



Research Article

A survey of the challenges and responsibilities of school district gifted education coordinators before and during the COVID-19 pandemic

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Abstract

District-level gifted education coordinators (DGECs) complete the critical work of overseeing and leading gifted and advanced education programs in school systems. However, only a few studies have explored what their roles and responsibilities entail (Ezzani et al., 2021; Floyd, 2023; Guilbault et al., 2022; Kennedy, 1997). Emerging qualitative research from the COVID-19 pandemic indicates that the pandemic posed unique challenges for DGECs (Guilbault et al., 2022), but quantitative information is also needed to further elucidate those challenges. The present study utilized descriptive cross-sectional methods to quantify and define DGECs' roles and responsibilities, how their roles and responsibilities changed throughout 2020-2021, and what challenges DGECs faced during the pandemic. Participants included a purposive national sample of 35 DGECs from small, medium, and large school districts in the United States. They completed an online questionnaire that was fitted to the research questions. Quantitative survey data were analyzed using descriptive statistics and 2x3 contingency tables with subsequent Pearson's chi-square tests of independence to examine how roles and responsibilities changed over three different time points: prior to COVID-19, during the spring 2020 semester, and during the spring 2021 semester. Results suggest that instructional leadership duties (such as overseeing district identification processes) and program management duties (like developing and revising policies, handbooks, and procedures) were the most common types of roles and responsibilities shared across the sample, while communication and collaboration duties were less widespread. Throughout the pandemic, duties that required face-to-face interactions and communication (e.g., observing teachers, in-person professional development, and parent informational nights) were most negatively impacted. Conversely, the provision of virtual professional development, overseeing district identification processes, and reporting of activities to the state department of education increased throughout the 2020-2021 school year. Furthermore, results revealed high levels of stress among the DGECs with a majority of them considering leaving their role. Major leadership challenges included the following: adapting to constant changes to policies and procedures, delivery of professional learning, gaps in student and teacher access to technology, equity issues, identification procedures, ensuring continuity of services, and providing teachers of the gifted with the necessary digital materials needed for online instruction. Recommendations for practice and future research will be discussed.

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Introduction

Gifted education programs vary widely across the United States. Because they are not mandated by the federal government, it is left up to each state to determine policies, procedures, and funding levels for services. In states with a mandate to identify and serve gifted and talented students, these programs are typically overseen by a coordinator in the

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central office. The duties of the district-level program coordinator are not always clearly defined and depend on several factors including the district's budget, size, geographic type (e.g., rural, urban, suburban), number of identified gifted and talented students, and certification requirements. In small or rural districts, for example, this person may have multiple duties and departments under their charge. Regardless of their job description, the district gifted education coordinator (DGEC) plays a key role as an advocate for students with gifts and talents (Peters & Brulles, 2017). They promote awareness of the academic and psychosocial needs of this population of students both internally (e.g., within the district, between schools, to the School Board) and externally (e.g., community groups, parent advocacy groups, business partners, and donors). To accomplish this task, the DGEC must effectively communicate and collaborate with school principals, caregivers, and other content supervisors.

While the typical challenges faced by DGECs in a regular school year vary and fluctuate, the COVID-19 pandemic presented additional complications for these leaders. For both special education and gifted education programs, decisions had to be made regarding how to adapt testing, student accommodations, and specialized instruction during remote learning while maintaining compliance with policies and mandates (Guilbault et al., 2022; Wolfgang & Snyderman, 2021; Yazçayır et al., 2022). The U.S. Department of Education released the following statement regarding the continuity of special education on March 21, 2020:

Although federal law requires distance instruction to be accessible to students with disabilities, it does not mandate specific methodologies. Where technology itself imposes a barrier to access or where educational materials simply are not available in an accessible format, educators may still meet their legal obligations by providing children with disabilities equally effective alternate access to the curriculum or services provided to other students. (p.2)

Continuity of services was expected and required flexibility and adaptation. It is evident that central office supervisors of specialized programs faced new challenges during this unique time. Little is known about how the pandemic impacted the roles and responsibilities of DGECs; however, lessons can be learned from research findings applied to school principals, special education administrators, and other curriculum supervisors during the COVID-19 pandemic.

Roles and Responsibilities of District Central Office Administrators

Central office leaders are in a “unique position as middle managers who interact daily with both teachers and central office administrators” (Stosich, 2020, p. 4). They serve as instructional leaders, coaches, curriculum supervisors, budget managers, and professional developers. Studies of district central office leaders reveal common responsibilities: (a) supporting principals (Honig, 2012; Rorrer et al., 2008; Stosich, 2020), (b) monitoring student achievement and equity (Ezzani et al., 2021; Rorrer et al., 2008), (c) providing professional development (Rorrer et al., 2008; Guilbault et al., 2022), (d) policy guidance (Ezzani et al., 2021; Honig, 2003, 2008; Guilbault et al., 2022), and (e) instructional leadership for school improvement (Augustine et al., 2009; Honig, 2012; Mania-Singer, 2017; Rorrer et al., 2008). However, additional research is needed to elucidate how these duties impact school improvement (Hooze et al., 2019). Previous literature generally frames the central office leader's responsibilities within a *system* rather than examining their effectiveness, preparation, or responsibilities as individuals (Mania-Singer, 2017).

Whitworth (2014) conducted a case study of three district science coordinators to explore their role in “supporting teacher change and student learning” (p. 3). Findings suggested that the structure of the district and the supervisor's background experience impacted their effectiveness. The author found that those working in smaller districts also experience more barriers such as time and lack of sufficient resources to support science teachers. Whitworth (2014) delineated several key responsibilities of the district science supervisor: (a) aligning curriculum to science standards, (b) disseminating information, (c) working with principals and other administrators, (d) developing curriculum, (e) evaluating science teachers, (f) monitoring a budget, (g) organizing professional development, and (h) fostering community relationships.

