SCERT REPORT

Issue One - October 23rd, 2020

Online Teaching Experience Survey:

Findings and Recommendations for Staff

The Summit Centre for Education, Research, and Training (SCERT) sent a survey to Summit School staff with the goal of understanding their experience with online teaching during the COVID-19 pandemic.

This report was written by SCERT to summarize the results of Summit School staff feedback and to provide research-informed guidelines and resources should our school community need to transition to online learning again.

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SCERT Online Teaching Experience Survey:

Findings and Recommendations for Staff

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Introduction

In March 2020, Summit School was faced with an unprecedented challenge when the COVID-19 pandemic forced the closure of schools across the province, nation, and world. In response, the Summit School staff pulled together to create an online learning environment that allowed students to continue to learn and interact with their peers and school staff, while providing a sense of normalcy and consistency during a difficult time. To support our students, Summit School offered regular Zoom lessons with classroom teachers supplemented by other departments as well as the Padlet platform and a Summit School Youtube channel filled with school resources.

Following this experience, the Summit Centre for Education, Research, and Training (SCERT) committee aimed to understand Summit School's staff perceptions of the process by documenting the successes and challenges they faced during the transition to online teaching. A survey was sent to Summit School staff with the goal of understanding their perceptions of online teaching, as well as developing recommendations and resources should we need to transition to online teaching again.

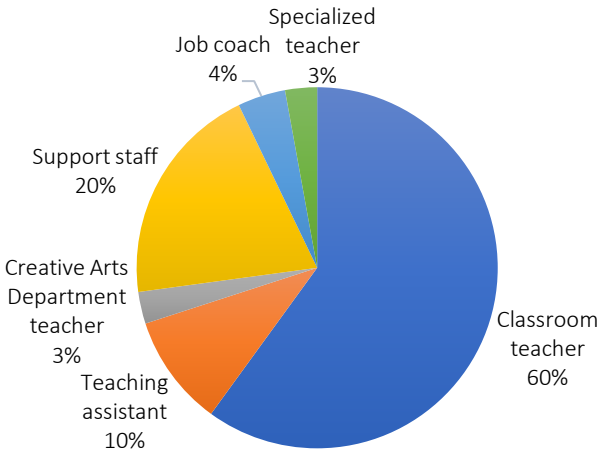
This report was written by the SCERT committee to summarize the results of the feedback received from Summit School staff regarding their challenges and successes related to their online teaching experience. Based on this feedback and a literature review, we have provided recommendations for teaching strategies that may be useful during online instruction for students with neurodevelopmental conditions. A brief summary of the results and recommendations has also been prepared for your convenience (see Appendices 1 and 2).

A special thank you to all staff members who took the time to answer the survey and share their feedback.

Who Responded?

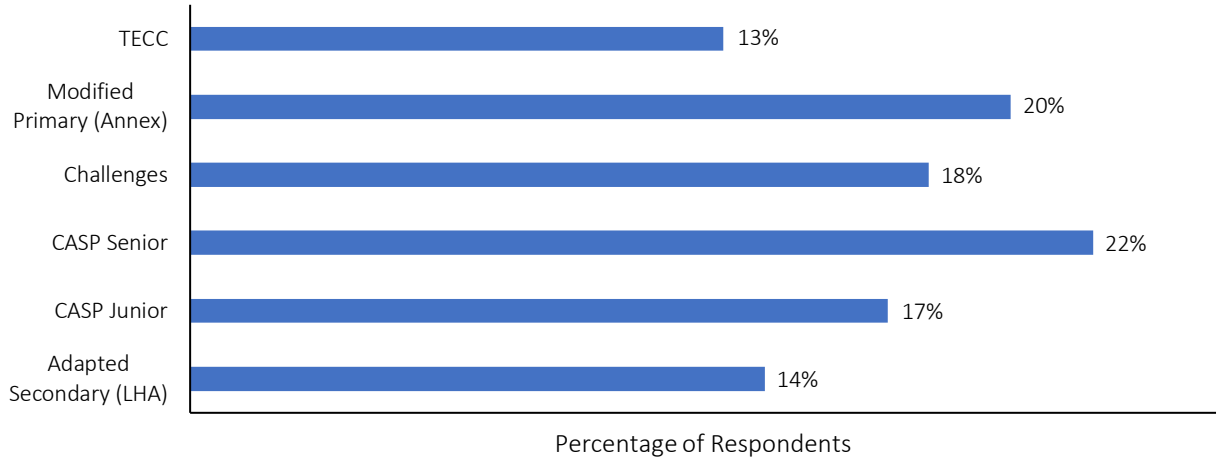
71 out of 224 Summit School staff members responded to the anonymous and voluntary survey. The majority of staff members who responded were classroom teachers (60%; 42 teachers); followed by support staff (20%).

