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Original Research Article

Use of Audio-Visual Teaching Learning Materials in Facilitating of Health Education in Early Childhood Development Centers, Pokhara, Nepal

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Abstract

Early Childhood Development (ECD); is a crucial period for nurturing the physical, cognitive, social, emotional, and linguistic growth of children aged three to eight. The study aims to assess the factors influencing the use of audio-visual teaching and learning materials in facilitating health education in the ECD centersin Pokhara, Nepal. The research utilized a quantitative, cross-sectional research design. Data were collected using face-to-face interviews with 486 respondents from 33 selected ECD centers. The participants were randomly selected using proportionate sampling from each selected ECD center. The descriptive analysis employed for univariate and bivariate analyses using Statistical Package of Social Science (SPSS) 25 version. Variables such as school type, facilitator qualification, management of learning materials, availability of potable water and sanitation facilities, learning corner condition, and classroom decoration were significantly associated with using audio-visual aids, $p<0.001$. Additionally, school building,, classroom conditions, and proper sitting arrangement were also found to be significant with audio-visual aids, $p<0.01$. Association was further observed between the use of other materials and audio-visual aids, $p<0.05$. The study highlights that enhancing infrastructure, providing adequate learning tools, and improving facilitator training are essential for optimizing health education through audio-visual aids. This improvement contributes to a more engaging and effective learning environment, fostering holistic child development and aligning with national educational policies and global educational goals.

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Introduction

Early Child Development (ECD) is a process of achieving the goal of ensuring opportunities for the physical, social, cognitive, emotional, and linguistic development of all children from three to eight years of age (Mustard, 2002). The ECD provides resources and techniques to support the holistic development of young children and establish a competent and highly skilled human resource in the long run. Along with this, it plays a significant role in ensuring the achievement of the United Nations' (UN's) Sustainable Development Goal (SDG) 4, which is to ensure inclusive and equitable quality of education and promote lifelong learning

opportunities for all (Government of Nepal [GoN], 2015). The GoN has started ECD classes at all school levels in the country and developed a syllabus regarding the concept of ECD in topics such as health, nutrition, safety education, and environment education (National Planning Commission [NPC], 2020). Despite this, teaching and learning were found to be ineffective in a part of ECD practices, as this period was crucial in developing lifelong skills on health-related topics such as sanitation, food habits, and environmental awareness (Ministry of Education, Science, and Technology [MoEST], 2017). Hence, this study was conducted to assess the practice of ECD learning and facilitation to measure the use of audio-video teaching learning materials while in teaching and learning practices.

The ECD isessential for fostering the physical, cognitive, social, emotional, and linguistic growth of children between the ages of three to eight with the overarching goal of promoting holistic development. By ensuring early developmental opportunities, ECD programs build a skilled and competent future workforce. These programs play a pivotal role in achieving the UN's SDG 4 that emphasizes inclusive, equitable quality education and lifelong learning opportunities for all (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2015). Pre-schooling: is one of the programs initiated in the form of primary classes in Nepal since the early 1980s and, an ECD program with a holistic development approach formally commenced in 2000 under the Education for All (EFA) framework (MoEST, 2017). In Nepal, ECD programs are integrated into all school levels, focusing on crucial topics such as health, nutrition, safety, and environmental education (NPC, 2020). Despite this broad integration, challenges persist in delivering effective health education, particularly in areas like sanitation, healthy food habits, and environmental awareness (MoEST, 2017). Addressing these gaps requires innovative teaching methods, promoting an investigation into the use of audio-visual teaching aids to enhance health education in ECD centers.