Whitworth et al. (2017) further investigated the roles of district science coordinators as part of the Lilead Project with a sample of 122 participants across the United States. They examined professional responsibilities, professional development experiences, barriers encountered at work, and the relationship between their roles, responsibilities, district context (i.e., size, type), and background. A majority of participants were female and White and had served for fewer

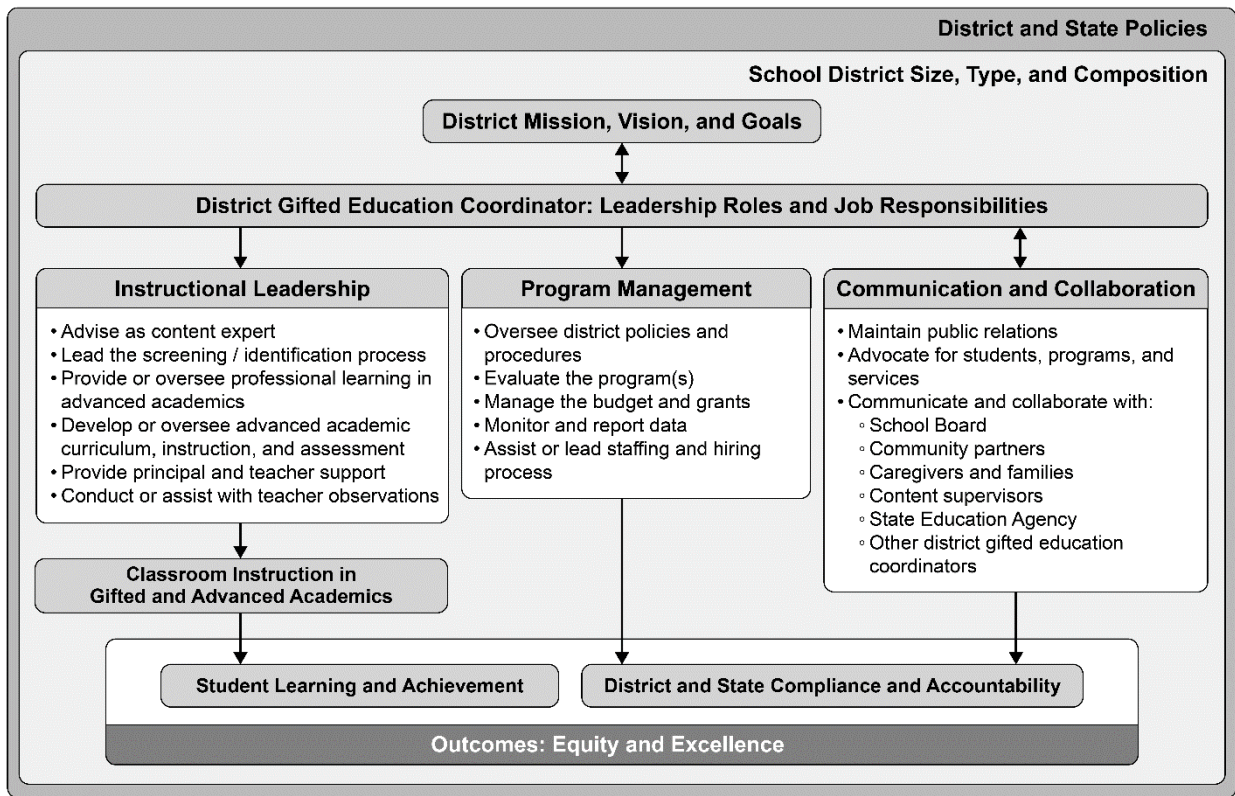
than 10 years in their role. Coordinators in this study held a degree in a science content area and most had been science teachers before being promoted to their current position. Those who were not certified in science came from mostly rural or smaller districts and supervised multiple content areas. Barriers experienced by these district science coordinators included lack of time, insufficient professional learning opportunities, lack of authority to enforce policies, and perception of a lack of emphasis on science instruction in their districts (Whitworth, 2017).

In a similar study of district library supervisors, Weeks et al. (2016) administered a national survey to examine the duties, background, and challenges they face. More than half (52.4%) of participants were school librarians immediately prior to their promotion to the supervisor position, 58.4% had experience as a former school librarian, and 60.8% held a Master of Library Science degree or equivalent. Challenges faced by district library supervisors included decreased funding leading to fewer resources and staff, shifts in technology policies that created barriers to access, and changes to content standards or curriculum. Overall, the authors found the district library supervisors to be highly educated and experienced, and they faced challenges that required the adoption of new skills. The authors emphasized the role of this leader as an advocate for the district school library program.

Finally, research has examined the leadership styles, recruitment, and preparation of district school psychologist supervisors and special education administrators (Milligan et al., 2014; Veale, 2010; Weaver et al., 2003; Young et al., 2021). Weaver et al. (2003) compiled a list of effective leadership behaviors among special education supervisors based on previous studies. Effective leaders use an effective system of communication and feedback, collaborate with staff with an attitude of inclusion, and demonstrate problem-solving skills (Weaver et al., 2003). Young et al. (2021) examined the supervisor's role in the recruitment and retention of school psychologists—a critical shortage area—and the impact that burnout has on school psychologist staffing shortages. The authors define two types of supervision: administrative and clinical. According to Young et al. (2021), “Clinical supervision focuses on supervising the direct services of school psychologists, and administrative supervision focuses on the legal, contractual, and organizational aspects within a school district; however, some areas of clinical and administrative supervision may occasionally overlap” (p. 1502).

Roles and Responsibilities of the District Gifted Education Coordinator

The leadership of a school district's gifted education and advanced academic program is typically overseen by a DGEC. In small or rural school districts, this individual may have other duties and content areas under their guidance, and in larger districts, there may be more than one person working in this capacity in the central office. Despite the critical role DGECs play in the supervision of advanced academic services, relatively little research has been conducted to investigate these leaders and their roles. Their job descriptions vary from district to district and from state to state; however, there are some common responsibilities outlined in the literature. These duties include supporting the district's teachers of the gifted, overseeing the district gifted identification process, facilitating professional learning for educators and administrators in their districts related to advanced learning, and program evaluation and monitoring tasks to ensure the programs are sustainable (Brulles, 2020; Guilbault et al., 2022; Novak & Lewis, 2023). In a recent qualitative study exploring the roles and responsibilities of gifted education coordinators before and during the pandemic (Guilbault et al., 2022), the authors identified three main categories of responsibilities inherent to the role: (1) instructional leadership, (2) program management, and (3) communication and collaboration (see Figure 1.)



