

Extra-curricular activities in secondary schools of Nepal: A survey study

Ganesh Man Giri¹ , Niroj Dahal^{2*} , Jiban Khadka³ 

¹Madhyabindu Multiple Campus, Kawasoti, NEPAL

²Department of STEAM Education, School of Education, Kathmandu University, Dhulikhel, NEPAL

³Faculty of Social Sciences and Education, Nepal Open University, Patan, NEPAL

*Corresponding Author: niroj@kusoed.edu.np

Citation: Giri, G. M., Dahal, N., & Khadka, J. (2023). Extra-curricular activities in secondary schools of Nepal: A survey study. *Journal of Mathematics and Science Teacher*, 3(2), em044. <https://doi.org/10.29333/mathsciteacher/13594>

ARTICLE INFO

Received: 18 Nov. 2022

Accepted: 09 Aug. 2023

ABSTRACT

This research explored the extra-curricular activities (ECA) in the secondary schools in Nawalparasi (Bardaghat-Susta East), District of Nepal. The research questions of this study incorporate stakeholders' (head teachers and secondary level teachers) perceptions, existing practices, problems, and remedial measures regarding practice of ECA in secondary schools. The study is guided by Alexander (1999)'s student involvement theory and Vygotsky's socio-cultural theory of learning. The study population included 239 secondary level teachers and 78 head teachers from Nawalparasi (Bardaghat-Susta East)'s 78 public secondary schools. The sample was chosen using a simple random sampling method with a lottery. The study's samples included 150 secondary level teachers and 66 head teachers. This study was guided by post-positivist paradigmatic assumptions and was designed quantitatively. Data were collected using the survey method. A structured questionnaire was administered to secondary level teachers and head teachers to collect data. After collecting the data, it was entered into SPSS and analyzed using descriptive statistics—frequencies, percentages, mean and standard deviation, and inferential statistics with a non-parametric Chi-square test. The results of the five-point likert scale converted trichotomize scale and closed-ended questionnaires and revealed that teachers have a high level of awareness of ECA knowledge, its importance, and implementation. This study found that head teachers and secondary level teachers involved students in different extra-curricular and social activities to successfully complete school education, as Astin's and Vygotsky's theory explained. The practices towards ECAs were stated by Ministry of Education's national education system plan (MoE, 1971) as an integral part of the school program in which participation would be compulsory for teachers and students and hence found compatible with the policy. In almost all cases, the responses of secondary level teachers and head teachers are nearly identical. As a result, head teachers and secondary level teachers, practiced and implemented ECAs to make them relevant and necessary for students' educational achievement.

Keywords: extra-curricular, student involvement, post-positivist paradigmatic, educational achievement, schools

INTRODUCTION

Extra-curricular activities (ECA) have a wide range of meanings and applications (Whitney, 1932). ECA are activities conducted in school for students' physical, mental, social, and emotional growth in addition to ongoing academic education (Curriculum Development Center [CDC], 2020). Even though many ECA are sponsored by the school and held on Nepali school, they are not part of the formal academic curriculum and are typically scheduled outside of school hours. ECA allow students to hone their social skills and explore potential interests (Bekomson et al., 2020). ECA are not graded or counted towards a grade (Giri, 2022). These activities are carried out locally, district, regional, and national. It is indisputable that education aims to help children develop physically, mentally, socially, and emotionally (Dmitruk et al., 2015). A formal curriculum of Nepal is likely to be insufficient to meet the desire, need, and purpose of learners and society for the holistic development of children (Munadi & Khuriyah, 2023). As a result, we should concentrate on physical training, exercise, games, cultures, and literary programs to develop the physical, mental, social, and emotional aspects of students' life. To this consideration, schools are including ECA into their curricula (Behtoui, 2019). In this approach, curriculum-based learning is not sufficient for children's overall growth. In fact, education's core concept is all-round growth (CDC, 2020).

School level ECAs including games, dancing, singing, and one-act plays (CDC, 2020). These programs take place during school celebrations such as school anniversaries, national festivals, and other school celebrations. On Fridays after 1 pm in Nepal, such ECA are held at the school. Similarly, various extra-curricular programs were performed at the school level from 1971 to 1992 to

develop ECA. ECA are vital to the school curriculum (MoE, 1971, 1991, 2003, 2009, 2015). Here, both instructors and students are expected to participate. Depending on the nature of the program, prizes are awarded at the district, zonal, and national levels. The educational laws of 1971 and 2002 have made it compulsory and given it legal recognition. National education system plan (NESP) (2028-032 BC) has declared ECAs as compulsory tasks. It includes gardening competition, quiz, folk song, dance, debate, and arts. ECA provide freedom and possibilities for students to discover their hidden skills outside school policies' constraints. It is also critical for their emotional and social well-being. Students can express themselves and rejuvenate themselves through ECA. To summarize, ECA are beneficial to students in terms of improving proper behavior, self-expression, and forming ideas, among other things.

Further, ECA are a common occurrence in the lives of students (Leung, 2003). They play an important part in students' life. They positively impact students' life by enhancing their behavior, academic achievement, and positive characteristics to assist them in becoming successful adults (Rahman & Hundal, 2016). As a result, ECA have played an important role in a child's overall development. As teachers, we must be mindful of the impact of ECA on education (Arias-Estero & Castejon, 2014). Students often do not want to join in ECA because they are voluntary. According to Bumpus and Harris (2020), participation in school activities, particularly athletics, increases self-esteem and peer status, which some believe can deter antisocial behavior (Iddrisu et al., 2023). As a result, ECA have a critical role in reducing antisocial behavior and behavioral issues. Participating in ECA improves academic achievement and provides benefits throughout the school year, lowering dropout rates (Vinas-Forcade et al., 2019). Students who participate in ECA are less likely to drop out and more likely to have higher academic accomplishments, as mentioned by Casinger (2011). ECA tend to assist students at risk of falling even more than they appear to benefit students who achieve normally. There appear to be behavioral, academic, moral, and dropout concerns in Nepali education today. According to Chapagain's (2020) research, the secondary education test [SEE] 's outcomes have been declining yearly. Most public-school pupils have poorer performance than private school students, and they score much worse in mathematics and science subjects. Numerous newspaper pieces of Nepal, such as those in the Kantipur national daily and Setopati (2019) (to name a few), have discussed various concerns related to dropouts and suicides. These were common and known every year after SEE results were published in Nepal. In addition to above, moral deterioration, criminal behavior, school dropout, and low academic success are more widespread in community schools than in private or institutional schools. Hence, ECA can improve the intended learning outcomes of secondary school education because research has shown that participation in ECA is positively related to academic performance and personality development (Guilmette et al., 2019; Moriana et al., 2006; Srikongchan et al., 2021).

