Exploring the Pedagogical Applications of Cultural Resources in Secondary Level Classroom Practices

Tara Nath Bhattarai, PhD
Assistant Professor
Butwal Multiple Campus
Email: tranath17@gmail.com

Article History

Keywords: Cultural resources, indigenous knowledge, interpretive phenomenology, contextualized pedagogy, task-based learning, experiential education, skill-oriented instruction.

Received: 10 June 2025

Reviewed: 15 November 2025

Accepted: 22 November 2025.

DOI: https://doi.org/10.3126/snprcj.v6i1.91796

Abstract

This paper examines the pedagogical uses of cultural resources in the context of secondary-level classroom settings in developing contextualized and skill-oriented learning environments. The application of a qualitative research approach with a phenomenological focus was used to examine the lived experiences of teachers and learners in the use of local knowledge in instructional settings. Data was gathered using classroom observation and semi-structured interviews. The results show that contextualization of culturally embedded resources in classroom instruction increases student engagement, understanding, and skill development, closing the gap between academic knowledge and everyday life. The research concludes that making secondary education relevant to the socio-cultural reality of learners can result in more significant and sustainable learning outcomes. It also recommends strategies for the use of socio-cultural resources in secondary education through contextualized and test-based learning frameworks.

Introduction

The relationship between knowledge, experience, and skill development formed the basic triad of the learning process. These aspects are not different units but work in a collaborative way to facilitate comprehensive and transformative learning. Education is a dynamic and continuous process by which experiences are acquired and reorganized, leading to the development of practical capabilities for adapting to one's environment (Dewey 1916). Education is the process transformation of potentiality into effective action that emphasize its functional and developmental importance. Likewise, Agrawal (1992) highlighted the productive aspect of education, stating that the application of acquired skills enables one to successfully meet and solve real-life problems. These views

collectively describe the philosophical basis of progressive education, which focuses on experiential learning, functionality, and the development of practical skills necessary for human development. The basic objective of education lies in helping learners prepare for the complex demands and responsibilities of adult life (Dewey, 1997). Learners are expected to engage in systematic learning and the development of standardized competencies that are used as content for teaching and learning in preparation for adult life (Dewey, 1997). Crow and Crow (2008) defined education as a developmental process that affects physical, cognitive, emotional, social, and ethical aspects of human development. They further state that such development has also been seen as helping learners internalize values and norms for responsible citizenship and learning throughout life (Crow & Crow, 2008). However, bridging this gap between theoretical knowledge and practical application demands educational strategies that provide learners with a meaningful interface with resources offered by their socio-cultural environments. This is because these environments are multifaceted, touching on both individual and collective attributes, including knowledge, culture, and experience. Socio-cultural contexts are considered to include a range of variables, from race and ethnicity, class and ability, age, gender, sexual orientation, religion, and nationality, to diverse learning conditions and learning styles, etc., which all influence learners' engagement and education outcomes (UNESCO, 2011). Supporting this idea, Nwabueze and Isiebo (2002) argue that modern educational paradigms lean in favor of even-driven and take-oriented pedagogies, which are based on social learning theory. This is because these pedagogies encourage learners to interface with indigenous knowledge systems and resources, thereby providing them with meaningful and relevant learning experiences.

Conceptualizing Resources

Nature is defined as a life-sustaining system, which transforms into a resource with the attribution of value through human recognition, use, or benefit. Within this conceptual framework, resources are defined as anthropogenic entities, which are developed through the appropriation, transformation, and utilization of natural elements for human need and aspirations (Hope, 2002, p. 2). This anthropocentric perspective on resources does not recognize resources as entities or objects in their own right but as dynamic entities or constructs based on human perceptions, interactions, and functional utility.

The World Bank gives a basic definition of natural resources as materials that occur in nature and are necessary or useful to human survival and development. These natural resources include air, water, land, forests, fisheries, wildlife, topsoil, and minerals (Collier, 2003). In relation to this description, the World Trade Report (2010) defines natural resources as predetermined stocks of materials that occur in nature and have economic value either in their normal state or with nominal processing. The economic definition of natural resources emphasizes two

important aspects: scarcity and value, which highlight the importance of natural resources in influencing global production systems and sustainable development.

From a philosophical perspective, an expansive definition of resources was provided by Worthington (1964), where everything that is derivable for the use and benefit of humans in the universe was referred to as resources (p. 2). This definition of resources encapsulates both the physical and non-physical dimensions of resources and extends the scope of resources beyond physical materials to include knowledge and technology for the benefit of human beings. Similarly, Sadhukhan (1986) has argued that resources are not just physical materials but outcomes of social processes in which human beings interact with their environment in a dynamic manner. In this context, resources have come into being as a result of human efforts to satisfy human desires (p. 94). This is further supported by Hussen (2000), who argued that a resource can be defined as "anything which is capable of directly or indirectly satisfying human needs and wants" (p. 3). The above definitions of resources highlight the socio-cultural and utilitarian dimensions of resources and emphasize the idea that the value of resources is determined by context and not by inherent properties of resources.

Integrating these views, Hussen (2000) developed a broad conceptualization of natural resources as including the basic elements of the Earth's life support systems. These are the atmosphere, hydrosphere, lithosphere, and solar radiation, each of which is essential to ecological equilibrium and human survival (p. xxv). In this way, the notion of resources goes beyond the physical, embedding itself within the intricate dynamics of human environment interactions driven by cultural, economic, and technological considerations. This richly nuanced view confirms that resources have their meaning not only from their existence in nature but from the meanings, purposes, and values assigned to them through human perception and usage.