Note. This figure depicts a model of a district gifted education coordinator’s leadership roles, responsibilities, and targeted outcomes. CC- By attribution 4.0 International. Guilbault, K. M. (2022, February 15). *Leadership Roles of a District Gifted Education Coordinator*. Retrieved from <https://osf.io/kyb3w/>. <https://doi.org/10.17605/OSF.IO/UK5TG>

Figure 1. Conceptual model of the leadership roles of a district-gifted education coordinator

In a recent qualitative study, Guilbault et al. (2022) found inconsistency in job titles even within individual states, which may add to confusion surrounding responsibilities. Compared to their work pre-pandemic, the DGECs reported a level of intensity and rapid change accompanied by uncertainty related to the work environment, decision-making, policies, and communication (Guilbault et al., 2022). Similar to studies by Ezzani et al. (2021) and Floyd (2022; 2023), DGECs were concerned with matters of equity. The focus of their work during the pandemic centered on ensuring student access to technology, continuation of gifted education services, gifted student identification, and addressing political and social justice issues that were magnified during this time.

A national focus on improving equity and eliminating barriers to advanced learning programs in the United States has led to a shift in focus for DGECs’ work and requires critical examination of policies and practices. This focus is reflected in updated gifted education standards and position statements from organizations like the National Association for Gifted Children (NAGC) and carries through into research in gifted education journals. Consequently, recent research on DGECs has examined organizational barriers to improving equity in gifted education programs and identification practices (Ezzani et al., 2021; Floyd, 2023; Floyd, 2022; Novak & Lewis, 2023). For example, Floyd (2022) conducted a case study of three DGECs in one state and found that these central office leaders need professional learning opportunities to prepare them for critical conversations related to systemic racism and how to directly address factors that contribute to underrepresentation in advanced academic programs for marginalized groups of students. Similarly, Ezzani et al. (2021) investigated how district efforts to provide professional learning in cultural proficiency affected policies and practices for gifted identification of culturally, linguistically, and economically diverse learners. Ezzani et al.’s (2021) findings emphasized the importance of communication, advocacy, and equitable conceptions of giftedness. DGECs may face barriers to attaining equity in their district gifted education programs because of teacher (and other external stakeholder) perceptions of giftedness (Novak & Lewis, 2023).

School and District Leadership During the COVID-19 Pandemic

School and district administrators were called on to solve a myriad of problems as they focused on the continuity of services, the effects of school closing on students’ mental well-being, learning loss, gaps in access to technology, and the

health and safety of their faculty, staff, and students (Yazçayır et al., 2022). All of these issues had to be addressed during periods of constant change and uncertainty. While navigating these new challenges and pressures, leaders also experienced an “increase in bureaucratic load” that left many feeling overwhelmed (Yazçayır et al., 2022, p. 182). Research evidence about how leaders navigated these challenges is beginning to emerge.

Recent studies have reported distress, burnout, and coping mechanisms used by district and school leaders during the COVID-19 pandemic (Longmuir, 2023; Walls & Louis, 2023; Wolfgang & Snyderman, 2021). Walls and Louis (2023) examined sources of moral distress and levels of intensity among 26 school district leaders across 13 school districts in the United States during the first year of the pandemic and found three main sources of problems that led to moral distress: (1) political problems with the community or teacher’s union, (2) dealing with problems among staff (e.g., stress, resistance to change, and collaboration), and (3) inability to meet student needs sufficiently (i.e., lack of resources, funding, policy, or family constraints). The authors noted that these burdens may be especially difficult in a caring profession like education.

Azukas (2022) explored the leadership competencies required for effectiveness during the COVID-19 pandemic through semi-structured interviews of principals and superintendents overseeing full-time virtual schools. Findings indicated differences in communication and engagement between leaders of brick-and-mortar schools and virtual schools, instructional support, supervision, and training and professional development. Longmuir (2023) suggested that these unusual circumstances forced leaders to rapidly make sense of changes and adjust how they led and consulted with others during decision-making processes; communication was critical during this time. Similar to prior research on leadership adaptations during times of crisis, studies exploring leadership during the COVID-19 pandemic employed change leadership, contextual leadership, crisis leadership, and caretaking leadership as frameworks for understanding (Huck & Zhang, 2021; Longmuir, 2023; Thornton, 2021; Yazçayır et al., 2022). A systematic literature review of 49 education-related COVID-19 studies (Huck & Zhang, 2021) investigated the challenges schools faced and provided recommendations for improving future remote and hybrid learning environments. Key findings focused on teacher preparation, equity, and communication. In examining leadership practices during the COVID-19 pandemic, multiple studies included themes related to caretaking leadership (Anderson et al., 2020; Kaul et al., 2022; Steilen & Stone-Johnson, 2023; Weiner et al., 2021). According to Steilen and Stone-Johnson (2023), leadership involved “model(ing) and provid(ing) care to support the growth of their organization, addressing the needs of teachers and students in order to create a positive environment and motivate learning” (p. 2). There were wide variations in the responses and adaptations to school closures and implementation of remote instruction.

Overall, previous research suggests traits and characteristics of effective leaders; however, leadership practices vary depending on factors such as district size and type, as well as other situational factors (Marzano, et al., 2005; Whitworth et al., 2017). Results of previous investigations suggest DGECs play an important role in assisting principals, teachers of the gifted, and other content supervisors in supporting instruction, ensuring compliance, and monitoring. All these practices ultimately serve the purpose of ensuring student achievement. These studies also reveal a gap in our understanding of the DGEC’s role and how they adapted to challenges faced during the COVID-19 pandemic. Understanding this may elucidate ways to prepare future DGECs for success.

The Present Study

The purpose of this study was to explore and quantify the experiences of district gifted education coordinators (DGECs) during the COVID-19 pandemic. Although initial school closings took place in the United States and across the world in March 2020, consequences of changes to gifted identification practices, educational services, and leadership have had a lasting effect to this day in regard to student achievement (Peters et al., 2023), teacher shortages (Pressley, 2021; Westphal et al., 2022), and health of faculty and students (Correa & First, 2021). It is important to understand the challenges faced by DGECs during this unique time in order to address current DGEC, teacher, and student needs. We therefore investigated the roles, challenges, opportunities, and strategies implemented by central office leaders who oversee K-12 advanced learning programs.

Problem of Study

Main problem: What are the roles and responsibilities of DGECs?

Sub-problem 1. What were some of the leadership challenges faced by DGECs during the first year of the COVID-19 pandemic related to continuity of services for gifted learners?