Figure 1. Summit Staff Role



Note. Two teachers who taught specialty courses during online instruction were grouped together in the "specialized teacher" category to ensure anonymity.

Figure 2. Percentage of Respondents by Team Membership at Summit School During the 2019-2020 Academic Year



Note. Thirteen staff members worked across multiple teams; the percentages reflect the total responses per team (out of a total of 71 responses).

Staff-Reported Pros and Cons of Online Teaching

The following summarizes emerging themes in staff-reported experiences. These are categorized as the Pros and Cons of online teaching with individual comments provided in italics.

PROS:

1. **Flexibility and convenience**

   "The flexible schedule. Because we started later in the day, none of my students were tired or hungry and they were ready to hop into the day's activities."

   "From a personal point of view, it provided me with structure in my life as well."

   "I loved the flexibility and seeing how students reacted and adjusted to this different environment."

2. **Planning online content**

   "I liked being able to plan my themes and look for different materials online."

   "Having the opportunity to define more pedagogy in my lesson plans."

   "Developed different skills in my own teaching. Made me analyse what I could teach using visual modelling and verbal cues as the main focus of my assistance versus being able to physically prompt a student ..."

3. **Maintaining connection with students**

   "The ability to reassure students that they were not isolated, and (always) able to reach out to connect with teachers/classmates."

   "Online teaching helped the students stay connected to their peers and teachers during the lockdown."

   "It gave me a chance to interact with my students, parents and peers."

4. **Parent presence**

   "Parents being present [..] gave them a better idea of where their child is at and what we do in class and they expressed positivity to that"

   "It gave the parents the opportunity to see what their child is able to do."

   "… increased communication between parent and staff."

CONS:

1. **Difficulty motivating students**

   "Retaining engagement and motivation. Some students got tired of showing up everyday and chasing after them became a lot of work for myself and the parents."

   "[Difficulties] keeping motivation up for the prolonged period of time."

   "... very difficult to motivate the students to complete any work online."

2. **Decrease in quality of social connections**

   "It is more difficult to connect with your students. It was harder to help a student who was struggling with an activity."

   "The quality of interactions was not the same as in-person interactions."

   "It was a very artificial way of connecting."

3. **Technological issues**

   "The technological difficulties provided me with much frustration. After planning a teaching session, there were several times when due to technological difficulties the session had to be modified at the last minute. "

   "... challenging internet connection."

4. **Lack of hands-on activities**

   "Lack of physical proximity with students"

   "Not having the critical hands on experience[s]"

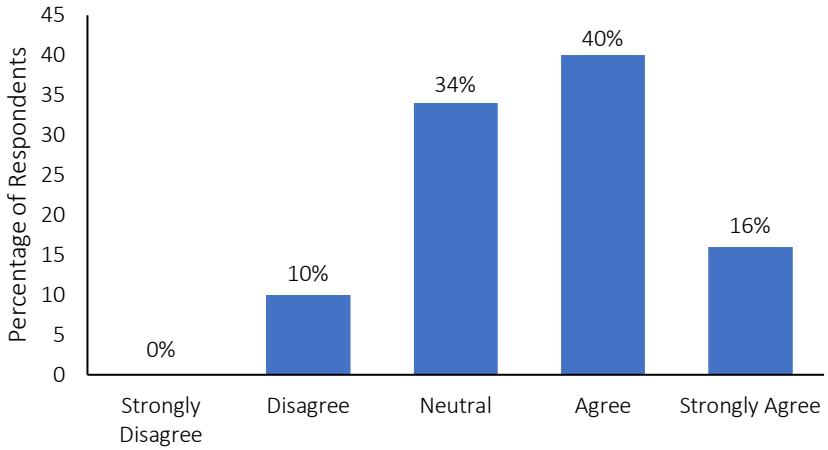
   "Very limited hands-on activities as the students often need support and I cannot be physically there to help them."

