Why Computers Won't Destroy CX Debate

Right Time to Make the Shift Into the Digital Revolution

By Dr. Rich Edwards

Debate Practice Has Always Adjusted to Resource Shifts in Information Technology

On my office shelf sits a well-worn wooden file box designed to hold about two hundred 3x5 index cards. This file box contained the sum total of my research arsenal when I entered high school debate on the 1964 national topic dealing with health care for elderly. My high school, Newton Senior High School in Newton, Iowa, was the defending state champion in cross examination debate. The Newton varsity team, consisting of Larry Griswold and Craig Shives, seemed to be able to dominate their opponents with just a few "cards" in their back pockets. While debate practice might have been different in other regions of the nation, it was typical for the best Iowa high school debaters to carry with them just a few file folders and a small box for cards. By the end of my high school debate career in 1967, however, this pattern had dramatically shifted. Competitive policy debate teams were now carrying with them several attaché and catalog cases of documents and massive metal file boxes containing thousands of 4x6 index cards. By the time I entered the coaching ranks in the late 1970s, most debaters had abandoned cards altogether in favor of fullpage briefs. Over the next couple of decades, the attaché and catalog cases gave way to mountains of plastic tubs. At the beginning of the twenty-first century, the typical competitive debate team would be carrying around over ten thousand pages of argument briefs.

Some debate coaches think back fondly on the debate practices of bygone eras, wishing for a return to a time when debaters could practice their art equipped only with a handful of 4x6 cards. Yet policy debate has changed because information processing in society has changed. The leaps in information technology happened as a result of technological innovations.

It All Began With the Typewriter: In the decades before the 1960s the only method of processing and disseminating information was the typewriter; if multiple copies were desired, carbon paper was the only option.

The Ditto Machine Revolution: In the mid-1960s, mimeograph and ditto machines came into common usage in high schools. Debate teams began reproducing evidence for multiple teams by typing a card on a ditto "master" and then hand-feeding 4x6 cards through a ditto machine. This process was very labor-intensive, but at least it provided a way that well-organized debate squads could share evidence, gaining the benefit of the research work done by other members of the team.

The Copy Machine Revolution: The next leap forward in information processing came when copy machines entered the picture. By the mid-1970s copy machines were available in high school and college libraries, but the cost was typically twentyfive cents per page. Because of the expense and the time it would take to make a single copy, most debate teams continued to reproduce materials on ditto machines. By the 1980s, however, copy machine costs came down to about ten cents per copy and debaters discovered a new way that information could be processed. For the first time it became feasible to photocopy desired pages from books and magazines so that they could be taped or pasted directly on pages of briefs.

The Digital Revolution: The first table-top computers became available to the average consumer in the early 1980s, gradually making typewriters obsolete. Debaters now had an easier way to type information and to store that information for later retrieval and revision. By the mid-1990s the Internet and online services such as Lexis/Nexis would make the computer into much more than a glorified typewriter—it became an information portal. By the beginning of the twenty-first century, the computer had become the standard means for accessing and processing information.

The point of this history of information resource shifts in policy debate is to demonstrate the following conclusion: practices in policy debate have adjusted to the larger shifts in information technology in society. Policy debaters have always been trained to be on the cutting edge of accessing information, processing information, and presenting information.

Ten Advantages of the Use of Computers in CX Debate

1. State-Of-The-Art Information Technology: For the top practitioners, computers are now a routine feature in boardrooms as well as courtrooms. They are used not only for advanced preparation, but also for information processing at presentation time. In the "real" world, no up-to-date practitioner would be flipping by hand through ten thousand pages of text trying to find the desired file. Laptop computers are now in routine use in the classrooms of America's top colleges. Our activity can no longer make the claim that we teach state-of-the-art information accessing, processing, or presentation



skills if we had continued to ban computers from our competition rooms.