Sub-problem 2. How did the roles and responsibilities of DGECs change, if at all, during the COVID-19 pandemic?

Method**Research Model**

The present study was part of a larger mixed-methods exploratory project that aimed to articulate the responsibilities, challenges, and creative solutions employed by DGECs in the United States during the first year of the pandemic (see Guilbault et al., 2022, for some of the qualitative findings from this larger project). Participants included a purposive sample of 35 DGECs across the United States. Both multiple-choice quantitative and open-ended qualitative survey data were initially collected. The data and findings presented in this paper were drawn from participants' quantitative survey responses, using a descriptive cross-sectional study design. This type of model provides a snapshot of the frequency and characteristics of participants' experiences at a particular point in time (Aggarwal & Ranganathan, 2019), which aligns with the initial goals of this larger exploratory project and utilizes the participants' quantitative responses to concretely define their experiences.

Participants and Sampling Procedure

A purposive sample of participants was recruited through a national list-serve of DGECs in the United States. We were interested in locating participants working in a central-office leadership role that had been in that position for at least two years in order to compare their roles and experiences before the COVID-19 pandemic and during the first year of the pandemic. Job descriptions, titles, and roles varied greatly from state to state and from district to district, therefore the invitation and survey consent clearly stated that we sought participants who were in an administration and supervision role in which they oversee advanced academics or gifted education services for all schools in a district. This study excluded anyone who held the title "gifted education coordinator" but held an instructional or teacher-leader role at one or more schools and spent some of their time instructing gifted students. Supervisors, directors, or coordinators who oversaw entire district programs were included in the study.

Prior to data collection, ethical research approval was obtained for this study from the Johns Hopkins University Institutional Review Board (IRB). An invitation with informed consent and a link to a Qualtrics survey with 35 items was distributed electronically to 102 members of a national network of DGECs in March 2021, one year after the initial school closings related to COVID-19. Participants were provided an option at the end of the survey to provide an email address to be entered into a raffle to receive a \$50 gift card. This was to incentivize participants to complete the lengthy survey. To ensure confidentiality, no IP addresses or other personally identifiable information were collected, except from those who volunteered to enter their email address for the raffle. Email addresses were removed from the downloaded data file prior to analysis.

The Analytic Sample

Sixty-five people initially completed the survey; 10 were eliminated because they had not worked in their role prior to the pandemic. Of the remaining 55 participants, 20 were eliminated from the analysis because they were not in a district leadership or administrative role, but rather were in a school or classroom instructional position. This left 35 participants in the analytic sample. Their demographic information is shown in Table 1.

Table 1. Respondent demographic information (N = 28)

Measure	Items	%	n
<i>Gender</i>	Female	96.43	27
	Male	3.57	1
<i>Age</i>	25-34 years	3.57	1
	35-44 years	35.71	10
	45-54 years	25.00	7
	55-64 years	25.00	7
	65-74 years	3.57	1
<i>Race</i>	White	92.86	26
	Black	7.14	2
<i>Highest Degree Earned</i>	Bachelor's	3.57	1
	Master's	32.14	9
	Post-Master's Certificate	28.57	8
	Ed.S.	7.14	2
	Ph.D.	25.00	7
<i>Gifted Certification</i>	No Certification	25.00	7
	Working on Certification	3.57	1
	Has Certification	67.86	19
<i>Years of Experience</i>	0-3 years	25	7
	4-6 years	39.29	11
	7-10 years	17.86	5
	16-20 years	14.29	4

Note. Ed.S. stands for Education Specialist degree. Twenty-eight of the 35 participants responded to demographic questions.

Participants were asked to indicate the size and type of school district in which they worked. Of the 28 responses to this question, 46.43% of respondents ($n = 13$) were employed in a medium-sized school district, 28.57% ($n = 8$) worked in a large school district, and 25% ($n = 7$) worked in a small school district. These districts were described as primarily *suburban* (50%), followed by *rural* (32.14%), and last, *urban* (14.29%).

Data Collection Tools and Procedures

Survey

Overarching research questions were developed after a review of the literature and national standards in gifted education. These questions guided survey design of an instrument that aimed to explore the following topics: (1) the roles and responsibilities of district gifted education coordinators before and during the pandemic, (2) coordinators' background experience and training prior to their current leadership position, (3) stress resulting from the COVID-19 pandemic, (4) in what ways, if any, the COVID-19 pandemic impacted their work and budget, (5) challenges they faced during remote instruction and school lockdowns, and (6) looking forward, what lessons they learned from this experience that they would like to see remain as part of their work in the future.

Pilot Testing

A survey with 50 items that included demographic questions and multiple-choice items, short response items, select all that apply items, and yes/no items was piloted with five DGECs from various states. Based on feedback from these content experts, items were removed or rephrased, resulting in a final survey with 35 total questions.

Data Analysis

Quantitative data were primarily analyzed with descriptive statistics to summarize the roles of DGEC and the challenges they faced during the COVID-19 pandemic related to continuity of services for gifted learners. To examine how DGEC's roles changed during the pandemic (for Sub-problem 2), 2x3 cross-tabulation tables (where binary yes/no responses comprised the two rows and the descriptions of their roles at the three distinct time points: (1) before the COVID-19 pandemic, (2) spring 2020, and (3) spring 2021 comprised the three columns) were used and tested with Pearson's chi-square test of independence to determine how the variables related to each other (Agresti, 2018). Some other bivariate relationships of interest (e.g., budget changes by district size, stress level by years of experience) were also tested with Pearson's chi-square test of independence to determine which relationships were statistically significant.

Results**Overview**

This section highlights results from the survey items as they relate to each research question. Data were examined to understand the duties and responsibilities of DGEC, how these responsibilities changed during the COVID-19 pandemic, if at all, and what challenges they experienced during the pandemic.

Roles and Responsibilities of DGECs

On the survey, participants could mark any role or duty for which they were responsible in their current position from 19 options. Descriptive statistics were calculated for each role and are presented in Table 2. Certain roles received the highest number of reports and greatest means across the three distinct time points: oversee the gifted identification process; develop or revise gifted or advanced program handbooks, policies, and/or procedures; and support school principals in their implementation of gifted/advanced education services. The high levels with which they were reported indicated that these roles and responsibilities may be considered key aspects of DGEC positions, regardless of DGECs' state, district size, or district urbanicity.