As per the MoEST (2020) of the total enrollment in grade one, about 64% of children aged three to four years enter with the experience of ECD. The ECD combines elements from several fields, including infant stimulation, child development, health, and nutrition Edwards et al. (1993), which should contribute directly to an individual's ability to successfully practice behaviors that protect, avoid, or reduce health risks (Hewett, 2001). Realizing this fact, GoN initiated an Early Childhood Education (ECE) program in the name of "ShishuKaksha" under the Basic and Primary Education Project (BPEP) in 1991–1992 (Bhandari, 2017). Until then, children used not taught through play model, and their demand for a more scientific way of teaching for the holistic development of children. "ShishuKaksha", thus conceived as a pre-school class to prepare children for schooling which was basically education-oriented but could not provide education. Hence, the program was later set up in an ECD model where children provided an environment of protection and playful learning by making it a community-based ECD center (Bhandari, 2017).

To maintain standards in service and facility delivery to ECDs, the Ministry of Education (MoE) and Department of Education (DoE) developed an operations and

management guideline to ensure minimum learning and development standards in all ECD centers (MoEST, 2017). Besides several interventions, GoN, through the Constitution of Nepal (CoN), provides protections for the right to education, proper nurturing, sufficient care, and recreational activities under Article 39 (2), stating children under the age of six are entitled to educational opportunities, health care, nutritional support, adequate caregiving, and recreational activities (GoN, 2015). In addition, it instituted free and compulsory education up to the basic level and free education up to the secondary level. Basic education includes grades one to eight, while secondary education comprises grades nine to twelve, as outlined in the School Sector Development Plan (SSDP-2016), (GoN, 2016). This initiative aligns with the SDG, specifically 4 Quality Education, aiming to ensure access to quality education for all by 2030. Despite several institutional attempts at expanding access, improving ECD quality in service delivery, and maintaining standards in its operation and systematic management, no progress has been made in facilitating ECD centers. Furthermore, there is limited research on the use of audio-visual aids in facilitating ECD centers. Those limited studies cannot represent all the study units and participants. As a result, the findings obtained from the study could not be generalized in another similar context. Hence, this study attempted to fill the academic gap in the field of ECD academia with scientific methods, appropriate respondents, and a study unit found the use of audio-visual teaching learning materials in facilitating ECD centers by ECD facilitators in Pokhara, Nepal.

Methods and Materials

Study Design

A quantitative, cross-sectional research design was employed to assess the factors influencing the use of audio-visual aids in facilitating health education at ECD centers in Pokhara, Nepal. The quantitative method and cross-sectional study design were used in answering the questions about the prevalence of audio-visual aids usagebecause this design allows researchers to collect data at a single point in time and is relatively inexpensive and less time-consuming than other types of research. Specifically, close-ended survey questionnaires were administered to gather detailed information on various factors influencing the use of audio-visual aids as teaching materials in ECD classes. These factors included the type of schools hosting ECD programs, the educational qualifications and training of facilitators, the condition of school and classroom buildings, the availability of library corners, seating arrangements, and other relevant covariates.

Instrument Development and Validation

The survey instrument was formulated in line with the study objective, and each item was carefully reviewed for relevancy by a panel of three experts before and after the pilot test to maintain the face or content validity of the tools. A pilot test among non-sampled ECD centers' respondents was conducted by taking 10% of the total sample size. Instantly after the pilot test, researchers revised the unclear, obscure, language errors, fluency, inconsistency, wording, and complex items, reworded based on the experts' remarks. In addition, the researcher discarded

the ambiguous, intricate, ineffective, and non functioning survey items experiencing difficulties and expert consultation following the pilot test. The reliability of the used instrument was ensured through the coefficient and Cronbach's alpha test, with values ranging from 0.75 to 0.79 for all variables. This confirmed the internal consistency of the questionnaire, validating its use or fieldwork.

Sample and Sampling Procedure

The sample frame consisted of all students (N = 4,590) from 205 ECD centers in community schools in Pokhara Metropolitan City, Nepal (MoEST, 2020). Since the city comprises 33 wards, one ECD center was randomly selected from each to make an equal representation of each. The sample size was calculated using the standard statistical formula for the finite population: n = N / [1 + N (e) 2], where N represents the finite population of the study (N = 4,590), "e" margin of error or acceptance range of error (e = 5% margin of error; 0.005 assumed), and "n" represents the corrected sample size. Since the calculated sample size was 368, considering all children above the age of 4 from each selected ECD center, the sample size was 486 based on probability theory.

