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PROMOTING INCLUSION IN CLASSROOM THROUGH COOPERATIVE INSTRUCTIONAL TECHNIQUES

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Abstract

This article investigates the effectiveness of various cooperative instructional techniques for promoting the inclusion of girls, marginalized, and disadvantaged children in secondary education in Nepal. The study used interpretivist paradigm followed by basic qualitative research, gathering information through focus group discussions, participant observation, and document analysis in a Nepali public school especially with grades 9-10 students. Four FGDs comprising of girls, marginalized, and disadvantaged students were conducted to gather qualitative information for the study. Furthermore, more than 20 conjugative lessons in social studies were conducted by using various instructional techniques. Then required information was collected, edited, transcribed, and analyzed by using various verbatim shared by informants. Study results showed that cooperative instruction methods were effective to cultivate interdependence, active engagement, we feeling, and inclusivity by empowering all students, including girls, marginalized, and disadvantaged to contribute and gain confidence. They were also useful to support and strengthen peer relationships, value diverse perspectives of students, foster social interaction and a sense of belonging, which ultimately improve learning students by breaking down social barriers.

Keywords: Collaboration, participation, inclusion, improved learning

Introduction

Nepal, a nation rich in diversity, is a home to 142 distinct castes speaking 124 languages (Central Statistics Office, 2022). Recognizing this heterogeneity, the Nepal government has made various attempts to ensure equitable access to education for all children disregarding their caste, gender, ethnicity, linguistic background, and so on (Ministry of Education, 2016). This has resulted in over 96% primary school enrollment, including girls, marginalized groups, and children with disabilities (Center for Education and Human Resource Development [CEHRD], 2023). However, despite this progress in enrollment, quality education remains a challenge especially for marginalized and disadvantaged students due to ineffective instructional practices and exclusionary educational approaches (Curriculum Development Center, 2019; Human Rights Watch, 2011). Thus, ensuring equitable access to quality education remains a significant hurdle despite achieving high enrollment rates at primary level. The persistence of ineffective teaching methods and exclusionary practices disproportionately affects the learning of marginalized and disadvantaged students.

Nepali classrooms are characterized by a wide range of student differences in terms of culture, language, ethnicity, learning needs, cognitive abilities, and learning styles (Curriculum Development Center, 2019). The currently practiced monolithic curriculum often fails to address these diverse needs, and disproportionately affects girls, Dalit children, and those from marginalized and disadvantaged families (Human Rights Watch, 2011). Traditional, textbook-driven instructional methods limit student engagement and comprehension, compelling them to perform poorly compared to the children from mainstream communities (Curriculum Development Center, 2019). Cooperative learning techniques such as jigsaw, group discussions, peer tutoring, etc. offer a promising alternative to improve academic outcomes for all students by fostering their active participation.

Inclusive education values and supports diverse learners in a shared learning environment (Couston & Tracy-Bronson, 2015). It aims at creating equitable educational practices by dismantling discrimination and prejudice (Zelta, 2016). In Nepal, inclusive education focuses on developing systems that provide non-discriminatory educational opportunities within communities by respecting multicultural differences (Curriculum Development Centre, 2007). Cooperative learning methods are recognized as effective strategies for promoting inclusion, enabling active participation and fostering a sense of belonging among all students, including those with special learning needs (Bhroina & King, 2020; Mulholland & O'Connor, 2016). Students work together in

groups to achieve specific goals in cooperative learning (Lawther, 2015). This approach shifts learning paradigm from teacher-centered to peer-centered by promoting collaboration and enhancing academic achievement for all students including those with special learning needs (Putnam, 2009). Using cooperative instructional techniques on a routine basis can be fruitful not only for students' learning but also for strengthening educational quality.