Table 2. Reported roles and responsibilities of DGECs across three time points

Role or Duty	Sum	Mean	SD
Oversee district gifted identification process	75	25	1
Develop or revise gifted program handbooks, policies, and/or procedures	70	23.33	0.58
Support school principals in their implementation of gifted/advanced education services	63	21	3
Curriculum supervision for advanced learning programs	59	19.67	0.58
Program evaluation	59	19.67	2.31
Assist principals with academic acceleration decisions	59	19.67	0.58
Oversee district gifted/advanced education budget	58	19.33	0.58
Supervise an appeals process	58	19.3	1.15
Test administration	58	19.33	4.04
Provide professional learning - virtual	56	18.67	6.66
Prepare, monitor, and/or submit reports or updates to the State Department	56	18.67	1.53
Facilitate or deliver parent information nights, open houses, or workshops	54	18	5.57
Maintain electronic file system with resources for teachers of the gifted	50	16.67	1.53
Observation of gifted education teachers	49	16.3	4.04
Attend and/or present at school board meetings	49	16.33	2.08
Facilitate parent or community advisory groups	41	13.67	2.08
Provide professional learning - in person	40	13.33	10.50
Supervise other content areas (e.g., magnet programs, STEM, etc.)	31	10.33	0.58
Attend school-based parent conferences	30	10	3.61

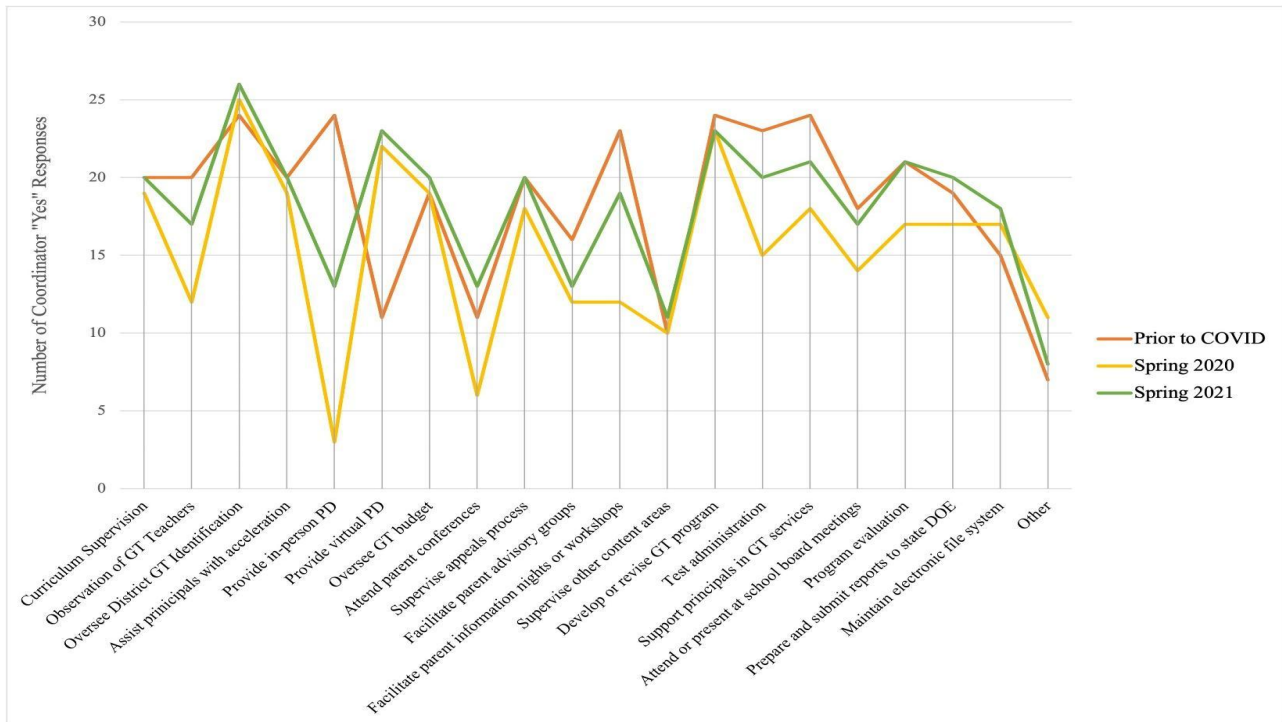
Note: Participants were asked to select all that apply.

Other roles and responsibilities were less frequently reported across the sample: attending school-based parent conferences, supervising other content areas (e.g., magnet programs, STEM), and facilitating parent or community advisory groups. The lower frequencies and means of these reports suggest that these duties are less imperative to the role of DGEC; however, some DGECs may fulfill these responsibilities either due to district or state policy differences, budget differences, or their own volitions.

Changes to DGEC Roles and Responsibilities during the COVID-19 Pandemic

Certain roles and responsibilities were most negatively impacted by the COVID-19 pandemic. Providing in-person professional learning (PL), attending parent conferences, observing teachers of the gifted, providing parent informational nights, administering tests, and attending school board meetings all took dips during the initial COVID-19-related school closings (i.e., the spring 2020 semester), as shown in Figure 2. These changes make sense since all roles typically required in-person attendance or a certain level of technological capacity for which districts were not yet prepared in the first months of the pandemic. It appeared that some other roles actually increased in importance one year after the pandemic hit (i.e., the spring 2021 semester). The provision of virtual PL, the overseeing of district

identification processes, and the reporting of activity to the state department of education were more frequently reported in March 2021 than they were prior to the pandemic. Certain roles remained the most consistent over time, as evidenced by their low standard deviation ($SD = 0.58$) presented in Table 2: curriculum supervision for advanced learning programs, assisting principals with academic acceleration decisions, overseeing the district gifted/advanced budget, supervising other areas, and developing or revising gifted program handbooks, policies, and procedures.



Note. This figure depicts the number of responses indicated by DGECs for each survey item across the three time points. It shows which roles remained relatively stable and which ones varied across the three time points. PD = professional development. GT = gifted and talented. DOE = Department of Education.

