

# The Shift to Online Tournaments Helped High School Speech and Debate Survive the COVID-19 Pandemic

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## ABSTRACT

The US lockdown during the COVID-19 pandemic forced education to shift to virtual platforms, causing many extracurriculars to suffer. Anecdotal evidence suggests that the transition of speech and debate (forensics) into virtual tournaments led to increases in accessibility due to the removal of travel costs and disability barriers. Conversely, potential harms such as internet and technology inequalities, as well as a lack of supervision, human connectivity, and focus, have been debated as reasons for a decrease in extracurricular interest during the pandemic. To bridge this gap, this paper aims to use statistical analysis to determine the impact of the shift to virtual tournaments brought about by COVID-19 on high school speech and debate participation and accessibility. Results demonstrated an increase in the number of states represented at competitive debate tournaments, while stability was maintained in the relative participation of “rural vs urban” and “small vs large” schools, even as net participation decreased across the board in the aftermath of the pandemic. This suggests that the transition to online tournaments not only allowed high school speech and debate to survive lockdown, but also maintained relative equity and increased accessibility for out-of-state debaters.

## Introduction

Coronavirus disease 2019 (COVID-19) was discovered in Wuhan, China, in November 2019 (Hao, 2022). Spreading globally, cases of COVID-19 were first officially reported in the United States in mid-January 2020 (Jordan, 2020). In response, on February 27, 2020, a school in Washington State became the first to close due to COVID-19 (Zviedrite et al., 2021). On March 27, 2020, Congress passed the Coronavirus Aid, Relief and Economic Security (CARES) Act, which was expanded to provide 277.7 billion dollars for Education Stabilization Fund (ESF) programs to “prevent, prepare for, and respond to coronavirus” (Skinner et al., 2023). Within three days, all public US school districts except one were closed, the first school closure in US history of that scale (Zviedrite et al., 2021). As the nation underwent a lockdown, these schools shifted to remote learning methods through online video conferencing platforms like Zoom (Storey & Slavin, 2020). Live instruction was conveyed through video calls, and asynchronous work was submitted online, which was a learning curve for many students and faculty who were not accustomed to such heavy reliance on digital technology (Abramo, 2021). School policies varied on whether teachers would work from the physical school campuses, but the vast majority of students accessed their learning from home (Nolasco, 2022).

The widespread implementation of remote learning had numerous implications for both academic and extracurricular activities, including notable curricular learning loss and dropout rates (Dorn et al., 2020). Online learning led to a significant decrease in educational opportunities, and retrospective analysis revealed that it could not provide fundamental learning needs related to social bond formation, self-motivation, stress management, focus, supervision, and development (Wong, 2020). Furthermore, systematic reviews found that remote

learning resulted in reduced academic desire and socio-emotional well-being, which further decreased academic performance (Cortés-Albornoz et al., 2023). This educational harm was even greater for those with attention disorders or unreliable access to the internet (Becker et al., 2020; Rosenthal et al., 2022; Francis & Weller, 2021). These gaps were also seen in many extracurricular activities, often in greater severity, leading to an inability to effectively access important learning opportunities as well as physical, social, and emotional outlets (Miserez, 2021; LaForge-MacKenzie et al., 2022; Koç, S. & Koç, A., 2021). Physical or team activities like sports and theater were particularly harmed, with members unable to practice together (Moody, 2020). However, going virtual had a silver lining for some activities. While bands could not meet together to rehearse, virtual tools allowed a greater focus on individual musicianship and lessons in music theory and history through personalized learning programs (Hash, 2020). Despite challenges with school enrollment and difficulties with hands-on collaborations, STEM extracurricular programs noted that the transition to virtual meetings allowed for more diverse guest speakers from more distant areas around the globe, increased attendance and flexibility, and allowed for the adoption of online tools such as collaborative documents that could be easily shared and organized (Morrison, 2021).

Along a similar vein, high school speech and debate (forensics) began transitioning to virtual rounds as soon as schools shut down (Malis, 2021), facing both challenges and hidden benefits. Effective engagement and collaboration were diminished due to the disconnected feeling that resulted from communicating virtually as well as the distractions of a casual home environment (Kuppers, 2022). Furthermore, resource disparities observed in online schooling, including unreliable adult presence and internet access, applied to virtual forensics as well (Luo, 2022; Ashta, 2023). Despite these challenges, firsthand anecdotal evidence suggested that speech and debate participation rapidly diversified and allowed for greater attendance by underprivileged communities due to the elimination of otherwise restrictive travel, food, and lodging costs (Goodson, 2023). Before online debating, these costs were an overwhelming barrier to participation, especially at highly competitive tournaments that often required traveling long distances and staying multiple nights (Elsakhawy, 2022). Beyond directly providing the ability to afford participation, virtual tournaments also reduced the commitment attached to attending a competitive tournament, allowing broader and more diverse participation (Ye, 2021). Furthermore, online forensics was noted to reduce a plethora of barriers that may discourage participation, including mobility issues for people with physical disabilities, dietary restrictions, dress codes, and conflicts with religious holidays (Goodson, 2023).