Cooperative instructional techniques promote social interaction through heterogeneous group work, cultivating interpersonal skills, respect, and a sense of belonging (Crawford et al., 2005; Gargiulo & Metcalf, 2013). Beyond academic achievement and motivation (Bhroina & King, 2020; Putnam, 2009), cooperative learning develops essential soft skills like communication, collaboration, and leadership (Bhroina & King, 2020). By assigning specific roles and responsibilities, these techniques ensure equal participation and encourage quieter students to engage by fostering a safe space for risk-taking and learning from mistakes (Lawther, 2015). In addition, cooperative learning cultivates a classroom culture that values diversity and empowers every student, including those with special learning needs, to succeed.

Many school teachers lack necessary skills to implement effective instructional techniques and utilize available resources to maximize student learning (Sikanku, 2018). The prevalent content-driven approach limits student interaction and participation. But cooperative learning encourages active engagement, idea sharing, and knowledge construction (Mulholland & O'Connor, 2016). Research indicates that cooperative learning enhances academic achievement and social acceptance of students with special needs (Putnam, 2009; Villa & Thousand, 2016). Cooperative instructional techniques play crucial role in dismantling the myths towards learning capabilities of girls, marginalized, disadvantaged, and children with disabilities. Students can develop essential social skills, build positive peer relationships, and cultivate a sense of belonging through collaborative activities. Furthermore, cooperative learning enables teachers to create inclusive learning environment to acknowledge differences and promote acceptance by ensuring active involvement of all learners in learning process. In this regard, this article aims at identifying the effectiveness of various cooperative instructional techniques for promoting the inclusion of girls, marginalized and disadvantaged children in secondary education in Nepal.

Research Methodology

This study adopted an interpretivist paradigm followed by basic qualitative design (Merriam & Tisdell, 2016). Interpretivism acknowledges multiple realities constructed by individuals towards specific phenomenon (Chilisa & Kawulich, 2012; Creswell & Poth, 2018) and basic qualitative research design is used when investigator has difficulty in selecting specific qualitative research design. The population of this study comprised of all students attending at secondary level, especially grades 9-10, in public schools. Sample of the study was a public school where corresponding author was working and students, including girls and marginalized, were studying at grades nine and ten in the school.

Participant observation, focus group discussions [FGDs], and document analysis (Ary et al., 2010; Creswell & Poth, 2018) were used to collect qualitative information about real-time classroom interactions, students' experiences and perspectives towards cooperative instructional techniques (jigsaw, think-pair-share, peer tutoring, and know-want to know-learned) used during this study process. Four FGDs (two from grade 9 and two from grade 10) comprising of girls, marginalized, and disadvantaged students were conducted to gather qualitative information for the study. Furthermore, five conjugative lessons in social studies were conducted by using each instructional technique sampled in this study. In some lessons, two or more than two of these instructional techniques were practiced to identify their effectiveness in learning process.

As Social Studies teacher, corresponding author herself observed all activities that took place inside the classroom while using particular instructional techniques. This disguised involvement of corresponding author as researcher helped her to gather credible and authentic information during the research process. Furthermore, document analysis was used to triangulate findings and provide supplementary information (Corbin & Strauss, 2015). Gathered information was edited, transcribed, coded, categorized, and thematized based on studied cooperative instructional techniques with a wide range of verbatim and thick descriptions to enhance credibility. Triangulation, member checking, and peer review were also used to ensure authenticity (Merriam & Tisdell, 2016; Creswell & Poth, 2018) and credibility. Informed consent was obtained from all participants and their confidentiality was assured through the use of pseudonyms. The researcher prioritized protecting participants from any form of social, psychological, and cultural harm by maintaining anonymity throughout the study (Cohen et al., 2007). This commitment to ethical practice was supposed to ensure the integrity and trustworthiness of the research findings.

Results

Based on the information collated from semi-structured interviews with secondary level teachers, focus group discussions with secondary level students, classroom observation, and document analysis, effectiveness of four collaborative instructional approaches – Jigsaw, Think-Pair-Share, Pair Tutoring, Know-Want to Know-Learned – in relation to promoting inclusion of girls, marginalized and disadvantaged children in education has been reported. Various verbatim shared by informants were used to show the effectiveness of the approaches below respectively.

