

# Contextual Education and Curriculum for Local Resource Utilization

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Received: October 8, 2024

Revised: October 13, 2024

Accepted: November 27, 2024,

Published: December 25, 2024

DOI: <https://doi.org/10.3126/sss.v24i1.75378>

## Abstract

*To rationalize the need of locally formulated curricula and its implementation aspect is the main concern of this study . It was conducted in Chandragiri municipality of Kathmandu valley . Study had examined locally accessible resources at municipal areas by exploring link between local curriculum policies and school practices, it seeks to externalize indigenous knowledge, skills and resources to face the real-life situations . Lack of traditional knowledge and skills in formal school curriculum and draws attention to a notable disconnect between existing curricula, the particular context, community needs and the rationale of local curriculum .*

*To implement purposive sampling phenomenological design was linked up . As primary data source four community schools were sampled . Data were collected through face-to face interview with head teachers, subject teachers of the sampled area of that municipality . The result is the necessity to incorporate contextual resources into education system by exposing a disconnect between formal education and the community needs . The study draw conclusion that in order to preserve indigenous knowledge, skills, resources and promote community independent development, school curricula need to be interlinked with contextually available resources to fulfill the gap between the day-to-day needs of community people and prepare for real life situation for the future.*

**Key words:** Context, Content, Natural resources, Diverse character, Utilization, Indigenous Knowledge, Traditional skills.

## Introduction

Among many diverse natural resources of Nepal, agricultural lands is the main natural resources (MOE, 2017) . It is known as Bhumidev or matribhumi (motherland/ Land of God or Janani) in Hinduism (Parajuli, 2016) . Nepal is the main shelter of all biological beings . But it has diverse characteristics and categorized in hilly, mountain and Tarai (plain) region according to its natural features (Jha, 2000) . The 70% people of Nepal are depending on land agriculture (MOE, 2017) . Beside agricultural land, there are so many other naturally available land and under-land, local and national macro and micro contextual innumerable resources but these resources are not properly identified and utilized (Shahi, 2021) .

Most of the empirical studies suggested that the education and curriculum system in Nepal has struggled to effectively integrate and correlate locally available natural resources with practical learning . This challenge is particularly evident in the school and higher education curriculum structures . In recent decades, the education system in Nepal has faced significant discrepancies between the diverse socio-cultural contexts of the country and the content being taught . This misalignment has contributed to the persistent shortcomings of Nepal's education system (Sharma, 2020).

The constitution of Nepal (2015) in its part 3, article 31, has ensured that, the right of preservation and maximum utilization of the national and local heritage of Nepal . These heritages may be preserved and destroyed by the society . If the society have proper access and success in contextual education and curriculum, they can more benefited through maximum utilization of their national and local resources in their own way (Parajuli, 2016) . But the ways of local resource utilization process still are not clearly defined in the reference of decentralized local curriculum provision at the local level . Although Nepal has been practiced and mentioned contextual resources in its national policies and programs but not properly implemented in real situation (NCF, 2019) .

In recent year, Nepalese education and its curriculum of school education is being highly influenced by global knowledge, skills and attitudes . The globalization practices have influenced in different sector of Nepal such as contextually available resources and the contextual knowledge of Nepali people is being eroded gradually . In this regard, the diverse local context of Nepal is calling contextual education and curriculum with its local and national resource utilization processes . These three dimensions local context, contextual education, and contextual resources were inter-related to each other in the ancient (Kirat, Li Chhavi, Malla) period of education era .

Most of the local resource utilization original examples of Nepal are ancient Buddha Nath, Swayambhu Nath, Pashupati Nath and changu Narayan temple etc . The local

knowledge, local resources and the local contextual education in the past was introduced as golden age of education . But in recent years this trend of education is being lost from the local community . It has created the gap between education, curriculum and local knowledge and locally available resources . The kinship between locally available resources, local knowledge and skills of local people is being strongly broken.

In this context, Nepal has informal, lived and sustainable way of living knowledge on the basis of context based available resources and its utilization process . The knowledge is diverse and contextual in our rural community that required the need of, need based contextual education and curriculum framework in the local level . so that the researcher has the anxiety to probe contextual knowledge through phenomenologically .

Intellectual curricula introduced contextual education interchangeably such as context-based education, place-based education, school-based education, curriculum in context, education in context . But here I have hanged my research title as contextual education and curriculum for local resource utilization (UNESCO, 2021).