The National Speech and Debate Association (NSDA) is the largest high school forensics organization in the US, with about 140,000 members (Membership Database. National Speech & Debate Association, <https://www.speechanddebate.org/membership-database>). Among competitive debate events, Policy Debate and Lincoln Douglas Debate are generally regarded as the most competitive, involving the largest tournaments and most rigorous research commitments (Whitman, 2000; Stanford National Forensic Institute). These formats have a large, prestigious tournament each summer, known as the Tournament of Champions (TOC), where participation is contingent on debaters earning “bids” by placing highly in competitive tournaments. These qualification tournaments, unlike smaller local tournaments, are open to anyone in the nation and thus are known as the “national circuit.” Different national circuit tournaments offer varying amounts of bids, which typically reflect the expected participation and level of competition at the tournament. As a result, tournaments that are “Quarterfinal Qualifiers” or “Octafinals Qualifiers,” offering 8 and 16 bids respectively, are generally the most competitive tournaments of the year. The sought-after nature of these tournaments makes them ideal places to observe whether changes in accessibility occurred.

Research has indicated that involvement in forensics, competitive debate in particular, is correlated with increases in chances of graduation, college-readiness benchmarks, and cumulative grade point averages (GPA), demonstrating its educational significance and utility (Mezuk, 2011). Interestingly, competitive debate was able to lend itself to a virtual platform with relative ease. Since 2012, debate tools and resources have

become widely managed and shared online, to the point where many debaters even at in-person tournaments carry nothing more than a laptop (Stables, 2011).

Forensics directors have shared their experiences navigating the activity during the pandemic, noting possible impacts and a lack of scholarship exploring them, and requesting that research be done in this direction to present the unique perspective of speech and debate on the larger tapestry of educational responses to COVID-19. For example, Annie Goodson, director of forensics at Blue Valley West High School in Kansas, stated that this research “would greatly benefit both the debate community and education as a whole” (Goodson, 2023). Provided with the proposed influences, both positive and negative, that virtual platforms had on accessibility, an analysis of participation data from before, during, and after COVID-19 could provide insight into the resulting trends in participation. In the current study, registration data for all national circuit Lincoln Douglas and Policy tournaments offering at least 8 bids from 2018 to 2023, as well as data gathered from NSDA databases about the broader high school forensics community, is examined to retrospectively determine the impact that online platforms had on accessibility to speech and debate.

## Methodology

A quantitative statistical analysis was employed to investigate whether the shift to virtual tournaments helped maintain or improve high school forensics participation and accessibility during the COVID-19 pandemic. Data was collected from competitive debate tournaments where demand likely outpaced accessibility, meaning that a temporary increase in accessibility could yield observable participation differences. Data was collected from NSDA databases to represent a more holistic picture of high school forensics and examine broader trends in participation across the nation.

### Data Collection

#### *Tabroom Data*

The official Tournament of Champions (TOC) website was utilized to identify all tournaments from January 1st, 2018 to December 31st, 2023 providing a minimum of 8 bids in Lincoln-Douglas (LD) and Policy (CX<sup>1</sup>) debate (Bid Tournaments, University of Kentucky Tournament of Champions. <https://ci.uky.edu/debate/toc/bids/bid-tournaments>). Publicly available annual registration data for these TOC tournaments was collected from Tabroom, a platform that handles tournament logistics and registration for most high school forensics events (Tabroom.com, <https://www.tabroom.com/index/index.mhtml>). Registration data included each participant's school, state, full name, and tournament entry code (codes serve as a placeholder for names during the tournament). The number of total entries at each TOC tournament was extracted and tabulated using Microsoft Excel. The number of different states that had LD or CX debaters at each tournament, which the National Debate Coaches Association defines as the “Diversity of Tournament,” was also tabulated.

#### *NSDA Data*

National Speech and Debate Association (NSDA) data was accessed through the NSDA website, which contains publicly available participation data (“Membership Database”). NSDA Data Warehouse files for each year from 2018 to 2023 was collected. These files were tabulated using Microsoft Excel, and contain various demographic information on attendees in addition to the number of attendees, such as awards earned, ethnic and religious distributions for participants, and the size and location (rural or urban) of participant schools.

