Research Article

An exploratory study of elementary gifted students' experiences during the COVID-19 pandemic in the United States

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Article Info

Abstract

The COVID-19 pandemic caused disruption to traditional schooling environments for students across the globe. Students had to learn new technology tools and navigate barriers such as lack of devices or the internet. Gifted learners have unique social-emotional characteristics that may impact how they adapted to this new learning environment and how they handled related stressors. This paper reports results from an exploratory study that investigated the experiences of elementary gifted learners in the United States during the first year of the global pandemic. In the Spring of 2021, focus groups were held with 12 gifted learners in grades three through six and surveys were administered to 300 elementary gifted students online using Qualtrics. Purposive and snowball sampling was implemented to recruit participants from national gifted organizations and from high intelligence societies. An online survey instrument was developed to elicit student feedback on type and quality of gifted services provided during remote learning, students' feelings about the pandemic, and their experiences in a virtual learning environment. Nine open-ended questions were included in the focus group protocol to probe student experiences. Thematic content analysis was used to analyze open-ended survey responses and focus group transcripts. Results revealed both positive and negative implications of online learning for the gifted, including satisfaction with opportunities to compact curriculum and accelerate learning, being able to spend more time on hobbies and with family, and feelings of social isolation, depression, and worry. Themes that emerged from the data include improvements to feedback, flexibility, and a desire for connections. Students provided insight and suggestions for improving content, pace, and social connections. Recommendations for educators, administrators, and families will be discussed.

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Introduction

As the COVID-19 pandemic broke out across the globe in the spring of 2020, preventative measures were put in place as schools closed and online instruction was implemented to stop the spread of the virus. Educators in the United States and abroad faced unprecedented challenges as they were left to support the learning needs of students with very little, if any, preparation time. Routine specialized education services offered prior to the pandemic for students with gifts and

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talents may have been reduced or even eliminated when schools closed. This study aimed to explore how the needs of gifted learners were met during the first year of the pandemic. Hearing from the voices of students is important when considering what strategies should be incorporated into instruction in the future. Integration of technology and utilization of various forms of hybrid or blended instruction may continue in a post-pandemic world. Results revealed both positive and negative implications of online learning for the gifted, including satisfaction with new opportunities to communicate, flexibility with spending more time on hobbies and with family, and feelings of social isolation, depression, and worry.

Emergency Remote Instruction During the COVID-19 Pandemic

The COVID-19 pandemic caused abrupt changes to education across the world. Many schools used emergency remote instruction when buildings were forced to close. Online learning was implemented to mitigate student learning loss and provide continuity of education (Kaya & Islekeller-Bozca, 2022). The quick shift to emergency remote instruction was not without challenges. Many educators felt unprepared to convert their face-to-face teaching to an online format. Challenges faced by educators included a lack of professional learning in technology prior to the pandemic, the hurdle of having to quickly learn how to use a Learning Management Systems (LMS), lack of sufficient technology equipment, and insufficient high-speed internet access (Kong, 2020; Patrick et al., 2021.) Students, especially young children, also had little experience with the specific educational technology tools and LMS that were adopted and may have lacked the organizational skills necessary to self-regulate and manage their online work (Aboud, 2021; Guilbault & McCormick, 2022). Some students also faced hardships related to access to devices, internet, and adult supervision to help them get organized and complete their online classes (Cardullo et al., 2021; Patrick et al., 2021). Special services like gifted education were also disrupted and directly impacted during the pandemic shutdown in Spring 2020 (Wolfgang & Snyderman, 2022).

