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Changing Trends in Shadowing in Education for Academic Achievement in Nepal

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Abstract

This paper is a part of a research conducted with the support of 'Faculty Research Grant' from the University Grants Commission, Nepal. Different forms of shadow education used by students of high school level were studied and analysed by asking the teachers teaching in high schools and the students studying bachelor level in different universities of Nepal about their school level experiences regarding shadow education activities and the impact of shadow education in their scores. Shadow education is also called private tutoring but it covers many other ways of getting support in studies. It has been very common in Nepal and everywhere in the world since formal education started. It was a survey study based on the information gathered from the students of different faculties at the bachelor level. The research tools used included a questionnaire for the students and a set of interview guidelines for FGD and interviewing the teachers teaching in high schools of three major cities of Nepal; Butwal, Pokhara and Kathmandu. After the analysis of the information gathered, it was found that the trends of getting shadow education and related activities was drastically changed not just in the form but also in the purpose of getting shadow education. The students were found to be using different forms of shadowing in education in Nepal and the trend of shadowing has also been changing with the development and incorporation of ICTs in education and online applications. The paper also presents that the changing trends in shadowing activities have also changed the lifestyles of the teachers as well.

Keywords: shadowing education activities, tuition centres, supplementary learning, coaching centres, cram schools etc.

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General Background

The Nepali society is basically guided by Hindu philosophy where educating the children used to be completed by keeping the children with the Gurus to learn necessary skills as well as the culture and to proudly become the disciple of the Guru. This culture of Gurukul Shikshya has some long lasting impressions in the Nepali education system

which is somehow linked with the shadow education or private tutoring at present as it paved the way that one can get better education by just staying close to the Guru. It sounds like shadow education in Nepal mirrors what many other countries experience. Private supplementary tutoring often arises due to various factors within the formal education system, such as curriculum demands, exam pressures, or perceived gaps in teaching. The term "shadow" seems fitting, as these activities exist in the periphery of the formal system, often following its patterns and adapting to its changes. It's interesting to note how closely intertwined shadow education is with the mainstream system. Changes in the formal education system can have ripple effects on the supplementary tutoring landscape, highlighting its dependence on the mainstream. Despite its significant role in many students' lives, shadow education often receives less public attention compared to the mainstream system. The fluidity and adaptability of shadow education make its features less distinct compared to the formal system, reflecting its diverse and sometimes informal nature. This underscores the complexity of education ecosystems and the various ways students seek support and enrichment outside of traditional classrooms.

The evolution of private tuition, or shadow education, in Nepal reflects broader global trends in education. What started as a supplementary service provided by individuals has transformed into a thriving industry with diverse service providers catering to various segments of the population. The expansion of private tuition services is closely intertwined with the demands of the formal education system, aiming to help students meet curriculum requirements and excel academically. This has led to a wide range of providers, from secondary school students to qualified teachers, organized businesses, and even chain businesses, offering tuition services. The industry's growth is fueled by both increasing demand and supply. Demand stems from students and parents seeking academic support, exam preparation, and enrichment beyond what is offered in traditional classrooms. On the supply side, there are individuals and organizations ready to meet this demand, offering services tailored to different needs and income levels, from relatively affordable options to more exclusive and personalized tutoring. The advent of the internet has further expanded the reach of private tuition through online tutoring, enabling students to access educational support regardless of their geographical location, as long as they have a reliable internet connection. Moreover, the concept of shadow education encompasses various forms of supplementary learning, including cram schooling like Bridge courses, Entrance preparation classes, and classes for Teacher Service and Public Service Commission exams. These offerings highlight the diverse ways in which students seek to enhance their academic performance and career prospects outside of formal educational settings. Overall, the growth and diversification of private tuition services underscore the importance of personalized and supplementary education in meeting the needs of students and navigating the complexities of modern educational systems.