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<sup>1</sup> Policy debate is commonly abbreviated as “CX” due to the prominent role of “Cross Examination” in policy debate rounds

## Data Organization

### *Tabroom Data*

The data available from January 1st, 2018 to December 31st, 2023 were selected for the current study to allow for approximately 2 years of pre-COVID tournaments (2018-19), 2 years of COVID-era tournaments (2020-21), and 2 years of post-COVID tournaments (2022-23). However, because all tournaments were originally hosted in-person and then transitioned to an online platform, with most transitioning back to in-person afterward, the platforms that tournaments used followed a repeated trend of physical to virtual to physical. To isolate the effect of differing platforms, tournaments were sorted into the groups “pre-COVID, COVID, and post-COVID” based on their respective relative progression along this trend rather than strictly by the year of their occurrence. For example, a tournament in 2020 that was still in person would be considered a “pre-COVID” tournament, while one that had transitioned to virtual that same year would be categorized as a “COVID” era tournament.

### *NSDA Data*

This data was released in groups by school year rather than calendar year. Participation data from 2018-19, 2019-20, 2020-21, 2021-22, and 2022-23 school years were collected. Because this data was a cumulation of all participation across various events and tournaments throughout the school year, it could not be sorted into conclusive platform-based categories such as LD or CX. The distribution of settings of NSDA participating schools were broken down into the categories of City, Suburb, Town, and Rural. The distributions of participant school sizes were 1-500, 501-1000, 1001-1500, 1501-2000, 2001-2500, 2501-3000, 3001-3500, 3501-4000, 4001-4500, 4501-5000, and >5000.

## Data Analysis

### *Tabroom Data*

The TOC data for participation and state diversity for LD and CX were tabulated in Microsoft Excel. The average number of participants in tournaments that were pre-COVID In-Person, COVID Online, and post-COVID In-Person were compared using a one-way Analysis of Variance (ANOVA) test with a Bonferroni post hoc analysis. The ANOVA test was selected because there were three samples of similar data to be compared. Through this test, the means, standard deviations, and significance of differences were calculated. The Bonferroni post hoc analysis was selected because there were three specific comparisons the study attempted to create (pre-COVID to COVID, COVID to post-COVID, and pre-COVID to post-COVID). Between the common post hoc analyses for ANOVA tests, Tukey, Bonferroni, and Scheffe analyses, the Bonferroni analysis provides the narrowest confidence interval and thus the most conclusive data. A  $p$ -value of less than 0.05 was considered statistically significant. Statistical analyses were performed and graphs were generated using GraphPad PRISM Software, Version 10.3.0 (507).

### *NSDA Data*

The setting and size data were analyzed using a chi-squared test for homogeneity to compare the distributions across school years. The data for 2018-19 school year appear to be erroneous in the NSDA database for both relative school sizes and school locations, which inflated the numbers to an unreasonable extent, such that their sum far exceeded the total participants during that school year. Therefore, that dataset was excluded from statistical analyses and only the data from the school years 2019-20, 2020-21, 2021-22, and 2022-23 were analyzed. A two-way Chi-squared test for homogeneity was conducted using MedCalc (MedCalc Software Ltd.,

Version 22.030, <https://www.medcalc.org/calc/chisquared-2way.php>) and graphs were created with Microsoft Excel.

### Ethical Considerations

All applicable terms of service of data sources (Tabroom, NSDA Data Warehouse) were strictly adhered to for the current study. Data from Tabroom and the NSDA database were all publicly accessible and the confidentiality of participant data was maintained.

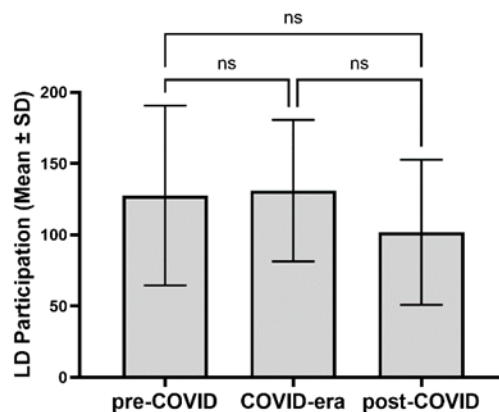
## Results

### The Online Platform Helped Maintain LD Participation During the COVID-19 Pandemic

Participation, as measured by the total number of attendees, was slightly higher in the online tournaments held during the pandemic years than in the in-person tournaments held before and after the COVID era (Table 1, Figure 1). The slight differences in participation were not statistically significant (Table 2).

**Table 1.** Number of attendees in LD debate tournaments during pre-COVID, COVID and post-COVID eras.

|                       | pre-COVID | COVID era | post-COVID |
|-----------------------|-----------|-----------|------------|
| <b>Mean</b>           | 127.53    | 130.95    | 101.79     |
| <b>Std. Deviation</b> | 63.09     | 49.63     | 50.93      |
| <b>Minimum</b>        | 34        | 57        | 35         |
| <b>Maximum</b>        | 296       | 288       | 231        |



**Figure 1.** Number of attendees in LD debate tournaments during pre-COVID, COVID and post-COVID eras.

**Table 2.** One-way ANOVA analysis of LD participation between pre-COVID, COVID and post-COVID eras.

|                 | Sum of Squares | df  | Mean Squares | F    | p    |
|-----------------|----------------|-----|--------------|------|------|
| <b>Factor</b>   | 16177.18       | 2   | 8088.59      | 2.64 | .076 |
| <b>Residual</b> | 340665.32      | 111 | 3069.06      |      |      |
| <b>Total</b>    | 356842.5       | 113 |              |      |      |