A focus of place-based education is education that is closely linked to local aspects, including the unique history, environment, culture, economy, literature, and art of a particular region . Community members provide invaluable resources and collaborate in teaching and learning, while student projects address local needs and interests, establishing the community as the basis for learning . By emphasizing local relevance, this method cultivates responsible citizenship, increases student engagement by fusing academic rigor with real-world relevance, and prepares people to success in whichever community they choose (Rural School and Community Trust, 2005).

Contextual education uses the local community and environment as foundational tools for teaching various subjects, including language arts, mathematics, social studies, and science . By focusing on hands-on and real-world learning experiences, this method promotes academic success, strengthens students' connections to their community, fosters a deeper appreciation for the natural world, and nurtures a sense of responsibility as active and contributing members of society (Sobel, 2004).

## **Objectives and Research Questions**

The study aims to develop significance of existing curriculum by utilizing contextual resources in local curriculum . Specifically, it focuses on identifying diverse resources in Chandragiri Municipality, exploring methods to utilize these resources in community schools through locally formulated curricula, and connecting indigenous skills with school education . The study highlights the urgent need to align formal education with local resources to preserve traditional knowledge and support sustainable

development . There is a wealth of opportunity for everyday use, family economies, and skill development in Nepal's varied context and resources . Inappropriate use puts communities at danger of losing their traditional knowledge, which could result in dependency and the extinction of important skills . Based on these objectives two research questions-how the local government provided local curriculum in the community is similar to policy level of Nepal? How the contextual resources are being addressed as the local curriculum practice? -have been answered through the research process.

## **Review of Literature**

### **Contextual Education in Nepal**

Education sector analysis report (2021) has recommended evidence- based education policy . Evidence based policy of education could not be success without objective measurement of contextual education and curriculum implementation in school level education . There is a need to create better links between education sector and the labor market . The need of education sector and labor market can be fulfilled through the best link between education, curriculum and local resource utilization process . So, this study aimed to establish the better link between education, curriculum and local or national resource utilization which are still available in diverse context of nature and its natural resources which are in the hidden form but not identified properly in the local community of Nepal . Labor market is closely related to technical and vocational education (Shahi, 2021) .

Nepal has its own traditional technical and vocational education which is life-long learning of Nepalese people . Nepali indigenous knowledge, skills and attitudes are really and naturally sustainable . It has no age bar or boundary of knowledge by its nature . Nepali knowledge, philosophy and skills are really sustainable in nature but these knowledge and skills are not mentioned in its school level curriculum practices (CDC, 2019).

Many efforts have been implemented on local and national resource utilization in Nepal . Nepal national education planning commission 1954 A.D . to 2023 in different policies and plans have done not left the issue of national resource utilization but they were continuing it in different forms of plans and programs of development in Nepal . likely national education commission (1992) has provisioned local curriculum in the structure of school level education . It has provisioned 20 percent weightage as local contents but it was not sufficiently implemented in the school level . it came into effect after ten years in primary school curriculum provision . And also mention it as national goal of education . Higher level education commission (2055) mentioned national and local resource utilization in its national goal of education . National curriculum

framework (2005, 2015, and 2019) also mentioned local knowledge, skills, technology stating knowledge-based society by providing 100 full marks separate optional subject in basic level education . Although these policies were not properly implemented . The constitution of Nepal (2072), NEP (2076) and other plans and programs of education have provisioned 20 percent weightages allocated in social studies, creative arts, and physical education subject . Likely NCF (2005) has provisioned one separate elective subject in basic education curriculum (6-8), NCF 2069 also provisioned local content . Local curriculum guideline (2076) has been facilitated the teachers training for local curriculum development and implementation . All of these practices have been pouring the water in the sand without incorporation of local resource utilization education and curriculum . according to National curriculum framework (2076) has mentioned some emerging problems and challenges in the implementation of local curriculum . the objective of such practice are to introduce, preserve the local knowledge, skills, traditions and locally available resources to link with the life situation of the students and to address the need of local community people and the environment . But the objectives of introducing local curriculum are not addressed properly yet as mentioned in the policy document (NCF, 2019) .

Challenges in local curriculum development include insufficient teacher orientation, limited capacity building for educators and stakeholders, and lack of community awareness about the value of local knowledge, traditions, and curricula . Inadequate technical and financial support, weak monitoring, and absence of long-term goals further hinder progress . Ideological interference and management inefficiencies also complicate subject selection . Despite these issues, integrating local knowledge is essential for effectively utilizing resources (NCF, 2076).