The Wikipedia (2020) describes that the concept of cram schools, also known as crammers or test-prep centers, reflects a long-standing tradition of supplementary education that has evolved over time. Originally, these specialized schools were primarily aimed at preparing students for specific goals, such as passing entrance examinations for high schools or universities. The term "cramming" itself refers to the intensive study of a large amount of material in a short period of time, capturing the essence of the focused and goal-oriented nature of these schools. For many students, especially those who may struggle with understanding the material taught in traditional classrooms, cram schools offer a second chance to grasp the content through targeted instruction and support. Historically, the practice of seeking extra help for students is as old as formal schooling itself. However, in earlier times, supplementary tutoring was often limited to more affluent households. Over the years, the landscape of supplementary education has undergone significant changes, with shadow education now reaching a much broader spectrum of income groups and becoming a major phenomenon globally. This shift reflects the increasing demand for academic support and enrichment beyond what is offered within the formal education system. As students and parents seek to enhance academic performance and gain competitive advantages, cram schools have evolved to cater to diverse needs and goals, offering specialized programs and resources to help students achieve success. Thus, the evolution of cram schools and the broader shadow education system underscores the enduring pursuit of educational excellence and the willingness of individuals and societies to invest in supplementary learning opportunities.

In fact, Bray (2013) describes that the history of private supplementary tutoring is probably as old as the history of formal schooling. The notion of seeking extra help for children and youths to help them to keep up with peers and/or to stretch their learning further is thus longstanding. However, in earlier decades and centuries supplementary tutoring was modest in scale, chiefly confined to relatively prosperous households. In the contemporary era, shadow education reaches a much wider spectrum of income groups and has become a major phenomenon around the world. In this regard, Bray (2013) points out that the history of private supplementary tutoring is probably as old as the history of formal schooling. The notion of seeking extra help for children and youths to help them to keep up with peers and/or to stretch their learning further is thus longstanding. However, in earlier decades and centuries supplementary tutoring was modest in scale, chiefly confined to relatively prosperous households. In the contemporary era, shadow education reaches a much wider spectrum of income groups and has become a major phenomenon around the world. In recent years as Byun et al (2014) describe shadow education—paid private supplementary tutoring or coaching aimed at providing additional help to students outside of school mainly to prepare for a variety of examinations—has been one of the fastest growing industries in many countries around the world. The worldwide growth of this industry, however, has caused much concern among educational policymakers due largely to its implication for

educational inequality. This growing status of shadow education has certainly contributed much in educating the students but Bray (2021) claims that around the continent, shadow education enrolment rates and the accompanying financial burdens are growing. Although current enrolment rates in some countries are relatively modest, one fundamental message of the study is that such modest enrolment rates should not be a cause for complacency but rather an opportunity to steer the shadow education sector before it gets engrained in cultures.

In fact, the participation in shadow education is an after-school activity directly targeted at improving academic performance (Jansen et al 2023) and in the same issue, Javadi, & Kazemirad (2020) write that shadow education has become a widespread phenomenon worldwide and is now an unavoidable learning space for many students. It challenges the traditional notion of factory-like one-size-fits-all education and provides students with more personalized learning. Moreover, it goes beyond shadowing the formal education and holds a mirror up to the formal education to reveal its shortcomings. Although more studies worldwide are focusing on the phenomenon, its scope, characteristics, history, and functionality remain underexplored. Therefore, shadow education should be considered as an emerging focus of recent curriculum studies and should not be disregarded by researchers who attempt to understand where, how, what, and with whom students learn. Unlike public schooling, shadow education enables students and parents to make decisions about courses, curriculum materials and even instructors (Kim & Jung, 2019). Therefore, "in an era when shadow education is reshaping student learning and arguably the whole landscape of education in many countries worldwide, shadow education, and more specifically shadow curriculum, should emerge as a new research area in the field of curriculum studies" (Kim & Jung, 2019, p. 16). Buchmann, Condron, and Roscigno (2010) also defined shadow education as "educational activities, such as tutoring and extra classes, occurring outside of formal schooling designed to improve a student's chance of successfully moving through high school graduation and into a college of their choice" (p. 436) cited in Javadi, & Kazemirad (2020).

In the similar line, Liang et al (2022) conclude that the results in the student dimension showed that students attending shadow education had a significantly higher level of wellbeing than students who did not attend, and in the school dimension, that school competition climate had a significant impact on students' wellbeing; however, shadow education caused by schoolwork pressure and shadow education support appeared to have no significant impact on wellbeing. Furthermore, there was an interactive effect between competition climate and shadow education time which negatively affected wellbeing.