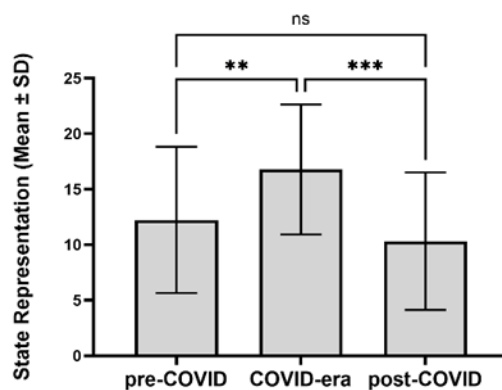
|  | Mean diff. | Std. Error | t     | p     | 95% CI<br>lower limit | 95% CI<br>upper limit |
|--|------------|------------|-------|-------|-----------------------|-----------------------|
| <b>pre-COVID<br/>vs. COVID<br/>era</b>   | -3.42      | 11.948     | -0.29 | > .99 | -32.7                 | 25.86                 |
| <b>Pre-COVID<br/>vs. post-<br/>COVID</b> | 25.75      | 13.453     | 1.91  | .175  | -7.22                 | 58.72                 |
| <b>COVID era<br/>vs. post-<br/>COVID</b> | 29.17      | 13.453     | 2.17  | .097  | -3.8                  | 62.14                 |

### The Online Platform Helped Increase LD State Diversity During the COVID-19 Pandemic

While participation numbers remained stable, state diversity, as measured by the total number of states with at least one debater attending, increased in the online tournaments held during the pandemic years compared to in-person tournaments held before and after the COVID era (Table 3, Figure 2). The ANOVA test revealed that the overall change in state diversity was statistically significant (Table 4). According to the Bonferroni post-hoc test, there was a statistically significant increase in state diversity from pre-COVID times to COVID times, followed by a statistically significant decrease from COVID to post-COVID (Table 4). The decrease from pre-COVID to post-COVID was not statistically significant (Table 4).

**Table 3.** Number of states represented in LD tournaments during pre-COVID, COVID and post-COVID eras.

|                       | pre-COVID | COVID era | post-COVID |
|-----------------------|-----------|-----------|------------|
| <b>Mean</b>           | 12.23     | 16.79     | 10.32      |
| <b>Std. Deviation</b> | 6.6       | 5.86      | 6.19       |
| <b>Minimum</b>        | 1         | 6         | 3          |
| <b>Maximum</b>        | 28        | 26        | 21         |



**Figure 2.** Number of states represented in LD debate tournaments during pre-COVID, COVID and post-COVID eras

**Table 4.** One-way ANOVA analysis of state representation in LD debate between pre-COVID, COVID and post-COVID eras.

| <b>ANOVA</b>    | <b>Sum of Squares</b> | <b>df</b> | <b>Mean Squares</b> | <b>F</b> | <b>p</b> |
|-----------------|-----------------------|-----------|---------------------|----------|----------|
| <b>Factor</b>   | 817.57                | 2         | 408.78              | 10.55    | <.001    |
| <b>Residual</b> | 4302.9                | 111       | 38.76               |          |          |
| <b>Total</b>    | 5120.46               | 113       |                     |          |          |

| <b>POST-TEST</b>                | <b>Mean diff.</b> | <b>Std. Error</b> | <b>t</b> | <b>p</b> | <b>95% CI lower limit</b> | <b>95% CI upper limit</b> |
|---------------------------------|-------------------|-------------------|----------|----------|---------------------------|---------------------------|
| <b>pre-COVID vs. COVID era</b>  | -4.56             | 1.343             | -3.39    | .003     | -7.85                     | -1.27                     |
| <b>pre-COVID vs. post-COVID</b> | 1.91              | 1.512             | 1.26     | .627     | -1.79                     | 5.62                      |
| <b>COVID era vs. post-COVID</b> | 6.47              | 1.512             | 4.28     | <.001    | 2.76                      | 10.17                     |

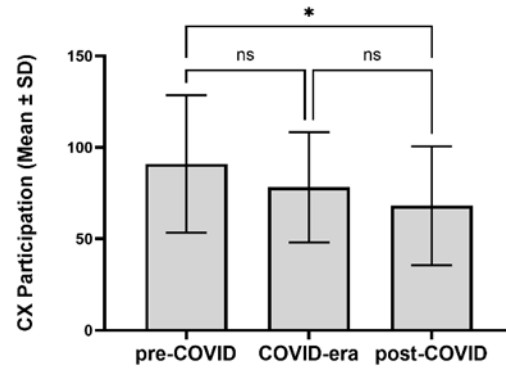
### The Online Platform Likely Maintained the Gradual Decline in CX Participation During The COVID-19 Pandemic