Jigsaw: An Instructional Approach to Cultivate Inclusive Learning Culture

Jigsaw method was developed by Elliot Aronson in early 1970s. It was found highly effective instructional method in promoting classroom inclusion by fostering interdependence and shared responsibility among students, including those with girls, marginalized and disadvantaged background. *When our teacher used jigsaw, even the quietest friend in the class contributed to build knowledge,* FGD-2 from Grade-9 concluded. Participant observation also revealed *increased engagement of almost all students in group discussions, some passive students were also actively answering the questions asked to whole group.* This study disclosed that Jigsaw creates an interesting learning platform by dividing learning materials into smaller and manageable segments, where each student's contribution is essential for group's success. Furthermore, it revealed that interdependence of group members optimizes active

engagement of students, including girls, marginalized and less confident learners, which directly impacted on overall learning of group. *The jigsaw method encouraged peer collaboration by creating a more supportive and equitable learning environment,* FGD-1 from Grade-10 informed. Furthermore, students got opportunity to become 'experts' on their assigned topics, which boost their self-esteem and empower them to share their knowledge with peers.

Classroom observation disclosed that jigsaw method is very useful to enhance students' engagement and social interaction for building an inclusive classroom community. It encourages students to appreciate diverse perspectives and develops interpersonal skills within them by creating ample opportunities to work in heterogeneous groups. The increased interaction helps both teacher and students break down social barriers and reduces prejudice, as students from different backgrounds work collaboratively towards a common goal. *This method encourages active listening and communication, where students effectively shared and received information to complete assigned work,* FGD-2 from Grade-10 stated. Such collaborative activities not only improve students' learning but also foster democratic culture that finally led to a more inclusive and supportive educational environment. Thus, this study found that the Jigsaw technique serves as a highly effective pedagogical approach for fostering inclusion in education.

Think-Pair-Share: A Method of Promoting Inclusive Participation and Confidence

Think-Pair-Share [TPS] is a cooperative learning strategy developed by Frank Lyman and his colleagues in early 1910s to enhance students' engagement, critical thinking, and communication skills. This study found it as another effective collaborative technique to foster inclusion in education by ensuring active involvement of students. *The 'Think' phase allows us to process information and generate our own ideas by offering a safe space for developing our own thoughts independently,* FGD-2 from Grade-9 indicated. *An encouraging environment was provided through TPS for initial engagement by allowing us to formulate ideas before sharing with peers in larger group,* FGD-1 from Grade-10 added. The 'Pair' phase was also found to encourage peer interaction and collaborative learning among the students including girls, marginalized, and disadvantaged.

Participant observation also disclosed that majority of students were actively involved in learning process while using this method in the lessons of Social Studies. This interaction promotes peer support and allows students to learn from each other by building confidence and fostering a sense of belonging. *I used to be scared to answer questions in class but think-pair-share opportunity helped me develop my confidence,* a Grade-9 student shared while having FGD. Hesitant students were also found sharing their ideas with their peers in Social Studies class. Furthermore, *the 'Share' phase provides an opportunity for us to exchange our thoughts with peers in larger class to get feedback on a required basis,* FGD-1 From Grade-9 concluded. Participant observation also showed that students contribute to collective learning experience by reinforcing the value of diverse perspectives and promoting a sense of community by sharing their ideas. It also helps to develop various twenty-fist century skills (communication, thinking, collaboration, critical thinking for example) as intended by competency-based school curriculum in Nepal. In this method, all students were given equal opportunities to contribute in peers at first and then in whole class.

Thus, the 'Think' phase provides an opportunity to each individual learner for processing and generating ideas and creating a safe foundation for peer collaboration especially for those who are hesitant to speak immediately. Another phase 'Pair' cultivates collaborative learning culture among all students by giving a change to interact with a peer on given topic. The final phase 'Share' then extends this engagement to the larger group by providing opportunities for students to exchange ideas, receive feedback, and contribute to a collective learning experience. As a whole, this method was also found as an effective collaborative technique to promote inclusion of excluded in education.