Figure 2. Changes to DGEC positions before, during, and after COVID-19 school closings

A 2x3 cross-tabulation table with subsequent Pearson’s chi-square tests of independence revealed some statistically significant changes in DGECs’ roles during the pandemic: a decrease in the provision of in-person PL ($p < .001$), an increase in virtual PL ($p = .001$), a decrease in parent informational nights, open houses, or workshops ($p = .004$), and a decrease in test administration ($p = .037$). The decreases in observation of teachers of the gifted ($p = .068$) and in supporting principals with their provision of gifted and advanced services ($p = .108$) were marginally significant.

Changes and Challenges Experienced by DGEC during the COVID-19 Pandemic

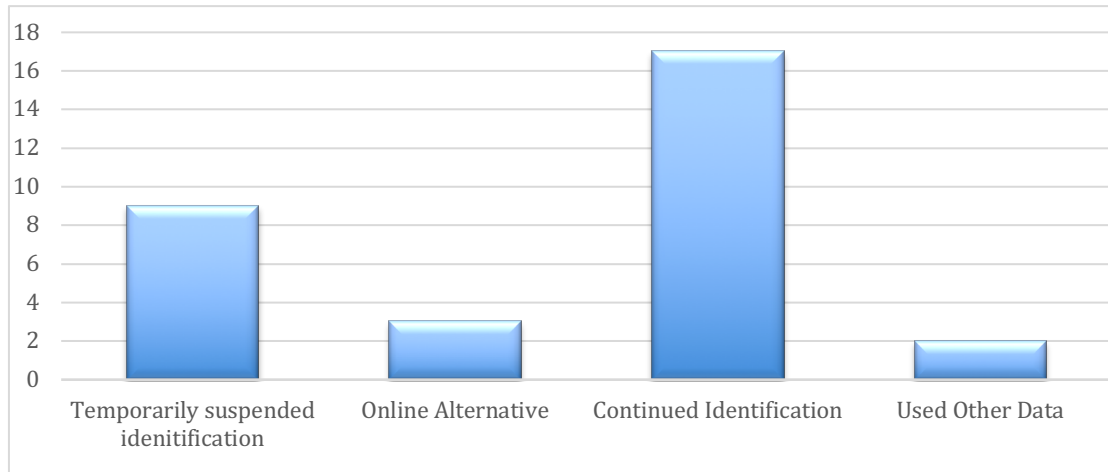
It appeared that DGECs endured some different challenges throughout the course of the pandemic, likely due to their varying district and state policies and access to needed funding or other provisions. At the time of data collection in March 2021, most respondents ($n = 17$) had returned to work fully in-person, with a few remaining in hybrid ($n = 3$), fully remote ($n = 2$), or other ($n = 4$) settings. Changes in their work settings may have affected the efficacy with which they could handle their positions and responsibilities.

Budget Changes

Forty-three percent of respondents ($n = 15$) reported that their gifted and advanced programming budget stayed the same throughout the first year of the pandemic, while 17% ($n = 6$) reported a decrease and 11% ($n = 4$) reported an increase. Interestingly, both rural ($p = .05$) and small ($p = .022$) districts had statistically significant relationships with reports of no budget change, via Pearson’s chi-square tests of independence, meaning that DGECs operating within those district types were likely less impacted by changes and stresses associated with budget. Of the six DGECs with a reduced budget, only one continued normal identifying procedures in accordance with the Centers for Disease Control and Prevention (CDC) guidelines.

Changes to Student Services and Identification

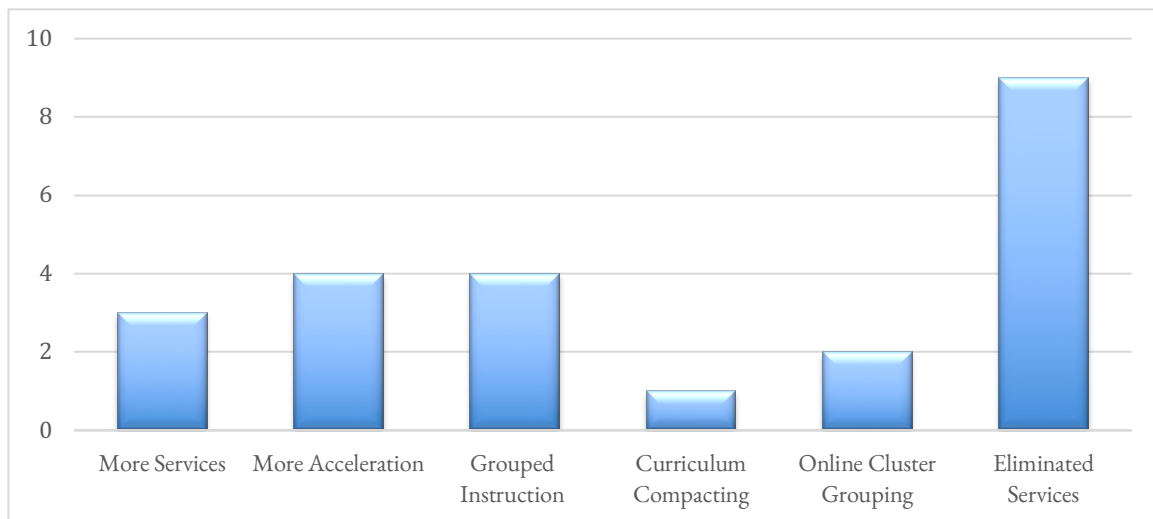
Participants could select all options that applied to their experience in how identification and services changed. Their reports for changes in identification are shown in Figure 3, and their reports for changes in services are shown in Figure 4. It appeared that the majority of participants ($n = 17$) were able to continue identification methods following the CDC safety guidelines, but several others ($n = 9$) had to temporarily suspend identification when the pandemic originally hit.



Note. This figure conveys the extent to which DGECs reported how their districts' identification procedures changed during the spring 2020 semester.

Figure 3. Gifted identification procedure changes during COVID-19 pandemic ($n = 35$)

The elimination of services was the greatest change in gifted and advanced services during the pandemic, with 26% of respondents ($n = 9$) reporting this issue. Overall, it appeared that most services for students did not change substantively during the first year of the pandemic, with all other options reported by only a few DGECs.



Note. This figure conveys the extent to which DGECs reported how their districts' services changed during the spring 2020 semester.

