



STUDENT TEACHERS' PERCEPTIONS ON THE INTERACTIVE LEARNING SESSIONS CONDUCTED VIA ZOOM

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This study investigated the perception of student teachers enrolled in the BEd Honours in Special Needs Education (SNE) Degree Program on Interactive Learning Sessions conducted via Zoom technology within the Open University of Sri Lanka. This study employed a survey design with a mixed-methods approach to gather insights from student teachers at Levels 5 and 6 of the BEd(Hons)SNE enrolled in the 2023/2024 academic year. Findings indicate that these Sessions are regularly conducted, often lasting 2-3 hours, and incorporate a mix of group work, lectures, and practical sessions, supported by various digital tools like PowerPoint and breakout rooms. Overall, the majority of student teachers reported a positive experience, highlighting convenience, reduced travel costs, and flexibility as key advantages. A high satisfaction with teacher-student interaction and perceived helpfulness in achieving learning objectives was also noted. However, a significant portion of student teachers faced challenges, primarily with connectivity issues, technical glitches, and continuously engaging with the sessions. Student teachers' suggestions for enhancing the quality of Zoom-based Interactive Learning Sessions include incorporating more interactive tools, providing dedicated technical support, sharing session recordings, implementing regular teacher training, encouraging camera use and active participation, and collecting continuous feedback. The study concludes that while the Zoom offers an effective and accessible learning modality for BEd(Hons) SNE student teachers, further improvements are necessary to address existing challenges and maximize its potential for all learners.

Keywords: BEd(Hons)SNE, student teacher, interactive learning sessions, Zoom technology

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1. INTRODUCTION

The landscape of education has been profoundly transformed by the advent of Open and Distance Learning (ODL) systems, offering flexible and accessible pathways to accessing knowledge and skills. At its core, the Open and Distance Learning refers to an educational methodology where teachers and learners are not necessarily bound by the same physical space or time, providing flexibility in modalities, timing of instruction, and often, admission criteria, without compromising quality (UNESCO TVETipedia). This approach aims to dismantle traditional barriers to access, such as geographical limitations, financial constraints, prior academic qualifications, age, and personal commitments, thereby increasing inclusive learning opportunities for a diverse student population.

The recent global challenges, such as the COVID-19 pandemic, underscored the critical role of flexible learning modalities in ensuring continuity of education. As digital infrastructure improves, innovative teaching methods evolve. Thus, ODL can provide alternative pathways for children in remote areas, those facing health challenges, or those seeking specialized learning experiences not readily available in traditional schools. According to Madhubhashini(2021), UNESCO had suggested implementation of online teaching and learning via new technology for the higher education sector due to the seriousness of the Covid-19 pandemic. The Open University of Sri Lanka (OUSL) which promotes ODL mode of teaching has also transformed its teaching and learning to the online mode. The lectures, oral presentations, supervision, consultations, counseling etc. are conducted via zoom.

As a result, the Zoom platform was provided to university academics to conduct teaching-learning sessions (and other academic activities. Accordingly, during that crucial time, the Open University of Sri Lanka all Interactive Learning Sessions, activity-based sessions (a type of assessment), teaching practice evaluations, action research project supervision, and meetings were conducted via Zoom. Accordingly, the Department of Special Needs Education at OUSL also implemented Zoom technology for academic activities without postponing their scheduled work. However, once everything returned to normal, the Department of Special Needs Education at OUSL has continued using Zoom technology for Interactive Learning Sessions due to several reasons. Due to limited academic expertise available, several SNE programs are conducted only in the main centre which resulted an increased transportation cost for student teachers. On the other



hand, in the ODL system, face-to-face teaching and learning activities are not compulsory. Sears (2020) highlighted that distance learning refers to a way of learning remotely without having regular face-to-face contact with the teacher in a traditional classroom setting. Therefore, zoom Interactive Learning Sessions are considered one of the most effective mechanisms of the ODL mode. In this context, the Department of Special Needs Education primarily intends to find out how the student teachers perceive the Interactive Learning Sessions conducted via Zoom for the highly sought-after Bachelor of Education Honours in Special Needs Education degree program. The study was guided by the following specific objectives:

Objectives:

1. Find out the status of Interactive Learning Sessions conducted via Zoom technology for the student teachers of BEd(Hons)SNE program of The Open University, Sri Lanka.
2. Identify the strengths and weaknesses of conducting Interactive Learning Sessions via Zoom technology from the point of view of student teachers of BEd(Hons)SNE program.
3. Make suggestions to enhance the quality & effectiveness of Interactive Learning Sessions conducted via Zoom technology.

2. METHODOLOGY

This study employed a convergent parallel mixed-methods design, integrating both quantitative and qualitative data collected simultaneously through a single survey instrument. This approach allowed for comprehensive exploration of student teachers' perceptions by combining numerical data with rich, descriptive insights.

The target population comprised undergraduates of the BEd(Hons) Special Needs Education Degree Programme (2023/2024), Levels 5 and 6. A sample of 100 students was selected using purposive sampling to specifically target those actively participating in Zoom-based Interactive Learning Sessions. While purposive sampling allowed focused data collection from relevant participants, it also limits the generalizability of findings beyond this group and may introduce selection bias, which is acknowledged as a study limitation. Data were gathered using a structured online questionnaire distributed via Google Forms, which included a combination of close-ended, multiple-choice, Likert-scale, and open-ended questions. This instrument was designed to collect quantitative data (e.g., frequency of sessions, satisfaction ratings) alongside qualitative responses (e.g., personal experiences, suggestions). Percentages were used to analyse quantitative data and qualitative techniques for the open-ended answers.

RESULTS AND DISCUSSION

This section presents an integrated analysis of both quantitative and qualitative data, following an exploratory framework. The aim is to understand not only how Zoom-based Interactive Learning Sessions are implemented and received by Bed



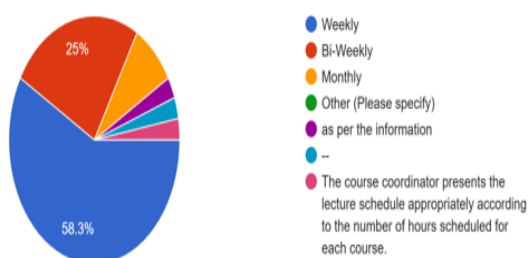
(Hons)SNE student teachers, but also why certain perceptions and patterns emerge in the Open and Distance Learning (ODL) context.

3.1. Objective 1: Present Status of Zoom-Based Interactive Learning Sessions

Frequency and Duration

Figure 1

Frequency of Zoom-Based Interactive Learning Sessions



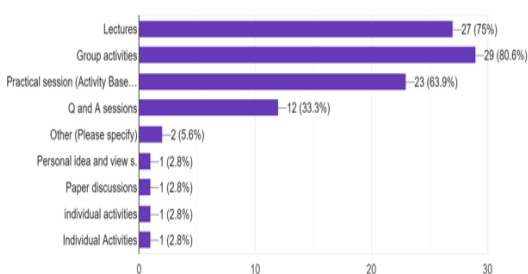
Quantitative findings indicate that Zoom sessions are conducted frequently, with 58.3% of student teachers attending weekly and 25% every fortnight, demonstrating institutional consistency in delivering online engagement. Sessions most commonly last 2–3 hours, which

reflects a standard structure for higher education virtual classes. However, several student teachers expressed concerns about session length. Some reported difficulty maintaining concentration, particularly when sessions exceeded 3 hours. This points to a tension between providing comprehensive content and maintaining student engagement.