Peer Tutoring: An Effective Method for Individualized Support

Study findings showed that peer tutoring promotes inclusion in education by creating a supportive and conducive learning environment where students of varying abilities can learn from and with each other. *When my friend helped me learn mathematical contents, I understood it better, and I felt less embarrassed to ask for help,* a grade 10 student during FGD shared. It was also found that this method fosters a sense of community and democratic culture because students were given opportunities to collaborate with each other. *A friend of mine is good in English but I am good in Math as compared to her.... We help each other to learn contents from different subjects,* a student of grade 9 replied while participating in FGD. Thus, teachers can encourage students to play supplementary role to support each other by using this instructional technique inside the classroom. In addition, participant observation disclosed that *increased interaction and positive relationships between students of diverse academic abilities were also strengthened through this approach.* Study results also indicated that peer tutoring allows for individualized instruction and targeted support by addressing diverse learning needs of students within a classroom and less knowledgeable one can get benefit from more knowledgeable one in collaborative culture.

This approach was found beneficial for majority of students, including girls, marginalized or disadvantaged who, in many cases, require additional assistance. It provides them with personalized support to strengthen their learning. Additionally, study result depicted that peer tutoring empowers tutor students to enhance their own understanding of curricular contents and develop valuable leadership and communication skills. It was also found that peer tutoring helps students dismantle social barriers and reduce feelings of exclusion. This method also fosters a more inclusive and accepting classroom culture by engaging students in collaborative learning. Peer tutoring increases student engagement and motivation because students are more likely to participate actively when they feel supported and valued, FGD-1 from Grade-10 concluded. Thus, peer tutoring creates an inclusive learning environment by providing opportunities for students to learn from and teach each other.

The findings of this study interestingly demonstrate that peer tutoring is a valuable strategy for promoting inclusion in education by establishing a supportive and conducive learning atmosphere where students with diverse abilities can learn collaboratively. The opportunities for collaboration consist in peer tutoring cultivate a strong sense of community and belonging

within the classroom. The individualized support provided in peer tutoring effectively address the diverse learning needs of students, including girls and students from marginalized and disadvantaged backgrounds, since students feel more comfortable to offer support in horizontal relationship, with same age peers in this case, compared to vertical one, with teacher for example.

KWL Chart: Tool for Connecting Curricular Contents with Students' Previous Knowledge

This approach was originally developed by Donna M. Ogle in 1986. It was found highly effective to engage students in the learning process and enhance overall learning outcomes. Study showed that Know, Want to Know, and Learned [KWL] chart, when used in collaborative way, works as a powerful tool for promoting inclusion by engaging students, including girls, marginalized, and disadvantaged in the learning process. *By initiating learning with 'Know' column, students are encouraged to share their existing knowledge and experiences to get entry into new topic going to be discussed. This phase helps students relate their pre-experiences with new topic to be learnt,* FGD-1 from Grade-10 concluded. In addition, *the KWL chart helped us make the learning more student-centered. Students, who were usually pushed to the side, were brought into the center of the learning and made them feel valued,* FGD-2 from Grade-9 revealed. This step was found beneficial for students who might feel marginalized by optimizing their contributions and valuing their voices. *When we started with 'Know,' I realized that we knew more than we thought... Sharing our experiences made us feel like our voice mattered,* a member of FGD-2 from Grade-10 informed.

Participant observation also showed that, initially, marginalized students were hesitant to contribute, but when lesson was started with 'Know,' they shared valuable local knowledge with high motivation and confidence. Furthermore, 'Want to Know' phase, in one hand, helped teacher tailor lessons based on students' learning needs and interests, and empowers students by allowing them to express their curiosity on the other. *Collaborative completion of KWL chart promotes peer interaction and knowledge sharing by creating a supportive learning environment where students learn from and with each other,* FGD-2 from Grade-9 disclosed. Participant observation also revealed that students, who did not speak, were also actively contributing to fill the KWL chart.