In addition to logistical and technical challenges, gifted students also experienced stress, confusion, and anxiety due to the period of social isolation and lack of information about the pandemic (Aboud, 2021; Guilbault & McCormick, 2022; Wolfgang & Snyderman, 2022). Research indicates that this type of isolation caused children to experience trauma similar to post-traumatic stress syndrome (Brooks et al., 2020; Demaria & Vicari, 2021) and caused some gifted children to experience changes to their emotional well-being as well as an increase in family tension (Duraku & Hoxha, 2020). Some research supports the notion that gifted children have heightened awareness, greater sensitivity, and strong emotional responses to stimuli that differ from nongifted classmates (Amend et al., 2020; Columbus Group, 1991; Silverman, 1993). As such, young, gifted learners may have experienced the pandemic-related stressors differently from other children (Wolfgang & Snyderman, 2022). Recent literature reveals insight into the coping mechanisms used by gifted learners during the COVID-19 pandemic including pursuing creative activities (Seydini & Cupchick, 2022), playing with siblings or friends (Guilbault & McCormick, 2022), and enjoying self-directed learning enrichment activities (Wolfgang & Snyderman, 2022).

Technology and Virtual Instruction for the Gifted

Online learning as an option for gifted students has been studied for several decades (Adams & Cross, 1999; Periathiruvadi & Rinn, 2012; Potts, 2019; Potts & Potts, 2017; Swan et al., 2015; Wallace, 2009). Emergency remote instruction experiences created as a response to initial school closings differ from regular virtual instruction in that there was not sufficient time for adequate planning; nevertheless, in general, virtual instruction offers many benefits. Such benefits of online learning for gifted students include flexibility, access to advanced courses, ability to work at their own pace, access to mentors, acceleration, and it can be a cost-effective option for schools (Potts, 2019; Swan et al., 2015; Wallace, 2009). One important need for gifted learners during remote instruction was social and emotional learning (Chowcase et al., 2022; Duraku & Hoxha, 2020; Guilbault & McCormick, 2022; Wolfgang & Snyderman, 2022). Students reported negative feelings about online learning when it did not include sufficient interaction with peers or their instructor (Guilbault & McCormick, 2022). They desired more synchronous sessions and experiences that would allow group work and collaboration (Wolfgang & Snyderman, 2022). Missing from the literature is insight into what

young, gifted students enjoyed about remote instruction, what they felt did not work well, and how to meet their cognitive and affective needs during emergency remote instruction. Thus, the present study aimed to explore the lived experiences of elementary gifted learners during the first year of the pandemic.

The Present Study

Previous studies focused on the use of technology and online instruction with gifted learners prior to the pandemic provide insight on benefits such as opportunities to pursue coursework outside of the general school curriculum, accelerated learning experiences, and instruction that is self-paced. Extant literature also indicates common problems with the use of virtual instruction, distance learning, and other forms of hybrid instruction prior to the pandemic such as misalignment with gifted student learning preferences for hands-on activities, lack of access to cognitive peers, and isolation. The present study aimed to fill in the gap in research on the use of virtual learning environments with gifted learners during the COVID-19 pandemic. Were gifted learners left to fend for themselves, or did they thrive during remote instruction?

The initial stage of emergency remote instruction required rapid transition to an online LMS without time for teacher technology training or sufficient planning time to convert face-to-face lessons to an online format. In addition to these hurdles, gifted education services in the United States are not universally mandated. Continuation of specialized services outside of the general curriculum may not have been a priority, and therefore could have been at risk for elimination or suspension if teachers of the gifted were needed to cover other classes due to teacher and substitute teacher shortages, if the pandemic impacted school budgets, and if an inability to administer gifted identification assessments in person resulted in a decrease of new students identified as gifted. The purpose of this study was to explore how the shift to virtual instruction and school closings impacted services for students with gifts and talents, and what their lived experiences were during this unique time.

Problem of Study

Main problem: In what ways did the pandemic and the shift to remote learning impact gifted education in the United States?

Sub-problem 1. How were elementary gifted learners' academic and affective needs addressed during the COVID-19 pandemic?

Sub-problem 2. What teaching practices implemented during remote instruction worked well for gifted learners? What did not work well?

Sub-problem 3. What lessons from student experiences during the pandemic can be applied to future teaching practices for the gifted?