Javadi & Kazemirad (2020) emphasize the growing prevalence of shadow education worldwide, highlighting its emergence as an inevitable educational platform for numerous students. They assert that shadow education offers personalized instruction

to children, challenging the conventional notion of uniform, factory-style schooling. Moreover, it goes beyond merely replicating traditional education, serving as a critical reflection of its shortcomings. Despite increased global research on this phenomenon, its scope, characteristics, origins, and applications remain largely unknown. Consequently, scholars investigating the nuances of shadow education should recognize its escalating importance within current curriculum studies. This article delves into the definition of "shadow education" and introduces "shadow curriculum," a novel aspect of curriculum studies that focuses on students' academic advancement within formal education systems. In contrast to public schooling, shadow education allows parents and students to select courses, curriculum, and even instructors (Kim & Jung, 2019). Hence, according to Kim & Jung (2019), as cited by Javadi & Kazemirad (2020), "shadow education, and particularly shadow curriculum, should emerge as a fresh research domain within the curriculum studies discipline, given its transformative influence on student learning and potentially the entire educational landscape across numerous nations." In the same way, Liang et al. (2022) conducted a study exploring the benefits of shadow education, particularly focusing on the well-being of both teachers and students. Their findings revealed that students engaged in shadow education exhibited significantly higher levels of well-being compared to those who did not participate. Additionally, the competitive atmosphere within schools was found to significantly influence students' well-being. However, factors such as pressure to complete schoolwork and support from shadow educators did not seem to have a significant impact on student well-being. Interestingly, there was a negative interaction between the duration of shadow education and the competitive school climate, leading to adverse effects on well-being. Similarly, Bray (2021) delineates the motivations behind students enrolling in shadow classes, highlighting their role in enhancing academic performance. He underscores that a majority of students and families perceive shadow classes as beneficial for academic success, which is understandable given the financial investment involved. However, the prevalent trend of engaging in shadow education can create pressure for families and students to participate, regardless of their individual needs. Furthermore, shadow education can have both positive and negative effects on the education system. In urban areas, it may draw top-tier teachers away from schools to work in tutorial centers, while those who remain in schools may prioritize their private tutoring over regular classes. This shift in focus could potentially affect the quality of education provided in traditional school settings. Additionally, the heavy schedule of full-day schooling followed by evenings and weekends of tutoring can impose significant burdens on children and youth, raising concerns about their well-being and overall educational experience.

There have been many changes in the ways children are educated and the contents as well as the modality of delivering the contents in the ELT classes. The roles of teachers in the traditional education system as well as the educational system now a day have been significantly changed. The shadowing in education also changed with time and

development of the ICTs. So, the evolution of shadow education has been profoundly influenced by advancements in information and communication technology (ICT) tools. As technology continues to progress, so too does the landscape of supplementary education. Bray (2017) notes, "The emergence of ICT has revolutionized the landscape of education, including shadow education." This transformation has been characterized by the integration of online platforms, virtual classrooms, and digital resources into shadow education practices. ICT tools have facilitated the expansion of shadow education beyond traditional face-to-face tutoring. Kim and Jung (2019) emphasize, "With the advent of ICT, shadow education has transcended geographical barriers, enabling students to access educational support remotely." This shift towards online tutoring has not only enhanced accessibility but also diversified the range of educational services available to students. Furthermore, ICT tools have enabled the customization of learning experiences within shadow education. As Javadi and Kazemirad (2020) point out, "ICT tools allow for personalized instruction and adaptive learning, catering to individual student needs and preferences." This personalization fosters a more effective and engaging learning environment, ultimately contributing to improved academic outcomes.

Moreover, the proliferation of ICT tools has facilitated the emergence of new forms of shadow education, such as educational apps, online courses, and gamified learning platforms. These innovative approaches leverage technology to make learning more interactive, immersive, and enjoyable for students. Thus we can say that the integration of ICT tools into shadow education has led to significant changes in how supplementary education is delivered and experienced. As technology continues to advance, it is expected that shadow education will further evolve, harnessing the power of ICT to enhance learning outcomes and provide greater access to educational opportunities. Thus, this paper was prepared with the basic objective of how the shadowing in education has been changing over time and how the incorporation of ICTs in education changed the ways of shadowing in education. This means that the present study focuses on how the trends of using shadow education have been changing in Nepali students learning English.