The 'Learned' column, completed after instruction, facilitates reflection and consolidation of new knowledge by ensuring that all students, disregarding their background or abilities, can demonstrate their learning in a meaningful way. *Learning together in the 'Learned' section, actually helped us understand curricular contents better. My friends explained it in ways I understood,* a student during FGD-2 from Grade-9 stated. Collaborative completion of the 'Learned' section enables students to expand their horizon of knowledge through various modes of expression. *After engaging in the activity guided by KWL chart, I learned that everyone has something to contribute, even if they are different than me,* a student in FGD-2 from Grade-10 disclosed. The KWL chart effectively encourages marginalized and disadvantaged students by promoting their inclusion in education by providing a structured framework for active participation.

Discussion

The findings of this study strongly support the results found from existing literature regarding the effectiveness of Jigsaw method in promoting inclusive and engaging learning environment. Some studies (Khan et al., 2024; Sharma et al., 2024 for example) indicate that Jigsaw method significantly improves students' knowledge and retention compared to traditional teaching method as study results revealed quietest students in the class also contributed to build knowledge in their active engagement. Furthermore, the study showed that Jigsaw creates an interesting learning platform for all students by dividing learning materials into smaller and manageable segments, where each of them should contribute for group's success. Ozkan and Uslusoy (2024) also state that the Jigsaw technique positively contributes to the academic success of all students, including girls, marginalized, and those with disabilities. Furthermore, study results depicted that when students become 'experts' on assigned topics, it empowers them and boosts their self-esteem as indicated by Sharma et al. (2024). The increased motivation for learning observed in this study is also supported by the findings reported by Khan et al. (2024).

In addition, the findings of study underscored that students learn to appreciate diverse perspectives and develop stronger interpersonal skills by working together in heterogeneous groups as highlighted Johnson and Johnson (2009). The Jigsaw implications in promoting classroom inclusion by fostering interdependence and shared responsibility among students (Aronson, 2000) is clearly evidenced by this study. Study results also depicted that students can learn various twenty-first century skills at a time while engaging in Jigsaw activities. In this regard, Salubayba et al. (2020) emphasize that students develop essential human skills such as listening, communication, and problem-solving through peer teaching and discussions within the Jigsaw framework. Thus, increased engagement of students, peer collaboration, and cultivation of a sense of belonging and mutual respect resulted from Jigsaw activities help to promote inclusion in education.

The findings of this study, furthermore, strongly support the effectiveness of Think-Pair-Share [TPS] strategy in fostering an inclusive and engaging learning environment through collaborative activities among students. In TPS approach 'Think' phase provides a safe space to all students for developing their own thoughts independently and offers an encouraging environment for initial engagement. Marzano and Pickering (2005) also indicates that TPS encourages active participation of all by providing an opportunity for every student to think and contribute to knowledge building process. The observed active involvement of the majority of students in Social Studies lessons, as revealed by participant observation, further reinforces the notion that TPS can motivate students, even those with little intrinsic interest in the topic being discussed. Furthermore, Otukile-Mongwaketse (2011) identified TPS as a valuable collaborative strategy for promoting inclusion by actively engaging all students.

Study findings also showed that the 'Pair' phase encourages peer interaction and collaborative learning among students. Previous research findings also directly support the concept that TPS fosters a cooperative learning environment where students learn with and from each other (Cabasag, 2025). Similarly, Hegwood (2024) stated that 'Pair' phase is evidenced by the increased confidence and sense of belonging reported by students. Similarly, study results depicted that the 'Share' phase, which provides opportunities to 'exchange thoughts with peers in larger class to get feedback' and contribute to 'collective learning experience by

reinforcing the value of diverse perspectives.' TPS method values every student's voice by breaking down barriers to active participation in the class (Mulholland & O'Connor, 2016). Thus, this method helps develop twenty-first century skills as intended by competency-based school curricula, including Social Studies, in Nepal.