CX participation, as measured by the total number of attending teams, decreased from pre-COVID tournaments to online tournaments, then decreased again when tournaments reverted back to an in-person platform (Table 5, Figure 3). This suggests a consistent trend of decreasing involvement of new debaters in this debate event. According to the ANOVA test, the overall change in participation was statistically significant (Table 6). According to the Bonferroni post-hoc test, the decrease in participation from pre-COVID times to COVID times was not statistically significant, and the decrease from COVID to post-COVID was not statistically significant either (Table 6). The decrease from pre-COVID to post-COVID was statistically significant, suggesting the decline was a larger trend irrespective of online platforms (Table 6).

**Table 5.** Number of attendees in CX debate tournaments during pre-COVID, COVID and post-COVID eras.

|                       | <b>pre-COVID</b> | <b>COVID era</b> | <b>post-COVID</b> |
|-----------------------|------------------|------------------|-------------------|
| <b>Mean</b>           | 90.96            | 78.2             | 68.1              |
| <b>Std. Deviation</b> | 37.53            | 30.15            | 32.51             |
| <b>Minimum</b>        | 37               | 31               | 37                |
| <b>Maximum</b>        | 201              | 148              | 185               |





**Figure 3.** Number of attendees in CX debate tournaments during pre-COVID, COVID and post-COVID eras.

**Table 6.** One-way ANOVA analysis of CX participation between pre-COVID, COVID and post-COVID eras.

|                 | Sum of Squares | df  | Mean Squares | F    | p    |
|-----------------|----------------|-----|--------------|------|------|
| <b>Factor</b>   | 10207.87       | 2   | 5103.94      | 4.47 | .013 |
| <b>Residual</b> | 139181.86      | 122 | 1140.83      |      |      |
| <b>Total</b>    | 149389.73      | 124 |              |      |      |

|                                 | Mean diff. | Std. Error | t    | p    | 95% CI lower limit | 95% CI upper limit |
|---------------------------------|------------|------------|------|------|--------------------|--------------------|
| <b>pre-COVID vs. COVID era</b>  | 12.76      | 6.934      | 1.84 | .204 | -4.23              | 29.76              |
| <b>pre-COVID vs. post-COVID</b> | 22.86      | 7.83       | 2.92 | .013 | 3.67               | 42.05              |
| <b>COVID era vs. post-COVID</b> | 10.1       | 7.926      | 1.27 | .616 | -9.33              | 29.52              |

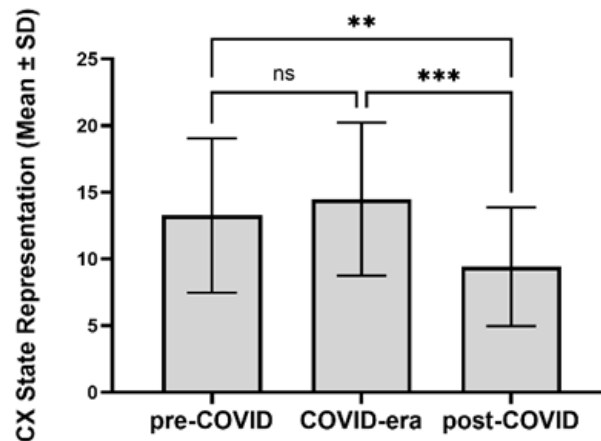
### The Online Platform Helped Increase CX State Diversity During the COVID-19 Pandemic

Even as participation numbers steadily decreased, state diversity, as measured by the total number of states with at least one CX team attending, increased in the online tournaments held during the pandemic years compared to in-person tournaments held before and after the COVID era (Table 7, Figure 4). According to the ANOVA test, the overall change in state diversity was statistically significant (Table 8). According to the Bonferroni post-hoc test, the increase in state diversity from pre-COVID times to COVID times was not statistically significant, but the decrease from COVID to post-COVID was statistically significant (Table 8). The decrease from pre-COVID to post-COVID was statistically significant (Table 8). This suggests that the online platform led to an increase in state diversity in the face of an overall trend of declining diversity.