Multifaceted Nature of Resources

Natural resources play a vital role in the global systems of production, consumption, and sustainability. According to the world trade report (2010), almost all goods in the world can be classified as either directly composed of or indirectly depending on natural resources. Moreover, natural resources like oil and gas are essential for driving almost every sector in the economy, while ecological resources like forests, fisheries, and aquifers are irreplaceable reserves for environmental stability and human survival itself (World Trade Report, 2010).

Whilst the importance of these factors has been universally accepted, the World Bank (2009) illustrates a primarily utilitarian approach, highlighting the instrumental role of natural resources in providing human life but failing to engage with the more fundamental philosophical and metaphysical implications of the human/nature relationship. Such a position raises fundamental epistemological

debates concerning the extent to which nature exists to serve human interests, versus the existence of a fundamental cosmological relationship between humans and their environment. Nevertheless, the instrumental role of naturel systems has been highlighted in further reports to their direct contribution to key human development factors such as health, education, and life expectancy (World Trade Report, 2014).

Supporting this essential yet utilitarian perspective, the Food and Agriculture organization (FAO, 2004), as cited in the World Bank (2009), highlights the multifaceted functions of natural resources, including the provision of food, fuel, medicines, freshwater, fisheries and ecological regulation. These resources are particularly crucial for the livelihoods and well-being of rural populations in developing regions, where access to natural capital determines subsistence, economic resilience, and food security. Beyond ecological and economic dimensions, the notion of social resources expands the conceptualization of resources value as a socially constructed phenomenon. The resources do not emerge solely from the Earth but are assigned meaning and value through cultural narratives, ideologies, and institutional practices (Burch, 1971). Similarly, Donenfeld (1914) recognized the social origins of resource formation within collective attitudes and institutional systems such as social agencies associations, and public organizations. These interpretations locate resource utilization and mobilization within the broader sociocultural domain, suggesting that the valuation and governance of resources are embedded in institutional structures, cultural norms and patterns of human interaction.

Human interaction with the natural environment is what gives the environment both symbolic and practical value. Social resources include all conditions that facilitate human interaction with the natural environment (Donenfeld, 1914). The interaction is mediated by various social variables. Both material and immaterial resources flow through social systems and constitute the basis of social capital (Tornblom & Kazemi, 2012). Similarly, other social theorists such as Galbraith (1967) and Bell (1973), as cited in Tornblom and Kazemi (2012), highlighted the significance of expert knowledge, communication competence, and organizational ability in promoting social development and effectiveness. Guided by the theory of social stratification developed by Weber, Tornblom and Kazemi (2012) identified the three main dimensions in which social resources operate. They include Class, status, and party affiliation. These stratifications, in turn, shape the allocation of both natural and social resources. They, therefore, show the link between individual agency, inequality, and access. The quality of life in society depends on the equitable production and distribution of both material and non-material resources (Tornblom & Kazemi, 2012). This view of human development requires attention to the allocation and sharing of social resources.

Natural environments are socially constructed through collective negotiation and sociocultural discourse to produce landscapes that are both ecological and symbolic (Greider & Garkovich, 1994). They authors highlighted that understanding how such landscapes are interpreted can help us understand the institutional processes involved in natural resource management. The human perception of nature is mediated through language systems which culturally organize sensory experience into meaningful wholes (Whorf, 1956). Human beings live in a world of symbolically meaningful objects and that meanings are constantly being created and reinterpreted through social interactions (Blumer, 1969). These arguments suggest that interpretation and management of resources are deeply embedded within cultural, linguistic, and institutional settings; hence, the idea of resource itself is a human construction.

Cultural Facet of Resources

Cultural resources are created out of the collective social realities of communities and are maintained through traditions, customs, and collective memory. Collective social realities are created through common sense knowledge and social interaction that organizes the routines of communal life (Rogers, 1981).The cultural groups are active in creating and re-creating their own realities through constantly making sense of symbols and meanings through social interaction (Goffman,1974; Denzin,1977; Corsaro,1985; Fine,1991; Greider & Garkovich, 1994). In the same context, Busch (1989) point out that natural environments are not only physical but also socially organized constructs of the belief system, value system, and institutional structure of the community.

Cultural landscapes have been defined as the visible outcomes of human activity in nature, which are shaped by cultural, social, and economic intentions (Pradhan & Pradhan, 2011). In this respect, there are landscapes which have been shaped through functional or economic intentions. There are also landscapes which have been shaped through symbolic or historical considerations. This reveals an understanding that the mobilization, use, and interpretation of natural resources are deeply embedded in cultural systems. In this respect, indigenous knowledge systems are considered critical in the governance of natural resources. Indigenous knowledge systems have an influence in the governance of natural resources through informal institutions, customary laws, and belief systems which regulate access, ownership, and usage (Fabricius & Koch, 2004). Socio-cultural contexts differ across societies. In this respect, they have asserted that socio-cultural contexts have an influence in shaping institutional norms, legal systems, values, and behavioral patterns (Torrington & Hall, 1991).