In this regard, relevant stakeholders such as secondary level teachers and head teachers must be aware of ECA' positive effects on educational outcomes and overall child development. Some of the most important questions are: How do head teachers and secondary level teachers understand the concept of ECA in school? What are the perspectives of relevant stakeholders on the implementation of ECA at the school level? Is there a link between our students' poor academic performance and their participation in ECA? How do we address ECA in our education policy and provision in school-level education? What is the current state of ECA in education? What are the issues and problems with providing ECA at the school level? Is there any evidence that schools have attempted to address the problem of ECA? When it comes to ECA, many questions arise, that is why extra-curricular activity research appeals to us for the study. Some of the above questions are being explored in this research. This study aimed to determine the current state of ECA in Nepali schools. The main purpose of this study was to study the current state of ECA in Nepali secondary schools. Moreover, the study aims to explore schools' policies and practices of ECA aligned with the national curriculum.

Research Questions

The following research questions were constructed based on the research problem and purpose of the study.

1. What are the stakeholders (head teachers and secondary level teachers) perceptions and understandings of the practice of ECA at the school level?
2. In what ways are schools addressing ECA-related problems?

Based on the research questions, the following three research hypotheses are formulated:

- H₁.** There is an association between head teachers and secondary level teachers in the perception and understanding of ECAs.
- H₂.** There is a significant association in understanding how to solve ECAs problems between head teachers and secondary level teachers.

METHOD

We followed quantitative research methods to gather reliable and legitimate data. "Quantitative approaches are typically associated with positivist perspectives in social research" (Henn et al., 2006, p. 116). As a result, quantitative processes are assumed to be the most important tool. They are also employed in the process of decision-making. We used a quantitative approach with a survey method. We used the survey method to collect data because our study aims to draw conclusions from a large sample and make inferences about the study population. In a survey design, a representative sample of a population is analyzed to provide a quantitative as well as a numeric description of trends, attitudes, and opinions (Creswell, 2003; Kong, 2012). Here, it is observed that the survey is done with a large population by viewing various questions. This method of gathering data involves questioning those that are the subject of the study and a part of a representative sample, using standard questioning procedures to determine the relationships between variables, as Corbetta (2003) explained. This study uses quantitative descriptive methodological approaches based on deductive processes to achieve the stated purpose and formulated research questions. The method used in this study is a survey research design. This design is considered appropriate as a single area chosen

for the study (Bryman, 2009). However, the design process is kept flexible to an extent. This means that the questionnaire had been followed, which had been changed after piloting the tool. Survey research was chosen as a data collection method because of the large number of respondents. We contacted respondents and requested that they complete a structured questionnaire to accomplish this. In this study, we administered a structured questionnaire. Participants were emailed a questionnaire that was delivered via Google form in an electronic format. We requested that respondents complete a questionnaire form within two-weeks of time duration.

Secondary-level teachers and head teachers at public schools in the Nawalparasi (Bardaghat-Susta East), Nepal were the sources of data. For the study, we collected primary data. This district was chosen because it has a large number of public schools in both rural and urban settings. As a result, the district of Nawalparasi (Bardaghat-Susta East) is the focus of our research. An entire group of people, events, or other things of interest that the researcher wishes to investigate is referred to as population (Wolff & Pant, 2005). This study's population consisted of secondary school teachers from public schools in the Nawalparasi (Bardaghat-Susta East), district. According to the education development and coordination unit (EDCU) Nawalparasi (Bardaghat-Susta East) (2021), the district has 78 public secondary schools with 239 secondary level teachers. The study population consists of 239 secondary school teachers and 78 head teachers from the Nawalparasi (Bardaghat-Susta East).

The total population of the target area was sampled based on a simple random method. Every element of the population has an equal chance of being selected in simple random sampling. Simple random sampling is described by Baker (1999) as a sampling method, where the elements of a sampling frame are numbered, and then they are drawn into the sample if they match the random numbers that have been selected. We used Yamane Taro's (1967) formula to decide the sample size of my study. This is presented, as follows: $N_0 = \frac{N}{1+N\alpha^2}$, where N_0 is sample size, N is total population, and α is level of significance 5% (0.05).

Our research population consisted of 239 secondary level teachers, and the sample size was calculated using the above formula to be 150 secondary level teachers. In addition to secondary level teachers, we attempted to include 66 head teachers by using the above formula and randomly collected data. Before selecting teachers, the number of secondary level teachers in each public secondary school's records was obtained from EDCU Nawalparasi (Bardaghat-Susta East). The schools were then chosen at random. This selection process continued until a sample of 66 head teachers and 150 secondary level teachers from the selected schools were selected. A simple random sampling method was used to select public secondary schools and teachers in the Nawalparasi (Bardaghat-Susta East). The lottery method was used to select 66 schools after alphabetizing 78 schools. For this, we put all the school names in one box and used probability sampling to select them randomly without replacement. One head teacher was chosen randomly from one sampled school, and 150 secondary level teachers were chosen using the same methods as for school selection.

The study's main instruments are the Likert scale and closed-ended items. These instruments primarily consisted of demographic data i.e., male-female, etc., respondent profiles i.e., qualification, training, etc., and current ECA i.e., understanding, practices, and problems of ECAs. The main key for the research instrumentation was the specification chart for the survey questionnaire. In contrast, the specification chart was created following the variables and their indicators that are linked to the research questions. The data collection tools were created in both English and Nepali. Tools were constructed for collecting data to measure perception, understanding, practices, and problems of ECA. For data collection, we first visited the sample schools of the Nawalparasi (Bardaghat-Susta East). Before collecting data, rapport building with the respondents was necessary. And it was needed to get in contact with the gatekeeper. Thus, we went to the sampled school and met to head teachers for this purpose.