Study results also revealed that peer tutoring cultivates a supportive and conducive learning environment where students of varying abilities can learn from and with each other. This is particularly crucial for promoting inclusivity, as it allows for individualized instruction and targeted support by addressing diverse learning needs of students within a classroom. Study findings also highlight significant advantage of peer support, particularly for students who may require additional assistance, including girls, marginalized, and disadvantaged. Some studies (Moeyaert et al., 2021; Okilwa & Shelby, 2010 for example) also added peer tutoring provides individualized support tailored to specific learning needs and styles, proving especially beneficial for at-risk students and those with disabilities by improving academic outcomes. Intentional pairing of diverse learners can create successful structured tutoring experiences in inclusive classrooms (Alexander, 2024). Therefore, this technique should be used on routine basis to promote collaborative learning environment in real classroom settings.

Beyond academic benefits, peer tutoring fosters a strong sense of community and a democratic culture within the classroom by providing opportunities for collaboration. This collaborative culture, rooted in Vygotsky's socio-cultural theory, emphasizes the role of social interaction in cognitive development, where peer tutors can effectively 'scaffold' learning by providing necessary support for tutees to accomplish tasks (Pitchard & Woollard, 2010). This study also found that peer tutoring empowers tutor students to enhance their own understanding of curricular content and develop valuable leadership and communication skills as indicated by Atamosa and Dioso (2024). They noted that significant improvements are seen in academic performance for both tutors and tutees as the result of peer tutoring. Therefore, this study strongly suggest that teachers should practice this instructional technique on a routine basis to allow students to play a supplementary role in supporting each other for academic growth.

Moreover, this study revealed that KWL chart helps to promote students' involvement in learning when used collaboratively. The initial phase, students brainstorm and list everything they already know about a topic. This process helps teachers link curricular content to previous knowledge of students. Study indicated that it does not only strengthen students learning but also motive them towards the lessons. A study (Storm, 2023 for example) also disclosed that this phase helps students relate their pre-experiences with new topic to be learnt. The Teacher Toolkit (n.d.) also indicates that teachers can activate existing schema of students and make connections between new and prior information through KWL chart to enhance understanding. This initial step helps validate and value every student's existing knowledge and curiosities (GroupMap, n.d.), including girls, marginalized, and those with disabilities to optimize their contributions and value their voices. This study also showed that initially hesitant marginalized students became highly motivated and confident in sharing valuable local knowledge once the lesson began with the 'Know' column.

The second phase 'Want to Know' further contributes to inclusivity by empowering students and providing valuable diagnostic information for teachers. In this stage, students share questions about what they are curious regarding the topic (Lucidchart Blog, n.d.). This process not only empowers students by allowing them to express their curiosity but also helps teachers tailor lessons based on students' learning needs and interests (GroupMap, n.d.). The chart is also very useful to improve reading comprehension of students (Macartney, 2023). Collaborative working culture created by KWL chart addresses the social isolation often experienced by marginalized students (Johnson & Johnson, 2009). Participant observation also highlighted that even non-speaking students actively contributed to filling the KWL chart. Finally, the 'Learned' column, completed after instruction, facilitates reflection and consolidation of new knowledge. This reflective stage encourages students to synthesize information, connect it to their prior knowledge, and identify any clarified misconceptions (Storyboard That, n.d.). As a whole, this illustrates that how the KWL chart effectively encourages and promotes the inclusion of marginalized and disadvantaged students by providing a clear framework for active participation in learning.

Conclusion

Instructional techniques used by teachers, while implementing curricula, need to be engaging and participatory to strengthen students learning. In many cases, quality curricula and learning materials go in vain due to faulty instructional process and cause huge educational loss. Collaborative instructional methods – Jigsaw, TPS, peer tutoring, and KWL for examples – can be an option to minimize such loss in cost-effective way. These techniques promote active participation, self-motivation, collaboration, democratic culture, we-feeling, interdependence, a sense of belonging, empathy, inclusivity, and retention by providing a supportive and conducive learning spaces. By valuing diverse perspectives, boosting self-esteem, and enhancing social interaction, these strategies not only improve academic performance of students but also cultivate essential 21st-century skills as intended by the competency-based curricula currently implemented in Nepalese schools. These methods are crucial for implementing social science curricula, including Social Studies, because these curricula are designed to cultivate various life skills.