Data Analysis Procedure

Data was collected through a face-to-face method using a structured survey questionnaire. The univariate and bivariate analyses were performed to analyze the study findings. In the initial phase, the research team performed univariate analysis to show the general characteristics of the respondents. The frequencies and percentages allowed for an understanding the characteristics of the participants. In the second phase, we assessed the association between independent and dependent variables through bivariate analysis. In the bivariate analysis $p<0.05$, it was considered statistically significant. The findings of the study were triangulated with previous findings to make them more realistic.

The independent variables include school type, ECD facilitators' qualifications, the training they have received, the condition of school buildings and classrooms, the availability and management of learning materials, the arrangement of seating, the status of water and sanitation, the condition of learning corners, classroom decoration, and the use of supplementary teaching materials. The dependent variable is represented by the use of audio-visual teaching and learning materials.Simultaneously, the use of audio-visual aids as teaching learning material measured outcome or dependent variables that were dichotomized by considering always and rarely or never usage. The audio-visual aids were categorized based on the idea of sensory experiences that include both audio (radio, tape-recorder, audio electronic equipment, language laboratory) and visual (charts, black and white board, maps, pictures, models, textbooks, a projector, transparency, flash cards, and print materials) aids.

Ethical Considerations

The study approval was obtained from selected schools, and written informed consent was obtained from all study respondents before data collection. Prior to obtaining consent, all participants were informed that they had no obligation to answer some sort of items, and had the

freedom to discontinue the interview at any point if they chose not to participate. Further, the interviews were conducted in a private and convenient environment chosen by participants, ensuring they felt comfortable responding to the questions.

Participants were assured of anonymity and confidentiality at every stage of the study, with strict measures in place to ensure data privacy, secure storage, and protection throughout the research process.. To ensure confidentiality, the identities of all participants were not disclosed elsewhere, and the information shared with the researchers during the interviews was strictly kept confidential. The research team used a unique code to refer to respondents instead of their real names.

Results

The study aimed to assess the factors influencing the use of audio-visual teaching aids in ECD centers in Pokhara, Nepal. The use of such aids remains pivotal in enhancing the learning environment, especially in areas of health education. Factors such as the type of school, facilitators' qualifications, classroom infrastructure, and the management of learning materials play a significant role in determining the extent of audio-visual aids usage. By examining these factors, this study provides a clearer understanding of the current conditions in ECD centers and how improvements in these areas can contribute to more effective teaching and learning practices. The results are categorized into two sections: (i) the background characteristics of the respondents and (ii) the association between different variables and the use of audio-visual aids in teaching and learning practices.

Background Characteristics of the Respondents

Table 1 depicts the background characteristics of the respondents, including those of ECD centers. A total of 486 respondents were participated in this study. Among them, approximately two in three (61.9%) of the respondents were from secondary-level schools, while more than a third (38.1%) were from basic-level schools. More than half (51.9%) of the ECD facilitators graduated above secondary level education, and less than half (48.1%) had just basic level education. The majority of ECD facilitators (65.8%) received more than two weeks of formal training, and the majority (89.9%) reported that the schools were well-equipped such asschool buildings, classrooms, and school compounds. A quarter of respondents reported proper management of age-wise learning materials, while two in three (66.3%) said limited and improper learning materials at their ECD centers. In the same way, two-thirds (65.6%) of respondents revealed flexible seating arrangements, well-organized, and conducive to a learning environment, while a quarter (34.4%) of respondents reported difficulties, un-organized, and uncomfortable seating arrangements.

More than two-thirds (69.5%) reported that their ECD centers were occupied with safer and potable water resources and proper sanitation facilities. Fewer than a quarter (21.2%) reported having well-organized learning corners equipped with ample play materials. Approximately two in three (64.4%) said that they had limited informative picturesin their ECD classrooms such as words, printed, and playing materials. The majority (92.0%) ECD

facilitators used charts or models, while nominal respondents (8.0%) used real teaching and learning materials during the practices.