Method

Research Model

To understand the lived experiences of gifted students with remote instruction during the COVID-19 pandemic, a mixed methods concurrent triangulation design was employed. This design calls for both qualitative and quantitative data to be simultaneously collected (Creswell & Clark, 2017). The combination of both types of data allows for a more accurate description of variables that are central to the study. A limitation of a typical mixed methods research design is that data are examined separately which can limit the data analysis process (Castro et al., 2010). In contrast, when qualitative and quantitative data are collected and analyzed concurrently, it allows for better integration through a unified process. This research model suited the study well as it allowed both qualitative and quantitative data from the survey to be simultaneously collected with qualitative data from the focus groups. This manuscript presents results from the qualitative portion of the study.

Participants

A purposive sample was obtained through contact with intelligence societies and education organizations that shared recruitment materials through their communication channels and social media groups. This recruitment process resulted in 300 students in grades three through six completing an online questionnaire. Of the 168 participants who

responded to the survey demographic item about their sex, 52.98% identified as male, 44.05% identified as female, 1.79% selected "other," and 1.19% preferred not to say. Twelve participants took part in focus group interviews (50.00% male, 25.00% female, and 25% preferred not to say). All participants were enrolled in elementary schools across the United States and were formally identified as gifted. Recruitment of participants took place through national gifted education associations across the country. Participants represented 36 different states. The ages of students ranged from seven to 13 years (M = 10.07 years, SD = 1.02).

Instruments

For this exploratory study, open-ended response items from an online questionnaire and focus group transcripts were used to investigate the lived experiences of elementary gifted learners during the first year of the pandemic.

Questionnaire. A questionnaire was administered online using Qualtrics. This questionnaire included student demographic items, Likert scale items, multiple choice, and open-ended response items. Questions were designed to elicit student responses about their experiences during the first year of the pandemic. Question categories included items asking students to compare school experiences before and during remote instruction, describe what worked well, explain what should be improved, share how they felt, and indicate what they hoped school would be like in the future. Quantitative data are not reported in the current manuscript.

Focus group protocol. A focus group protocol was developed with open-ended questions that probed survey topics and addressed the same major themes as the questionnaire. A draft protocol was developed, and feedback was elicited from three experts in the field of gifted education, and a final protocol containing nine open-ended questions was used. See Appendix A for the focus group protocol.

Procedure

An invitation to participate in the study along with information about the purpose of the study, the authors' institutional ethics review board approval letters, and consent forms were distributed through state and national gifted education associations in March of 2021. These materials were shared in their electronic newsletters, member emails, organization websites, and through social media.

The student questionnaire was administered online in participants' homes using Qualtrics. The online questionnaire first provided background information on the purpose of the study followed by a question asking for caregiver consent. Once the parent or caregiver clicked the button to acknowledge that permission was given for the child to participate, the questionnaire continued to a page with a question to acknowledge student assent. Students who agreed to participate were then given access to the questionnaire. There was an option for students to volunteer to participate in focus groups to share more in-depth information if they were interested. A list of volunteers was maintained, and communication was distributed to caregivers by email with a link to sign up for different focus group dates. Survey data were collected from March 2021 through May 2021.

Four focus group sessions were held online between April 22, 2021, and May 5, 2021, with a total of 12 participants using the virtual conferencing platform, Zoom. Caregiver consent and student assent was obtained. Students chose a pseudonym and did not use their cameras during the focus group interviews. Each focus group lasted an hour and were audio recorded.

Data Analysis

Focus groups were recorded using Zoom. Audio recordings were transcribed through Zoom and the primary author reviewed transcripts for errors using the audio recordings as a guide. Once the transcripts were edited, they were shared with participants and caregivers to check for any statements that were not accurate as a member-checking step for added trustworthiness. Final de-identified transcripts were shared with the corresponding author for analysis. An inductive thematic analysis approach was used to analyze qualitative data from focus groups and open-ended survey responses. Both researchers familiarized themselves with the data first, and then independently analyzed each line of every transcript using open coding to identify initial codes and categories. Next, the researchers met, discussed initial categories, and grouped them into themes and came to consensus. This same process was conducted using student responses to open-

ended questionnaire items. Results from focus groups and questionnaire responses were compared and grouped together under the main categories. This iterative process continued, and final themes were extracted from the categories. These themes included: (1) improvements to communication, (2) flexibility, and (3) need for connections.