After the fieldwork is completed, the collected data was entered into a SPSS and thoroughly analyzed. Data in terms of frequency was analyzed. The data collected from the study area was used to make assumptions. This data type had a specific and preliminary interpretation completed during the analysis process. The process of generating meaning from raw data is called data analysis and interpretation. To analyze the data, we used statistics like frequency, percentage for "yes" and "no" responses, and nonparametric chi-square test of the likert scale by changing the likert scale to three trichotomized variables (high level, low level, and neutral) (Jeong & Lee, 2016). For descriptive statistics—frequencies, percentages, mean and standard deviation, and inferential statistics with a non-parametric Chi-square test were used to explain the findings. That is, the findings of statistics were explained in greater depth. The researchers then linked findings in the literature to theories, objectives, and research questions. The researchers first described and discussed the tabulated data analysis of data. Following that, the researchers examined the data for similarities, differences, and newness. The researcher attempted to connect it to the reviewed literature, theory, and research question. Finally, after analyzing data from various perspectives, the researchers arrived at the study's findings and drew the appropriate conclusions.

ANALYSIS AND INTERPRETATIONS

This section contains the presentation, analysis, and interpretation of relevant data to answer the specific research questions of the study, which are focused on ECA in the secondary level school of Nawalparasi (Bardaghat-Susta East), Nepal. This study aims to explore the policy and practice of ECA aligned to the intent of the curriculum. Furthermore, the study has analyzed how the teachers practiced ECA aligned with the curricular objectives. To begin with, the researcher stated the following respondents' profiles. Likewise, the research questions guided the study's data collection and analysis phase. The four questions were related to:

- (a) head teachers and secondary level teachers' perception of the practice of extra-curricular activity at the school level,
- (b) existing conditions of extra-curricular activity in the secondary school of Nawalparasi (Bardaghat-Susta East),

Table 1. Respondents' profile (n=216)

Variable	Category	Value
Sex	Male	181
	Female	35
Educational level	+2	5
	Bachelor	42
	Masters	165
	MPhil	3
Level of teacher	PhD	1
	Head teachers	66
	Secondary level teachers	150

Table 2. Perception & understandings of head teachers & secondary level teachers on ECAs (n=216, HT=66, & SLT=150)

SN	Activities	Level of teachers	Level of use		
			High	Low	Neutral
1	ECAs are conducted outside of regular school day	Head teachers	16	42	8
		Teachers	33	99	18
2	ECAs are social activities delivered outside of school curriculum	Head teachers	34	26	6
		Teachers	75	54	21
3	ECAs are volunteers' work: they are sponsored by a school	Head teachers	5	57	4
		Teachers	13	116	21
4	Explore students' interests offered by a school curriculum	Head teachers	46	15	5
		Teachers	106	16	28
5	Prepare higher education & future career of students	Head teachers	53	3	10
		Teachers	126	7	17
6	Tools for emotional & psychological development of students	Head teachers	61	0	5
		Teachers	135	3	12
7	Tools for decreasing unsocial behaviors & developing social	Head teachers	62	1	3
		Teachers	128	3	19
8	Medium for students to perform better grade result in school	Head teachers	41	13	12
		Teachers	76	28	46
9	Needed to facilitate friendships, build self-esteem, & learn socialization	Head teachers	65	0	1
		Teachers	145	2	3
10	Facilitators to discover natural abilities & build on their skills to perfect	Head teachers	62	2	2
		Teachers	140	0	10
11	Means to avoid risky behavior like drug addiction, crime, & stress	Head teachers	55	4	7
		Teachers	115	11	24

- (c) types of problems faced by head teachers and secondary level teachers for implementation of extra-curricular activity, and
 (d) ways to address problems of ECAs.

This section is divided into four parts. Part I includes the perception of stakeholders on practicing ECA at the secondary level in Nawalparasi (Bardaghat-Susta East). Part II includes the existing condition of ECA secondary level. Part III includes the problem faced by schools and teachers in implementing ECA. Part IV includes ways to address problems in practicing ECA.

Table 1 shows the respondents' background profiles for the study. **Table 1** shows that there were 216 respondents. Among them 66 were head teachers and 150 were secondary level teachers. Regarding gender, 181 were male and 35 were female. Out of 216 respondents, the education level was—five completed +2 level, 42 completed bachelor's level, 165 completed master's level, three completed MPhil, and one completed Ph.D.

Understandings of Stakeholders on ECAs

Head teachers and secondary level teachers perceived the school's ECA differently. There were three options—ECA as outside regular school day activity, social activities delivered outside school, and volunteer work but not sponsored. They were to be to choose in a Liker five-point rating scale of strongly disagree, disagree, neutral, agree and strongly agree and later changed in trichotomized response. **Table 2** shows the result perception of head teachers and secondary level teachers.

Table 2 shows the respondents' perception of ECAs. Among the parameter of the perceptions, ECAs are conducted outside of the regular school day, showing that most head teachers and secondary level teachers responded to a low level of use of ECAs. Likewise, the majority of the head teachers and secondary level teachers did not agree because it was very difficult to manage other sources' time. Regarding this statement, the perceptions and understanding of head teachers and secondary level teachers seem alike thinking that ECA's are supposed to conduct outside of the school. Further, ECAs are volunteers' work. School head teachers sponsor them, and teachers showed that they were strongly against it, whereas 57 head teachers out of 66 and 116 secondary level teachers out of 150 expressed their disagreement. Likewise, **Table 2** shows the strongly positive perceptions and understanding of both head teachers and secondary level teachers upon ECAs exploring student interest offered by a school curriculum. Among the mentioned statements, perception and understanding of head teachers and secondary level teachers were strongly positive whereas 46 head teachers out of 66 and 126 secondary level teachers out of 150 were totally agree. It shows that the majority of head teachers and secondary level teachers strongly agreed that it was helpful to develop emotional and psychological aspects of students in the community school. The underlying statements perception and understanding of head

Table 3. Chi-square tests on perception & understanding of head teachers & secondary level teachers on ECAs (n=216)