Student Engagement

Student engagement can be defined as a multi-faceted construct based on 2 components. The first component is academic or behavioural engagement, referring to observable behaviours displayed by the student in an academic context. The second component is emotional engagement, which refers to the student's social interactions, motivations, and interest (Hollingshead, Williamson & Carnahan, 2018). Academic engagement (based on observable academic responding, learning outcomes, etc.) was not considered in the survey as Summit students were not being academically assessed during this period of online learning.

A majority of respondents either Agreed (40%) or Strongly Agreed (16%) that their students were engaged during online learning sessions (Figure 3). Comments indicated that student engagement varied depending on distractions within the home environment, the length of the online learning session, and the nature of the activity. For example, some staff members reported greater student engagement during fun activities (e.g., guest segments, games, songs) that did not last longer than 30-40 minutes.

Figure 3. Overall, my students were engaged during online learning sessions



Staff reported using a variety of strategies and activities to keep students engaged. These include:

- Using the "raise hand" and "share screen" features of the online Zoom platform
- Greater use of interactive activities (e.g., online educational games, quizzes, creating and using props, contests...)
- Integrating class discussions during online sessions
- Audiovisual aids (e.g., videos, music, online stories, Summit's YouTube channel)

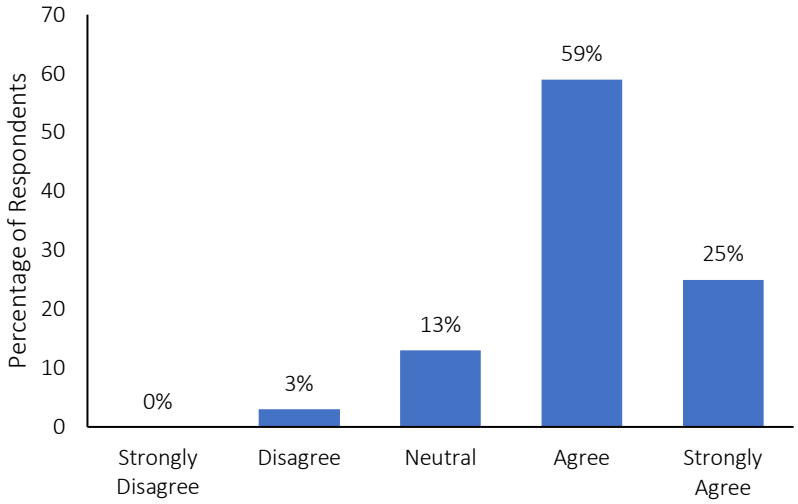
Student Behaviour

Although many online resources that are currently available were designed to assist with positive behaviour management for online teaching, most are not supported by scientifically-sound, empirical research. This is clearly a niche for future researchers to focus on, particularly for students with a neurodevelopmental condition.

In our survey, the majority of respondents reported that their students behaved appropriately during online learning sessions (see Figure 4). The comments section suggested that behavioural incidents may have been higher at the beginning of the online learning period and reduced over time as students and staff adjusted to the new platform.

Examples of common behaviours reported included speaking out of turn, making inappropriate noises, excessive talking, and acting as if not in a classroom setting (e.g., eating, dressed in pyjamas, getting out of seat).

Figure 4. Overall, my students behaved appropriately during online learning sessions



Staff-reported strategies to encourage appropriate behaviour included:

- Reminding students of expectations
- Muting loud/disruptive students
- Relying on parental intervention to assist with handling behaviours

Student Social Connectedness & Social Development

Research suggests that promoting social connectedness is possible through online learning and is associated with greater positive emotional (McInnerney & Roberts, 2004) and academic (Muillenburg & Berge, 2007) outcomes. The development of an online community by emphasizing social and emotional connectedness is extraordinarily important to limit feelings of alienation and isolation during online learning (McInnerney & Roberts, 2004). In addition, researchers have demonstrated that social interaction during online learning is correlated with effectiveness of the online learning program, as compared to the traditional classroom setting (Muillenburg & Berge, 2007).