Data Trustworthiness

Trustworthiness in qualitative studies can be established by ensuring credibility of the researchers and validity of data collected. Surveys and focus group questions were piloted with a small sample of students to establish content validity. Triangulation of data occurred through use of focus group transcripts and member checking, open item survey responses, researcher memoing, and probing student responses through follow-up questions. Researchers acknowledged potential bias as instruments in the data collection process and maintained journals to bracket their thoughts. Both researchers have over 15 years of experience in the field of gifted education, are parents of gifted learners, and are former gifted students themselves.

Results

Overview

This section highlights the students' perceptions of their experiences of being a gifted and talented student during the pandemic as shared through survey responses and focus groups. Data were examined to understand how the pandemic and the shift to remote learning impacted gifted learners.

Theme 1. Improvements to Communication

This theme provided insight that some students enjoyed the online learning environment because technology provided more opportunities for them to receive feedback from teachers and made it easier for them to communicate with their teachers. Learning management platforms allowed for multiple methods to communicate. Students could raise their hand virtually in a synchronous class, type a question in the chat box, send emails, post a question in the class discussion board, or insert a comment in an electronic assignment. Student 1 (S1, male) shared, "Communication with teachers is easier. I am able to do group work from home due to all the new technology. I can ask all the questions I have" (Survey response, April 28, 2021).

Students also felt that they had access to support if and when they needed it. Technology allowed students to work at their own pace and gave them freedom and flexibility to check in as needed. Instead of waiting for a teacher to come around to their desk, students could email a question or send a direct message for support while continuing to work. Focus group participants commented on how their learning management systems allowed for feedback and communication options that were differentiated for who they are as learners. "Ryan" stated, "My teacher kind of let me go at my own speed and gave me the support I needed to check in with technology if I had questions. That, like, let me kind of go do my own thing" (Focus group, April 17).

Theme 2. Flexibility

Another theme that emerged from the data connects to how students enjoyed learning at their own pace, in their own environment, and with autonomy. The theme of opportunities for *flexibility* refers to the enjoyment students felt with the informal aspects of remote learning.

For example, remote learning provides a comfortable physical environment. Remote learning during the pandemic allowed gifted learners to be with their families and have a relaxed element to their school day. Schedules were a bit more flexible which allowed students opportunities that a traditional school day does not provide. Student 3 (S3, female) wrote:

> *I like that we get to use lots of new ways of learning. I like being at home to sleep more because class starts later, and I can eat snacks and lunch with my family and play with my brother. I like seeing my dad too* (Survey response, March 20, 2021).

Students mentioned the freedom that they had with their pacing of the school day. Based on the remote learning expectations set about by their school, students could choose when to start and stop their learning as long as they were meeting the goals set out by teachers. This flexibility allowed for choice of activity after their work was done and the choice to stop and take breaks when needed. Student 4 (S4, male) wrote:

> *I like being online because I don't have to sit in class and listen to the same things over and over. When I am done, I can sign out and do something I like. I also like to work for a bit then take a break and I can choose when to work online* (Survey response, April 15, 2021).

Students shared that the time constraints of the day were also manipulated during remote learning to allow for a school day schedule that was a better fit. The remote learning environment allowed for a condensed school day when additional elements like special area classes such as art and music, recess, and lunch were removed. Students could focus their attention on what learning tasks needed to be completed and then move on with the rest of their day. "Sabrina" stated:

> *I'm usually done by around 10 or 11a.m. so I do not feel like they need to keep us on from 8:35 a.m. all the way to maybe even a little bit past 3:00 p.m. I feel like you can get, like, much more accomplished when you're remote in a quicker time than like a standard school day* (Focus group, April 29, 2021).