SN	Activities	Value of Pearson Chi-square	Asymptotic sig. (2-sided)
1	ECAs are conducted outside of regular school day	0.141	0.931
2	ECAs are social activities delivered outside of the school curriculum	1.047	0.592
3	ECAs are social activities delivered outside of school curriculum	3.028	0.220
4	Explore students' interests offered by a school curriculum	8.341	0.015
5	ECAs are volunteers' work: they are sponsored by a school	0.611	0.736
6	Tools for emotional and psychological development of students	1.360	0.506
7	Explore students' interests offered by a school curriculum	3.412	0.181
8	Medium for students to perform better grade result in school	3.796	0.149
9	Prepare higher education & future career of students	0.953	0.620
10	Facilitators to discover natural abilities and build on their skills to perfect	5.638	0.059
11	Tools for emotional & psychological development of students	1.294	0.523

teachers and secondary level teachers were also positively accepted/agreed to student perform betterment in result in community schools. In response to the activity-needed to facilitate friendships, build self-esteem, and learn socialization-65 head teachers out of 66, and 145 secondary level teachers out of 150 were strongly convinced to implement ECA's in the community school. It shows that it helped to create friendships, build self-esteem, and learn socialization. Next, it was helpful to discover natural abilities and creative activities and helped build other skills for students. Finally, the understanding of head teachers and secondary level teachers upon this statement mean to avoid risky behavior like drug addiction, crime and stress is highly appreciative whereas 55 head teachers out of 66 and 115 secondary level teachers out of 150 agreed to avoid risky behavior like drug addiction, crime and stress within students at community school.

Table 3 shows the result of the Pearson Chi-square tests. The values of the test statistics of 11 categories (ECAs are conducted outside of the regular school day, ECAs are social activities delivered outside of the school curriculum, ECAs are volunteers work; schools sponsor them, explore students' interests offered by a school curriculum, prepare higher education and future career of students, tools for the emotional and psychological development of students, tools for decreasing unsocial behaviors and developing social, medium for students to perform better grade result in school, needed to facilitate friendships, build self-esteem, learn socialization, facilitators to discover natural abilities and build on their skills to perfect and means to avoid risky behavior like drug addiction, crime, and stress) were 0.141, 1.047, 3.028, 8.341, 0.611, 1.360, 3.412, 3.796, 0.953, 5.638, and 1.294. The test statistics were based on a 3x2 crosstabulation table at the degrees of freedom (df) for the test statistics were 2. The corresponding p-value of the test statistics were 0.931, 0.592, 0.220, 0.015, 0.736, 0.506, 0.181, 0.149, 0.620, 0.059, and 0.523. Except on the variable, explore students' interests offered by a school curriculum with p-value of the test statistics of 0.015. Majority of the p-value of the test statistics were greater than the chosen significance level ($\alpha=0.05$), we do not reject the null hypothesis. There was not enough evidence to suggest an association between head teachers and secondary level teachers' perception and understanding of ECAs.

Problems Faced by School and Teacher for Implementation of ECAs

In this part, we attempted to investigate the issues and challenges that head teachers and secondary level teachers experience when implementing ECAs. Respondents were given a variety of options to rate using the Likert scale of five points.

Understanding of ECAs implementation problem

In this section, the researcher attempted to investigate the issues and challenges that head teachers, and secondary level teachers experience while implementing ECAs.

Table 4 shows responses on understanding ECA implementation problem of head teachers and secondary level teachers. Among the responses, most of the head teachers (44 out of 66), and 94 secondary level teachers out of 150 agreed that because of a lack of budget it was very difficult to run ECA's. The statement, poor socio-economic and educational status of teacher gives mixed results. 29 head teachers out of 66 agreed and 29 disagreed. The same numbers of Head teachers agreed and disagreed as others were neutral. Similarly, numbers of secondary level teachers i.e., 75 out of 150 (50%) agreed that teachers' poor socio-economic and educational states are barriers to these problems. Similarly, the statement 'inadequate number of teachers' showed the mixed opinion of head teachers and secondary level teachers. Inadequate numbers of teachers are the main problem to implement ECA's. Regarding this statement, most (56%) head teachers and (62%) of secondary level teachers strongly agreed that lack of training is the problem to conduct ECAs.

In the statement 'not clear perception of ECAs' had mixed opinions, where 21 head teachers out of 66 agreed, 54 head teachers out of 66 disagreed and seven were neutral. Likewise, upon lack of adequate physical facilities and equipment statement, they had mixed perception. 41 head teachers out of 66 and 99 secondary level teachers out of 150 agreed, 17 head teachers and 28 secondary level teachers disagreed and eight head teachers and 23 secondary level teachers were neutral out of 66 head teacher and 150 secondary level teachers. Likewise, in response to the statement 'lack of professional support' 37 Head teachers out of 66 strongly agreed, 14 head teachers out of 66 disagreed, two head teachers out of 66, and 15 secondary level teachers out of 150 were neutral, 85 out of 150 teachers agreed, 36 were neutral out of 150 secondary level teacher, and 29 secondary level teachers out of 150 disagreed. Upon the statement 'partial implication of formulated policy', 50% of head teachers strongly agreed, 53% of secondary level teachers agreed. Regarding the statement 'unscientific classification of ECAs' there were mixed understanding in both head teachers and secondary level teachers. 27 head teachers out of 66 and 30 secondary level teachers out of 150, 15 head teachers out of 66.

Table 4. Response on an understanding of ECA implementation problem head teachers & secondary level teachers (n=216)

SN	Activities	Level of teachers	Level of use		
			High	Low	Neutral
1	Lack of budget	Head teachers	44	17	5
		Teachers	94	22	34
2	Poor socio-economic & educational status of teacher	Head teachers	29	29	8
		Teachers	71	45	34
3	Inadequate number of teachers	Head teachers	22	30	14
		Teachers	42	76	32
4	Lack of training	Head teachers	37	20	9
		Teachers	94	31	25
5	Not clear perception of ECAs	Head teachers	21	38	7
		Teachers	68	54	28
6	Lack of adequate physical facilities & equipment	Head teachers	41	17	8
		Teachers	99	28	23
7	Lack of professional support	Head teachers	37	114	15
		Teachers	85	29	36
8	Partial implication of formulated policy	Head teachers	33	20	13
		Teachers	80	30	40
9	Unscientific classification of ECAs	Head teachers	27	24	15
		Teachers	76	40	34

Table 5. Chi-square tests result on problems & barriers faced by head teachers & secondary level teachers (n=216)