Cultural values fundamentally influence how people relate to the natural world, shaping perceptions of what constitutes a resource and determining how resource are valued and used. Cultural norms significantly affect organizational behavior, particularly in system of human resource management and that

neglecting socio-cultural variables can obstruct institutional reforms (Adhikari,2009) Thus, culture and nature are not separate or opposing domains but are interdependent and mutually constitutive. Cultural landscapes mirror both the technological capacities and socio-economic aspirations of local population (Pradhan & Pradhan, 2011) while cultural resources encompass not only tangible artifacts but also natural features redefined through human interpretation and practice (Ngozi & Chinonso, 2016). Understanding environmental change and patterns of resource use requires an appreciation of these cultural frameworks. Greider and Garkovich (1994) emphasize that cultural interpretations of landscapes are key to understanding how societies perceive and respond to environmental transformations. Similarly, Bennett (1976) maintains that human communities continually reinterpret natural phenomena through culturally shaped lenses. Symbols in culture play an instrumental role in shaping how groups think about and interact with their environments (Greider & Garkovich, 1994). These culturally constructed meanings result in varied knowledge systems that are crucial in the management of resources in an environmentally sustainable manner.

Consequently, the importance of recognizing the value of indigenous knowledge and culture in the system of resource governance calls for scholarly attention. The variety of socio-cultural contexts provides an extensive range of options for resource mobilization that are informed by socio-cultural contexts. The integration of the knowledge system in the broader framework of governance can promote ecological sustainability.

Local Communities and Cultural Resources

Indigenous and local communities represent distinct socio-cultural groups bound by ancestral connections to their landscapes and resources. These relationships extend beyond material dependence, encompassing cultural identity, language, traditional livelihoods, and spiritual well-being. Through centuries of continuous interaction with their environments, such communities have cultivated deep, place-based knowledge systems and sustainable management practices. Their ability to mobilize resources collectively is grounded in context-specific experiences, traditional skills, and adaptive strategies that balance ecological and social priorities. Local people have the collective capacity to manage natural resources through their knowledge and experiences; in community-based conservation and development programs local communities are responsible for managing their natural resources for the development of practical skills (Getz et al, 1999). Weddell (2002) supports this view by documenting the crucial role indigenous populations play in formulating innovative, ecologically sound conservation initiatives across diverse ecosystems from arctic to tropical regions. Such initiatives not only contribute to environmental sustainability but also nurture indigenous innovation, technical expertise and context-appropriate technologies.

The increasing acceptance of indigenous knowledge in the realm of academia and development highlights the necessity to assimilate indigenous knowledge systems in education and natural resource management. Scientists themselves have admitted that knowledge that comes from the school and university education is all based on the indigenous knowledge system which has existed with the community and farmers for generations (Timsina & Ojha, 2008). This view challenges the conventional dominance of Western knowledge systems by accepting indigenous knowledge systems as the foundation of contemporary scientific thought and education. Assimilating indigenous knowledge systems in education is thus a necessity. In a culturally pluralistic country like Nepal, indigenous knowledge systems could provide a fillip to the pluralistic nature of education. The model of participatory variety selection put forward by Timsina and Ojhja (2008) is a good example in this context. In spite of acknowledging the fact that indigenous knowledge systems are often given low priority in the development of new technology, the authors recommend an inclusive model to validate indigenous knowledge systems.

Policy support for the institutionalization of community knowledge systems is equally critical. Building local institutions and communities can help in the recognition of socio-cultural resources in national education and development policies. Local communities have a unique ability to recognize resource varieties and management strategies that are ecologically and culturally compatible (Timsina & Ojha, 2008). This puts indigenous knowledge holders in an invaluable position as co-creators of education and technology innovations. Thus, local communities act as vital sources of socio-cultural knowledge, technical expertise, and intergenerational wisdom that play an integral role in the development of sustainable development, inclusive education, and culturally relevant pedagogy. The lived experiences of the people in these communities, embedded in environmental engagement and traditional practice, act as the basis for the development of localized solutions and participatory learning models. In Nepal, there are many communities that possess rich indigenous knowledge system that plays an integral role in sustainable development, ecology, and community learning. However, these knowledge systems are often marginalized in the context of formal education that places more value on standardized curriculum and externally derived knowledge. Thus, this gap needs to be addressed in an effective manner. In this context, this study is intended to identify the socio-cultural resources in the community, analyze the potential of these resources in terms of classroom integration, and suggest ways in which these resources can be integrated into the broader context of education. In this manner, this research also becomes an integral part of the broader discourses in the context of sustainable education, inclusion, and empowerment that are relevant at the global level.

In the backdrop of the culturally diverse educational scenario in Nepal, secondary education appears to exist in isolation from the socio-cultural contexts of students' everyday lives. The existing curriculum mainly focuses on standardized contexts developed externally, which mostly do not coincide with the socio-cultural contexts of students. Such disconnection not only makes the educational content less relevant but also inhibits students from exploring and using their potential for creativity and practical application of knowledge. In this context, the current study is conceptualized with the premise that socio-cultural contexts of students' everyday lives, including indigenous knowledge, culture, community practices, and artifacts developed at the local level, have the potential to enhance educational content with immense scope for exploration. Such socio-cultural contexts have been part of the social fabric of communities and have been developed over generations.