A majority of respondents either Agreed (32.4%) or Strongly Agreed (32.4%) that their students felt connected to their peers during online learning sessions (Figure 5). Similarly, a majority of respondents either Agreed (44%) or Strongly Agreed (49%) that their students felt connected to their teachers during online learning sessions (Figure 6).

Figure 5. Overall, my students felt connected with their **peers** during online learning sessions

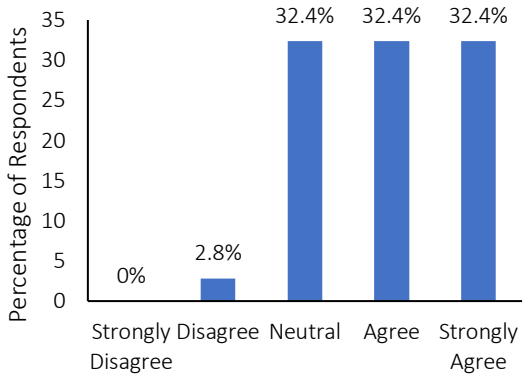
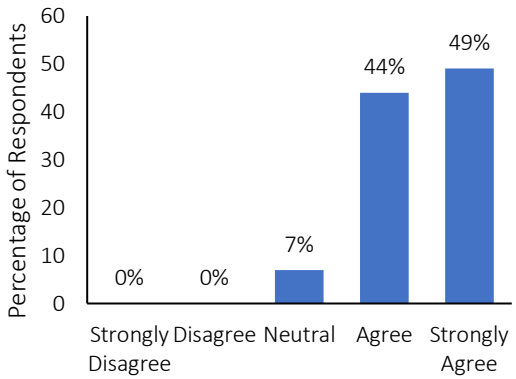


Figure 6. Overall, my students felt connected with their **teachers** during online learning sessions

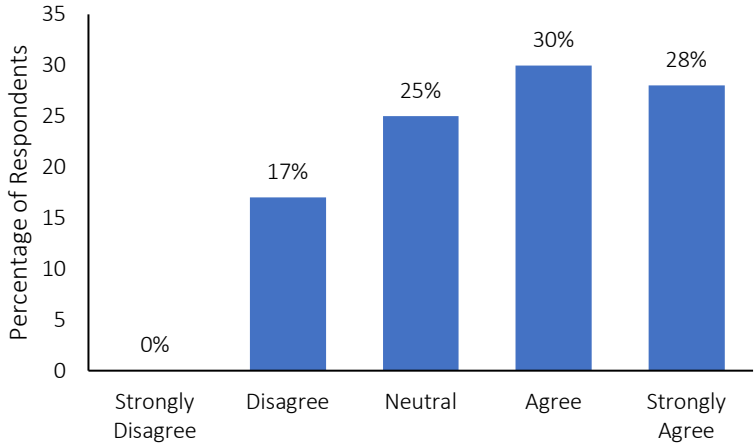


Comments from staff regarding their students' social connectedness included the following:

- Group discussions and conversations guided by the teacher allowed students to express themselves and share their opinions.
- Students had the opportunity to practice their social skills during online sessions, e.g., saying their names, waving hello or goodbye, raising their hand, discussing their weekends, etc.
- Students especially enjoyed free time to talk with each other and their teachers.

A majority of respondents either Agreed (30%) or Strongly Agreed (28%) that online learning is an effective tool for promoting the social development of students with special needs when they do not have access to a typical classroom setting. Of note, some staff viewed that the development of social skills on the online platform varied depending on student's age and level of functioning. In particular, staff members felt that the younger and lower functioning students did not benefit socially from online learning. Comments indicated that online learning environments should not replace in-class learning without good reason, as the lack of direct human interaction was lacking, making it difficult to do many activities

Figure 7. Online learning is an effective tool for promoting the social development of students with special needs when they do not have access to a typical classroom setting.



Student Emotional Well-Being

Recent research has demonstrated that emotional support to both students and their families during the pandemic was essential for ensuring the well-being of online learners during the pandemic (Drane, Vernon & O'Shea, 2020).

The majority of respondents Agreed (32%) or Strongly Agreed (34%) that online learning promoted their students' emotional well-being (Figure 8).

Similarly, a majority of respondents Agreed (31%) or Strongly Agreed (38%) that online learning is an effective tool for promoting the well-being of students with special needs when they do not have access to a typical classroom setting (Figure 9).

