Tomlinson, C. A. (2021). Differentiated instruction in rural school contexts. In *Gifted education in rural schools* (pp. 79-90). Routledge.
- Xanthoudaki, M. (2017). From STEM to STEAM (education): A necessary change or ‘the theory of whatever’. *Spokes*, 28, 1-9.