The basic objective of this research lies in exploring the possibility of contextualizing available socio-cultural resources within the teaching-learning process in the secondary level of education. In addition to this, it also aims to identify these resources and assess their relevance for teaching-learning purposes. The basic objective of carrying out such an exercise lies in creating an appropriate teaching-learning process that resonates with the socio-cultural realities of learners. In doing so, it also attempts to promote a culturally responsive teaching-learning process that resonates with learners' lived realities. Such an attempt not only makes teaching-learning more relevant and contextual but also resonates with broader imperatives for reforming education in a manner that promotes sustainability and engagement with communities. In doing so, it also has the potential to promote a sense of empowerment among both teachers and learners and also foster a sense of ownership and belonging within the teaching-learning process. In the end, this study hopes to contribute to the discourse on educational transformation in Nepal through an illustration of how socio-cultural knowledge systems in local contexts could function as a dynamic pedagogical tool. In the process, it underscores the need to infuse cultural identity, indigenous wisdom, and community participation at the very core of secondary education in Nepal.

Objectives of the Study

1. To identify the locally available cultural resources in the study areas.
2. To explore the pedagogical applications of identified cultural resources in secondary level classroom instruction.
3. To recommend pedagogical strategies for the contextualization of identified socio-cultural resources in classroom instruction.

Methods and Materials

This study employed a qualitative research design rooted in hermeneutic phenomenology, aiming to explore and interpret the lived experiences of individuals within their unique socio-cultural contexts. Phenomenological inquiry seeks to interpret human experiences as it is lived, revealing the structures of meaning embedded within daily life (Manen, 2014). Data were collected using a combination of unstructured and semi-structured interviews, each guided by phenomenological questions intended to elicit rich, reflective narrative (Beck, 2021). These open-ended conversations enabled participants to express their experiences in their own words, revealing nuanced insights into their perceptions and realities. To complement the interview data, field observations were conducted in participants' natural settings, allowing the research to document behaviors, interactions and contextual features that enriched understanding. Additional data sources such as detailed field notes, photographic documentation, and audio recording provided valuable triangulation, enhancing both the credibility and depth of the findings.

Analysis of the collected data was done through a phenomenological process in six phases, from raw descriptions to interpretive understanding. These phases included immersion in the data through repeated readings and listening, comprehension of the lived descriptions in context, abstraction of essential statements and meanings, synthesis of developing thematic patterns, illumination and illustration of essential phenomena through interpretive writing, and finally, integration and reflection to connect themes with broader theoretical understandings (Stolz, 2023)..By using interpretive methods in phenomenology, meaning emerged through dialogue and text in a way that was consistent with a hermeneutic understanding of understanding as a co-constructed process with the participant.

The research site was purposively selected to reflect a unique socio-cultural and demographic profile, in line with the advice provided in Rowland & Leu (2011). The study setting was a suburban area in Lumbini Cultural Municipality in Rupandehi District in Lumbini Province in Nepal. This setting was selected because it has a unique mix of indigenous people and immigrants that makes it a culturally vibrant setting in which to examine the influences of local resources on educational practices. Purposive sampling was used to select participants who could provide a range of relevant information on the research themes. The participants included ten local people, two teachers, two students, two parents, two social workers, one from the School Management Committee (SMC), and one local government representative. Diversity in terms of gender, age, profession, and socio-economic status was sought in the participants to ensure a multiplicity of viewpoints reflective of the local population. Throughout the research process, ethical considerations were stringently observed. Informed consent was sought from all

participants after informing them of the purpose and procedures of the research. To ensure that the identities of the participants were not revealed, all documents were referred to by pseudonyms, and all information was stored in password-protected computer files. The research also followed the ethical standards of qualitative research, which include respect and transparency.

Result and Discussion

This section will provide a systematic analysis of the socio-cultural resources that have been identified through the process of filed observations and semi-structured interviews that have been carried out in the selected study area. The identification and analysis of socio-cultural resources have been carried out through rigorous thematic coding and analysis. This framework of analysis has allowed the development of themes and patterns that have a genuine representation of the participants' views while being methodologically rigorous. special emphasis has been placed on those socio-cultural resources that have a practical application in the classroom teaching process, and the development of contextualized and meaningful learning experiences that can facilitate the integration of indigenous and community knowledge into formal secondary education. Through this process, important themes have been identified in relation to the nature, role, and significance of socio-cultural resources.

From the findings, it is evident that a wide array of socio-cultural factors exists, which are interrelated with each other. These factors include indigenous knowledge systems, traditional practices, arts and crafts, community rituals, linguistic heritage, and skills relevant to a particular context or situation. These factors are a reflection of a culturally enriched educational environment, which signifies historical continuity, social values, and a sense of community identity. However, the participants were unanimous in their opinion that these resources had the potential to enrich the curriculum and instructional practices in a way that could increase student engagement and life skills competencies.