Figure 8. Online learning promoted my students' emotional well-being

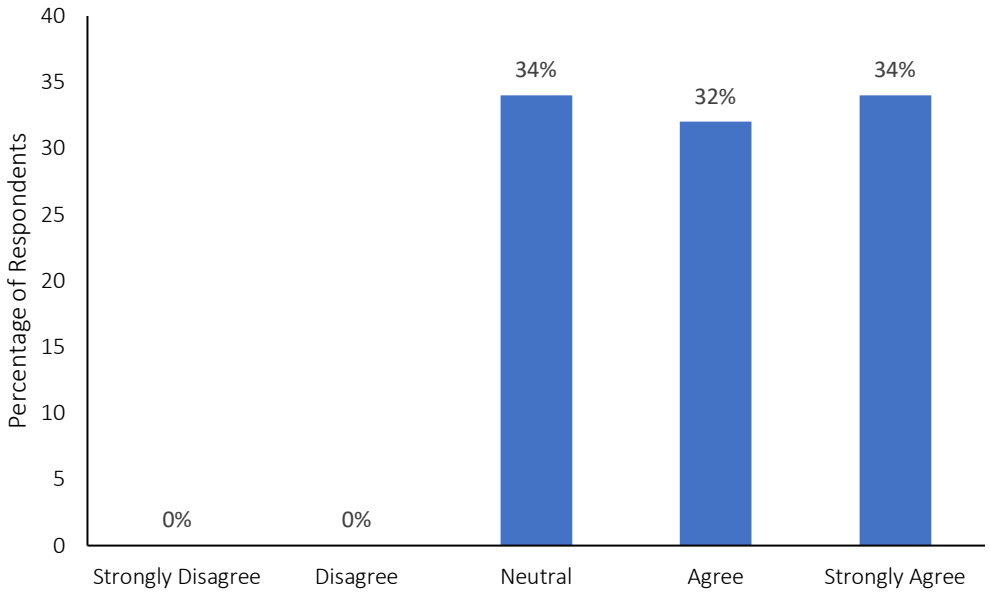
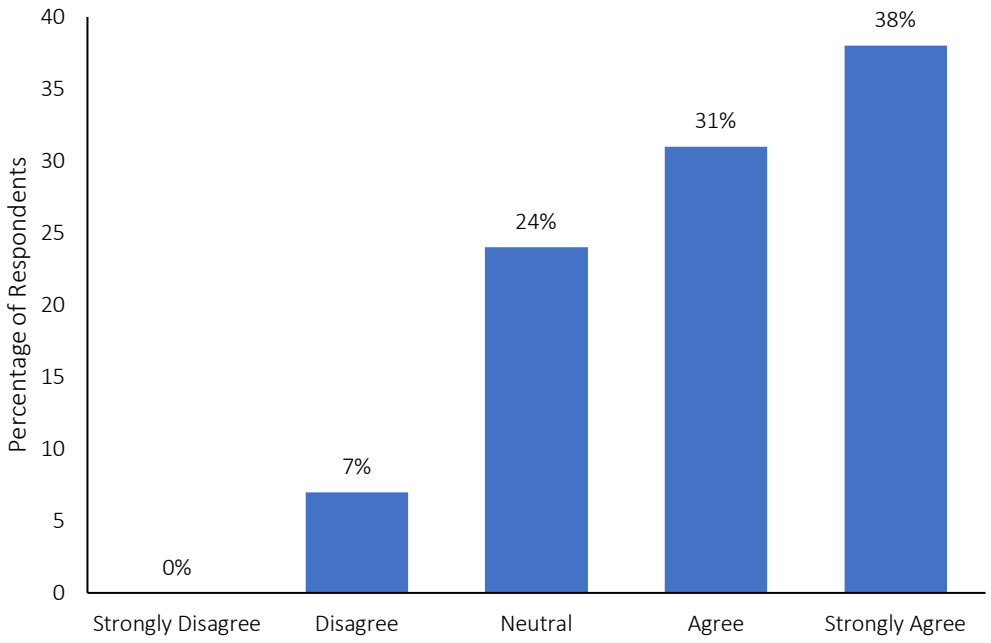


Figure 9. Online learning is an effective tool for promoting the emotional well-being of students with special needs when they do not have access to a typical classroom setting



Staff comments indicated the following:

- The online classroom helped to provide the students with a sense of structure and purpose during the pandemic.
- The student emotional responses during online sessions were overall very positive (e.g., smiles, laughter, etc).
- Some staff members noted that the younger students and students with more severe intellectual disabilities relied more heavily on parental support and instruction, which sometimes lead to frustration and family conflict.