**Table 7.** Number of states represented in CX debate tournaments during pre-COVID, COVID and post-COVID eras.



|                       | pre-COVID | COVID era | post-COVID |
|-----------------------|-----------|-----------|------------|
| <b>Mean</b>           | 13.27     | 14.49     | 9.43       |
| <b>Std. Deviation</b> | 5.8       | 5.74      | 4.45       |
| <b>Minimum</b>        | 4         | 6         | 4          |
| <b>Maximum</b>        | 27        | 27        | 22         |



**Figure 4.** Number of states represented in CX debate tournaments during pre-COVID, COVID and post-COVID eras.

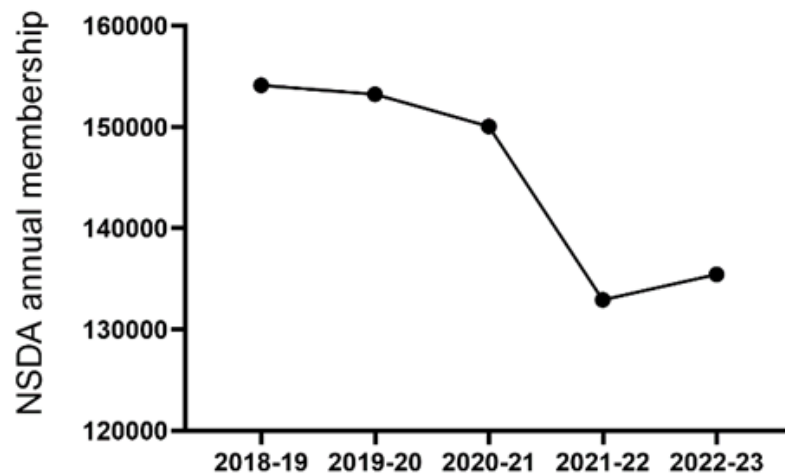
**Table 8.** One-way ANOVA analysis of state representation in CX debate between pre-COVID, COVID and post-COVID eras.

|                 | Sum of Squares | df  | Mean Squares | F    | p    |
|-----------------|----------------|-----|--------------|------|------|
| <b>Factor</b>   | 484.77         | 2   | 242.38       | 8.05 | .001 |
| <b>Residual</b> | 3702.66        | 123 | 30.1         |      |      |
| <b>Total</b>    | 4187.43        | 125 |              |      |      |

|                                 | Mean diff. | Std. Error | t     | p     | 95% CI lower limit | 95% CI upper limit |
|---------------------------------|------------|------------|-------|-------|--------------------|--------------------|
| <b>pre-COVID vs. COVID era</b>  | -1.22      | 1.12       | -1.09 | .83   | -3.97              | 1.52               |
| <b>pre-COVID vs. post-COVID</b> | 3.83       | 1.272      | 3.01  | .009  | 0.72               | 6.95               |
| <b>COVID era vs. post-COVID</b> | 5.06       | 1.282      | 3.94  | <.001 | 1.91               | 8.2                |

Overall Forensics Participation Decreased Evenly Across School Settings and Sizes

Total NSDA membership decreased slightly in 2020-21 from the previous two years, but the decrease from 2020-21 to 2021-22 was substantially greater (Figure 5). There was a slight increase in total membership from 2021-22 to 2022-23 (Figure 5). To investigate whether or not such decrease in membership disproportionately affected rural or small schools, the school setting and size data were analyzed using a chi-squared test for homogeneity to compare the distributions across school years. The demographic data for 2018-19 school year appear to be erroneous in the NSDA database for both relative school sizes and school locations, which inflated the numbers to an unreasonable extent, such that their sum far exceeded the total participants during that school year. Therefore, that dataset was excluded from statistical analyses, however, the data regarding total membership from that school year appears accurate and is included in Figure 5. The results of the chi-squared test for homogeneity revealed no statistically significant change in the distribution among locations (Table 9, Figure 6) and sizes (Table 10, Figure 7) of participant schools, demonstrating that the decrease in participation happened relatively uniformly.

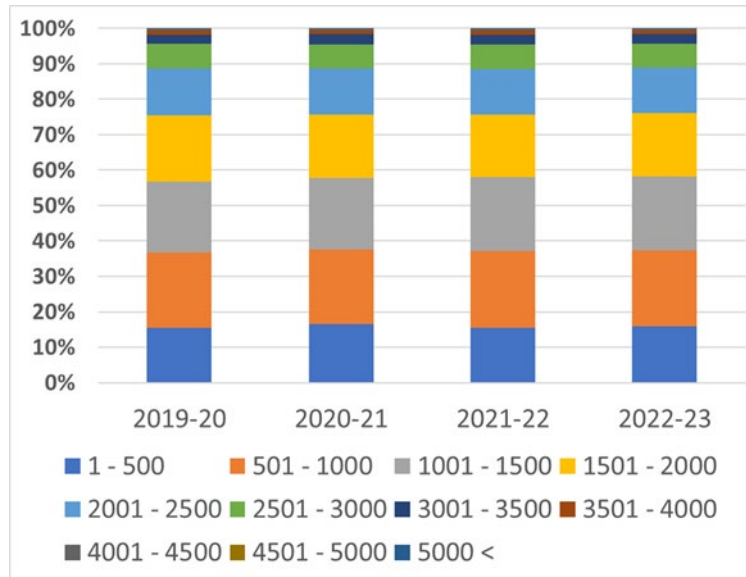


**Figure 5.** A drop in NSDA membership was observed post-COVID.

**Table 9.** Schools participating in NSDA are grouped by their size. Data under the 2018-19 column were not included for statistical analysis.