References

Alexander, K. L. (2024). *Using intentional pairing and peer tutoring during structured literacy activities in inclusive classrooms*. https://ila.onlinelibrary.wiley.com/doi/ full/10.1002/trtr.2329

Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to research in education* (8th edition). Wadsworth, Cengage Learning.

Atamosa, M. S., & Dioso, E. D. (2024). Peer tutoring approach and academic performance of pupils: an experimental study. *International Journal of Innovative Science and Research Technology, 9*(7), 1085. https://www.ijisrt.com/peer-tutoring-approach-and-academic-performance-of-pupils-an-experimental-study

Bhroina, O. N., & King. F. (2020). Teacher education for inclusive education: a framework for developing collaboration for the inclusion of students with support plans. *European Journal of Teacher Education, 43*(1), 38-63. https://www.tandfonline.com/doi/full/ 10.1080/02619768.2019.1691993#d1e160

Cabasag, A. C. (2025). Exploring the usefulness of think-pair share strategy enhancing understanding in literature lessons. *Recent Advances in Evoluion of Education and Outreach, 2*(1). https://www.biolscigroup.com/articles/RAEEO-2-104.php

Causton, J., & Tracy-Bronson, C. (2015). *The educator's handbook for inclusive school practices.* Paul H. Books Publishing Co. Inc.

Center for Education and Human Resource Development (2023). *Flash I report – 2022/23.* Government of Nepal, Ministry of Education, Science and Technology.

Central Statistics Office (2022). *National population and housing census 2021.* National Planning Commission Secretariat.

Chilisa, B. & Kawulich, B. (2012). *Selecting a research approach: paradigm, methodology and methods.* https://www.researchgate.net/publication/257944787

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education.* Routledge.

Corbin, J., & Strauss, A. (2015). *Basic of qualitative research: Techniques and procedures for developing grounded theory* (4th edition). SAGE Publication, Inc.

Crawford, A., Saul, E. W., Mathews, S., & Makinster, J. (2005). *Teaching and learning activities for the thinking classroom.* Open Society Institute.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: choosing among five approaches* (4th edition). SAGE Publications.

Curriculum Development Center (2007). *National curriculum framework.* https://nepalindata.com/media/resources/items/20/bNational-Curriculum-Framework-2007-English.pdf

Curriculum Development Center (2019). *National curriculum framework for school education.* Ministry of Education, Science and Technology.

Gargiulo, R. M., & Metcalf, D. (2013). *Teaching in today's inclusive classrooms* (2nd edition). Wadsworth, Cengage Learning.

GroupMap. (n.d.). *KWL Chart, KWL Chart Template Online*. https://www.groupmap.com/ portfolio/kwl-chart

Hegwook, V. (2024). *Think-Pair-Share strategy: how this activity can enhance student engagement*. https://www.prodigygame.com/main-en/blog/think-pair-share-learning-strategy

Human Rights Watch (2011). *Future stolen: barriers to education for children with disabilities.* https://reliefweb.int/report/nepal/futures-stolen-barriers-education-childrendisabilities-nepal

Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher, 38*(5), 365-379. https://doi.org/10.3102/0013189X09339057

Khan, S., Ullah, S., Abbas, M. M., Khatoon, M., Malik, M. S., & Noreen, S. (2024). Effect of Jigsaw strategy on academic achievement and motivation of science students: evidence from classroom intervention. *Kurdish Studies*, *12*(1), 3455–3462. https://kurdishstudies. net/menu-script/index.php/KS/article/view/1625

Lawther, S. (2015). *Fostering inclusion in the classroom through cooperative learning.* Ontario Institute for Studies in Education of the University of Toronto. https://utoronto.scholaris.ca/server/api/core/bitstreams/7dfd63b4-28f3-4f9a-9940-7689162 9 60a5/content

Lucidchart Blog. (n.d.). *Harnessing the power of KWL charts in education*. https://www.lucidchart.com/blog/what-is-a-kwl-chart

Macartney, N. (2023). *How to use a KWL chart to improve reading comprehension.* https://bedrocklearning.org/literacy-blogs/how-to-use-a-kwl-chart-to-improve-reading-comprehension/

Marzano, R. J., & Pickering, D. J. (2005). *Building academic vocabulary: teacher's manual*. https://www.ascd.org/books/building-academic-vocabulary-teachers-manual?variant=1051 53

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: a guide to design and implementation* (4th edition). John Wiley and Sons, Inc.