To address the contextual resource utilization issue, the school level national curriculum framework (NCF, 2076) has provisioned local curriculum . My study is more concern with local curriculum development process because (NNEPC 1954, NESP 1971, NEC 1992, HLNEC 1998, NCF 2005, NCF 2015, NCF 2019, NEP 2019, ESA 2021, ESD 2021 etc.) commissions reports, policy documents and programs have some positive efforts and continue this issue along with regularly . But this issue of local and national resource utilization could not ensure the success result in the field of educational development practices . Although the intent of local curriculum practice is to broaden the scope of traditional knowledge, skills, attitudes, values by utilizing contextually available resources.

### **Western Insight from Theories and Philosophies**

French philosopher and naturalist Rousseau (1712-1878) assumed that effective learning is possible from peaceful environment and further states let the child in the

lap of nature . He/she can learn himself . Focusing on the nature and natural beauty Rousseau writes social contract theory and raised the question how can a state ethically justify its use of force? When we are morally obligate to obey the law? The question refers to the ideas of the Swiss philosopher Jean-Jacques Rousseau, who is well-known for his work on the concept of the social contract . Rousseau argued that an ethical state must be founded on a social contract, which represents a collective agreement among individuals to work toward the common good . He proposed that this contract forms the basis of a state that ensures the protection of its citizens, guarantees their freedom, and strives to make decisions that benefit the society as a whole . His influential work, *The Social Contract* (1762), explores these principles in depth.

Linking with Nepali context, the same line as Rousseau Hario Ban Nepal Ko Dhan (green forest is the wealth of Nepal) nature is the family of our children because our family and children both depend on it . There is absolute freedom in learning in the lap of nature and natural resources . The benefit of life is inside a society . The society is in the environment and contextual nature . The legitimate society can't infringe on natural freedom while providing those benefits . Rousseau determine the benefit and moral standards as society must offer to be legitimate from the maximum utilization and interaction with the nature and natural assets for sustainable learning.

Vygotsky (1896-1934) proposed that learning is a social and environmental process, with children learning from their social surroundings, including cultural and socio-economic factors . Vygotsky emphasized that cognitive development occurs through interactions with others and is shaped by the cultural context in which a child grows up.

Similarly, behaviorist . Watson (1878-1958) focused on the role of the environment in learning . He famously stated, "Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in, and I'll guarantee to make them any type of specialist I want" (Watson, 1924) . Watson believed that behavior and learning are primarily influenced by the environment.

Darwin (1809-1882) also contributed to understanding human development through his theories of natural selection and evolution . His works, such as *The Descent of Man* (1871) and *The Fertilization of Orchids* (1862), addressed the role of nature in shaping human behavior and development . Darwin's research helped explain the connections between nature, psychology, and culture, influencing studies in biology and human development.

Together, these thinkers emphasize the significant impact of social, environmental, and natural factors on human learning and development.

In conclusion, developing strong connections between schools and their communities

is crucial for creating meaningful and impactful education . By integrating local knowledge, resources, and community assets, schools can foster transformative relationships that enhance curricula and educational practices . Recognizing that schools operate within distinct social contexts, policymakers and educators should prioritize collaboration with parents, businesses, and local organizations to establish mutual trust and shared responsibility.

Incorporating locally available resources and traditional knowledge into the curriculum not only bridges, generational gaps but also deepens students' sense of identity and connection to their heritage . Positive parental attitudes and high student engagement further demonstrate the effectiveness of such approaches . Building networks within the community ensures that schools can maximize resource utilization while contributing to the overall development of students and their surroundings.

Ultimately, fostering a dynamic relationship between schools and communities ensures that both grow together, enriching education through real-world connections and collaboration . This holistic approach aligns with the principles of contextual education and underscores the transformative power of school-community partnerships (Sobel, 2004 and Dewey, 1938).

### **Place -based Education: Theory and Practice**

Local learning, often referred to as place-based or community-based education, encompasses a range of practices and objectives aimed at connecting students to their local environments . This approach emphasizes designing a curriculum that centers on real-world inquiries, encouraging students to explore and learn within their communities . By engaging with local issues, teachers and students collaborate with nearby organizations, businesses, and individuals, using these relationships as a foundation for knowledge acquisition, active learning, and valuable community involvement (Smith, 2018).