| School Size: | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|--------------|---------|---------|---------|---------|---------|
| 1 - 500      | 2107    | 376     | 407     | 388     | 418     |
| 501 - 1000   | 1796    | 517     | 523     | 544     | 560     |
| 1001 - 1500  | 1420    | 486     | 499     | 525     | 552     |
| 1501 - 2000  | 1146    | 457     | 444     | 441     | 468     |
| 2001 - 2500  | 720     | 321     | 322     | 324     | 335     |
| 2501 - 3000  | 328     | 167     | 171     | 171     | 176     |
| 3001 - 3500  | 114     | 66      | 70      | 71      | 75      |
| 3501 - 4000  | 43      | 28      | 28      | 31      | 26      |
| 4001 - 4500  | 19      | 10      | 9       | 9       | 9       |
| 4501 - 5000  | 7       | 2       | 2       | 3       | 3       |
| 5000 <       | 2       | 2       | 2       | 2       | 2       |

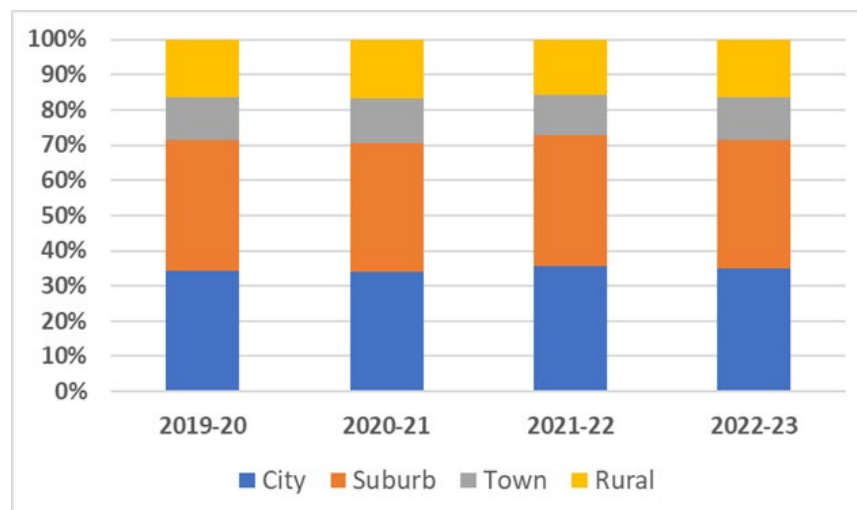
|               |  |     |     |     |     |
|---------------|--|-----|-----|-----|-----|
| Uncategorized |  | 729 | 755 | 895 | 929 |
|---------------|--|-----|-----|-----|-----|



**Figure 6.** The relative distribution of different size schools remained the same pre and post COVID. Different size categories are represented as the percentage of the total schools participating in a given academic year. The relative change in distribution was measured using a Chi-squared test ( $p \sim 0.94$ ).

**Table 10.** Schools participating in NSDA are grouped by their location. Data under the 2018-19 column were not included for statistical analysis.

|        | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|--------|---------|---------|---------|---------|---------|
| City   | 2535    | 836     | 842     | 894     | 920     |
| Suburb | 2509    | 907     | 912     | 934     | 957     |
| Town   | 1033    | 296     | 315     | 286     | 317     |
| Rural  | 1648    | 399     | 413     | 399     | 430     |



**Figure 7.** The relative distribution of schools at different settings remained the same pre and post COVID. Different setting categories are represented as the percentage of the total schools participating in a given academic year. The relative change in distribution was measured using a Chi-squared test ( $p \sim 0.93$ ).

## Discussion

The current study demonstrates that despite widespread school shut downs and interruptions in curriculums during the COVID-19 pandemic, high school forensics was able to uphold participation by relocating tournaments onto online platforms. Although the adoption of online tournaments protected forensics participation from a complete collapse across every category we investigated, some unique characteristics were observed among LD, CX, and NSDA data. While participation in LD was almost similar during pre-COVID and COVID periods, a clear decline was observed in CX participation. It is important to note that LD debate is an individual event, while CX debate is based on two-member teams. One can speculate that CX debaters faced additional challenges in organizing their teams during the pandemic as it required close coordination between team members who were not able to meet in person. The same reason probably also prevented novice debaters from choosing the CX category during the pandemic, and as a consequence the participation in the CX category continued to decline in the post-pandemic era simply because not enough experienced debaters existed in the general pool to attend the tournaments. If this is true, a rebound in CX participation will become evident in the near future. If the declining trend in CX participation continues, it may suggest a diminishing interest in that debate category due to some reason unrelated to the pandemic or platform. This trend has been observed and discussed by others but further research is needed to better understand the causality of it (Batterman, 2021).