Ministry of Education (2016). *School sector development plan 2016–2023.* http://elibrary.moest.gov.np/handle/123456789/187

Moeyaert, M., Klingbeil, D. A., Rodabaugh, E., & Turan, M. (2021). Three-level meta-analysis of single-case data regarding the effects of peer tutoring on academic and social-behavioral outcomes for at-risk students and students with disabilities. *Remedial and Special Education, 42*(2), 94-106. https://files.eric.ed.gov/fulltext/EJ1287976.pdf

Mulholland, M., & O'Connor, U. (2016). Collaborative classroom practice for inclusion: perspectives of classroom teachers and learning support/resource teachers. *International Journal of Inclusive Education 20*(10), 1070-1083. https://doi.org/10.1080/13603116.2016. 1145266

Okilwa, N. S. A., & Shelby, L. (2010). The effects of peer tutoring on academic performance of students with disabilities in grades 6 through 12: a synthesis of the literature. *Remedial and Special Education, 31*(6), 107-118.https://journals.sagepub.com/doi/10.1177/0741932 509355991

Otukile-Mongwaketse, M. E. (2011). *Implementing inclusive education in Botswana primary school settings: an exploration of teachers' understanding of curriculum, curriculum adaptations, and children who have learning difficulties.* University of Exeter. https://ore.exeter.ac.uk/repository/bitstream/handle/10036/3435/Otukile-Mongwaketse.pdf? sequence=1

Ozkan, S., & Uslusoy, E. C. (2024). Outcomes of jigsaw technique in nurse education: a systematic review and meta-analysis. *Nurse Education in Practice.* https://pubmed.ncbi.nlm.nih.gov/38301377/

Pritchard, A., & Woollard, J. (2010). *Psychology for the classroom: constructivism and social learning.* Routledge, Tyler and Francis Group.

Putnam, J. W. (2009). Cooperative learning for inclusion. In P. Hick, R. Kershner, & P. T. Farrell (Editors). *Psychology for Inclusive Education: New Direction in Theory and Practice.* Routledge Taylor and Francis Group.

Salubayba, P. J. C., Serrano, E. P., Baconguis, R., & Dicolen, E. D. (2020). The effectiveness of using the Jigsaw technique in teaching cellular structure among selected grade 7 students of the Laguna College, San Pablo City, Philippines. *Journal of Human Ecology*, 7, 89-99. https://ovcre.uplb.edu.ph/journals-uplb/index.php/JHE/article/view/309/282

Sharma, S., Singh, J. P., & Devi, P. (2025). Beyond traditional boundaries: Exploring the jigsaw method to strengthen academic achievement in biology. *Multidisciplinary Science Journal.* https://malque.pub/ojs/index.php/msj/article/download/5282/2497/30579

Sikanku, S. T. (2018). Challenges in teaching pupils with visual impairment in inclusive classrooms: The experience of Ghanaian teachers. *Research on Humanities and Social Sciences, 8*(11), 43-48. ISSN 2224-5766.

Storm, A. (2023). KWL chart teaching and learning strategy: examples, templates, and other strategies. https://www.thinkific.com/blog/kwl-chart-teaching-learning-strategy/

Storyboard That. (n.d.). KWL chart template-graphic organizer and templates. https://www.storyboardthat.com/articles/e/kwl-chart

The Teacher Toolkit. (n.d.). *KWL*. https://www.theteachertoolkit.com/index.php/tool/kwl

Villa, R. A., & Thousand, J. S. (2016). *The inclusive education checklist: a self-assessment of best practices.* Dude Publishing, A Division of National Professional Resources, Inc.

Zelta, B. (2016). *Inclusive education: perspective on pedagogy, policy, and practice.* Routledge, Tayler and Francis Group.