SN	Activities	Value of Pearson Chi-square	Asymptotic sig. (2-sided)
1	Lack of budget	9.018	0.011
2	ECAs are social activities delivered outside of the school curriculum	5.334	0.069
3	Poor socio-economic & educational status of teacher	0.694	0.706
4	Explore students' interests offered by a school curriculum	2.399	0.301
5	Inadequate number of teachers	8.878	0.011
6	Tools for emotional and psychological development of students	1.542	0.462
7	Lack of training	0.115	0.943
8	Medium for students to perform better grade result in school	3.106	0.211
9	Not clear perception of ECAs	2.369	0.305

Table 5 shows the result of the Pearson Chi-square tests. The values of the test statistics of nine categories—lack of budget, poor socio-economic and educational status of teachers, inadequate number of teachers, lack of training, not clear perception of ECAs, lack of adequate physical facilities and equipment, lack of professional support, partial implication of formulated policy, and unscientific classification of ECAs were 9.018, 5.334, 0.694, 2.399, 8.878, 1.542, 0.115, 3.106, and 2.369, respectively. The test statistics were based on a 3×2 crosstabulation table. The degrees of freedom (df) for the test statistics were two. The corresponding p-value of the test statistics were 0.011, 0.069, 0.706, 0.301, 0.011, 0.462, 0.943, 0.211, and 0.305. Except for the variables of lack of budget and unclear perception of ECAs both p-value of the test statistics were 0.011. However, the p-values of other parameters were greater than the chosen significance level ($\alpha=0.05$). Hence, we do not reject the null hypothesis. And concluded that there is not enough evidence to find the problems and barriers faced by head teachers and secondary level teachers. According to the data collected on the ground, different types of problems were encountered when practicing ECAs in Nawalparasi (Bardaghat-Susta East). Nepal's ECAs are also hindered by a lack of properly trained teachers, inadequate physical facilities, and poor economic standards of schools, according to CERID (2004, 2010). These barriers were evident in Nawalparasi (Bardaghat-Susta East) schools.

Efforts Made to Address the Problems and Barriers of ECAs

In this data analysis section and response to the fourth research question, the researcher identifies possible efforts to address the problems and barriers associated with conducting ECAs in schools.

Table 6 shows that the values of the test statistics of seven categories (increasing budget for ECAs, providing adequate training for teachers, increasing teacher number, making a provision of reward, providing separate teachers for ECAs, motivated students, and increasing participation of resource person). 'Increasing budgets for ECA' statement shows the strong agreement of 53 head teachers out of 66 and 124 secondary level teachers out of 150. Likewise, 53 head teachers out of 66 and 124 secondary level teachers out of 150 strongly agreed with the statement providing adequate training for teacher. Regarding the statement 'increasing teacher numbers' majority of head teachers (41 out of 66), secondary level teachers (80 out of 150) were strongly positive, and others had mixed views/perceptions.

Further, the majority of head teachers- 54 out of 66 and 123 secondary level teachers out of 150 had positive responses upon "making a provision of reward" that leads student to take participate in ECAs. In the statement "to provide separate ECAs teachers" the majority number of head teachers i.e., 53 out of 66 and secondary level teachers i.e., 112 out of 150 convinced positively. Likewise, 53 head teachers out of 66 and 125 secondary level teachers out of 150 were highly influenced by the statement "motivating students for ECAs practice and implementations". The greater numbers of head teachers and secondary level teachers accepted the statement "increasing participation of resource persons". The numbers were 44 head teachers out of 66, 102 secondary level teachers out of 150.

Table 6. Understanding of how to solve ECAs problems between head teachers & secondary level teachers (n=216)

SN	Activities	Level of teachers	Level of use		
			High	Low	Neutral
1	Increasing budget for ECAs	Head teachers	53	7	6
		Teachers	124	11	15
2	Providing adequate training for teacher	Head teachers	53	7	6
		Teachers	124	15	11
3	Increasing teacher number	Head teachers	41	14	11
		Teachers	80	22	48
4	Making a provision of reward	Head teachers	54	4	8
		Teachers	123	10	17
5	Providing separate teachers for ECAs	Head teachers	53	6	7
		Teachers	112	211	17
6	Motivating student	Head teachers	53	6	7
		Teachers	125	10	15
7	Increasing participation of resource person	Head teachers	44	14	8
		Teachers	102	18	30

Table 7. Chi-square tests result on understanding of how to solve ECAs problems between head teachers & secondary level teachers (n=216)

SN	Activities	Value of Pearson Chi-square	Asymptotic sig. (2-sided)
1	Increasing budget for ECAs	0.659	0.719
2	ECAs are social activities delivered outside of the school curriculum	0.227	0.892
3	Providing adequate training for teacher	5.755	0.056
4	Explore students' interests offered by a school curriculum	0.050	0.974
5	Increasing teacher number	1.096	0.578
6	Tools for emotional and psychological development of students	0.431	0.806
7	Making a provision of reward	4.254	0.119

Table 7 shows the result of the Pearson Chi-square tests. The values of the test statistics of 7 categories (increasing budget for ECAs, providing adequate training for teachers, increasing teacher number, making a provision of reward, providing separate teachers for ECAs, motivating students, and increasing participation of resource person) were 0.659, 0.227, 5.755, 0.050, 1.096, 0.431, and 4.254. The test statistics were calculated using a 3x2 cross-tabulation table with a degree of freedom (df) of two. The test statistics' related p-values are 0.719, 0.892, 0.056, 0.974, 0.578, 0.806, and 0.119. We do not reject the null hypothesis because the p-values of each parameter are bigger than the selected significance level (0.05). And they concluded that there is not enough evidence to indicate a link between head teachers and secondary school teachers in terms of understanding how to address ECA problems. Furthermore, Astin (1999) established the student participation hypothesis, which highlights the necessity of increased student involvement in school for learning and personal-social development. It motivates students to behave by focusing their attention on something other than the subject matter. A child can learn by interacting with the culture of the environment in which they live. Studying the external social milieu in which a child has grown up is necessary to comprehend that child's development (Vygotsky, 1960). Students can gain a lot more from social interaction than they can from traditional school subjects. Interactions with others, self-esteem, self-control, and other factors play a role in student participation. Holland and Andre (1987) list membership in clubs, student government, youth groups, school bands, basketball teams, Junior red cross, volleyball team, karate club, dance, and other ECAs. As a result, the budget for ECAs in Nawalparasi (Bardaghat-Susta East) schools must be increased.