Despite these differences, the LD and CX results had a shared trend in state participation. Both saw statistically significant increases in the state diversity at online tournaments compared to in-person ones. This is especially interesting for CX, as the number of states represented in each tournament increased even as the number of participants decreased significantly. This trend suggests that elements of the online platform had a substantial impact on accessibility, most likely due to reductions in costs and time commitments associated with travel and accommodations needed to attend overnight tournaments. It is important to note in this context that national circuit tournaments are held in a limited number of states. For example, for LD, there are a total of 24 tournaments held in 13 different states that offer TOC bids, and 11 out of those 24 tournaments are held in California and Texas. This clearly shows the need for out of state travel for students from all across the nation attending these tournaments.

The TOC data, which includes both LD and CX, represents highly competitive national circuit debate and a small segment of the forensics world. The NSDA data, on the other hand, provides insight into the trends that the speech and debate community saw as a whole, including both local events and larger tournaments. The general decline seen in participation was expected, as was almost universally experienced in the realm of extracurriculars. However, the predicted factors that would disadvantage students with less access to urban or large-school resources did not appear to have a significant influence, as the data revealed a similar distribution of membership from both rural and urban schools of all sizes.

The apparent increase in accessibility that online tournaments provide, combined with the lack of expected barriers, opens up discussion as to whether these tournaments should continue in the post-COVID world. If they were able to keep the activity afloat for those interested and even increase diversity amid a global pandemic, applying the innovative approach during a time of normal activity could bring participation and accessibility to unprecedented heights.

The net membership data from NSDA decreased only slightly in 2020-21 during the COVID pandemic, but dropped substantially in the following year. Conceivably, the decrease in the first year of the pandemic was not dramatic because NSDA memberships remained active from previous subscriptions despite a

decrease in actual participation. Once the subscription period expired, in the years directly following the pandemic, there was a drastic (over 50%) decrease in members. Interestingly, there was no statistically significant difference in the distribution among locations and sizes of participant schools. While in some other contexts it has been shown that rural schools often suffer from lack of infrastructure and technology (Francis & Weller 45), this data suggests that the effect of accessibility concerns with online forensics, like those relating to technology inequities, were not as profound of a factor on debate participation.

A major limitation of the NSDA dataset analysis is that the data regarding school location and size were gathered based on information about schools that were members of the NSDA program each school year, regardless of whether or not any student from a particular school actually participated in a debate tournament in a given year. As a result, the natural caveat to the statement that the relative distribution of participation from “rural vs urban schools” or “small vs large schools” remained the same is that school membership may not always be an accurate predictor of student participation. For example, even if a rural school faced limited resources and student forensics participation dropped dramatically, is it unlikely that the school would withdraw from the NSDA program altogether. As a result, it would appear that there are just as many rural schools participating, when in reality rural involvement may have dramatically decreased, and the same applies for small schools.

## Conclusion and Future Direction

The data demonstrated a significant increase in the state diversity at both LD and CX national circuit tournaments during the era of COVID and online tournaments, suggesting that an online platform allowed debaters to attend tournaments that were traditionally inaccessible due to traveling. Across the NSDA, there remained a stable distribution of relative participation in terms of school location and size during COVID, despite an overall decrease in participation. State diversity at national circuit debate tournaments decreased once tournaments returned to in-person formats, further supporting that the widespread adoption of online tournaments was the factor behind the increased diversity.

Recently, initiatives to maintain virtual tournaments in the post-COVID world have sprung up on the national circuit and the NSDA as a whole. For example, the TOC organization now offers an official Digital Speech and Debate Series, which started in 2022, and the NSDA offers the Digital Speech and Debate E-Championship among other smaller virtual tournaments hosted by individual schools. While these events have only been held once or twice, as more data emerges it would be beneficial to examine their participation trends. Unlike with past online tournaments that served to replace in-person ones, participation at online tournaments that exist in addition to in-person tournaments may shed light on what demographics are benefitting from them, and whether net participation in speech and debate improves.

To further examine accessibility, an important step is to gather personal accounts in a qualitative analysis to reveal the perspectives of individual speech and debate members and their experiences with online tournaments. Due to time constraints and a goal of broader trend analysis, this study focused solely on quantitative analysis, but bringing to light the ways that speech and debate members interacted with the change in platforms could serve as a valuable complement to the conclusions found here. These insights are key to a more complete narrative, and could help in determining the best way to move forward, especially in the context of accessibility.

The conclusions of this study serve as a stepping stone to verify anecdotally observed trends in extracurriculars beyond the realm of debate as well. Forensics was one of many extracurriculars that were noted to be impacted in both positive and negative ways by online platforms, alongside STEM programs losing hands-on connectivity but gaining virtual tools and guest speakers, and bands giving students more personalized learning plans while losing access to live rehearsals. Quantitative analysis could corroborate these case studies and allow targeted efforts in the post-pandemic world to maximize the effectiveness of learning.

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