Building a curriculum around local questions draws from several educational traditions, such as inquiry-based learning, standards-driven curriculum design, project-based learning, and problem-solving approaches, alongside best practices in education . Although this method is not novel, place-based education aligns with several educational advancements that have shaped current pedagogical approaches (Green, 2020) .

Linking this aforementioned insight Nepalese school education and even higher education curriculum has not found interlinked between community available resources, community-based knowledge, community-based skills and their utilization process in

its school education and curriculum even higher education curriculum . It has created the huge gap between Nepalese diverse natural context and available resources . School level and higher education level curriculum has not mentioned traditional knowledge, skills and attitudes to utilize the locally available resources in its formulated curriculum neither in the past nor recent years . As a consequence of this problems, Nepalese educated youth are being faced the unemployment problems, less productivity, independent in abroad knowledge and skills because they have already left their native knowledge and skills by the lack opportunity of contextual knowledge and education of Nepali diverse community.

## **Methods**

This study employed the phenomenological research design, emphasizing the interpretative research paradigm of actual environmental circumstances and lived experiences . The qualitative research paradigm includes phenomenology, which is developing as a science, research design, and philosophy . In order to collect primary data source in natural setting, this study used qualitative techniques as field visits, interviews, and direct observation of the targeted population from the sampled area.

Four head-teachers, four subject teachers and 5 to 8 class students of the "local curriculum" from Chandragiri Municipality were sampled for in-person interview using a purposive sampling technique . Schedules for interviews and observation forms were used during field visits . Furthermore, the researcher participated in examination evaluations with 80 students from 16 schools as an expert in the Chandragiri Municipality Basic Level School Education evaluation committee.

In individual interviews, four subject teachers and four head teachers were held direct interview . Tentatively 70 minutes interview was held with students and teachers.



## Results and Discussion

**Table 1**

*Perspectives of Subject Teachers*

Respondents/ participants	Role	Expe-rience	Key topic discussed	Problems and challenges	Suggestions for improvement	Notable Quotes.
Teacher-A	Teach-er	10	Integration of local resource in lesson	Limited teacher training and materials	Regular training for local resource utilization	Using local materials makes rele-vant learning.
Teacher-B	Teach-er	5	Communi-ty involve-ment.	Time con-straints, pa-renal disen-gagement	Collabora-tion with experts	Community experts pro-vide skills
Teacher-C	Teach-er	7	Aligning resources in curricu-lum	Limited flex-ibility in cur-riculum	Adopt local need based curriculum	Curriculum should ad-dress our sur-roundings
Teacher-D	teach-er	3	Practical implemen-tation con-text-based content.	Local re-sources and knowledge are being de-stroyed.	Needed nonformal knowl-edge-based expert.	Practical learning is in indigenous knowledge and skills .

**Table 2**

*Perspectives from the Head Teachers*

Partici-pants	Role	experi-ence	Key topic	challenges	suggestions	Notable Quotes
HT-A	admin-istrative	15 years	challenges in imple-mentation	Lack of funding and bureaucratic hurdles.	Simplify policies al-located lim-ited fund	Ground lev-el practices are not sup-porting
HT-B	Mana-gerial	12 years	Teacher training and sup-port	Inadequate professional develop-ment	Lack of contextual education training	Empowered teachers empowered students
HT-C	Ad-minis-trative	8 years.	Collabora-tion with local com-munities	Weak com-munication channel	Community partnership with local expert.	Community is rich in contextual resources
HT-D	Ad-minis-trative	20years	Monitoring and super-vision in contextual education implemen-tation	Discrepancy between policy and practice.	Provide measurable outcomes	We need to measure what to achieved ob-jectively.

## **Students' Perspectives**

Students are found very curious and critical to learn indigenous skills and knowledge . Most of the students of class eight responded that we need our old grandfather and father to teach us vocational traditional skills by utilizing local resources . One of the female students claimed that “from the core subject teacher we cannot learn indigenous skills to utilize environmentally available resources.” Another female student said “my grandmother can made best mat made up of straw” or (*paral ko sukul ramro bunnu hunxa*), another student responded that “the uncle near to my house can made best basket made by bamboo and he is selling that basket one thousand rupees per piece” . From these responses from the student site we absolutely ensure that the students' interest is in the favor of contextual resource utilization but there is the lack in local curricula.