There were also flexible options when it came to how students set up their home learning spaces for remote learning. Traditional desks and chairs were replaced by seating that allowed them to be engaged but also include movement and space. "Miles" shared:

> *So, my dad set a rowing machine up and I can just put my computer or whatever I'm using, because I also have an iPad that I sometimes work on, and I can just listen to class while I work out or something* (Focus group, April 20, 2021).

Theme 3. Need for Connections

A final theme centered around the *need for connections*. Students expressed the need for more connection to others. They missed the social interactions that came from in-person learning. Students shared they wanted to go back to the classroom not necessarily because of academics but because they missed the social aspects.

> *A remote learning environment at its core is different from a face-to-face experience. Students talked about how group work and socialization looked and felt different in the online space. Student 5 (S5, female) wrote, "there are less things for me to be involved in. There is a lot less group work and socializing which makes learning less fun"* (Survey response, April 10, 2021).

Remote learning also limited students' extra-curricular activities and opportunities such as participating in after school clubs and sports. This gave students a feeling that they were only able to really talk to the same people in their homes and lost the connections they had with individuals outside of their immediate families. Student 6 (S6, female) shared when asked what was not working during remote learning, "the chance to talk to people I don't see everyday. I miss being allowed to participate in extracurricular and school activities" (Survey response, March 31, 2021).

It is also important to note that in some schools across the country gifted programming options were put on hold during the pandemic. This led to gifted students losing their connections to their gifted peers. Student 7 (S7, male) expressed on the survey:

> *I wish that the gifted program would come back and then I could see my friends, have gifted classrooms again, and actually get to work. School hasn't been that challenging in my other classes since I only get pulled out for math and English.* (Survey response, April 2, 2021)

Conclusion and Discussion

This exploratory study investigated the lived experiences of elementary gifted students during the first year of the pandemic. During this time, students shifted back and forth between in person learning, remote instruction, and hybrid models. The importance of addressing both affective as well as cognitive needs with gifted students in virtual learning environments was highlighted. Even young, gifted learners in elementary school experienced periods of stress and fear, similar to older gifted learners in a study by Chowkase et al. (2022) and wanted to understand what was happening in the world around them. As student 8 (S8, female) shared:

> *At first it was exciting to think about not having school and getting to be home all the time. I was confused because everyone said it's not that bad, so then why were we having to close the school? Later I felt more worried because I was scared that we would get sick, and I was sad because I realized that remote learning is not as enjoyable as regular school. And I really like school and learning* (Survey response, March 30, 2021).

This finding aligns with the work of Duraku and Hoxha (2020) who reported that gifted learners experienced feelings of sadness, loneliness, and an increased lack of motivation when their routines were upended during the pandemic. This finding was also similar to those of parent participants in a study by Kaya and Akgul (2022). Kaya and Akgul found that disadvantages to remote instruction reported by parents of gifted learners included barriers to social relationships, loneliness, mood-related changes, and problems associated with learning online such as boredom, motivation, and distractions.

Gifted elementary students rapidly acquired new technology skills that have better prepared them for future self-directed learning, independent research projects, and new, creative ways to demonstrate what they have learned to authentic audiences. Student 9 (S9, male) wrote:

> *What I mostly learned from this experience is that new things can bring challenges, but I was able to learn how to handle it and become more independent. I knew what work I had to do, and when to do it. My computer skills got a lot better through typing in virtual learning* (Survey response, April 7, 2021).

Findings suggest that elementary gifted students took pride in their ability to gain new technology skills and improve their independent research skills during emergency remote instruction. Student 8 (S8, male) wrote, "I am now way more computer skilled than I was before, and I used and discovered applications I didn't know existed before" (Survey response, March 31, 2021). Although most students reported that they preferred face-to-face instruction and missed their friends, extra-curricular activities, and teachers, they did enjoy the flexibility afforded by participating in online school from home.