FINDINGS AND DISCUSSION

Here is a summary of the entire study's findings. We've discussed the key findings in light of the results and the relevant literature. The findings are presented based on the four research questions posed by the study. The first research question concerns the perceptions of stakeholders regarding extracurricular activities (head teachers and secondary level teachers). The second research question relates to the present condition of ECAs. The third research question concerns problems that schools and teachers encounter when implementing ECAs. The fourth research question concerns remedies to the problems. As a result, the headings below provide a summary of key findings as well as a discussion.

Perceptions of the Respondents on Extra-Curricular Activities

This section is about how the respondents understand and perceive the concept and importance of ECAs. The teacher recognizes that ECAs should be incorporated into the regular school day's curriculum. However, the students objected the teacher's interpretation. The majority of head teachers and secondary level teachers disagreed on whether ECAs should take place outside of the regular school day. Students, on the other hand, were neutral. It means ECAs are considered inside the regular school activity (Cunliffe, 2008). The majority of head teachers and secondary level teachers were unconcerned about ECAs taking place outside of the regular school day. However, most head teachers and secondary level teachers agreed that ECAs should take place outside the regular school day. Similarly, ECAs were volunteer activities; they were not sponsored by a school and are opposed by both head teachers and secondary level teachers. There is a significant difference in how head teachers and secondary

level teachers perceive ECAs. According to CDC (2003), ECA are conducted in schools for students' physical, mental, social, and emotional development and their regular studies. As a result, when viewed from this perspective, it is discovered that participants understand the importance of ECA in the overall development of students. Vygotsky (1978) said that ECA are primarily a social interaction in which students can learn from others who are more skilled than they are in the activity in front of them. When we discuss and interpret the above data responses from study participants, we get a debatable meaning and concept about ECA. In one sense, Vygotsky's interpretation of ECAs is that they are social interactions in which students learn from role models. On the other hand, respondents do not agree that it is a direct social interaction outside of school during regular school days. Participants comprehended ECAs in various ways. The researchers investigated what participants said and concluded that ECAs are those activities that are not included as part of the formal curriculum but are not delivered outside of the school milieu. It must be conducted within the school and managed by the school administration to foster social interaction between and among students, teachers, and head teachers. Vygotsky also explained that social interaction teaches students more than just the activities taught in traditional school subjects (Dahal et al., 2019). Indeed, the importance of ECAs in the overall development of students cannot be overstated. Participants in this study agreed on the value of ECAs as a way to pursue their interests in a variety of fields. In addition, the responses of the respondents are consistent. Students are unconcerned about it. It implies that they do not understand the significance of ECA. The majority of stakeholders believe that ECAs are important in preparing students for higher education and future careers. When comparing literal and data-based viewpoints, we can argue that one of the most important functions of ECAs is for students' emotional and psychological development. We concluded that ECAs are tools for decreasing students' unsocial behavior based on the voices of participants in this study. The majority of head teachers and secondary level teachers supported the statement. The researchers concluded that ECA is the best medium for obtaining a higher grade. According to many head teachers and secondary level teachers, ECA are important for fostering friendships, building self-esteem, learning socialism, and improving physical fitness. A high percentage of head teachers, teachers, and students believe that ECAs help students discover and develop their natural talents. According to a strong agreement among participants, youth participation in ECAs is therefore essential for preventing risky behavior in their new adult years. According to student involvement theory (Astin, 1999), for good and energetic school involvement of students, students must be involved in ECA and other social engagement-related activities for overall development. According to theory and data collected from the research field, student involvement in ECAs is important to the social engagement of students because it helps to avoid risky behaviors, improve physical and mental fitness, and build up their inherent skills and abilities that are hidden. The socialization process assists students in developing friendships, which is important for developing self-esteem and performing better in school because it creates interaction habits between peers and teachers. However, when the collected data from the research field was analyzed and discussed, the participants' understanding of the concepts and their importance was found to be satisfactory.

Problem Faced by School and Teachers for Implementation of ECAs

Public secondary schools must manage their educational programs effectively to effectively provide quality service to their students. This includes organizing and facilitating all learning activities for students to have rewarding and fulfilling educational experiences (Kerrigan & Manktelow, 2021). The head teachers must continuously and methodically plan all academic programs to accomplish this. There are numerous problems and barriers to managing and systematically organizing ECA in public secondary schools in the Nawalparasi (Bardaghat-Susta East). According to the information provided by the study's respondents, various problems are encountered by schools and teachers when implementing ECAs in their context. One of the factors influencing proper ECA planning, and organization is a scarcity of resources across the provisioning spectrum, specifically human, financial, and infrastructural resources. Some of these issues, such as a scarcity of financial resources in most schools, have fragmented ECA budget. Another issue is a lack of interest on the part of learners to participate in ECAs as a result of a lack of clarity about ECAs among students and teachers. This presents significant challenges and problems for school administration in developing and maintaining a viable and sustainable organizational structure for ECAs. A lack of motivation to improve teachers' competencies in ECA coaching has an impact on ECA organization. Few have been to schools, where the head teachers and administration are ECA enthusiasts, and in many cases, they do not value the contributions of sports activities to the development of a healthy mind (Cladellas Pros & Castelló Tarrida, 2017). When head teachers and teachers are not interested in one thing, they tend to focus on that, neglecting other important activities. This leaves learners with no choice but to participate in the activity that is being offered, even if they are not interested in it (Curtner-Smith et al., 2007). Other problems associated with ECA include a school's poor socioeconomic and educational status, an insufficient number of teachers, a lack of teacher training, a lack of adequate physical facilities and equipment in the school, a lack of professional support, an insufficient supervision and monitoring system of administration, a partial implementation of formulated educational policy, and an unscientific classification. Many school administrations leave their efforts to plan and implement an ECA program in their schools. Similar to the findings of CERID (2004, 2010), inadequate numbers of trained teachers, a lack of physical facilities, and a poor economic status of the school are all issues that this study discovered when conducting ECAs in the Nawalparasi (Bardaghat-Susta East). Effective teaching for successful learning, on the other hand, entails sharing and coordinating all activities that impact learners' lives inside and outside the classroom (Fuadiah et al., 2019). Administrations must therefore motivate themselves and all other stakeholders to contribute to the realization of a viable ECA in Nawalparasi (Bardaghat-Susta East) schools.