Recommended Strategies for Online Teaching

Based on staff feedback and a review of relevant literature, the SCERT committee has developed the following recommendations for creating a positive and productive online classroom experience.

Recommendation #1:

Provide dedicated time for socializing with peers each day

Staff members reported that students seemed to especially enjoy social activities, even when shared online. This is consistent with findings that incorporating social interaction in an online learning platform is critical to target and minimize feelings of isolation and create a greater sense of community (McInnerney & Roberts, 2004). For example, in one study, positive social interactions between students and their instructor in an online setting were related to increased academic student achievement (Kang & Im, 2013). Thus, teachers should encourage social talk by providing students with both structured and unstructured opportunities for socialization each day. Examples of structured social activities include following an online social skills program, practicing greetings, taking turns talking about their weekend or evening plans, incorporating icebreakers at the start of an online lesson, etc. Unstructured social time should be student-driven, allowing students to discuss topics of interest freely while being moderated/facilitated by staff.

Recommendation #2:

Teach and practice online etiquette during in-person and online sessions

Many staff members reported that their students initially lacked knowledge of online classroom etiquette and took time to adjust to the new online platform. By reviewing expectations and practising online etiquette in the classroom (e.g., during Zoom PEAKS assembly or while participating in an online session with peers currently learning from home), students may be better prepared to transfer these skills to online learning. Thus, the staff may also want to take a few minutes at the beginning of each online learning session to review online etiquette with their students. Research has shown that adhering to a code of online etiquette fosters a greater sense of community and harmony (Conrad, 2010).

Appendix 3 provides a list of rules for online classroom etiquette that you can share with your students. The following is another useful resource: "Tips and Tricks: Teachers Educating on Zoom" that was published by Zoom.

Recommendation #3:

Focus on positive reinforcement by adapting PEAKS to the online classroom

Many staff members reported difficulty managing negative student behaviours on a digital platform. Aside from muting the student, staff members reported having limited options when a student had an outburst or was behaving inappropriately.

Decades of research has suggested that positive reinforcement is highly effective in managing student behaviours in the in-person classroom (Horner et al., 2010). Positive Behavioural Intervention & Supports (PBIS) has recently published guidelines for adapting PBIS to the online learning environment. For example, they suggest that keeping the same school-wide expectations to help students learn that the same systems apply regardless of location. For more detailed recommendations on how to adapt PBIS to online learning, click on this resource link.

Examples of online PEAKS rewards for Summit School can include allowing the child to choose the next virtual Zoom background, choosing a story, song, video or virtual field trip for the class, choosing the song for a dance party, and so many more. You can visit this resource link for some inspiration in selecting PEAKS rewards for your students.

Recommendation #4:

Add breaks during online sessions

Participation in physical activity breaks throughout in-class instruction has been found to promote academic engagement for students diagnosed with ASD (Nicholson et al., 2010). In addition, incorporating the arts into online instruction may foster openness and connection, flexibility, and humor (Sajnani et al., 2020). This was seen in our survey as many staff members emphasized that the students were highly engaged during the Creative Arts (e.g., dance, music) and Physical Education classes that were offered on the Zoom platform. Therefore, the SCERT recommends continuing offering these classes should Summit School return to online learning, and additionally, try to incorporate art and movement breaks during general online instruction.