This study contributes to the literature on the use of online courses and technology with the gifted and asserts that skills gained during this unique time can be used to innovate education for gifted learners. Prior studies on the use of technology to provide individualized or accelerated learning for gifted students indicate benefits such as greater differentiation, access to advanced coursework, greater challenge, and self-directed learning (Periathirivadi & Rinn, 2012; Potts, 2019; Potts & Potts, 2017; Swan et al., 2015). Results from the current study indicate that young, gifted learners felt empowered by their growth in technology and organizational skills. Teachers can tap into these new skills and confidence to adapt instruction that utilizes the skills developed during emergency remote instruction.

Remote learning also provided a safe space for students to ask for help from their teachers. Private chat boxes and email exchanges allowed students private access to support without having to physically demonstrate to peers that they needed help or had a question. Specifically, students shared that they enjoyed not having to demonstrate emotional elements like shame or embarrassment when they wanted to reach out to their teacher. When asked what worked well for her during remote learning, "Sarah" shared "probably the fact that I can leave a message with my teacher instead of having to raise my hand and ask a question to the entire class" (Focus group, April 10, 2021).

Similar sentiments have been reported in other studies that investigated the experiences of gifted students during the pandemic. Chowkase et al. (2022) found that gifted students were happier, calmer, and less anxious during remote

instruction compared to the pre-pandemic period. The authors noted that these positive changes were a result of the extra time students had available during the pandemic to study, research, read, learn, and carry out activities of interest to them. Benefits that were brought about by the pandemic included time to pursue passions, time for self-recovery, and reduced fear or anxiety by having non-physical meetings with teachers.

Students in the current study felt a void of connection that was not entirely filled by their remote learning environments. They missed seeing their friends, interacting with their gifted peers, connecting with their teachers, and having the opportunity to associate with individuals outside of their households, similar to participants in the studies by Kaya and Islekellar-Bozca (2022) and Wolfgang and Snyderman (2022) . While technology allows students to interact with others, the physical connections that are made in a traditional classroom were missed. Connections are a need for all human beings. Something as simple as sharing a table during lunch or having a conversation at recess was important to students. "Kelsey" shared:

> *When I am on the computer all day it is like looking at my teachers through a piece of glass. I don't ever get to like actually see my teachers and like meet with them and give them a handshake. I just feel like I look at them through a piece of glass* (Focus group, April 17, 2021).

Social relationships and physical activities are among the most important factors in the healthy development of a child (Kaya & Islekellar-Bozca, 2022). One of the biggest hurdles brought about by the COVID-19 pandemic was how young children were limited in opportunities for social interaction and physical activities. As noted by Kaya and Islekellar-Bozca (2022) and Wolfgang and Snyderman (2022), both parents and teachers overwhelmingly agreed that the lack of interaction with classmates and teachers was something students missed most during the school shutdowns.

The goal of this exploratory study was to understand the experiences of elementary gifted students during the COVID-19 pandemic. The open-ended survey questions and focus group protocols provided an opportunity to gain insight into gifted students' perspectives on learning during a pandemic and what from this experience can be applied for best practices in the future.

Recommendations

Recommendations for Practice

Based on the results of this exploratory study, there are several recommendations for practice that can be used to improve virtual and hybrid instruction with gifted students in the future. First, technology should be integrated into all modes of instruction in ways that facilitate curriculum compacting, acceleration, self-paced learning, and social connections. The COVID-19 pandemic provided an opportunity for both educators and students to rapidly gain new skills that can be utilized to move education forward in the future (Lockee, 2021; Pitts et al., 2022). As the impact of the pandemic has subsided, and schools have returned primarily to face-to-face instruction, it is unknown whether teachers will continue to employ virtual components and strategies that can be used to enhance advanced learning programs. While some may return to their comfort zone, teachers of the gifted have gained valuable tools to support both the cognitive and affective needs of gifted students in virtual and hybrid modalities.