Table 1

Background Characteristics of the Respondents

Variables	Categories	%	n
Type of school	Basic	38.1	185
	Secondary	61.9	301
Facilitator educational qualification	Above secondary level	51.9	252
	Below secondary level	48.1	234
Facilitator training duration	Below two weeks	34.2	166
	Above two weeks	65.8	320
School building, classroom, and compound condition	well school building, classroom, and compound	89.9	437
	Facilities less than a minimum standard	10.1	49
Arrangement of learning materials	Availability and management of age-wise materials	33.7	164
	Low availability and improper management of age-wise materials	66.3	322
Sitting arrangement situation	Flexible, decorated, and well organized	65.6	167
	Difficult, undecorated, and disorganized	34.4	51
Water and sanitation status	Provision of potable drinking water and proper sanitation facilities	69.5	338
	Lack of drinking water and sanitation	30.5	148
Learning corner condition	Proper arrangement of Learning corner and play materials	21.2	103
	Limited learning corner & play materials	78.8	383
Classroom decoration	Provision of informative pictures: words, printed, and play materials	35.6	173
	Limited informative pictures: words, printed, and play materials	64.4	313
Use of other materials in teaching	Chart/model	92.0	447
	Real materials	8.0	39
Type of school	Always	37.7	303
	Rarely/not Use	62.3	307
	Total	100.0	486

Association Between Different Variables and the Use of Audio-Visual Aids in Teaching Learning Practices

Table 2 shows how factors such as school type, facilitators' qualification, management of learning materials, learning corner condition, classroom decoration, and use of supplementary teaching materials were associated with the use of audio-visual aidsusingbivariate analysis.

ECD centers at the secondary level school always use audio-visual aids (51.2%) compared to ECD centers at basic level schools (15.7%), $p<0.001$. The majority of ECD facilitators (64.7%) having above-secondary level qualifications always use audio-visual aids, compared to those with below-secondary level qualifications (8.5%), $p<0.001$. The availability

and proper management of age-wise learning materials are significantly associated with the use of audio-visual aids. The ECD centers with well-managed materials are more likely to use these aids (63.5%) compared to centers with limited materials (24.5%), *p<0.001*.

ECD centers with well-arranged learning corners use audio-visual aids more frequently (57.3%) than those with poorly managed or limited learning corners (32.4%), *p<0.001*. Well-decorated classrooms with informative pictures, printed materials, and other visual aids significantly are associated with the uses of audio-visual aids (61.3%), that consists 37% higher than limited provisioned materials (24.6%), *p<0.001*. Facilitator who uses supplementary teaching tools such as charts and models' are significant in using audio-visual aids (39.1%) compared to those who used real materials (20.5%), *p<0.05*.

In contrast, there is no sufficient evidence to claim that the duration of facilitator training and the use of audio-visual aids in teaching ECD were closely associated. The result highlights the critical role of school infrastructure, facilitator education level, and the management of resources in determining the extent of audio-visual aids at ECD centers.

Table 2

Association Between Variables in Using Audio-Visual Aids in TeachingLearning Practices

Variables	Categories	Use of Audio/visual Teaching Materials						χ^2	P-value
		Always		Rarely/not use		Total			
		N	%	N	%	N	%		
Type of school ***	Basic	29	15.7	156	84.3	185	100.0	61.464	0.000
	Secondary	154	51.2	147	48.8	301	100.0		
Facilitator educational qualification***	Above secondarylevel	163	64.7	89	35.3	252	100.0	162.868	0.000
	Below secondary level	20	8.5	214	91.5	234	100.0		
Facilitator training duration	Below two weeks	56	33.7	110	66.3	166	100.0	1.650	0.199
	Above two weeks	127	39.7	193	60.3	320	100.0		
School building, classroom, and compound condition	Well school buildings, classrooms, and compound	154	35.2	283	64.8	437	100.0	10.759	0.001
	Facilities less than a minimum standard	29	59.2	20	40.8	49	100.0		
Arrangement of learning materials	Availability and management of age-wise materials	104	63.4	60	36.6	164	100.0	69.969	0.000
	Low availability and improper management of age-wise materials	79	24.5	243	75.5	322	100.0		
Sitting arrangement situation	Flexible, decorated, and well organized	136	42.6	183	57.4	319	100.0	9.803	0.002
	Difficult, undecorated, and disorganized	47	28.1	120	71.9	167	100.0		
Water and sanitation status ***	Provision of potable drinking water and proper sanitation facilities	106	31.4	232	68.6	338	100.0	18.726	0.000