The following are examples of breaks you can incorporate into your online teaching sessions:

- *Movement breaks*, which are shown to improve levels of physical activity and moderate attitudes towards healthy habits in online learners (Mladenova, 2020)
- *Yoga, meditation and quiet breathing breaks* as a source of mindfulness (Conversano et al., 2020)

- *Resting yours and your students' eyes* by encouraging looking away from the screen to prevent eyestrain
    - Follow the 20-20-20 rule: every 20 minutes, take a 20 second break and focus your eyes on something at least 20 feet away (https://opto.ca/health-library/the-20-20-20-rule)
- *Use whiteboards* for students to write or draw answers to display virtually to the class, serving as a creative addition to your lessons
- *Incorporate art* into academic lessons

Recommendation #5:

Engage in frequent communication with students and parents

Increases in reported parental involvement leads to higher student satisfaction with an online course (Beck & Maranto, 2013). This is consistent with multiple comments we received in the surveys sent to Summit parents; they appreciated the contact with their child's teachers and staff. Parents felt that this kept their child engaged with the learning material beyond the virtual classroom and would incorporate this into their daily lives. Some parents would recommend even more contact, as suggested in a comment about the potential for weekly email updates, to ensure that they can maintain student engagement from home. Sending weekly newsletters home has proven to be an effective mode of communication with parents (Coy, 2015). This keeps families up to date with educational strategies, material and progress. In addition, research suggests having multiple communication channels available with students and their parents, as this has been correlated with higher student engagement (Dixson, 2010). For example, incorporating announcements on a home page (e.g., Padlet), emails to students or parents, discussion forums and group chats allow for meaningful communication between students and with their instructor, allowing the student to increase their social presence online.

Recommendation #6:

Incorporate active and multimodal learning strategies

The Summit staff reported that students were especially engaged when they were presented with multimedia content. Sharing videos, online stories, and songs with the students helped to keep them engaged with the material, as compared to only verbal instruction. A general theme that emerged regarding student engagement was the successful use of active learning strategies, which can be defined as learning strategies that are used to seek new information, organize it meaningfully and allow others to engage with it (Khan et al., 2017). Examples of online active learning strategies include collaborative activities, discussions and debates, group problem-solving, online polls, etc. This finding is consistent with evidence that active learning strategies may indirectly lead to increased student engagement by helping to develop students' social presence online (Dixson, 2010).

Conclusion

The topic of online learning with a neurodiverse population is a relatively understudied domain. This area would benefit from further investigation, such as understanding the dynamics of online instruction through the lens of education providers for children with exceptionalities, such as was done here.

The COVID-19 pandemic provided a setting for an "experiment in nature" that enabled us to examine this topic. However, online learning for students with neurodevelopmental conditions is not an emergent property of the pandemic; many students with disabilities are learning online for various reasons other than being mandated by the Government due to the pandemic (e.g., behavioural difficulties, remote education, among others). The recommendations brought forth by the SCERT committee based on past research and our findings can apply to all online teachers and staff members with the goal of better serving and educating students with neurodevelopmental conditions.

The SCERT committee would like to thank all Summit School staff members who participated in this important pedagogical exercise. Your participation in this research has enabled the SCERT to collect valuable preliminary data regarding your views of online learning.

If you have any additional comments, suggestions or questions regarding these findings, please contact our research coordinator, Taryn Perelmiter, by email at [scert@summit-school.com].

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APPENDICES

Appendix 1: Summary of Findings

Appendix 2: Summary of Recommendations

Appendix 3: Zoom Rules for Students

SCERT REPORT

Issue One: SCERT Online Teaching Experience Survey

SUMMARY OF FINDINGS

Please refer to the SCERT Report Issue 1: SCERT Online Teaching Experience Survey for more information and resources

Pros of Online Teaching (Pg.4)

1. Flexibility and convenience of online teaching
2. Planning online content
3. Maintaining connection with students
4. Parent presence

Cons of Online Teaching (Pg.5)

1. Difficulties motivating students
2. Decrease in quality of social connections
3. Technological issues
4. Lack of hands-on activities

Student Engagement and Behaviour (Pg.6-7)

- Engagement varied depending on the distractions at home, the length of the online learning session, and the nature of the online activity
- Strategies to keep students engaged: interactive activities, discussions, audiovisual aids, etc
- Behaviours increased at the beginning of the online learning period
- Providing clear expectations of behaviour online helped students understand the online platforms and etiquette

Student Social Connectedness and Emotional Well-Being (Pg.8-11)

- High reports of social connectedness between students and between students and their teachers
- Development of social skills varied depending on student's age and level of functioning
- Online learning was able to support the emotional well-being of students by giving them structure and a sense of purpose
- Students exhibited positive emotional responses

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SCERT REPORT

Issue One: SCERT Online Teaching Experience Survey

SUMMARY OF RECOMMENDATIONS

Please refer to the SCERT Report Issue 1: SCERT Online Teaching Experience Survey for more information and resources

Recommendation 1:

Increase dedicated time for socializing during online lessons

- Provide structured and unstructured opportunities for socialization each session
- *Examples:* online social skills program, practise greetings, taking turns talking about their weekend plans, incorporating ice breakers, etc.