Research Methodology

This paper is a part of the study planned to analyse the influence of shadow education in the academic achievement of the students in Nepal. The objectives of the study were mainly to describe various forms of shadow education used in Nepal, and analyse the influence of shadow education on the students' achievement in English. For this, the study was focused in three major cities of Nepal as the education hub of the country; Butwal, Pokhara and Kathmandu. All the data were gathered from the three cities of Nepal. For the study information was gathered from 400 students studying bachelor level in different faculties of different universities and 30 teachers teaching in high schools of the selected cities. There was a FGD guideline and two sets of

questionnaires for the students and teachers as the research tools. The study was granted by UGC Nepal with Faculty Research Grant and it took about two years to accomplish the research and finalize the report. This paper focuses on the following issues related to the changing trends of shadowing in education.

Places of Getting Shadow Education

Students getting education from only school and those who get support from other sources was one of the basic curiosities for the research and thus a question was asked to the students and teachers about the number of students depending on only schools and those who did not depend on only school and got education from other various sources. The data gathered from the study showed that there were a great number of students in different schools in Nepal who did not rely on just the school and colleges they were studying. The table no 1 below shows the number of students studying in bachelor level and their trend of taking shadow education during their school education.

Table no 1: Students getting education from the places other than their schools

Responses	No of Boys	Percent	No of Girls	Percent	Remarks
Getting involved in Shadowing in Education	140	35	134	34	
Studying only in Schools	62	15	64	16	
Total	202		198		

The table no 1 above shows that there were a huge number of students taking shadow education. It was found that about 70 percent of the informants told that they were involved in different kinds of educational activities apart from their regular classes in the schools. But in the past, the number of students taking tuition and coaching used to be far less and there used to be very limited opportunities of getting shadow education and the traditional teachers used to think that teaching tuition and coaching getting fees from students was like selling the knowledge which is not good practice. At present the teaching has been a profession and the teachers should provide their expertise taking fees. There are many kinds of opportunities for those who like to take shadow education. This shows that the trend of not being dependent only on the regular school classes and activities has been a bit different at present as the students have many alternatives for their educational development and achievements.

Shadow Education with the Same School and Teachers

Getting tuition and coaching classes from the school where the students study or from outsiders is also a question in discussion. In the past the students normally used to take tuition and coaching from their own teachers and some social and political activists used to describe this as unethical practice. But at present the situation has been changed. Though some people still describe this activity as unethical practice, the teachers think themselves as professionals and they take the service charge for their teaching as expert service.

In the study, the students were asked whether they took tuition in their schools with the teachers who taught them in the class. There were questions regarding the pull and push forces for using shadow education like taking tuition and coaching like activities. The results of the responses given by the students are presented in the figure no 1 below which show that 156 boys and 160 girl students took tuition and coaching classes in their own schools. This means that most of the students like to get shadow education in their own schools. It also showed that only 11 percent boys and 10 percent girls were found to be taking shadow education i.e. tuition and coaching classes from the institutions and teachers away from their schools. Not only this, 30 percent boys and 31 percent girls responded that they were getting shadow education from the teachers who taught them in the regular classes and 82 boys and 74 girls replied that they were taking tuition and coaching classes from the teachers outside their schools or at least with the teachers who were not teaching them in the regular classes.

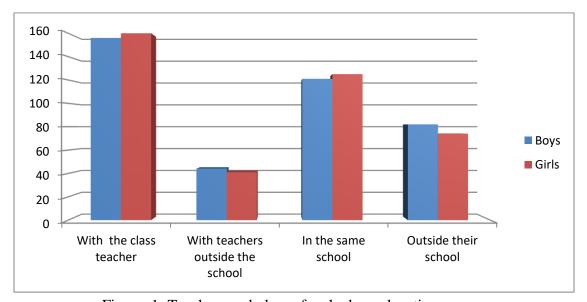


Fig no. 1: Teachers and places for shadow education

Forms of Shadow Education

In the study there was another question to the students to mention the forms of shadow education apart from their regular classes of the schools. The students were given the opportunity to choose the varieties of forms of shadow education and an extra place to mention any other way they got education from if not mentioned there. In that question some very common ways of getting shadow education like taking tuition, coaching classes, home tuition, study groups, You-tube / online learning, consulting seniors, academic support from relatives and family members were mentioned and there was a space to mention any other way or form of shadow education for the students. The four hundred students' responses of the forms of shadow education have been presented below.