- 2. Easing Restrictions on Travel: For the typical top tier of policy debaters, travel to a tournament involves transporting six plastic tubs of information per team. Each team must also travel with its own "moving truck" to facilitate moving three hundred pounds of evidence. Air travel becomes an expensive proposition as most airlines now limit passengers to two items of checked luggage. Van travel offers no escape from the six-tub-nightmare. More than half of the interior travel space is taken up by evidence. Fewer evidence tubs will mean that more debaters can travel to tournaments in the same space. When evidence is stacked to the ceiling in the rear of a van, the risk of injury in the event of an accident is dramatically increased. Heavy objects in the rear of the vehicle become missiles in the event of collision. More than a few debaters have lost their lives as the result of sudden impact with their own evidence tubs.
- 3. Room Moves Become Manageable. Precious time between debate rounds time which could otherwise be spent in preparation must now be spent lugging three hundred pounds of evidence up and down staircases. These room moves are especially debilitating for students who have an injured limb or are otherwise physically ill-equipped to spend their weekend moving heavy furniture. In the near future the typical debate team will be able to manage with one plastic tub and computer equipment designed for mobility.
- 4. Copying Files For Multiple Teams Becomes Affordable. Consider the task now facing policy debaters when a new team needs its own copy of the six tubs-worth of evidence carried by the top team. A typical evidence tub holds 2500 pages of briefs; that is the equivalent of 16 megabytes of storage space for computer files in word processing format. One compact disc can hold 700 megabytes of information, or the equivalent of 50 plastic tubs filled with evidence. One DVD can hold 4.4 gigabytes of information, or the equivalent of 288 evidence tubs. Duplicating six tubs worth of evidence briefs would typically cost over six hundred

- dollars (at 5 cents per copy) and would take one person at least fifty hours to accomplish. Duplicating one compact disc (the equivalent of 50 evidence tubs) would cost 10 cents and would take less than three minutes.
- 5. Solves the "Coach, I Left My 1AC At Home" Problem. Every policy debate coach has experienced the frustration involved when debaters lose important files. The missing briefs may have been left in the squad room, misfiled after the last round, or not returned by the team met in an earlier round. Having a digital copy of the files provides protection against all of these problems.
- 6. The Computer Becomes "The Great Leveler." Policy debaters have become accustomed to playing silly intimidation games with the number of their evidence tubs. Opposing teams are expected to become faint when observing the sheer volume of the opposing team's briefs. In the computer era, the team with eight evidence tubs will intimidate no one. The other team's laptop computer, with its 60 gigabyte hard drive, could easily contain the equivalent of hundreds of tubs worth of data and have plenty of room to spare. After a few years of adjustment to the digital revolution, no one will know or care how many pages of briefs are present in the other team's computer. Even the smallest school, with its inexpensive laptops, can nullify the "intimidation factor" which in the past involved counting the number of tubs.
- 7. Debaters Will Focus on the Evidence They Actually Need. Most of the briefs debaters now carry will not be used during the entirety of any given tournament. They are carried across the country and brought back unused simply because of the following fear: "But what if we hit that case/ disadvantage/kritik that so-and-so ran three years ago." The fear of needing a file and not having it causes debaters to travel with excessively large sets of data. The truth is that the typical competitive debate team could easily fit the briefs they will actually use at a given tournament in a single evidence tub. The rounds the team is affirmative typically require the use of only one or two "expando" files with case answers, topicality answers, and answers

- to expected disadvantages and kritiks. On the negative, most teams rely on an admixture of four or five disadvantages/ kritiks which would easily fit in one evidence tub. The debaters' awareness that all of the team's backfiles exist on their computer's hard drive will free them from the "but what if we meet that argument" worry. In most cases, modern debaters are aware before the round what case and/or negative argument they are likely to confront. The preparation time can be spent selecting and printing relevant briefs rather than in moving mountains of unnecessary evidence. In the vast majority of debate rounds, all of the needed files will already exist in hard copy in the one tub that the debaters will carry with them.
- 8. Flowsheets Become a More Valuable Learning Tool. Many policy debaters have already discovered the computer's unique ability to help them construct more usable flowsheets. Modern spreadsheet programs such as Excel allow debaters to create any number of individual worksheets, clearly labeled with file-folderlooking tabs down at the bottom of the screen. By clicking on the tab, debaters can move immediately to the arguments which pertain to the "deficit disadvantage" or the "substantial topicality" argument. Spreadsheets are conveniently arranged in columns, corresponding nicely to the columns that the debaters of earlier eras so laboriously constructed by hand. Wonder of wonders, these flowsheets can be read by all rather than exclusively by the person who constructed them. Each flowsheet can be named to correspond to the team met, the round, and the date. Regardless of the number of argument tabs in the spreadsheet, the whole round is now captured in a single computer file. After the tournament, these flowsheets can be stored in a master file for the squad so that all debaters on the team can learn from the past. Files can easily be created showing a comprehensive list of the case arguments made against the team's affirmative case, the disadvantages faced, and the topicality arguments encountered.
- 9. Timing Is No Longer a Laborious Task. Debaters who flow on their computers can download free countdown timers from