Table 1

The identified Cultural Resources in Study Site

1. Socio-cultural Resources: Organizations/Associations	- Community Associations-Youth Club-Typical Song Groups-Indigenous Band Associations. - Dairy Associations-Financial Cooperatives - Agricultural Cooperatives-Women's Associations. - Rickshaw Association-Hotel Association - Vegetable Plantation Association-Jewelers' Association - Barbers' Association
Industries	- Mushroom Production - Diary production –Rice/flour/oil mill

	- Handicraft production, Furniture
Primary Occupation	Agriculture
Secondary occupation	Teaching, Jobs in office, shop keeping, making statues, crafts, making houses, tour guide, working for wages, laborers, barbers
Institutions	- Madhuvani sec. school - Metta Gurukul School - Karuna Girls' Sec. School
2. Religious Heritages	- Buddha Bihars, Gumbas - Janaki Temple-Durga Temple - Shiva Temple - Mahilwar Masjid-Samay Mai Than
3. Evens and Festivals: Festivals	- Dashain, Tihar, Teej, Ramnawami, Nagpanchami, Rakshyabandhan, Maghi, Faghu purnima, Buddha Purnima, Eid, bakar Eid.
Seasonal Celebrations	- Gawa (beginning of Ropai) - Harihari (conclusion of Ropai) - Winter Fair (Buddhist) - Chaitra Fair (Hindu) - Baisakh Fair (Buddha Purnima)
Worships	- Chhathi Mai Pooja - Shivaji Pooja (in Shravan) - Samay Mai Pooja - Shivaratri Pooja - Buddha Pooja (in Baisakh)
Rituals	- Fasting-Mundan-Chhati (6^{th} Day of Birth) - Nwaran (9^{th} day of birth)-Shahada (Falth declaration) - Salat (prayers)-Zakat (Charitable Giving) - Sawan (Fasting)
Public Events	- Karahi Pooja (before monsoon, all the villagers get together in one place, cook for all, worship, spell and move around the entire village)
Public Tours	- Pilgrimage (Hindu/Muslim/Buddhist) - Occasional excursions organized by financial/occupational cooperative associations
4. Indigenous People/Ethno Groups	- Yadav, Kewat/mallah, Brahmin, Teli, Chhetri, Gupta, Kurmi, Harijan, Lod, Pandey, Jollah (muslim), Chamar, Tharu, Gaderiya, Badhai, Dhobi, Pashi, Lohar, Sonar, Dhandi, Pathak, Tiwari, Mishre, Shukla
5. Indigenous Knowledge: (Physical/technical/Social)Based on (Mukherjee, 1995, p.11) Physical Knowledge	- Topographic Knowledge-Land Structure - Soil type-Land condition - Land tenure-Quantifying - Thatching

6. Indigenous Technologies	- Weather prediction - Planting potato/paddy/wheat - Making ploughing equipments set(by Badhai People) - Chakiya (For making pulse) - Making walls made of straw and mud - Making boats (by Badhai people) - Making Khasi (blocking reproduction of male goat)-Muslim - processing the skin of dead cattle (Harijan/Chamar) - making Khapada (Roofing materials) - Making puffed rice - Pottering (by Kumal) - Jato (Flour Making device)

Table 1 offers a synthesis of the identified socio-cultural resources by grouping them according to their defining characteristics and exploring their potential pedagogical use in teaching-learning activities in secondary level education. The synthesis reveals the multi-dimensional nature of socio-cultural resources and their potential to bridge the divide between formal education and community-based knowledge and practices. The discussion also explores how the strategic use of socio-cultural resources can facilitate task-based/experiential learning methods that are consistent with learners' cultural backgrounds and lived experiences, thereby enhancing the relevance and effectiveness of secondary level education. The comprehensive data obtained from the chosen study area reveals a complex system of socio-cultural resources that are intricately linked and embedded in one another and which hold great educational, social, and practical importance. The data obtained reveals that these resources are diverse and encompass all aspects of nature, society, culture, indigenousness, and technology, each making a distinctive contribution to the collective knowledge base and identity formation of the community. The resources are not used in an isolated manner but are used synergistically to guide daily life and support socio-economic and cultural life.

Natural resources and heritage elements like parks, conservation areas, water bodies, and historically significant locations reflect the community's rich environmental endowments and cultural landscapes. They have multiple ecological, recreational, and symbolic values. They also have the potential to provide authentic contexts for place-based and environmental education. The integration of these elements into the classroom curriculum has the potential to promote students with regard to natural processes and environmental history. Socio-cultural organizations and occupational groups also reflect a strong communal structure that enables collective action, social cohesion, and economic sustainability. The presence of various community-based organizations such as youth organizations, women's organizations, cooperatives, and occupational guilds indicates the presence of strong social capital. Local industries such as dairy

production, handicrafts, and milling reflect economic diversification and skill development, while primary and secondary occupations such as agriculture, craftsmanship, and service-related employment reflect a broad spectrum of livelihood practices. These occupational practices provide rich pedagogical content for vocational education, entrepreneurship education, and life skills learning.

Sites of cultural heritage and religious landmarks, such as temples, mosques, and monasteries, appear to be critical areas for communal identity and spirituality. The associated rituals, festivals, and cultural practices, such as Dashain, Tihar, Shivaratri, and Buddha Purnima, represent important forms of intangible cultural heritage, which play a critical role in guiding social relations, ethics, and values. From an educational perspective, these cultural heritages offer important opportunities for promoting moral education, inter-cultural understanding, civic values, and participatory learning, which are critical in values-based education. The presence of indigenous communities and various ethno-linguistic groups also emphasizes the cultural diversity of the study area. The co-existence of various castes, ethnic groups, languages, and religious systems adds to the richness of the socio-cultural context of the community, which in turn leads to the existence of multiple knowledge systems and worldviews. This provides a rich background for the development of culturally responsive curricula that take into account the diverse backgrounds of the learners.

