A STUDY OF CEDA AND NDT FINALISTS SPEAKING RATES

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Over the years, critics have written essays expressing disenchantment with the rate of delivery used by intercollegiate debaters. (Jones, 1978; Brooks, 1984, and McGough, 1988) One reason for the creation of CEDA (Cross Examination Debate Association) is that NDT (National Debate Tournament) had perpetuated an incomprehensible rate of delivery. (Howe, 1972; Hollihan, Riley, & Austin, 1983; and Thomas, 1983) Most recently, Brey's (1989) content analysis of CEDA debate judging philosophies concludes, "One of the most divisive concerns of CEDA debate is the judge's willingness to tolerate a rapid delivery rate" (p. 76). His analysis shows a "2-to-1 margin favoring [CEDA] judges who flatly reject speed, compared to [sic] judges who accept speed."

Many would agree that NDT debater speaking rates remain significantly faster than other formats of public speaking. The speaking rates of NDT finalists are documented. Rives (1976) reports the results of one final round of the NDT concluding, "the average speaking rate is 245 words per minute . . . " (p. 47) Colbert's (1981) content analysis of 13 years (64 speeches) of NDT final round speaking rates found, "[t]he average (speaking rate) of all debaters observed in this study has risen from about 200 wpm (1968) to 270 wpm (1980). A Pearson correlation suggested a significant increase in speaking rates over time $r = .9244$, $N = 13$, $p = .001$. This indicates 85% of the rate is a function of the recency of the round" (p. 74) Colbert (1988) extended the research to include NDT finalists from 1968 through 1985. Again their speaking rate increased significantly over time. The average NDT finalists' rate appears to have reached its ceiling at about 300 words per minute.

Some observers of CEDA debate argue speaking rates also appear to be increasing. For example, Ulrich (1985) writes, "CEDA's formation was partly out of dissatisfaction by many with the delivery of NDT debaters. In recent years, however, this distinction has been less clear, as CEDA debaters became faster and faster . . .." (p. 58) Unfortunately, much of the current literature chastising CEDA debater speaker rates are supported by conjecture and speculation.

Unlike theoretical differences, quantitative factual claims about the rate of speech should be supported by quantitative data. One recent study found CEDA finalists averaged 241 wpm in 1986, 234 wpm in 1987, and 227 wpm in 1988. (Colbert, 1988) Given the previous data reporting NDT speaking rates, it appears that CEDA finalists are not as fast as their counterparts. Although previous data established baseline measures of debater speaking rates, a specific comparison between CEDA and NDT speaking rates has not been reported. This study attempts to answer one simple question, "Do NDT finalists speak faster than CEDA finalists?" The null

hypothesis: "There is no difference in speaking rates between CEDA and NDT finalists" attempts to answer the research question.

PROCEDURES

The transcripts of CEDA and NDT finals were used to determine speaking rates in words per minute (wpm). CEDA transcripts were edited by Brey of Florida State University and NDT transcripts were edited by Boaz of Illinois State University. After consulting with Brey and Boaz about editorial insertions and changes, the transcripts were modified to include only the text of the actual debate. Untimed introductions, recognitions, conclusions, cross examinations, judging critiques, footnotes, and editorial insertions (such as "laughter") were eliminated from the transcripts before the analysis. Hyphens were removed from the text and numeric words were converted to alphabetic characters (i.e. 2 = two, 5 = five, 1985 = nineteen eighty five, etc . . .). The word "[unintelligible]" inserted by both editors counted as one word.

A computer program named "Readability" calculated the number of words in each constructive and rebuttal speech. A word is any sequence of alphabetic characters surrounded by nonalphabetic characters. If one accepts the definition of a word the procedure is accurate. After Readability tabulated the total number of words for each speech, the total number was divided to determine the average of words per minute (wpm). NDT constructives were divided by ten, CEDA constructives were divided by eight, and both CEDA and NDT rebuttals were divided by five.

The reliability of Readability was obtained by comparing it to an exact word count from 16 randomly selected pages of the transcripts. The reliably figures of Readability and an actual count of words in this study were: $N = 16$; Mean of $a = 234.94$; Mean of $b = 234.75$; SD of $a = 51$; SD of $b = 51$; and $r = .9998$.