the Internet, specifically programmed to manage speech time as well as preparation time. One such timing program, written as a public service to debaters and judges is available for free download at www.freewareppc.com/clock/ speechanddebatetimekeeper.shtml. This software was written by Jemmy Chen, a former policy debater at Esperanza High School in Anaheim, California. The timer is written in Java, meaning that it will work on any laptop, including those made by Apple. The timer has a setting that will even give spoken time signals. This software installs easily and is pre-programmed with all of the NFL debate speech and preparation times.

10. Solves the "I Know I've Got That Brief Somewhere" Problem. With ten thousand pages of briefs at their disposal, debaters often become awash in information. This is a common problem in the "real" world of information processing; fortunately, software exists to solve this problem. The premier software tool for finding information on your own laptop is Google Desktop. This software is provided free by the folks at Google and it can be used when the laptop is offline (as the laptop must be in order to conform to NFL rules).1 You can a search term such "AmeriCorps*NCCC" and Google Desktop will almost instantaneously list for you all documents on your computer containing the search term. The same search using Window's "find file" menu could take minutes to complete. Importantly, Google Desktop will not limit its search to the title of the briefs, but will reach into the text of documents as well. If the brief exists anywhere on your computer, it is almost impossible to lose when you have a tool such as Google Desktop.

Five Myths About Computer Use in CX Debate

Myth 1: Computers will discriminate against small schools. Fact: Computers

will perform exactly the opposite function for CX debate. Specifically, computers will be the great leveler. The revolution in researching methods has already demonstrated this phenomenon. In the past, the large schools in major metropolitan areas had unequal access to university libraries and extensive backfiles. With the advent of computer research, a small school hundreds of miles from any major library can now compete because the computer brings the world of information to the school's doorstep. Now, as computers enter competition rounds, the same leveling function will be demonstrated. Large squads may have a long tradition of debate success, but they have no monopoly on students with computer expertise. In small high schools all around the country there are students highly adept at using computers who can bring that expertise to bear in policy debate.

Large squads can afford the massive copy costs associated with copying multiple tubs of evidence briefs. They can afford to rent the vans necessary to travel with hundreds of pounds of evidence per team. In the computer era, small schools will be able to inexpensively copy the same amount of evidence and travel to tournaments in less expensive and more accessible vehicles. Computers in debate rounds will also neutralize the "intimidation factor" of facing a team with six tubs full of evidence. An opposing team will never know how many pages of briefs exist on a computer's hard drive.

Much of the fear concerning the "small school" disadvantage focuses on the cost of a laptop. First, those costs are coming down rapidly. Laptops for use in a debate round require only entry level capabilities (word processing and spreadsheet programs). Even the cheapest laptop (now dipping under \$400) will do just fine. By the time a team pays to photocopy three tubs worth of evidence, they have already spent more than a laptop would cost.

Furthermore, debaters (whether from small or large schools) will have to be

proficient in the use of computers in order to succeed in college or in their later careers. Debate can play a role in equipping students from small schools to compete in that larger world.