Figure 4. District service changes during remote instruction ($n = 30$)

Supporting Teachers of the Gifted Through Challenges

Knowing that teacher supervision, observation, and providing support are relatively common responsibilities of DGECs in the United States, as presented above, it makes sense that one challenge for DGECs was adapting how they supported gifted resource teachers throughout the pandemic and responsively attended to the teachers' needs. The sample selected all the needs they observed among their districts' gifted resource teachers over the first year of the pandemic, as shown in Table 3.

Table 3. Needs of gifted resource teachers during the COVID-19 pandemic

Needs of Gifted Resource Teachers	%	n
Technology tools (software, hardware, Wi-Fi, cameras, headsets, etc.)	57.14	20
New materials for working with advanced learners (books, e-books, apps, online learning subscriptions, etc.)	54.29	19
Technology training	48.57	17
Support for working with advanced learners	45.71	16
Additional planning time	42.86	15
Autonomy to be creative and flexible	40.00	14
More frequent meetings with other teachers of the gifted	34.29	12
Co-planning	22.86	8
Reduced testing of students	20.00	7
Other (please list)	20.00	7
Fewer extra duties	17.14	6
Fewer meetings	17.14	6
Smaller class sizes	14.29	5
Briefer meetings	14.29	5
Fewer observations or evaluations	8.57	3
Total		160

Note: Participants were asked to select all that apply.

Equity Challenges

DGECs reported several concerns they held regarding how the COVID-19 pandemic impacted the equity of their gifted and advanced programming and services, as shown in Table 4. The most widespread equity concerns across this sample were teachers’ varying comfort levels with providing virtual instruction (*n* = 21), disparate access to adult supervision at home during virtual learning (*n* = 20), and unequal access to needed technology (*n* = 17).

Table 4. Challenges related to equity

Responses	%	n
Comfort level with online learning and educational tech tools used for instruction	16.15	21
Adult supervision/support for online learning at home	15.38	20
Unequal access to technology (Wi-Fi, laptops, bandwidth, cameras, etc.)	13.08	17
Changes to (or elimination of) identification practices	10.00	13
Lack of culturally proficient teaching practices in virtual learning	10.00	13
Resources and materials lack diversity	10.00	13
Special education needs (i.e., IEP plans or 504 plans could not be fully met, technology tools lacked ADA compliance, lessons not created with Universal Design for Learning practices, etc.)	10.00	13
Language barriers	7.69	10
Other, please explain	5.38	7
Access to school meals	2.31	3
Total	100%	130

Note: Participants were asked to select all that apply.

Stress and Job Satisfaction

Forty percent of the respondents reported feeling more stressed in their position, compared to the prior, pre-pandemic year. Eleven percent actually reported being less stressed during the first year of the pandemic, while the remaining respondents felt the same levels of stress as before. Interestingly, no participants who had served as a DGEC for four to six years reported less stress; they had a negative marginally significant relationship with less stress, per Pearson’s chi-square test of independence test (*p* = .063). All of the DGECs whose districts reduced services reported either greater levels of stress or no change in stress. Likewise, 34% of the sample (*n* = 12) considered leaving their positions or retiring early after the first year of the pandemic, and 26% (*n* = 9) said they considered it.

Discussion

This study sought to define the most common roles and responsibilities of DGECs, capture how those roles and responsibilities changed during the COVID-19 pandemic, and articulate some of the most prevalent challenges they faced in the first year of the pandemic related to continuity of gifted and advanced education services. Prior to this study, only a few studies (Ezzani et al., 2021; Floyd, 2022 & 2023; Guilbault et al., 2022) examined the unique roles of DGECs. Since state gifted education policies and funding vary quite a bit (Rinn et al., 2022), there was a gap in knowledge about which duties most comprise DGEC positions in the United States, regardless of location or district context.

The findings in this descriptive study suggest that most DGECs oversee their districts' gifted identification process; develop or revise their district's gifted handbook, policies, and procedures; and support site principals in the implementation of gifted and advanced services. Thus, these responsibilities are central to the position of DGECs in this sample, regardless of location or district context. Our findings suggest that the responsibilities of supporting principals (Honig, 2012; Rorrer et al., 2008; Stosich, 2020; Whitworth, 2014) and making policy decisions (Ezzani et al., 2021; Honig, 2003) are similar to expectations held of other central office leaders (e.g., special education administrators, district science coordinators, district library supervisors), whereas the duty of overseeing the gifted identification process is unique to DGECs. Like the administrative supervisors of school psychologists interviewed by Young et al. (2021), DGECs also take on both clinical and administrative supervision responsibilities in how they oversee psychological, achievement, and/or cognitive assessments for identification processes, tend to principals' and teachers' needs, and facilitate several legal and organizational aspects related to gifted and advanced education services.

These findings add to and support the small body of literature that describes what the position of a DGEC in the United States entails (Brulles, 2020; Ezzani et al., 2021; Guilbault et al., 2022). In considering how the primary DGEC responsibilities from this study align with Guilbault's (2022) Conceptual Framework of the Leadership Roles of a DGEC, two fall into instructional leadership, one falls into program management, and none comprise communication and collaboration directly, although most of these roles require effective communication and collaboration in order to be accomplished. Meanwhile, certain responsibilities like attending parent conferences, facilitating parent and community advisory groups, and supervising other programs seemed less common. Again, considering Guilbault's conceptual framework, two of those duties fall into the role of communication and collaboration, while one falls into the role of program management. These differences perhaps might be explained by state mandate or budgetary differences (e.g., a district with a lower budget may only allocate half of a salary toward the DGEC role and expect them to oversee teacher instructional coaching for the other half of their position). Put together, based on this sample, it seems that instructional leadership is the most dominant role taken on by DGECs, followed by program management, and then followed by communication and collaboration. This ordinal breakdown of roles implies that DGECs particularly share commonalities in their roles and responsibilities with the position of a district science coordinator, as described by Whitworth (2014) and Whitworth et al. (2017), whose primary duties also fall into both instructional leader and program manager role; thus, it may be of interest to see how those leaders can collaborate or learn from each other to grow in their distinct positions.