Indigenous knowledge systems include physical knowledge, technical knowledge, and social knowledge. Physical knowledge encompasses knowledge of local topography and indigenous weather forecasting. Technical knowledge encompasses agricultural practices such as transplanting and ploughing, as well as mapping and land use. Social knowledge encompasses practices such as listening, dialogue, cooperation, and collective problem-solving. These practices show how knowledge is socially constructed and shared among people. In addition, it indicates how knowledge is shared among people within communities. The practices also show how knowledge is shared among communities. Likewise, indigenous technologies and skills also demonstrate the community's adaptive capacity and creative ingenuity. Craft skills in sloughing tool making, mud wall construction, boats, and craft skills in making household items demonstrate community-specific technological skills that were developed in response to community needs and resources. Skills in livelihood activities like fishing, pottery making, dairy products processing, traditional medicine making, cultural activities like Biraha songs, and Khadgodawa dance offer scope for effective pedagogical integration of arts education and cultural heritage studies with livelihood skills in the curriculum.

The findings from these studies reinforce the significance of acknowledging, valuing, and contextualizing local socio-cultural resources in educational systems. The range and depth of local socio-cultural resources clearly indicate that they are

not peripheral in nature; they are an integral part of the social structure, behavior, and culture. At the same time, they are challenges as well as solutions for local people. This is a reflection of a dynamic relationship between a traditional knowledge system and local experience. Local socio-cultural resources are adaptive frameworks in which an individual makes sense of his or her environment. These socio-cultural resources include a broad spectrum of culturally grounded knowledge systems, which include language systems, classification systems, resource use systems, ritual systems, spiritual systems, and worldview systems. Culturally grounded knowledge systems provide the fundamental bases for local-level decision-making processes in survival issues, environmental issues, and socio-cultural issues (Boven & Toyohashi, 2002).

In recognition of the significant potential for education that these resources possess, this study critically analyzed the application and integration of these socio-cultural resources in the classroom setting. The factors that have been identified are significant in offering a range of pedagogical opportunities that can be utilized to facilitate experiential learning, critical and reflective thinking, cultural literacy, and contextually relevant problem-solving for students. When carefully integrated into the educational setting, these factors have the potential to play a significant role in the development of a range of cognitive, affective, and psychomotor skills. As such, a number of potential applications of socio-cultural resources in the classroom setting have been identified by this study, and these are outlined in Table 2.

Table 2

Possible Pedagogical Contextualization of Socio-Cultural Resources

Available Socio-Cultural Resources	Techniques for Contextualizing the Socio-Cultural Resources
Organizations/Associations	Field visit, Simulation, drama, project work, report writing,
Indigenous/ethno groups	Demonstration, resource person, Interaction, Group Discussion
Industries	Project work, report Writing, Observation, Demonstration
Occupations	Role play, simulation, drama, interaction, project work
Cultural heritages	Project work, report writing, observation demonstration, field visit
Events and Festivals	Role play, simulation, drama, integration, project work
Seasonal celebrations	Role play, simulations, drama, interaction, project work
Public Gatherings	Dramatization, interaction, discussion, group work
Tours	Excursion, project work, questioning, answering

Physical knowledge	Demonstrating, facilitating, group work discussion, project work, observation, interaction, presentation
Technical Knowledge	Field visit, demonstrating, Facilitating, group work, discussion project work, observation, presentation, interaction, problems solving.
Social Knowledge	Interaction discussion facilitation, group work, project work, observation, interaction, problem solving, question-answer presentation.
Local Technologies	Demonstration, presentation, observation, field visit, participation, field work modeling realia,
Local Skills	Demonstration, presentation, observation, field visit, participation, field work modeling realia, role play dramatization, project work, problem-solving.

The above data suggest a significant potential for the meaningful contextualization of socio-cultural resources within the classroom teaching-learning process. Moreover, the identified teaching strategies such as field visits, demonstrations, simulations, dramatizations, and project-based teaching methods suggest a constructivist and experiential approach to teaching-learning, which emphasizes the importance of the learner's engagement with the contextual relevance and the development of practical and transferable knowledge. Such an approach enables the learners to actively construct their knowledge in such a way that it relates to their socio-cultural environments.

The use of local organizations and associations such as youth groups, women's groups, and occupational associations in the process of teaching and learning through field visits, simulations, observation, and report writing helps to provide students with real-life exposure to the structures and functions of the local community. Moreover, the use of indigenous and ethno-cultural groups in the process of pedagogical resource generation through interaction, group discussions, and the use of resource persons from the local community helps to promote intercultural understanding, social inclusion, and respect for diversity in a culturally responsive learning environment that is closely aligned with the demographic characteristics of the local context.

Community-based industries and occupations, e.g., handicrafts, agriculture, barbering, and other trades, can be integrated within class work through learners observing, role playing, and demonstrating. These modes of instruction can help learners develop an understanding of the economic bases of their communities and, at the same time, gain a glimpse of technical, vocational, and entrepreneurial know-how. The integration of locally-relevant content in the delivery of the curriculum can help strengthen the relationship between education and livelihood realities, which is in response to the rising demand for skills-based education in Nepal's rural and semi-urban areas. The pedagogical application of cultural

heritage sites, local events, and festivals through project work, dramatization, and role play can further enhance students' cultural literacy, creativity, and socio-emotional development. These culturally contextualized learning activities can be considered effective strategies in promoting values, ethics, history, and religious pluralism. Additionally, the integration of seasonal celebrations and local events within educational activities can further strengthen the link between education and daily life.