### **a . Policy Related Perspectives**

The group of local curriculum subject teachers viewed that our existing local curriculum is not favoring policy provisions exactly . National curriculum framework (2076 B.S.) has rationalized local knowledge, skills, traditions and resources need to be addressed to preserve the indigenous Nepali knowledge as local curriculum but in the practice, schools are found teaching computer education instead of local resource utilization contents . Some of the sampled schools are found teaching optional math instead of local curriculum subject . 80 percent teachers replied that there is no provision of teacher's quota of local curriculum subject . The teachers have lack of indigenous knowledge and skills but they are teaching about the temples, religious sites and tourist areas . Teachers are not getting teacher's guide, text-books and curriculum to teach local curriculum subject . There is the contradiction to implement local resource utilization curriculum course . Students are getting certificate as marks filled in their mark-sheet.

### **b . Human Resource for Vocational Study**

Local experts who have the better knowledge of winning basket, making soil pots, making house, carpenter skills and so many other skilled manpower can give the productive vocational knowledge and skills . Such types of non-formal education having teachers must be appointed as a local curriculum subject teacher . They can teach the skills from learning doing methods . Students can product new materials, can harvest plants and vegetables, missing agriculture-based skills can be transfer from the school curricula.

### **c . Professional Development**

Most of the Head teachers responded that “empowered teacher can empower the students” in learning . De-empowered teachers cannot support the students in their

effective knowledge and skills so teachers' professional development is the essential aspect for local resource utilization curriculum . There is the weak community partnership mechanism, weak organizational mechanism in implementing the need-based curriculum . Market based knowledge and skills with linking locally available resources are being crowd as the cloud.

#### **d . Lack of Local Curriculum Expert**

There is the lack of expert having knowledge and skills of contextual curricula but the constitution of Nepal ensured the right of education according to their need . That created contradiction between teachers, parents, students and community members . But the constitution of Nepal (2015) handed the power in local level in the formulation and development of local curriculum . In the local level there is the lack of expertise, local experts demand tentative high budget from the local government and they develop local curriculum according to their own interest . They did not conduct need assessment analysis in the local curriculum development . So, there are so many challenges are being found from this study.

- Poor budgeting in formulation of local curriculum
- Weak managerial and administration practice
- Double hurdles in test, measurement, assessment and evaluation
- Reliability and validity in certification.
- Organizational and institutional hurdles of different interest groups.

The focus on local resources within a community should shift from identifying weaknesses to highlighting its strengths, seeing the locality as an opportunity for growth rather than a challenge . Strengthening communities by empowering them to control and utilize their assets promotes social justice and enhances the overall quality of life . Integrating these local resources into the school curriculum allows schools to play a pivotal role in this process . Furthermore, it fosters collaboration between the community and public agencies, working together to improve educational quality through the strategic use of local resources.

It is important to acknowledge that while every community possesses valuable assets, skills, and resources, there are also constraints that limit what can be achieved . This brings us to the concept of community capacity building, which refers to empowering communities to effectively use their resources and strengths to overcome challenges and bring about sustainable improvements in areas such as education . Investing in community capacity building enhances collaboration between schools, communities, and local entities, fostering educational and community development (Chaskin, 2001).

Such an approach can help schools have a different perspective in disadvantaged

contexts . Rather than referring to parents who do not attend meetings when invited as ‘hard to reach’, schools can come to a realization that it is they who are the possible cause of such exclusion.

## Conclusions

Contextually available natural resources and their utilization processes are not addressed in school curriculum of Nepal . Most of the students are not familiarize in their surrounding available plants, ethno-plants, herbs and shrubs . Ninety percent students of basic level grade five from Chandragiri municipality found unknown to tell the name of their surrounding plants . Eighty percent school children of basic level private school are unfamiliar in their parents farming . Especially private school children of urban area found unable to identify the local farming and harvesting . In the comparison of private school community school children have the better knowledge of their surroundings available resources . In recent context, school children could not identify the paddy, wheat, barley, garlic, ginger, turmeric plants and other so many locally available resources and their knowledge utilization processes even there are varies of resources in their environment which are most essential in their everyday life . School education and curriculum of Nepal has faced and created the huge gap between contextual resources, contextual knowledge and school provided education and curriculum of Nepalese school today . That has created the gap in provided education system and existing real context of Nepal . Local curriculum, text-books and other curricular material need to be easy access for teachers for effective teaching and learning . Local curriculum teacher’s quota is highly lacking in the local level . Only from the teacher’s commission appointed teacher found unable to teach indigenous knowledge, technology and skills as the content of local curriculum . Policies and provisions are found fine as written document but in the field of implementation aspect these are unsatisfactory .

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