Transcripts were available for every CEDA final round. NDT speeches were sampled from the period between 1980 and 1988. NDT transcripts were not available after 1988 when Boaz stopped publishing them in the Journal of the American Forensics Association. All the data that was available from Brey and Boaz were included in the analysis. It was decided that using transcriptions from other editors (if they were available) would sacrifice the reliability of the data.

The sample limitations justify three qualifications. First, the data does not represent all CEDA and NDT debate. One could argue the final round is a rhetorically unique setting. A larger different audience is present, the final rounds are video taped and transcribed for educational purposes. All these aspects could influence the participant's performances. While the championship round may be considered unique, the relative rate differences between CEDA and NDT finalists should not be very different. Remember that both CEDA and NDT final rounds have larger audiences, are taped, and result in transcripts used for educational purposes.

The second limitation involves how representative national

final rounds are to any other debate rounds. It seems the similarities (time limits, topic, format, competitive motives, etc . . .) are more similar than different. In addition, the may data relevant beyond CEDA and NDT finals because of the "role model effect" (Williams, 1982) national finalists allegedly provide to other students in the activity. Certainly, an argument can be made that the data represents many of the best debaters from both organizations. It is important to study and report data that examines the participants that each organization considers its best.

A third qualification concerns the degree that wpm affects comprehensibility. While some people have the physical characteristics needed to articulate and enunciate at rapid rates, others do not. Spacing, pausing, and variation in word length are also important features. In using wpm as a measure, this study did not attempt to control for these other variables, although excessive rates of wpm may affect vocal variety.

In short, larger and more representative samples should be tested before final generalizations are made about debater speaking rates. Even with its limitations, the data in this study establishes a baseline measurement for future research about CEDA and NDT speaking rates that is more precise than the speculation often appearing in essays. Additionally, the relative difference between the two groups provides a unique basis to monitor the evolution of speaking rates between the two organizations.

RESULTS

The results of speaking rates for the CEDA and NDT final debate rounds are reported in Table I. The analysis revealed CEDA first affirmative constructive finalists averaged 212 wpm. The first negative constructive finalists in CEDA averaged 225 wpm. Second affirmative constructive CEDA finalists averaged 243 wpm. The second negative constructive CEDA finalists averaged 238 wpm. CEDA first negative rebuttal finalists averaged 249 wpm. CEDA first affirmative rebuttal finalists averaged 251 wpm. CEDA second negative rebuttal finalists averaged 247 wpm. CEDA second affirmative rebuttal finalists averaged 235 wpm. The mean wpm for all CEDA finalists in this study was 237 wpm.

The analysis revealed that NDT first affirmative finalists averaged 260 wpm. NDT first negative constructive finalists averaged 281 wpm. NDT second affirmative constructive finalists averaged 300 wpm. NDT second negative finalists averaged 269 wpm. NDT first negative rebuttal finalists averaged 302 wpm. NDT first affirmative rebuttal finalist averaged 297 wpm. NDT second negative rebuttal finalists averaged 284 wpm. NDT second affirmative rebuttal finalists averaged 279 wpm. The mean for all NDT finalists in this study was 284 wpm.

A t-test was used to test the null hypothesis. A t-score of -7.06 that was significant at the $p > .0001$ level supports rejecting the null, leaving the alternative that NDT finalists are significantly faster than CEDA finalists speaking rates.

DISCUSSION

The results of this study suggest NDT finalists speak significantly faster than CEDA finalists. One cannot infer from this data that all NDT debaters speak faster than all CEDA debaters. There are individual CEDA debaters that speak as fast as any NDT debater. However, the data does suggest that debaters who reach the pinnacle of their respective organization speak at significantly different rates from the other. This could imply that CEDA has been moderately successful in its attempt to maintain a slower rate of delivery than their NDT counterparts, at least at the highest level.

In pondering the results of this research one should consider at least three related issues. First, are the rates of CEDA and NDT debaters within the range of comprehension? Second, how do these rates compare with other public speaking activities? Third, why do debaters speak fast?