DGECs experienced some similar pandemic-related challenges with other district central office leaders, such as focusing on continuity of services, navigating inequitable access to needed technology, and supporting teachers transitioning to online environments (Huck & Zhang, 2021; Steilen & Stone-Johnson, 2023; Yazçayır et al., 2022). Although some DGEC responsibilities remained relatively stable throughout the first year of the COVID-19 pandemic (i.e., curriculum supervision, supporting principals with academic acceleration decisions, overseeing the budget, supervising other programs, and developing and revising the handbook, policies, and procedures), certain duties—particularly those typically relying on face-to-face interactions and communication, such as parent conferences, in-person teacher PL, parent informational nights, observing teachers, administering tests, and attending school board meetings—decreased in frequency across DGECs. This makes sense, considering that many districts took time to locate needed technology to better facilitate virtual meetings and interactions. This also aligns with other literature about district leaders' challenges emerging from the pandemic (Longmuir, 2023; Steilen & Stone-Johnson, 2023; Yazçayır et

al., 2022). However, it suggests a need to further examine how the lack of face-to-face interactions and communication with teachers and parents impacted the provision of services and students' individual learning experiences during the pandemic.

Certain challenges were felt across the sample, such as increased levels of stress when compared to the prior year and delays in district identification procedures. Equity, in particular, was a key concern of DGECS during the COVID-19 pandemic, as many identified that students had insufficient access to technology, adult supervision during virtual learning, and teachers with varying levels of comfort in facilitating virtual instruction. Given the long-standing equity issues present within the field of gifted education (Peters, 2022), this finding warrants concern, as it adds to the body of literature suggesting that historically marginalized students were more greatly impacted by the negative outcomes from the pandemic (Peters et al., 2023). It also provides further support from Floyd's (2022) and Ezzani et al.'s (2021) studies about how DGECS require more guided training in how to resolve equity issues in gifted and advanced education programs; perhaps if trained more cohesively, they can act as advocates for equity, as Weeks et al. (2016) recommended for district library supervisors.

The majority of the sample felt greater levels of stress in the pandemic year than the year prior, and they also reported considering leaving their positions or retiring early, again echoing patterns observed across other leadership roles (Longmuir, 2023; Walls & Louis, 2023; Wolfgang & Snyderman, 2021; Yazçayır et al., 2022). This also should prompt sustained empirical and practical attention; DGECS often hold a special skillset and pursue technical gifted education training (as observed in our sample, in which over 70% held or were working on gifted education certification). If DGECS experience burnout and opt to leave their current positions, it might create a shortage of qualified people to lead gifted and advanced programs, which may have negative trickle-down effects on teachers of the gifted and their students. Most of the current literature examines how COVID-19 impacted teachers' levels of stress and burn-out (Pressley, 2021; Westphal et al., 2022), but our findings suggest focused attention should also be granted to DGECS' stress and work satisfaction post-pandemic.

Conclusion

Put together, the findings from this study suggest that DGECS in the United States share some similar responsibilities with other central office leaders, such as supporting principals and developing policies and program handbooks, but there are specific responsibilities unique to their position, especially related to gifted identification procedures. In our sample, DGECS primarily took on instructional leadership roles, followed by program management roles, and they saw a decrease in their communication and collaboration roles in the spring of 2020 and spring of 2021 (i.e., after the COVID-19 pandemic). DGECS reported specific challenges those arose from the pandemic, such as inequitable student access to adult support and needed technology, increased DGECS levels of stress and considerations of leaving their positions, and a lack of needed instructional resources for teachers of the gifted. Based on these findings, we provide certain recommendations for practice and future research.

Recommendations

Recommendations for Practice

It is recommended that there be a focus on monitoring the stress levels and well-being of DGECS and subsequent efforts made to address burn-out resulting from their experiences at work over the past three years. Also, DGECS would benefit from resources and time to evaluate the impact of the COVID-19 pandemic on equity in student identification and provision of services, and the impact this may have had on student achievement. Finally, efforts should be made to strengthen communication gaps that may have developed between DGECS and outreach to families in their districts. This may be accomplished through use of technology tools that families and staff became comfortable with during the COVID-19 pandemic, as well as by safely reinstating in-person events to build community.

Recommendations for Future Research

Results from this study suggest a need to further examine the impact of alternative identification practices that were employed during the COVID-19 pandemic on the present student enrollment in gifted education programs. Future studies should investigate the impact of the modified identification processes, service disruption, and related equity issues. Additionally, research should explore how the lack of face-to-face interactions and communication with teachers and parents impacted the identification and provision of services and students' individual learning experiences during the COVID-19 pandemic.

It would be beneficial to conduct a study on the roles, responsibilities, background, and training of DGECs with a larger sample size to continue to add to the literature. This information would be valuable to graduate programs that prepare administrators and teachers of the gifted so they could adapt courses to meet the skills and competencies that are needed for success as a DGEC. Researchers could examine which factors predict differences in roles (i.e., Why do some DGECs oversee other content areas? Why are communication and collaboration less prevalent than instructional leadership and program management for some DGECs?) and explore current DGEC stress levels and whether that effect persists or has leveled off over time. Such research could include a focus on what DGECs need from their supervisors in a post-pandemic context to feel successful in their work. Furthermore, research is needed to determine how the challenges and barriers observed impact DGECs in effectively supporting teachers of the gifted.

Limitations

The objective of this study was to explore the roles, responsibilities, challenges, and solutions employed by district gifted education coordinators during the pandemic. There are several limitations to consider when interpreting and drawing conclusions from this study. First, one limitation is the low response rate. Approximately 30% of the total members of the national group invited to participate in the study qualified and completed the survey. Also, some participants chose to skip some survey items. Because of the low response rate and sample size, findings may not be generalizable to all DGECs, and it is possible that the sample in this study may have had more extreme reactions and feelings about the pandemic, hence their motivation to complete the survey. As an exploratory study, the information gained was useful for creating the semi-structured interview protocol and revised survey for the second phase of this study.

Second, another limitation is the homogeneity of sex and gender in this sample. Although there are more female educators than males in the United States (Institute of Education Sciences, 2020), it is unknown if that is also the case for central office supervisors of advanced academic programs. No data sets are available, as this information is not collected by any agency or organization. The lack of racial and ethnic diversity in this sample is also a limitation. In the second phase of the study, additional efforts were made to recruit more participants of Color.

A final limitation is the data collection time period. This was a snapshot of the experiences during the first year of the pandemic. At the point of data collection, many of the district coordinators had returned to work in person. It would have been useful to collect data across multiple points in time, from the initial school closings, mid-way through year one, one year later, and again in the following year.

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