Recommendation 2:

Teach online etiquette in the in-person classroom to transfer to the virtual classroom

- Also applicable for distance learning students, during assemblies, etc.
- Review expectations and practise online etiquette
- See SCERT's Handout: Summit School's Virtual Classroom Rules on Zoom for Students

Recommendation 3:

Focus on positive reinforcement by adapting PEAKS to the online classroom

- Continue to use the PEAKS program online
- *Examples of PEAKS rewards:* allow student to choose the teacher's virtual background, choosing a story, song, video, or virtual field trip for class, choosing a song for a dance party, etc.

Recommendation 4:

Add breaks during online learning sessions

- Movement breaks: Yoga, mediation and quiet breathing breaks
- Break to rest your eyes for 20 seconds every 20 minutes
- Incorporate art into lesson (e.g., using whiteboards)

Recommendation 5:

Engage in frequent communication with students and parents

- Examples: emails, updating Padlet, weekly newsletters
- Individual phone or Zoom updates are effective

Recommendation 6:

Incorporate active and multimodal learning strategies during online learning

- Active learning strategies include collaborative activities, discussions and debates, group problem-solving, online polls, etc.
- Share videos, online stories, and songs to keep students engaged

SCERT

SCERT Handout

VIRTUAL CLASSROOM RULES FOR: zoom

Choose a quiet spot to set up for class.

Turn off cell phones, TV or any other devices

Close all other games, apps or programs on your computer

Now you are ready to start!

REMEMBER: Dress Appropriately. Come to Class Early. Be Respectful. AND HAVE FUN!!!

USING ZOOM...

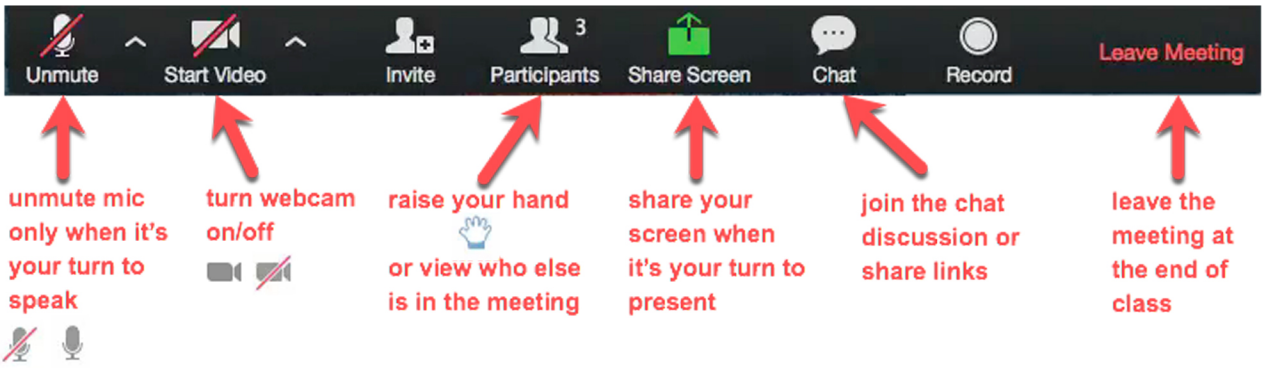
When the teacher lets you into the class, make sure your VIDEO and AUDIO are on.

If your teacher asks you to... mute your microphone.

Participate by using the "Raise Your Hand" button.

If you are allowed, use the "Chat" feature. Remember to be respectful!

ALL THESE FEATURES ARE ALONG THE BOTTOM TOOL BAR ON YOUR ZOOM SCREEN.



When class is over, you can close the Zoom screen to leave!

REMEMBER: Behave in a Zoom class the same way as you would in a real classroom!

MIGOU SAYS:
You can do it! If you follow the rules you will become a Super Zoomer!

(Adapted from https://ivyedgeglobal.com/virtual/virtual-classroom-rules/)