Other areas of learning can include educational tours and excursion activities such as visiting religious sites and attending community-organized activities. The teaching methods of guided questioning and reporting can help in the development of analytical learning and enable learners to relate abstract theoretical concepts to real-life experiences.One of the most interesting aspects of the study is the pedagogical value of indigenous knowledge systems such as physical knowledge, technical knowledge, and social knowledge. These can be effectively integrated into the learning processes of learners through collaborative learning methods such as group work, interaction, and problem-solving activities. Physical knowledge in areas such as land utilization, weather patterns, and topography can be effectively taught through observation and exploration activities. Technical knowledge in areas such as farming and irrigation can be integrated into the learning processes of learners through practical experiments and demonstration activities. Social Knowledge in areas such as interpersonal communication and conflict resolution can provide valuable input for language learning and civic education.

Likewise, local technologies and indigenous skills in pottery-making, weaving, the use of medicinal plants, and local building designs can also be brought inside the classroom through fieldwork, the use of real objects or realia, modeling, and direct involvement. Not only do these teaching methods legitimize and value indigenous knowledge, but they also provide students with concrete skills and appreciation for local innovation and craftsmanship. When dramatization, role-playing, and problem-solving are added to these methods, they can be very effective in developing creativity, critical thinking, cooperation, and cooperative learning. The finding reveled the notion that socio-cultural resources, when properly contextualized and integrated into the teaching and learning equation, represent a rich resource for building on existing classroom instruction. The utilization of such resources can facilitate a move away from textbook-based instruction and towards a more participatory and inclusive form of teaching and learning. This is in line with contemporary discourses on culturally responsive teaching and learning (Gay, 2010), as well as the emergent curriculum reform initiatives advocated by UNESCO and reflected in the national education policies of Nepal. Significantly, this is because such initiatives reinforce the notion of education as being not just about the transfer of knowledge but about the

transformation of the learner in a meaningful way through engagement with the social and cultural contexts in which they live.

Locally relevant socio-cultural resources incorporated in the secondary school curriculum have thus immense potential in facilitating contextual learning. This resources package, which includes community-based knowledge, cultural practices, social values, and indigenous problem-solving skills, has immense potential in enriching the curriculum content as well as the processes. This is in line with the Curriculum Development Center's (2010) principle of "Think Globally, Act Locally," which has been central in shaping the curriculum. This lack of evidence has hindered the formulation of context-sensitive research-based strategies to guide teachers and curriculum developers. Moreover, teachers have been observed to display low levels of motivation towards the implementation of socio-culturally informed teaching practices because of the assessment framework that emphasizes standardized and textbook learning. Without proper recognition and assessment frameworks that place value on context-driven teaching practices, these teaching practices are likely to be de-emphasized. To bridge the gap between the two, there is a need for academic research and professional development programs that highlight the importance of socio-cultural knowledge in education.

Conclusion

The contextualization of socio-cultural resources in secondary level classroom teaching-learning practices can be seen as a transformative and sustainable approach in promoting relevant and skill-oriented education. Such socio-cultural resources, embedded in community knowledge systems, indigenous practices and culture, can be seen as significant pedagogical tools in overcoming the gap between formal academic knowledge and socio-cultural realities. The recognition, interpretation, and utilization of socio-cultural resources not only legitimize indigenous knowledge systems but also enhance learner's engagement by improving authenticity, relevance, and participatory dimensions. The effective pedagogical utilization of socio-cultural resources can enhance learner's cognitive, effective, and practical capabilities with the support of appropriate contextual teaching-learning strategies like project-based learning, field work, role play, observation, and experiential inquiry. Such approaches can enable learners to engage in the exploration of their socio-environment in a critical manner and develop indigenous knowledge with appropriate communication and life skills. In this regard, subject areas like Social Studies, Agriculture, Technical Education, and Business Studies at the secondary level (Grade 8-10) can be seen as appropriate areas where formal curriculum can be contextualized with appropriate indigenous contexts and practices.

Moreover, the participation of local practitioners, artisans, elders, and community members as resource persons adds value to the learning experience in that students get exposed to various epistemologies and the application of

knowledge in real life situations. The participation of community members in this manner contributes to inclusive education because of the recognition of diverse knowledge systems and the promotion of intergenerational learning and cultural continuity. Educational activities like excursions in the community, observing seasonal and occupational activities, and analyzing indigenous technologies add value to interdisciplinary and hands-on learning in alignment with constructivist and experiential learning theories.

Despite its immense educational potential, the integration of socio-cultural resources in the classroom is still limited due to a lack of sufficient academic documentation in curriculum and policy frameworks and a lack of sufficient consideration for context-based and experiential learning in assessment systems. This calls for collaborative efforts in empirical studies, curriculum development, and teacher training programs, which are necessary for the development of institutional frameworks for recognizing the educational value of local and indigenous knowledge systems. In conclusion, it can be argued that the contextualization of socio-cultural resources in secondary education has a significant tendency to entice teaching and learning by making it more locally relevant and practically meaningful. In accordance with the "Guiding Principle" propounded by the Curriculum Development Center (2010), "Think Globally, Act Locally," it can be argued that there is immense scope for nurturing socially responsible, technically competent, and critically conscious citizens. Therefore, it can be argued that the integration of socio-cultural resources should not only be viewed as a significant educational innovation, but also as a pedagogical imperative for promoting equity, sustainability, and community empowerment in the ever-changing educational scenario of Nepal.