Types of Activities and Tools

Figure 2

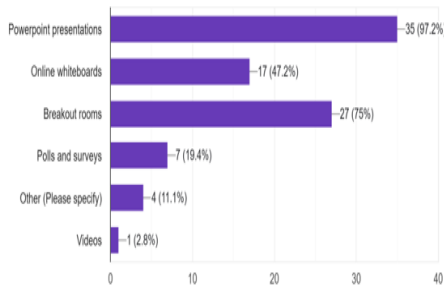
Activities Included in Zoom-Based Interactive Learning Sessions



The sessions incorporate a balanced mix of lectures (75%), group work (80.6%), and practical tasks (63.9%), promoting varied instructional methods. These findings indicate a blended pedagogical strategy aimed at promoting collaborative and applied learning.

Figure 3

Additional Tools/Resources Used During Zoom Sessions Digital tools such as PowerPoint (97.2%), breakout rooms (75%), and online whiteboards (47.2%) were frequently used. These tools support active learning, particularly in breakout rooms where students can interact in smaller groups.



Yet, some students noted inconsistency in the effective use of these tools, particularly in sessions that remained heavily lecture focused.

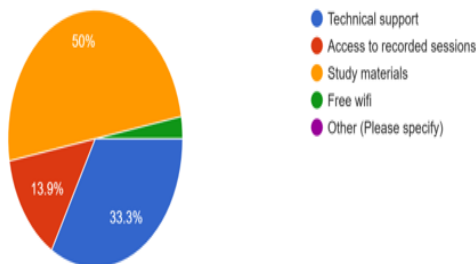
"Sometimes breakout rooms are used, but we're not guided clearly on what to do." (S.T 48) This suggests the potential for improvement in instructional design,

especially in guiding group activities.

Academic Support

Figure 4

Types of Support Provided by Academics for Zoom-Based Interactive Learning Sessions



Academic support was primarily provided through study materials (50%) and technical assistance (33.3%), but only 13.9% reported receiving recordings of sessions. This may hinder learning continuity for those facing connectivity issues. "I

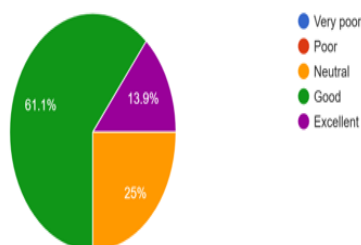
couldn't attend one session because of a power cut, and no recording was shared." (S.T 54) This highlights an accessibility gap, pointing to the need for a policy of consistently recording and sharing sessions.

3.2. Objective 2: Strengths and Weaknesses of Zoom-Based Interactive Learning Sessions

Perceived Effectiveness and Engagement

Figure 5

Overall Experience with Zoom-Based Interactive Learning Sessions



A combined 75% of student teachers rated their Zoom experience as either "Good" (61.1%) or "Excellent" (13.9%), indicating broad acceptance. However, 25% were neutral, and no students rated the experience negatively, suggesting baseline satisfaction but room for improvement. However, a negative

rating wasn't given by any students, indicating that the use of Zoom for interactive

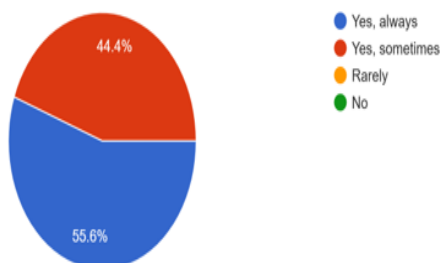


learning sessions was generally accepted and they were satisfied with it. These results suggest that Zoom is a reliable and effective platform for conducting interactive learning sessions.

Opportunities for Interaction

Figure 6

Opportunities to ask questions and participate in discussions



A majority (55.6%) felt they “always” had opportunities to participate, while 44.4% said “sometimes.” This shows that student voice is generally accommodated, though not uniformly.

Student feedback emphasized that while interaction was present, it

was not always dynamic:

"Sometimes the teacher talks a lot, and we don't get time to respond." (S.T 69)

This suggests a need to enhance structured participation opportunities, such as polls or guided discussions.