Efforts made to Address the Problem and Barriers of ECAs

ECA participation can be a significant source of positive influence in the lives of students. Based on the data gathered from the research field, it was discovered that various efforts were made to solve the problems and barriers to the implementation of ECAs in schools, such as increasing budgets for conducting ECAs, attempting to provide adequate training for teachers, establishing a provision of reward for both teachers and students, attempting to motivate students to participate in ECAs, and increasing the number of ECAs. Not only that, ECAs have to be enjoyable and appealing to youth. Youth are frequently the best judges of this.

Youth must be involved in determining how a program is organized and carried out. According to BNFP (1987), teachers and students are incentivized to implement ECAs in Nepali schools. Nawalparasi (Bardaghat-Susta East) schools are making numerous efforts to promote the effective use of ECAs, but students and teachers must be properly motivated.

CONCLUSIONS

Conclusions were drawn based on the findings of this study using research questions that guided the research. ECAs are essential to improve educational (Shulruf, 2010) quality by making teaching-learning more effective. The perception and understanding of teachers, head teachers, and students directly impact the implementation of ECAs. Based on the scale response rate, it can be concluded that teachers, principals, and students have the knowledge and a good understanding of the importance of ECA. Teachers are concerned about increasing student participation and believe that ECAs are important for students' educational, physical, and social development. Stakeholders are fully aware of the importance and ramifications of ECAs in the classroom. The Likert five-point rating scale results were converted into trichotomous categorical variables of closed-ended questionnaires. The respondents had different perceptions and ideas about ECAs. The educational act of Nepal's Department of education, which is part of the Ministry of Education (Moe, 1971, 1991, 2003, 2009, 2015), referred to and assured that teachers' practices in conducting ECAs were in accordance with the educational commission's laws and rules. Most of the time, the stakeholders' perceptions were the same. It means they're communicating properly. All public schools in the Nawalparasi (Bardaghat-Susta East) appeared to be able to implement ECA.

Implications

Schools, students, and teachers understand and utilize ECAs in a variety of ways. ECA's policies and practices contradict. A number of impediments to ECAs' effective procedures have been discovered. Ministry of Education can host a teacher training, workshop, or seminar on ECAs. Local governments can support such activities in their designated regions and school districts. It is important to introduce additional ECAs facilitators because human resources for them appear to be limited in schools. Clear and strong procedures, policies, and legislation addressing ECAs should be in place in schools.

Learning in natural settings offered the students learning achievement exceptional. Students are happier when they get a break from their classroom environment, so ECAs play an important role in making students feel refreshed and happy. Schools must figure out why students are not participating in ECAs and implement steps to correct the situation. Hiring a physical education teacher is advisable because their knowledge and performance will inspire students to engage in more ECAs. An intensive teacher training program might be advantageous for teachers without a physical education background.

ECA is just one of many. Our investigation was limited to a few schools of Nepal's Nawalparasi (Bardaghat-Susta East) district. ECAs in schools are usually regarded to have a high probability of future research. More in-depth and deeply engaging research is required to cover a wide spectrum of ECAs and associated topics. This study was limited to the public schools of the Nawalparasi (Bardaghat-Susta East) due to limited time, economics, and haste. As a result, could conduct research in a range of contexts, including private schools, owing to this study.

Author contributions: All authors have sufficiently contributed to the study and agreed with the results and conclusions.

Funding: No funding source is reported for this study.

Ethical statement: Authors stated that the study was approved by the institutional ethics committee of Kathmandu University School of Education, Nepal on April 23, 2021 (Approval code: MPhil-Edu-20211). Authors stated that they conducted the research in an ethical and responsible manner. Informed consents were obtained from the participants.

Declaration of interest: No conflict of interest is declared by authors.

Data sharing statement: Data supporting the findings and conclusions are available upon request from the corresponding author.

REFERENCES

- Alexander, W. A. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development, 40*(5), 518-529.
- Arias-Estero, J., & Castejon, F. (2014). Using instruments for tactical assessment in physical education and extra-curricular sports. *European Physical Education Review, 20*(4), 525-535. <https://doi.org/10.1177/1356336X14539214>
- Baker, T. L. (1999). *Doing social research*. Mc Graw Hill.
- Behtoui, A. (2019). Swedish young people's after-school extra-curricular activities: Attendance, opportunities and consequences. *British Journal of Sociology of Education, 40*(3), 340-356. <https://doi.org/10.1080/01425692.2018.1540924>
- Bekomson, A. N., Amalu, M. N., Mgbani, A. N., & B. Abang, K. (2020). Interest in extra curricular activities and self efficacy of senior secondary school students in cross river state, Nigeria. *International Education Studies, 13*(8), 79. <https://doi.org/10.5539/ies.v13n8p79>
- Bryman, A. (2009). *Social research methods*. Oxford University Press.
- Casinger, J. (2011). *College extra-curricular activities: The history of activities*. <http://www.articledashboard.com/Extracurricular-Activities--the-History-of-Activities/>
- CDC. (2003). *Extra-curricular activities*. <https://www.cdc.gov/>