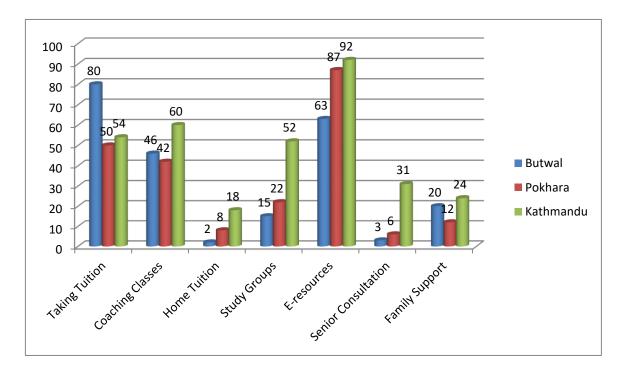


Figure no 2: Forms of shadow education

The figure no 2 above shows the various forms of shadow education used by the respondent students studying in the selected cities of Nepal. This figure shows that the students took the different forms of shadow education in the cities where they were studying during the SEE exam time and grade XI and XII exam preparation period. This means that the students might have completed their higher school education from other parts of the nation. This shows that the students were very much attracted towards using different kinds of online resources like YouTube, Google search and other e-resources as well as taking tuition in all the cities of the nation. The data shows that the trend of taking tuition was higher in Butwal as 80 students from Butwal responded that they took tuition apart from the regular school teaching. Not only this, fifty students from Pokhara also

told that they took tuition for their shadowing in education. On the other hand, 54 students from Kathmandu city responded that they took tuition for the preparation of their SEE and grade XI and XII examinations. Thus, it can be said that taking tuition is still a very common shadowing practice among the students as 46 percent of the students responded that they took tuition as their shadowing to the regular school classes.

Regarding the popularity of another common shadowing practice which is joining the coaching classes organized by the schools the students studying or conducted by the outsiders, the trend was seen slightly different. Only 37 percent of the students i.e. 148 respondents responded that they had joined coaching classes as the shadowing to the regular school teaching and learning activities. Among them 46 students were from Butwal, 42 from Pokhara and 60 respondents were from Kathmandu. In the same way, taking home tuition was not found to be very common to the students of this level, as only 28 respondents i.e. seven percent of the respondents replied that they took home tuition for their academic support apart from the regular classes in their schools. Among them only two from Butwal, eight students from Pokhara and 18 students from Kathmandu wrote that they took home tuition for their academic support.

As for the other forms of shadowing 22 percent of the students responded that they formed the study groups of friends and supported each other for their mutual benefit. Among them, fifteen from Butwal, twenty two from Pokhara and fifty one respondents from Kathmandu wrote that they formed study groups and supported each other for their mutual academic benefit. On the other hand, only ten percent of the students responded that they consulted seniors for their academic benefit. Consultation of seniors means that whenever and wherever the students feel any problem in their studies, they have some seniors to ask and get support in their studies. This practice is very common in the hostels and some common residential areas where there are a lot of students reside for their studies. Three students from Butwal, six from Pokhara and 31 respondents from Kathmandu responded that they had access to consult senior students for their academic support for the preparation of different level examinations. Not only this, another common form of shadowing in education was getting academic support from relatives and family members. Fourteen percent of the respondents responded that they were getting family support and support from the relatives for their studies. Twenty respondents from Butwal, twelve from Pokhara and twenty four from Kathmandu replied that they got academic support from the family members and relatives.