	Lack of drinking water and sanitation	77	52.0	71	48.0	148	100.0		
Learning corner condition ***	Proper arrangement of Learning corner and play materials	59	57.3	44	42.7	103	100.0	21.447	0.000
	Limited learning corner and play materials	124	32.4	259	67.6	383	100.0		
Classroom decoration ***	Provision of informative pictures, words, printed and play materials	106	61.3	67	38.7	173	100.0	63.823	0.000
	Limited informative pictures, words, printed and play materials	77	24.6	236	75.4	313	100.0		
Use of other materials in teaching *	Chart/model	175	39.1	272	60.9	447	100.0	5.307	0.021
	Real materials and smart card	8	20.5	31	79.5	39	100.0		
	Total	183	37.7	303	62.3	486	100.0		

Chi-square is Significant at ***p<0.001, **p<0.01 and *p<0.05.

Discussion

This study provides valuable insights into the factors influencing the use of audio-visual aids in ECD centers in Nepal. The results demonstrate a significant relationship between facilitators' education level, school infrastructure, and the availability of learning materials, highlighting how these elements contribute to the effective use of audio-visual aids in health education for ECD children. The discussion section presented in four-fold such as facilitators' education and audio-visual material use, impact of ECD infrastructure and resources availability, learning environment and classroom design, and learning corners and play materials.

Facilitators Education Level and Use of Audio-Visual Material in Teaching Learning

This study revealed a positive and statistically significant association between the ECD facilitators' education level and the use of audio-visual teaching-learning materials. Facilitators with higher education levels are more likely to adopt these audio-visual aids, supporting the idea that educators with greater knowledge and training feel more confident and capable of using innovative teaching tools. This finding is consistent with the study conducted in Kenya by Akıntemı and Oduolowu (2021), who found that higher education levels among facilitators led to a more child-centered approach and greatly used audio-visual aids. The role of facilitators' education is pivotal in delivering meaningful health education, particularly at the early stages of child development.

Impact of ECD Infrastructure and Resources Using Audio-Visual Materials

A positive association between the availability of age-appropriate learning materials and the use of audio-visual aids originated another critical finding of this study. In support of the present findings, Bulter (2005) emphasizes that children benefit from the various teaching methods employed, emphasizing the importance of considering the techniques used in teaching

young children in ECD classes. Centers with well-equipped classrooms and organized teaching learning resources are significantly associated with the use of audio-visual aids while teaching compared to poor management and limited materials. On the other hand, centers with limited or poorly managed materials struggled to integrate audio-visual tools effectively, suggesting that resource availability directly influences teaching quality and student engagement. This finding closely aligns with the viewpoint of Kanter et al. (2010), who emphasize the use of diverse methods and approaches in teaching ECD children. Kanter et al. (2010) further stated that children can learn from various aspects because every child necessitates various instructional techniques. Likewise, the MoEST (2017) mentioned that children can perform better in ECD centers with good infrastructure and adequate learning materials than those students with poor infrastructure and limited learning materials.