Challenges Faced

Figure 7

Challenges Faced While Participating in Zoom-Based Interactive Learning Sessions

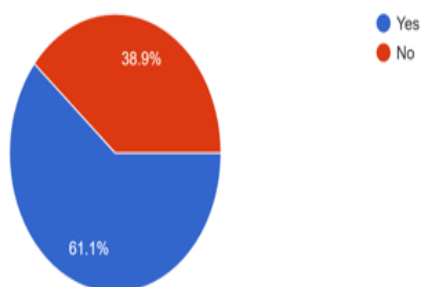


Figure 7: Challenges Faced While Participating in Zoom-Based Interactive Learning Sessions

While 61.1% faced challenges, only 38.9% reported no issues. Thematic coding of qualitative responses identified three main challenge categories:

1. Technical limitations

Connectivity issues, platform lag, and device constraints.

"My internet connection is unstable; I often miss parts of the session." – (S.T 20)



2.Engagement fatigue

- Difficulty concentrating during long, lecture-heavy sessions.

"After a while, I feel disconnected from the class." – (S.T 17)

3.Lack of interactive tools

- Sessions sometimes lacked active participation components.

"Only PowerPoint slides are used. No discussion." – (S.T 7)

These findings highlight unequal access and varied instructional quality, two major barriers in effective online education delivery.

3.3 Objective 3: Suggestions for Improvement

Finally, student teachers shared suggestions to enhance the quality and effectiveness of Zoom-based interactive learning sessions. It was revealed that most student teachers expressed a strong need to improve the quality of these sessions.

From the open-ended responses, six major **recommendation themes** were identified through inductive coding:

1. Enhance interactivity

"Use more polls, breakout rooms, and interactive activities." – (S.T 21, S.T.3)

2. Record and archive sessions

"Session recordings are essential for revision." – (S.T 26)

3. Provide technical support

"There should be someone to help with tech issues during class." – (S.T 42)

4. Ongoing teacher training

"Teachers need training to use Zoom features creatively." – (S.T 69)

5. Encourage camera use and engagement

"Students should be encouraged to turn cameras on and take part." – (S.T 11)

6. Gather regular feedback

"We should be asked for feedback after each session." – (S.T 36)

The convergence of these suggestions with the quantitative findings strengthens their validity and points to clear action areas for the Department of Special Needs Education.

4.CONCLUSIONS/RECOMMENDATIONS

4.1 Conclusion

This study explored the perceptions of BEd (Hons) in Special Needs Education (SNE) student teachers at the Open University of Sri Lanka regarding Interactive



Learning Sessions conducted via Zoom technology. Using a mixed-methods approach, the research analyzed responses from Levels 5 and 6 student teachers enrolled in the 2023/2024 academic year, focusing on three main objectives: the current status of Zoom-based sessions, their strengths and weaknesses, and student-suggested improvements. Findings confirm that Zoom-based Interactive Learning Sessions are widely accepted and regularly implemented in the SNE program, primarily lasting 2–3 hours and integrating a mix of lectures, group work, and practical tasks. The consistent use of digital tools such as PowerPoint and breakout rooms reflects a shift towards digitally enhanced ODL pedagogy. Most student teachers rated the sessions positively, citing key benefits such as flexibility, convenience, and reduced travel-related burdens, particularly important in the context of Sri Lanka's geographical and economic challenges. However, several challenges persist. Technical issues, especially unstable internet connections, remain a major barrier to equitable access. Additionally, lengthy sessions without sufficient breaks or engaging activities contributed to "Zoom fatigue" and diminished concentration. In some cases, limited use of interactive tools and over-reliance on lecture-based delivery further constrained student engagement. A notable gap identified was the inconsistent sharing of session recordings, which negatively affected those who could not attend live sessions due to connectivity or power-related issues. Despite these limitations, student teachers emphasized their willingness to actively participate and provided constructive suggestions for enhancing the quality and inclusivity of Zoom-based learning. These insights point to the significant potential of Zoom technology in supporting effective ODL, while highlighting the importance of continuous instructional improvement, equitable access, and student-centered design.