References

Adhikari, D. R. (2009). *Human resource management.* Buddha Academic Publishers and Distributors Pvt. Ltd

Agrawal, J. C. (1992). *Theory and principles of Education.* Bikas Publication House.

Beck, C. (2021). *Introduction to phenomenology: A focus on methodology.* SAGE.

Bennett, J. W. (1976). *The ecological transition: Cultural anthropology and human adaptation.* Pergamon Press.

Berger, G. (1992). *Social structure and rural development in the third world.* Cambridge University Press.

Berger, P. L. & Luckmann, T. (1967). *The social construction of reality: A treatise in the sociology of knowledge.* Garden City, Anchor Books.

Blumer, H. (1969). *Sociological implications of the thought of George Herbert Mead: Sociological theory.* Aldine.

Boven, K. & Morohashi, J. (2002) *Best practices using indigenous knowledge.* The Hague, UNESCO/MOST and Nuffic.

Burch, W. R., Jr. (1971). *Daydreams and nightmares: A sociological essay on the American environment.* Harper & Row Publishers.

Busch, L. (1989). Irony, tragedy and temporarility in agricultural systems or values and systems are related. *Agriculture and Human Values,* 6 (4), 4-11.

CDC (2010). Local Curriculum: Resource and Training Materials. Government of Nepal, MoE Curriculum Development Center, Sanothimi, Bhaktapur.

Collier, P. (2003). The market for civil war. *Foreign Policy, (136),* 38–45. https://doi.org/10.2307/3183590

Crow, A. & Crow, L. D. (2008). *Introduction to education.* Surjeet Publications.

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education.* Macmillan.

Dewey, J. (1997). *Experience and education.* A Touchstone Edition Book Published by Simon & Schuster.

Donenfeld, M. J. (1914). The meaning of social resources. *The Journal of Educational Sociology by American Sociological Association,* 13 (9), 569-564.

Fabricius, C. & Koch, E. (2004). *Rights, resources and rural development.* Earthscan.

Getz, W. M., Fortmann, L., Cumming, D., du Toit, J., Hilty, J., Martin, R., Murphree, M., Owen-Smith, N., Starfield, A. M., & Westphal, M. I. (1999). Sustaining natural and human capital: Villagers and scientists. *Science, 283*(5409), 1855–1857. https://doi.org/10.1126/science.283.5409.1855

Greider, T. & Garkovich, L. (1994). *Landscapes: The social construction of nature and environment.* Kentucky: Published by Rural Sociological Society.

England: Butterworth-Heinemann, 1, 44-67.

Hope, T. E. (2002). *The Managing Nature as Resource.* University of the West Indies Press.

Hussen, A. M. (2000). *Principles of environmental economics: Economics, ecology and public policy.* Routledge.

Hugo, K, & Clanahan, S. M. (2009). *Financing social policy: Mobilizing resources for social development.* Palgrave Macmillan.

Mukherjee, S. K. (1995). *Textbook of soil science.* Tata McGraw-Hill.

Ngozi, E. & Chinonso, I. (2016). The role of cultural resources in Tourism development in Awka. *African Journal of Hospitality, Tourism and Leisure* 5 (2) http//: www.ajhtl.com

Nwabueze, A. I. & Isilebo, N. C. (2022). Modern trends in educational development. In Y.M. Abdulrahman, R.O. Anyaogu, N.J. Izuagba & R.O. Osim (Eds.) International and comparative education: Cross-cultural approach (Pp. 545-558).

Pradhan, P. K. & Pradhan, B. (2011). *Environment and natural resources: Concepts, methods, planning and management*. Quest Publication.

Rogers, M. F. (1981). Taken- forgrantedness. *Current Perspectives in social theory*. 2,133-151.

Rowland, M. M. & Leu, M. (2011). Study Area Description. *Sagebrush Ecosystem Conservation and Management, 1, 10–45.*

Sadhukhan, S. K. (1986). *Economic geography*. S. Chand and Company Limited.

Smith, A. (2006). *Promoting social cohesion through education*. The World Bank.

Stolz, S. A. (2023) The practice of phenomenology in educational research, Educational Philosophy and Theory, 55:7, 822-834, DOI: 10.1080/00131857.2022.2138745.

Timsina, N. P. & Ojha, H. R. (2008). *Agricultural technology development in Nepal: Critical assessment from knowledge system perspective*. Cambridge University Press.

UNESCO. (2011). *Addressing socio-cultural diversity through the curriculum*. International Bureau of Education. http://www.unesco.org/education/.

Tornblom, K. & Kazemi, A. (2012). *Hand book of social resource theory: Theoretical extensions, empirical insights and social applications, critical issues in social justice*. Springer.

Torrington, D. & Hall, L. (1991). *Personal management: A new approach*. Prentice Hall International (UK) Ltd.

Van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Left Coast Press.

Whorf, B. L. (1956). *Language, thought and reality*. Technology Press of Massachusetts Institute of Technology and John Wiley.

World Bank (2009). *Agriculture and rural development*. Author.

World Trade Report (2010). *Trade in natural resources*. World Trade Organization.

World Trade Report (2014). *Trade and development: recent trends and the role of WTO*. World Trade Organization.

Worthington, B. E. (1964). *A definition of natural resources*. UNESCO.

Weddell, B. J. (2002). *Conserving living natural resources in the context of a changing world*. Cambridge University Press.