Impact of Learning Environment and Classroom Design on the Use of Audio-Visual Aids

The finding of this study shows a significant relationship between classroom decoration and the use of audio-visual aids. Classrooms enriched with visual stimuli, such as informative pictures, charts, and printed materials, are more likely to incorporate audio-visual elements. The finding is supported by Yavuz and Guzel (2020), who argue that visually stimulating environments foster better learning outcomes by encouraging active participation and engagement. Mooney (2000) highlights the importance of availability, accessibility, and well-organized teaching and learning materials, which play a vital role in strategic use and ultimately affect teaching and learning practices. A well-decorated classroom and the strategic use of audio-visual tools create a dynamic learning environment where children can better grasp abstract concepts, particularly in health-related topics. Yavuz and Guzel (2020) further emphasize that children learn through what they see and have access to, allowing them to see, touch, understand, experience, and create a visually stimulating learning environment that is abundant in printed materials in ECD classrooms. This study further found that the absence of teaching and learning materials negatively affects a child's academic performance, as they may struggle to comprehend the content being taught. The findings of the study support Yavuz and Guzel (2020), who state that the success of teaching and learning is influenced by the availability and management of resources that support the process.

Impact of Learning Corners and Play Materials Using Audio-Visual Aids

The presence of well-arranged learning materials at corners with sufficient playing materials was also positively associated with the use of audio-visual aids. As Butler (2005) notes, the use of varied teaching methods, including interactive learning corners, enhances children's social, emotional, and cognitive development. This finding underscores the importance of providing a stimulating environment where children can explore, interact, and learn through diverse educational materials. The present study aligns with Shrestha and Subedi (2020), which highlight the significance of various factors in creating and enabling a positive environment for ECD children. The authors further highlight the significant association between the availability and accessibility of learning and playing materials, including well-organized playing corners at ECD centers, with children's social, emotional, cognitive, and emotional growth. Centers with well-organized learning corners that provide children with hands-on

experiences are more likely to incorporate audio-visual tools as part of a comprehensive learning strategy.

Conclusion

This study highlights the significant association between ECD facilitators' qualifications, school type, and the availability of resources with the use of audio-visual teaching aids in ECD centers in Pokhara, Nepal. The ECD centers with facilitators who possess higher qualifications, were found to use audio-visual materials in their teaching practices more frequently. This underscores the importance of facilitator education in promoting innovative and effective teaching practices. Centers with well-managed age-appropriate teaching materials and well-decorated classrooms are more likely to incorporate audio-visual aids, demonstrating that the physical learning environment plays a crucial role in supporting educational quality. The lack of higher education among facilitators, insufficient training, inadequate classroom infrastructure, and poor management of learning materials significantly interrupt the effective use of audio-visual tools. Issues such as disorganized seating arrangements, limited access to safe drinking water, and poorly managed learning corners further exacerbated the challenges faced by ECD centers in utilizing these teaching aids.

To improve the use of audio-visual materials in ECD centers, it is essential to prioritize the professional development of facilitators, ensuring they receive adequate training and resources, additionally, improving the physical infrastructure of ECD centers such as providing age-appropriate learning materials, a well-organized learning environment. Policy makers and administrators in the education field need to focus on addressing these gaps to enhance the quality of early childhood education and ensure children in Nepal receive the holistic development they need during their formative years.

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Data Availability

All data analyzed in this research work is included in this research.

Conflict of Interest

All authors ensure that we have no competitive interest in publishing this research work.

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References

Akıntemı, E. O., & Oduolowu, E. A. (2021). Sciencing activities and scientific skills of children at pre-primary level in Nigeria. *International Online Journal of Primary Education*, (IOJPE), *10*(1), 106–118. https://www.iojpe.org/index.php/iojpe/article/view/7/10

Butler, J. M. (2005). Forensic DNA typing: Biology technology and genetics of STR markers. (2nd ed.).Academic Press. *Scientific Research an Academic Paper.* https://www.scirp.org/reference/referencespapers?referenceid=102097

Bhandari, R. (2017). Early childhood education and development in Nepal: Access, quality and professionalism. *Prima Educatione*, 1, 129–138. DOI: 10.17951/PE/2017.1.129 https://doi.org/10.17951/PE/2017.1.129