Myth 2: Wireless chatting during debate rounds will create an unfair competitive advantage. Fact: Computer use does nothing to encourage unethical conduct. Use of the Internet during a competition round, or any form of connectivity beyond printing, is forbidden by the NFL rule recently adopted. Is it possible for debaters to cheat? Well, if they are truly determined to cheat, they can, but the penalties are significant enough to make this unlikely. Consider that, at present, debaters can communicate with their coaches or other students if they are willing to break the rules. Virtually all debaters have cell phones; they can text message someone outside the room with no more risk of detection than is involved in computer use. Students can take a restroom break during the round and conveniently meet the coach on the way. Such efforts to receive coaching during the round violate longstanding rules, but they are already possible even without the computer. Why have such rule violations been minimal or nonexistent? Two reasons: (1) Such violations require the complicity of a coach in the unethical act. Even given the competitive pressures of modern policy debate, the vast majority of coaches follow the rules. For the few who have no compunction about ethical violations, the size of the penalty (expulsion from the tournament) should provide sufficient counter persuasion. (2) There is actually minimal advantage resulting from communication during the debate round. Preparation time is quite precious during policy debate rounds. Once the first negative speech is underway, the negative team is pretty well committed to a strategy for the round. Coaches have an opportunity to assist with the development of that strategy before the round, but have little alternative but to trust the debaters for the execution of the strategy.

¹ For the text of the new NFL rule allowing use of laptops in policy debate, see the November, 2006 issue of the Rostrum or visit the NFL Web site at http://www.nflonline.org/uploads/Main/councilpkt.pdf. Please note that the NFL rule is in a trial period for the 2006-2007 debate season and that each NFL district is autonomous in deciding whether to allow the use of laptops at their district tournament.





Myth 3: Debaters and coaches will be confused about how to implement the rule requiring the disabling of wireless devices. Fact: Disabling a wireless device is a simple task, and the result can be easily verified. Any person who owns a laptop must know how to disable their wireless device when they board any commercial aircraft. When a laptop with a Windows operating system is connected to the Internet, a small double-computer icon appears at the bottom of the screen. When wireless access is disabled, the doublecomputer icon appears with a red X completely across the icon. Disabling a wireless device is as simple as right-clicking the double-computer symbol and selecting the option to "disable." Furthermore, the NFL rule does not impose upon judges any affirmative burden to establish that each team has disabled its wireless devices. This is a responsibility that any debater using a computer must accept.

Myth 4: Use of computers will further degrade presentation skills in policy debate. Fact: There is no more temptation to continually read from a computer screen than from a hard copy brief. Most policy debaters who use computers in a debate round use the computer as a flowing device. They will have the computer in front of them during the speech because it contains their flow, not because they are reading briefs from the computer. In fact, it is a nearly impossible skill to use the computer both for flowing and for evidence display during a speech. It is true that policy debaters focus too much on the reading of briefs and too little on the public speaking components of their presentation. Computers had nothing to do with producing this phenomenon and would do nothing to make it worse.

In addition to working with policy debaters, I have taught public speaking at the college level for the past three decades. Public speaking instruction at the college level is now considered woefully inadequate if it fails to teach students how to speak persuasively while using a computer. While the manipulation of presentation software is a somewhat different skill from the way policy debaters will use computers, many of the same

principles apply. In both cases, students must be taught how to speak persuasively in computer-mediated environments.

Myth 5: Use of computers will make running a tournament more difficult because of equipment constraints and rule challenges. Fact: The NFL evidence rule is carefully designed to avoid imposing such constraints. Tournament directors have no obligation to provide outlets, extension cords, printers, paper or any other equipment. The rule explicitly establishes that debaters choosing to use computers will assume all responsibilities. I assisted with the direction of the Texas Forensic Association (TFA) policy debate tab room in 2006, the first year that computers were allowed in that tournament. The TFA tournament is one of the largest and most competitive tournaments in the nation. In a typical year there are dozens of rule challenges and allegations of violations requiring the attention of the tab room. Though many teams used computers during the 2006 tournament, only one alleged violation involved the use of a computer. That allegation was easily resolved after a brief discussion with the participants in the

A Vision of the Appropriate Use of Computers in CX Debate

Schools will react in a variety of ways to the new NFL rule regarding computer use. Many schools will determine that computer use offers minimal competitive advantage and will stay with existing practice.

Some schools will take the other extreme and argue before the school board that all debaters must be equipped with laptops. Most schools will fall somewhere in between these extremes.