Second, curriculum for the gifted should include social and emotional learning and lessons that help young students process global events. Students in this study reported confusion, worry, and fear over what COVID-19 was, why school was closed, when it would reopen, and worries about their friends and family members falling ill. Some researchers in the field of gifted education and psychology report heightened sensitivity among the gifted (Columbus Group, 1991), interest and awareness of global issues from younger age (Silverman, 1993) and overexcitabilities that could either make them vulnerable, or more resilient to crises like the COVID-19 pandemic (Daniels & Piechowski, 2009; Gallagher, 2021). Planning lessons to address these characteristics, especially for younger gifted learners who lack life experience to process the news, would be useful to support their well-being.

Third, educators and administrators should rethink and redesign elementary gifted services to include blended or virtual opportunities that allow students to collaborate with like-ability peers. Gifted students seek connections with others who are like-minded and with whom they share interests. Based on student preferences reported in this study, virtual learning may provide new opportunities to collaborate with students across classes, schools, and even districts for accelerated instruction. The need for virtual options will not end after the COVID-19 pandemic. Public demands for virtual learning options have increased (Lockee, 2021; Pitts et al., 2022) and many school systems in the United States are creating virtual K-12 schools that will offer families safe choices while many caregivers continue to work remotely for various reasons.

Recommendations for Further Research

The research conducted for this study allowed an opportunity for voices to be heard that typically are not given an outlet to do so. In order to ensure that best practices for gifted students occur, it is vital that gifted students themselves are asked what can be done to improve remote instruction. The types of educational challenges that were brought about by the pandemic still persist. Results from this study can inform future research into a) effective supports for gifted learners across non-traditional learning environments, b) social and emotional learning strategies to combat the stressors and pressures of emergency remote learning, and c) how to ensure that even in times of unpresented learning challenges, gifted students make continuous academic progress.

Limitations

The goal of this study was to explore how the needs of gifted learners were met during the pandemic. The researchers acknowledge several limitations. First, data were not collected from students in all 50 states and participants were predominately white. Second, school re-openings were on different schedules across the country, therefore some students may have been more recently involved in virtual instruction and recalled feelings and activities better than others. As students reflected on their school experiences during the 2020-2021 academic year, they referred to participating in various learning modalities: completely remote, a hybrid model, in-person for a portion of the week, or moving back and forth between modalities. Every effort was made to reiterate that students were to speak to their remote learning experiences. Third, use of the online survey instrument with young students posed additional limitations. Low response rates on some items could be attributed to not forcing every question to be answered, including open response questions, and the overall length of the survey. As noted by Fan & Yan (2010) factors like survey content, length of time to complete the survey, question wording and ordering, and scrolling and clicking features can all contribute to low response rates. In addition, the survey population for this study was elementary students in grades three through six. While it has been shown that it is feasible to conduct survey research with children as young as seven, it is important to note that the younger the age of survey participants the more these factors are going to inhibit response rates (Bell, 2007). Considerable care was given in the design of questions and study instruments were piloted with sample students ahead of data collection. Transferability of results is not a goal of this type of qualitative exploratory study; however, results and implications may be useful for future studies with similar student populations.

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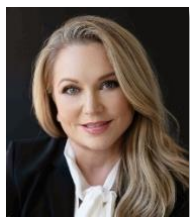
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Appendix A. Focus Group Protocol

Interview Questions

Q1. Please share with us what school looked like for you when the pandemic started? What does it look like this year? *(e.g., in-person, remote, mixture)*

Q2. Could you tell us a little bit about what kinds of activities you did during remote learning? *(e.g., types of activities, expectations, routines)*

Q3. If we observed one of your remote learning sessions, what would we see or hear?

Q4. What is the best thing for you about remote learning?

Q5. What do (or did) you get to do doing remote learning that you did not get to do before the pandemic?

Q6. What do you wish people knew about learning during the pandemic that no one ever asks or talks about?

Q7. What do you wish could be changed about school to make it better for you?

Q8. If you could design the best learning and school environment for you during this unique time, what would it be?

Q9. What else would you like to share about learning during the COVID-19 pandemic?