Are debater speaker rates within the range of comprehension? Orr's review of the literature found that 275 to 300 wpm is range at which comprehension begins to suffer. No CEDA finalists spoke at what Voor and Miller (1965) operationalized as "rapid fire 300 to 500 wpm" (p. 452). The average speaking rate for all CEDA debaters in the present study was approximately 237 wpm. The average for all NDT finalists in this study was 284 wpm, although 9 of 42 speeches sampled exceeded 300 wpm. Even if people can comprehend speeches that are well delivered at high rates of speed, some may not be willing to. It is evident that not everyone has or wants the mental and physiological skills to speak at or listen to rapid vocal delivery. No matter how much faster NDT debaters speak over CEDA debaters, this does not change the preferences of those who do not like fast speaking. Debaters should consider listener desirability and the fact that judges must process the information into written form (flowing).

How do the rates of debaters compare with other public speaking activities? Even though CEDA finalists speak significantly slower than NDT finalists, this does not imply that CEDA rates are consistent with what is generally considered normal public speaking rates. Burgoon and Ruffner (1974) suggest, "Americans on average, speak at approximately 125 wpm . . . " (p. 81) DeVito (1981) reports, "[a]pproximately 160 to 170 wpm seems average for speaking as well as reading aloud" (p. 339). Finally, Mayer (1988) explains, "A speaking rate of 120 to 140 wpm can irk your listener even more than the 'faster-than-a-speeding bullet' rate some hyperkinetic individuals use. It suggests that its user is ill, timorous or stupid . . . A rate of 180 to 200 wpm may exhaust your listeners . . . The most tolerable and useful all-purpose rate is 140 to 180 wpm" (p. 178-9). It appears that even though CEDA finalists speaking rates are slower than NDT finalists, both greatly exceed what is considered optimal for normal speaking rates.

While debaters generally speak faster than normal public speaking, it is not clear that rate is the key variable responsible

when receivers have difficulty evaluating debates. Factors like enunciation, pronunciation, articulation, pauses, and spacing are all important contributors. Verderber (1984) suggests, "[u]sually even the fastest rate is acceptable if words are well articulated and there is sufficient vocal variety and emphasis" (p. 291). Bradley (1974) says, "[a]lthough some are critical of a fast rate of speaking, so long as the speaker can articulate sounds in a comprehensible way and it is appropriate to the situation, there seems little justification for antipathy to a fast rate" (p. 239). It is therefore imperative that debaters maximize all aspects of vocal intensity and that judges make their preferences known before each round begins, so debaters will have adequate knowledge to adapt.

One should also speculate if competitive debating is an appropriate laboratory to hone certain public speaking skills. Competitive aspects, proof burdens, time constraints, and other competing argumentative skill requirements may make debating the wrong form for the development of speaking eloquence. However, this does not suggest it is counterproductive to other formats that do. No serious scholarly and objective data shows debating is counterproductive to speaking style. All serious research suggest that debaters are generally considered better communicators than those who do not debate. (Semlak & Shields, 1977 and Pollock, 1984)

Finally, why do debaters speak fast? First, debaters are adapting to a competitive environment. The rules impose time limits on their presentations, so they adapt by speaking faster and economizing word usage. Second, debaters are adapting to their environment. Devito (1971) establishes that speakers tend to increase speaking rates as audience size declines. (p. 10) The typical audience for a debate is usually two opponents and one experienced judge. Third, debaters know they have a burden to prove their claims by reading quotations from secondary sources. The literature has suggested for years that reading during oral presentations usually occurs at faster rates than extemporaneous presentations. (Brigance, 1926 p. 341) Finally, debaters are taught that new arguments cannot be presented during rebuttal speeches, so they attempt to present enough material in constructive speeches to be able to win the debate. These factors combined with the stress of competition provides some outlook for why debaters speak rapidly. If behavioral characteristics of the activity encourage faster rates it may be unrealistic and unfair to attempt to suppress them.

In summary, this paper has presented data measuring the speaking rates of NDT and CEDA finalists. NDT finalists speak at significantly higher rates than do CEDA finalists. Even so, both styles of debate speak at greater rates than would be considered normal for speaking in public. Whether rate alone degrades comprehensive is unclear. Educators should teach proper articulation to ensure comprehension even at slower rates. While this data will not change the preferences of those who like or dislike rapid rates of delivery, it provides a more accurate portrayal of the actual rates these debaters use.

REFERENCES

Brey, J. (1989). A descriptive analysis of CEDA judging philosophies, Part I: Definitive acceptance or rejection of certain tactics and arguments. CEDA Yearbook, 10, 67-77.

Brigance, W.N. (1926). How fast do we talk? Quarterly Journal of Speech Communication, 13, 337-42.