If I were coaching a high school debate team I would react to the computer rule change by implementing the following squad procedures:

1. Digital Brief Submission: Beginning now, all debaters submitting research assignments would submit them digitally. Digital submission has numerous advantages. First, it saves paper. When

briefs are prepared through the old cut-andpaste method, only two or three arguments make it onto a page. When briefs are word processed, twice as many arguments appear per page. This will save copying and printing costs. Second, digital submission assures that the briefs are readable. When tags are hand-printed on briefs, they often are marginally useful because some debaters are unable to follow the scribbles of others. Third, and most importantly, digitally submitted briefs are easily preserved for future squad use — even in subsequent years.

2. Scanning of Backfiles: I would set in motion an orderly process for creating digital copies of squad backfiles. Most debate squads have attached to them some students who are computer whizzes, though their debating skills are not yet ready for prime time. These students can provide major assistance to future squad success by scanning backfiles into word processing or PDF (Portable Document File) formats. For those backfiles where the photocopy quality is poor or where the briefs contain underlining of the text, the scanning software will do an unsatisfactory job of converting the brief into a readable word processing file. The alternative is to create PDF documents, where the scanner simply takes a picture of the brief and makes it available in digital format. The optimal situation, however, is to convert backfiles into a word processing format through optical character recognition (OCR). This places the backfiles into a format where they can easily be updated by leaving some portions and replacing others. Most scanners now come equipped with OCR

3. Computer Flowing for the Willing: Not all students will benefit from flowing on a computer. The standard I suggest is as follows: Does the student type faster than he/she writes (in a text messaging age, this is the case for many students) and/or will the typed flowsheet be substantially more readable/usable than the traditional byhand flowsheet? I would not force students to flow on the computer if they are reluctant. Furthermore, every debater needs to know how to flow the old fashioned way. There will inevitably be those rounds when the



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laptop crashes or the battery runs out. Just as presenters in the real world must be trained to carry on when things go wrong with technology, so debaters must be prepared to adjust to problems.

4. One Tub Rule: In the ideal (future) computer world, policy debaters on my squad would be limited to one tub of evidence. I would instruct debaters to choose the briefs most often used to carry around in hard copy. I would not force debaters to buy a laptop or to use a computer at all. Some teams would choose to get along with a single tub worth of evidence. The squad would provide a CD or DVD with the full version of the squad's backfiles. Debaters equipped with computers and fast/quiet printers would print out any additional briefs needed before a round or during preparation time. This one-tub-rule would make air travel (or van travel) much less expensive, more enjoyable, and safer. Room moves would no longer be such a production. Granted, this one-tub-rule could not be implemented until after a few years of gathering briefs in digital form and scanning of backfiles.

5. Hard Copy for Reading and

Sharing. I would encourage my debaters to use the computer during speeches only for display of the flow, not for the reading of briefs. In my ideal computer world, most debaters would work from the hard copies of the most-often-used briefs from their one tub of evidence. Since the debater has used hard copy for the presentation of arguments, it is no problem to show the other team or the judge the copies of the evidence read.

But if the debater reads briefs from hard copy, how does this reduce tub storage? Needed briefs will typically be printed out before the round as the team is prepping for the team they are meeting. A few will be printed during the preparation time (only rarely). Most of the common arguments debaters make would come from their one tub of briefs. Remember that the proliferation of tubs is spurred by two motivations: (1) intimidation and (2) what if we end up needing that brief (no matter how unlikely the possibility)? By having a digital copy of all of the backfiles, both worries are redressed and the team can be happy carrying around one tub worth of hard copy. Policy debaters will continue to read from hard copy, but the amount of paper carried will be reduced. A policy debate team is negative in only half of its rounds, which would typically be four rounds or less per tournament. In at least two of those rounds all of the needed arguments will come from the expandos for the most common case responses/disadvantages/kritiks the team likes to run in their one tub. In only a round or two will additional briefs from backfiles need to be printed out.

It is the right time for policy debate to make the shift into the digital revolution. With the new rule in place, we will be able truthfully to say that policy debaters are taught to thrive on the cutting edge of accessing, processing, and presenting evidence.

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