The most common form of shadowing was found to be the use of online recourses or e-recourses like You Tube and other resources as the support for academic problems instead of joining tuition, coaching classes or other activities. In the past, as a teacher stated, there used to be no choice except joining coaching classes or taking tuition from the same teachers who teach them in the classes. But in course of time there were coaching centres and tuition centres run by the teachers who were not involved in the school teaching and the students started to get opportunity to study things different way

from what their teachers in their schools used to teach. Not only this, the development in printing technologies also brought many kinds of supportive books and booklets making learning easier and specially helping the students easier and more comfortable in preparing for the decisive examinations. Not only this, in course of time with the development of ICTs and with the incorporation of such ICTs in education to make the teaching and learning of English easier and more effective there was drastic change in the ways of getting shadow education. At present there are many online applications and tools which support in the teaching and learning of English and there are varieties of blogs and Vlogs which give tutorial classes for learning English. The teacher further explained the past days of shadowing when he himself was a student and had to go to the English teacher's house which was far from his house. His father used to go to take him back from the teacher's house as he got the evening shift for tuition. With a torch light in his hand his father would come at right time after the tuition class. He further added that the students now-a-days can learn whatever they want to learn by searching things in Google or just searching in the You Tube videos. Many of these online resources are found free of cost and some require some payment to study them. Likewise the students at present can download and read many research articles and other books that they need for their studies or their preparation of different kinds of examinations. Many students thus do not like to go to the teachers or coaching centres or tuition centres for shadow education nor have to stay in groups for their studies now-a-days. They can just stay in front of their computers or just open their laptops. They can get most of the online resources for their studies or preparation of examinations in their own cell phones. Thus the situation of shadowing in education has been changed drastically with the development of technology and inclusion of ICTs in education.

The information gathered during the study showed that those who responded that they used online resources for their academic supported were more than 60 percent, i.e. 242 respondents were found to have used the e-resources, You Tube and Google search etc. From Butwal area 63 students were found to respond that they used such online resources and YouTube like sources as their shadowing activities for their academic support. Likewise, 87 respondent students from Pokhara replied that that they used the online resources whereas 92 respondents from Kathmandu replied that they used the online resources like YouTube and online resources as the form of shadow education. The teachers were in the view that the value of English teachers in the past used to be special as they used to be respected in the society and they used to have more opportunities of earning extra money through tuition and coaching classes. But now-adays the students have many opportunities of shadowing in education and the teachers do not get many students for tuition or coaching classes. A teacher explained the situation 'I used to get very less time even to eat food and sleep in the night during SLC exam time in the past but now I have sufficient time as the students have other ways of learning and preparing the examinations. This indicates that the trend of shadowing has been slightly

changing over the time as the students can easily click on to their cell phones to search anything they feel difficulty and they can take some online classes for studying different courses free of cost or with much economized fees. The internet facilities in Nepal are getting common and almost everyone can easily access to online resources. Many advantages of using e-resources over taking tuition or joining coaching classes have brought such trends in the shadowing activities.

Shadow Education for Better Academic Achievement

Generally getting involved in different kinds of shadow education activities is aimed at securing better marks or securing competitive scores or grades in the examinations and tests. Most of the students try their best to secure better marks in the exams but when they realize that they may be unable to secure good scores, they would join different ways of shadowing i.e. either join coaching classes or take tuition or other ways of being supported to secure better scores or grades. For this study as well, there was a question related to this just asking whether the students were involved in the shadow education activities with the aim of better achievement in their education. The information gathered showed that there were 156 boys and 160 girls who believed that different kinds of shadow education activities aimed at increasing the academic achievement. On the other hand there were some informants who responded that they had not joined the tuition and coaching like activities for only academic achievement. The informants were 46 boys and 38 girls who did not believe that the shadow education was meant only to increase academic achievement. This means that they joined the coaching and tuition like activities not only because of the academic benefit but also for making the relation to the teachers better so that they can be benefited in many ways. In fact the students were found to be thinking that the good relationship with the teachers may be beneficial to the students in many ways like getting important questions for the examinations, support during the exam hall, and support for better marks in the practical scores and the like.

The respondents also gave the reason for thinking that the joining different kinds of shadow education activities for their educational achievement. They were in the view that if they involved in such activities instead of playing and doing other activities it would certainly be beneficial for their academic progress, they would learn things bit by bit and this would result in better educational achievement. They were also in the view that the teachers' attitude towards them would be positive if they took tuition or other activities with the teachers like getting important questions for the examinations, support during the exam hall, support for better marks in the practical scores etc. In the past, a young teacher told, that they used to take tuition and coaching centres only with the aim of securing pass marks in English and other difficult subjects. He further said that they never expected any extra benefit from those who taught them in the coaching or tuition

centres. But the children now are very much smart and they expect many benefits by joining the coaching and tuition centres.