Edwards, C., Gandini, L., & Forman, G. (1993). The hundred languages of children: The reggioemiliaapproach to early childhood education. Ablex Publishing Corporation. *Scientific Research an Academic Publisher.* https://www.scirp.org/reference/referencespapers?referenceid=2382216

Government of Nepal. (2015). *The Constitution of Nepal 2015*. https://aaokhotangbazar.moha.gov.np/en/page/constitution-of-nepal-2072-2

Government of Nepal. (2015). Nepal sustainable development and goals, status and roadmap 2016–2030. Nepal Planning Commission Kathmandu. https://www.npc.gov.np/images/category/SDGs_Report_Final.pdf

Government of Nepal. (2016). Environment management framework, Government of Nepal Ministry of Education 2016. https://www.doe.gov.np/assets/uploads/files/3bee63bb9c50761bb8c97e2cc75b85b2.pdf

Hewett, V. M. (2001). Examining the reggio Emilia approach to early childhood education. *Early Childhood Education Journal* 29, 95–100 https://static1.squarespace.com/static/51ed94d0e4b03bd18bdcc998/t/526c8eabe4b0f35a9f0216e3/1382846123076/ExaminingtheReggioEmiliaApproach.pdf

Kanter, J. W., Manos, R. C., Bowe, W. M., Baruch, D. E., Busch, A. M., & Rusch, L. C. (2010). What is behavioral activation? A review of the empirical literature. *Clinical Psychology Review*, *30*(6), 608–620. https://doi.org/10.1016/j.cpr.2010.04.001

Ministry of Education, Science, and Technology (2017). An assessment of early learning and development in Nepal 2017. *Government of Nepal Ministry of Education, Science and Technology Education Review Office*. https://www.ero.gov.np/category/14

Ministry of Education, Science, and Technology (2022/023). School sector education plan. For the Nepal school education sector, 2022/23–2031–2032. https://moest.gov.np/upload_file/files/post/1668690227_1997409338_Nepal%20School%20Education%20Sector%20Plan%20final%202022%20.pdf

Mooney, C. G. (2002). Theories of childhood: An introduction to Dewey, Montessori, Erikson, Piaget, & Vygotsky. St. Paul, MN: Redleaf Press. *Scientific Research and Academic Publisher.* https://www.scirp.org/reference/referencespapers?referenceid=954331

Mustard, J. F., (2000). Early child development and the brain the base for health, learning, and behaviour throughout life. In M. E. Young (Eds.), *From early child development to human development investing in our children's future* (pp. 23-63). World Bank. https://citeseerx.ist.psu.edu/document?doi=851c01205e45b4c45aa14cb7c3a94bd9a6e79996&repid=rep1&type=pdf&utm_medium=email&utm_source=transaction

Nepal Planning Commission. (2020). Nepal's sustainable development goals: Status and roadmap 2016-2030. http://sdg.npc.gov.np/en/resource/Sustainable-Development-Goals--Status-And-Roadmap:-2016-2030-2017-AD/

Sharma, A. U., Aryal B., Kuikel J., & Sharma M. K. (2024). Dietary practices of type 2 diabetes mellitus patients concerning Pender's Health Promotion Model in Lalitpur District, Nepal. *Human Nutrition & Metabolism*3; 200288. https://doi.org/10.1016/j.hnm.2024.200288

Shrestha, M., & Subedi, D. (2020). Organizational citizenship behaviour among teachers of Nepal: Did locale contribute it's in school settings? *American Journal of Economics and Business Management. Global Research Network 3*(1) 2576–5973https://doi.org/10.31150/ajebm.Vol3.Iss1.92

United Nations Educational, Scientific and Cultural Organization . (2015). Education for all 2015 national review reports: Nepal

https://unesdoc.unesco.org/ark:/48223/pf0000232769

Yavuz, S., & Güzel, U. (2020). Evaluation of teachers' perception of effective communication skills according to gender. *African Educational Research Journal*, 8, 134–138.

https://doi.org/10.30918/AERJ.82.20.010