Brooks, J. (1984, December). Current problems in college debate. Debate Issues, 18, 14.

Burgoon, M. & Ruffner, M. (1974). Human Communication. New York: Holt, Rinehart, and Winston.

Colbert, K. R. (1981). Speaking rates of NDT finalists 1968-80. Journal of the American Forensics Association, 18, 75-6.

Colbert, K. R. & Biggers, T. (1985). Why should we support debate? Journal of the American Forensics Association, 21, 237-240.

Colbert, K.R. (1988, November). Debater speaking rates: How fast is too fast? Debate Issues, 2 7-14.

Colbert, K. R. (1989). A quantitative analysis of CEDA speaker rates, National Forensics Journal, 6, 113-120.

Cox, J. Robert, (1974). A study of judging philosophies of the participants of the National Debate Tournament. Journal of the American Forensics Association, 11, 61-71.

DeVito, J.A. (1981). The Elements of Public Speaking. New York: Harper & Row.

Hollihan, T., Riley, P. & Austin, C. (1983). A content analysis of selected CEDA and NDT judges' ballots. In D. Zarefsky, M. Sillars, & J. Rhodes (Eds.) Argument in Transition: Proceedings of the Third Summer Conference on Argumentation, Speech Communication Association: Annandale, Virginia.

Howe, J. (1981). CEDA's objectives: Lest we forget. In Don Brownlee, (Ed.). Contributions on the Philosophy and Practice CEDA. 1.

Jones, M. (1978). CEDA vs. NDT: The fact-value dichotomy emerges in educational debate. (ERIC Document Reproduction Service No. ED 169 581)

Mayer, L. V. (1988). Voice & Diction. (8th ed.), Dubuque, Iowa: Wm. C. Brown.

McGough, M. (1988, October). The decline of debate: Pull it across your flow. The New Republic, 17-19.

Rives, S. G. (1976). Final debate-national debate tournament technical notes: Speaking rates and evidence use. Journal of the American Forensics Association, 13, 49.

Thomas, D. (1983). Research in forensics from the past five years: Trends, omissions, and recommendations. Paper presented at The Speech Communication Association National Convention. (Washington, D. C.), 20.

Ulrich, W. (1985). Debating generic disadvantages. Debate issues, 14, 10-14.

Williams, T. (1982, Feb.). Minutes from the National Debate Tournament Committee. Evanston, Ill.: Northwestern University.

WHAT DO THEY HAVE THAT I HAVEN'T GOT? COMPARISON SURVEY DATA OF THE RESOURCES AND SUPPORT SYSTEMS OF TOP CEDA PROGRAMS AND DIRECTORS[1]

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John Dewey once said that the net worth of education is not always measured in terms of the student's success or failure. Sometimes the educational process itself can be of greater benefit to the student than the subject matter taught. Forensics is designed to teach. Those of us who direct programs from an educational perspective, would argue that no other activity can better educate our students to think critically, write clearly and speak effectively.

Administrators are quick to extol the virtues of this viewpoint. However, it seems that no matter how educational an activity "might" be, it must be justified in terms of its expense to education ratio. The condition of America's institutions of higher learning reflects a system in the midst of financial crisis. To merit further administrative support, such as an increase in funding and/or resources, "competitive" programs must not only have educational merit, but must also achieve at least some degree of "success." The question is how does one measure success? The administration's answer is often tied to numbers: numbers that program directors are hard pressed to supply. How much will it cost? How many students are involved? What kind of budget do the other programs have? How does their ranking compare to ours? What do they have that we don't and how does it contribute to their success? What kind of resources do we need to build or strengthen a forensics program to a comparable level with at least a chance of equivalent success? This article proceeds from the assumption that the Top 20 programs in the U.S. and the Top 10 programs within each region, as reported by the final 1990 CEDA rankings, have achieved at least some degree of "measurable" success. Administrations often seem to recognize high rankings as a "measure" of success. If directors could provide their administrations with comparison data from the nation's leading programs, perhaps this would satisfy the "evidentiary press." Therefore, this article seeks to provide new and small programs with hard data they can use to more effectively plead their case. Larger and more successful programs may find the data useful in their efforts to maintain the status quo within their support systems.

In addition to program data, there is a section on program directors. Increases in rank, tenure, release time, and salary are

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