Conclusion

In this way the trends of shadowing were found to be changing with time and the development in technology as well as with the incorporation of ICTs in education in Nepal. The places of taking tuition and coaching like shadowing activities have been changed and the persons to teach the coaching and tuition were also added in the roster of tuition and coaching centres. The modalities of getting educated have also been changed at present. In the past the students who used to fee that they could not pass any subject in the examinations would take shadow education and get passed. But the trend of shadowing or at least taking tuition and coaching classes has been almost like a new fashion among the students. Not only this the students in the past used to have limited opportunities for taking tuition and coaching centres which now-a-days has become very easy as there are many teachers who can support their learning in the coaching and tuition centres. The most important change in shadowing in education was found to be the use of online resources for the support of their learning and preparation of examinations. Many students at present were in the view that there are a lot of materials for their studies may that be learning or preparing for the examinations which students can easily use in their computers and even smart phones. There are different apps and blogs/ Vlogs easily available in the online sources. The students were found to be thinking that instead of going to the tuition or coaching centres and using other means of shadowing in education they can use the online resources which will not only save their money and time, but also the chances of getting indulged in unnecessary activities of the young age. The teachers also felt that their tuition and coaching centres would not get as many students as they used to teach in the past.

REFERENCES

- Bray, M. (2010). Researching shadow education: methodological challenges and directions. *Asia Pacific Education Review* 11(1): 3–13.
- ----- (2013). Benefits and tensions of shadow education: Comparative perspectives on the roles and impact of private supplementary tutoring in the lives of Hong Kong students. *Journal of International and Comparative Education*: 2(1).
- (2017). Schooling and its supplements: Changing global patterns and implications for comparative education. *Comparative Education Review*, *61*(3), 469–491. https://doi.org/10.1086/692709.
- (2021) Shadow education in Africa private supplementary tutoring and its policy implications. *Comparative Education Research Centre*. The University of Hong Kong

- Bray, M. & Chad L. (2012). Shadow education: Private supplementary tutoring and its implications for policy makers in Asia. Mandaluyong City, Philippines: Asian Development Bank.
- Buchmann, C., D. J. Condron, and V.J. Roscigno. (2010). Shadow education, American style: Test preparation, the SAT and college enrollment. *Social Forces* 89(2):435-61.
- Byun, Soo-yong, Park, H. &Kim,K (Eds.)(2014). Shadow education and academic success in Republic of Korea. *Korean Education in Changing Economic and Demographic Contexts*
- Ho Yung, K. W. (2019). Investing in English private tutoring to move socially upward: a narrative inquiry of an underprivileged student in Hong Kong, *Journal of Multilingual and Multicultural Development. Hong Kong*.
- Jansen, D., Elffers, L. & Jak, S. (2023) A cross-national exploration of shadow education use by high and low SES families, International Studies in Sociology of Education, 32(3) 653-674, DOI: 10.1080/09620214.2021.1880332
- Javadi, Y. & Kazemirad, F. (2020). Worldwide shadow education epidemic and its move toward shadow curriculum. *Journal of Language Teaching and Research*, 11(2), 212-220. DOI: http://dx.doi.org/10.17507/jltr.1102.09
- Kim, Y. C., Gough, N., & Jung, J.-H. (2019). Shadow education as an emerging focus in worldwide curriculum studies. *Curriculum Matters*, 14, 8–30. https://doi.org/10.18296/cm.0027
- Krishnaswamy, J., Seow S. K., & Annamalai, N. (2019). The shadow education system: Students' responses to private tutorial learning. *Malaysian Journal of Learning and Instruction*, 16(2), 201-225.
- Liang H, Wang Z. & Wu W (2022). The effect of shadow education on Hong Kong student wellbeing: Evidence from PISA 2018. Front. Psychol. 13:860179. doi: 10.3389/fpsyg.2022.860179
- Malik, M. A. (2017). Shadow education: Evolution, flaws and further development of the term. *Social Sciences and Education Research Review*, *4*(1), 6–29.
- Stevenson, D. L. & Baker, D. P. (1992). Shadow education and allocation in formal schooling: transition to university in Japan. *American Journal of Sociology*, 97 (6).