- CDC. (2020). *Extra-curricular activities*. <https://www.cdc.gov/>
- CERID. (2004). *Status of co-curricular and extra-curricular activities in primary schools of Nepal: Problems & prospects*. http://www.cerid.org/formative/files/1148449015-co_xtr_crrl.pdf
- CERID. (2010). *Formative research project*. https://www.cerid.org/?s=formative&a=browse&formative_cat_id=cc1f5c282a7e41cf4c9a57e5830d6575
- Chapagain, Y. (2020). School student academic performance in Nepal: An analysis using the school education exam (SEE) results. *International Journal on Studies in Education*, 3, 22-36. <https://doi.org/10.46328/ijonse.34>
- Cladellas Pros, R., & Castelló Tarrida, A. (2017). Extra-curricular activities in Spain. Sports-related activities and their personal and academical implications. *International Journal for Research on Extended Education*, 5(1), 108-115. <https://doi.org/10.3224/ijree.v5i1.09>
- Corbetta, P. (2003). *Social research, theory, methods and technique*. SAGE. <https://doi.org/10.4135/9781849209922>
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approach*. SAGE.
- Cunliffe, L. (2008). A case study of an extra-curricular school activity designed to promote creativity. *International Journal of Education through Art*, 4(1), 91-105. https://doi.org/10.1386/eta.4.1.91_1
- Curtner-Smith, M., Sofo, S., Chouinard, J., & Wallace, S. (2007). Health-promoting physical activity and extra-curricular sport. *European Physical Education Review*, 13(2), 131-144. <https://doi.org/10.1177/1356336X07076871>
- Dahal, N., Luitel, B. C., & Pant, B. P. (2019). Teacher-students relationship and its potential impact on mathematics learning. *Mathematics Education Forum Chitwan*, 4(4), 35-53. <https://doi.org/10.3126/mefc.v4i4.26357>
- Dmitruk, A., Popławska, H., Gorniak, K., & Hołub, W. (2015). The participation of girls and boys from ages 10 to 18 in structured sports and extra-curricular activities in the aspect of social and economic conditions. *Polish Journal of Sport and Tourism*, 21(4), 240-246. <https://doi.org/10.1515/pjst-2015-0005>
- Fuadih, N. F., Suryadi, D., & Turmudi (2019). Teaching and learning activities in classroom and their impact on student misunderstanding: A case study on negative integers. *International Journal of Instruction*, 12(1), 407-424. <https://doi.org/10.29333/iji.2019.12127a>
- Giri, G. M. (2022). *Extra-curricular activities in secondary schools of Nawalparasi (Bardaghat-Susta East): A survey study* [Unpublished MPhil dissertation]. Kathmandu University School of Education.
- Guilmette, M., Mulvihill, K., Viltemaire-Karjden, R., & Barker, E. T. (2019). Past and present participation in extra-curricular activities is associated with adaptive self-regulation of goals, academic success, and emotional wellbeing among university students. *Learning and Individual Differences*, 78, 8-15. <https://doi.org/10.1016/j.lindif.2019.04.006>
- Henn, M., Weinstein, M., & Foard, N. (2005). *A short introduction to social research*. SAGE.
- Holland, A., & Andre, T. (1987). Participation in extra-curricular activities in secondary school. *Review of Educational Research*, 57(4), 437-466. <https://doi.org/10.3102/00346543057004437>
- Iddrisu, M. A., Senadjki, A., Ogbeibu, S., & Senadjki, M. (2023). Inclination of student's participation in extra-curricular activities in Malaysian universities. *SCHOLE: A Journal of Leisure Studies and Recreation Education*. <https://doi.org/10.1080/1937156X.2023.2166437>
- Jeong, H. J., & Lee, W. C. (2016). The level of collapse we are allowed: Comparison of different response scales in safety attitudes questionnaire. *Biometrics & Biostatistics International Journal*, 4(4), 00100. <https://doi.org/10.15406/bbij.2016.04.00100>
- Kerrigan, M., & Manktelow, A. (2021). Extra-curricular activities in higher education: Enhancing the student experience. *Widening Participation and Lifelong Learning*, 23(1), 123-147. <https://doi.org/10.5456/WPLL.23.1.123>
- Kong, M. S. (2012). *A study of the changes in students' attitudes with the enhancement of their voices in extra-curricular activities in secondary schools*.
- Leung, C. C. (2003). Extra-curricular music activities in Hong Kong secondary schools. *Music Education Research*, 5(2), 183-197. <https://doi.org/10.1080/1461380032000085559>
- MoE. (1971). *National education system plan for 1971-76*. Government of Nepal.
- MoE. (1991). *Basic and primary education program master plan*. Government of Nepal.
- MoE. (2003). *National plan of action (NPoA)*. Government of Nepal.
- MoE. (2009). *School sector reform plan 2009-2015*. Government of Nepal.
- MoE. (2015). *Education for all: National review report*. Government of Nepal.
- Moriana, J. A., Alos, F., Alcalá, R., Pino, M. J., Herruzo, J., & Ruiz, R. (2006). Extra-curricular activities and academic performance in secondary students. *Electronic Journal of Research in Educational Psychology*, 4(1), 35-46.
- Munadi, M., & Khuriyah. (2023). The extracurricular activities and student development of secondary school: Learning from Indonesia. *International Journal of Education and Practice*, 11(1), 23-34. <https://doi.org/10.18488/61.v11i1.3245>
- Rahman, A., & Hundal, R. A. (2021). Inclination of students towards active participation in extra-curricular activities as an effective tool for professional development during education in Pakistan. *Indonesian Journal on Learning and Advanced Education*, 3(2), 76-85. <https://doi.org/10.23917/ijolae.v3i2.12026>

- Setopati. (2019). *Seeing through SEE result*. https://www.facebook.com/permalink.php?id=1486516881362370&story_fbid=3328131693867537
- Shulruf, B. (2010). Do extra-curricular activities in schools improve educational outcomes? A critical review and meta-analysis of the literature. *International Review of Education*, 56(5/6), 591-612. <https://doi.org/10.1007/s11159-010-9180-x>
- Srikongchan, W., Kaewkuekool, S., & Mejaleurn, S. (2021). Backward instructional design-based learning activities to developing students' creative thinking with lateral thinking technique. *International Journal of Instruction*, 14(2), 233-252. <https://doi.org/10.29333/iji.2021.14214a>
- Vinas-Forcade, J., Mels, C., Valcke, M., & Derluyn, I. (2019). Beyond academics: Dropout prevention summer school programs in the transition to secondary education. *International Journal of Educational Development*, 70, 102087. <https://doi.org/10.1016/j.ijedudev.2019.102087>
- Vygotsky, L. S. (1960). *The development of the higher mental functions*. RSFSR.
- Vygotsky, L. S. (1978). *Mind in society*. Harvard University Press.
- Whitney, F. P. (1932). Review of extra-curricular activities in secondary schools. *Educational Research Bulletin*, 11(10), 277-277.
- Wolff, H. K., & Panta, P. R. (2005). *Social science research and thesis writing*. Buddha Publishers and Distributors.
- Yamane, T. (1967). *Statistics: An introductory analysis*. Harper and Row.