4.2 Recommendations

Based on the findings, the following detailed suggestions are proposed to enhance the quality, engagement, and accessibility of Interactive Learning Sessions conducted via Zoom for the BEd(Hons)SNE program:

1. Increase Interactivity in Session Design- Incorporate interactive tools such as real-time polls, quizzes, digital whiteboards, Padlet, to boost engagement. Facilitate structured breakout room activities with clear instructions, expected outcomes, and

group facilitation guidelines. Include live student presentations, peer feedback sessions, and collaborative learning activities to promote active participation.

2. Record and Archive All Sessions- Mandate the recording of all Zoom sessions and ensure they are uploaded promptly to the Learning Management System (LMS). Provide downloadable versions of session materials for offline access, benefiting students with inconsistent connectivity or limited data.

3. Establish Dedicated Technical Support- Deploy real-time technical support staff during sessions to assist both academics and students with troubleshooting. Offer pre-session orientation on using Zoom tools, particularly for new enrollees or those less digitally literate.



4. Continuous Professional Development for Academics-Conduct regular teacher training workshops focused on online pedagogy, effective Zoom usage, and student-centered digital teaching strategies. Promote peer-sharing platforms where academics can exchange best practices and innovative teaching methods.
5. Encourage Camera Use and Active Engagement- Motivate students to turn on their cameras during sessions to foster a stronger classroom atmosphere, while being sensitive to bandwidth limitations and privacy concerns. Incorporate participation-based marks or incentives to encourage active involvement in discussions, Q&A sessions, and collaborative tasks.
6. Implement Structured Feedback Mechanisms- Collect post-session feedback using brief surveys or Google Forms to evaluate session quality and responsiveness to student needs. Use feedback data to inform session planning and continuous improvement, ensuring responsiveness to emerging student concerns.
7. Optimize Session Length and Pacing- Avoid excessively long sessions by breaking content into manageable segments with periodic breaks and interactive transitions. Adopt a modular delivery format, allowing flexibility in content coverage while maintaining student attention and participation.
8. Address Digital Equity- Consider partnerships with telecom providers to offer subsidized data packages for OUSL students. Provide loan devices or offline content packages (e.g., recorded lectures on USBs) to students from under-resourced areas.

REFERENCES

- Dumford, A. D., & Miller, A. L. (2018). *Online learning in higher education: Exploring advantages and disadvantages for engagement*. *Journal of Computing in Higher Education*, 30, 452–465. <https://doi.org/10.1007/s12528-018-9179-z>.
- Madhubhashini, M. (2021). *Challenges and opportunities of e-learning via Zoom*. In *Proceedings of the 34th Annual Conference of the Asian Association of Open Universities (Vol. II, pp. 375-382)*. Department of Social Studies, The Open University of Sri Lanka.
- Nawastheen, F. M., & Perera, S. A. S. K. (2021). *Students' perceptions on participating in remote learning activities in the time of COVID-19 pandemic*. *SiLeT*, 2(3), 33-44.
- Oktaviani, S. (2021). *Online lectures using Zoom application for undergraduate students during COVID-19 pandemic period*. *Risenologi*, 6(1), 31-36.
- Sears, D. (2020, April 30). *What is the difference between remote and distance learning?* Bromcom. <https://bromcom.medium.com/what-is-the-difference-between-remote-and-distance-learning-11552f45d998>.
- Wan Hassan, W. A. S., Ariffin, A., Ahmad, F., Hamzah, N., Rubani, S. N. K., & Zakaria, N. (2020). *Students' perceptions of using Zoom webinar during COVID-19 pandemic in technical and vocational education*. *Journal of Critical Reviews*, 7(19), 5853.