Teleconferencing & IPDA: Case study, requirements, budget, and instructions for effective teleconferencing debate.

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Summary:

On February 28, 2009, Henderson State University hosted a competitor from Oregon State University in the Open Division of The IPDA Reddie to Rumble Debate Tournament. The student competed without leaving his home state; he paid no travel expenses, and slept in his own bed. The student competed through the first ever, active teleconferencing system in IPDA history. The competitor, who is an undergraduate with no university level degree, competed in six official rounds of debate against multiple coaches of debate and graduate students with degrees ranging from Baccalaureate Degrees to Doctorates. The Open Division was chosen because of its small quantity of highly intelligent and experienced debaters. The Oregon student competed against every competitor in the open division. It was determined that these individuals would be the least negatively affected by such a dramatic alternative to the normal concept of live debate. It was also felt that it was a more controlled environment to attend to any situations that may arise from the experiment. The experiment was a complete success. All six rounds were independently deemed fair, official, and valid by both competitors involved, the judge, the Tournament Director, and the President of IPDA. The competitor from Oregon State finished with a record of 1-5 and as a result did not break into outrounds; however, the competitor did win 3rd place speaker in the Open Division.

		Exhaustive Budget			
Item	Company	Specifications	Price	Amount	Cost
Projection Screen	Da-Lite	70" x 70" Picture King Tripod - Matte White	\$236.00	2	\$472.00
LCD Projector	NEC	Model VT595	\$1,199.00	2	\$2398.00
iMac	Apple	Mac OS X, 2.33 GHz, 2GB RAM	\$1,799.00	2	\$3598.00
Aspire 9410 - Laptop	Acer	Vista Premium, 2.00GHz, 1GB RAM	\$762.50	-	\$762.50
QuickCam Communicate MP	Logitech	 Megapixel Sensor, Built-In Mic 	\$49.99	-	\$49.99
2.0 Speaker System	Altec Lansing	BXR1120	\$19.95	-	\$19.95
Mini DVI to VGA Adapter	Apple		\$19.00	-	\$19.00
Pro Series USB Extension Cable	BELKIN	10 ft. Model F3U134-10	\$5.99	-	\$5.99
AV Cart	BRETFORD	Model "E", 2 Outlet, 10 AMP, 125 Volt	\$69.00	-	\$69.00
3 Outlet Extension Cord Reel	Tasco	25 ft., 16 Gauge	\$19.99	-	\$19.99
CAT 5e Ethernet Cable	Staples	25' – Gray	\$21.98	-	\$21.98
CAT 5e Ethernet Cable	Staples	14' – Gray	\$11.98	-	\$11.98
				Total:	\$7,448.38

This budget includes any and all items used. Many of the items were used to enhance the aesthetic value and give a more personal feel to draw and pre-round communication as well as items that would not be needed had alternative rooms or layouts been available.

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Effects on IPDA Format:

A. Time Lag in Cross-Examination

There is a delay in the time it takes for information to pass from competitors to their opponent. This is not an issue during the speeches as they appear to both the competitor and the judge as a consistent flow of thought. In cross-examination, however, a timely response is required to use limited cross-ex time efficiently. There was a consideration of extending the cross-examination time by 15-30 seconds but this was abandoned to hold true to the official IPDA format. Tournament Directors are encouraged to consider extending cross-examination time to account for any delay. In the Reddie to Rumble Tournament, however, there was no change made. There was also no conflict in regards to this delay.

B. Loss of Connection

One issue that was considered in preparation of the tournament is the total loss of connection preventing further debate. The question was posed as to how the round would be awarded. It was determined that loss of connection would result in a forfeit on behalf of the competitor not physically present at the tournament. Telecommunication is the means for a student to compete. It is the same instance as a team's vehicle breaking down in route to the tournament. If their means fails, even at no fault of the competitor, precedence awards the round to their opponent.

C. Speaking Ability Statistics

One interesting aspect that has yet to be fully examined is the change in speaking skills from normal debate to teleconferencing debate. An analysis of all competitors in the open division shows a clear, but minor, increase in average speaking points when in the teleconferencing round. I took an average of all rounds of the non-Oregon competitors excluding rounds using the teleconferencing system (disregarding byes and including High-Lows). I then compared that to the average score of the non-Oregon competitors teleconferencing rounds. The last number I have is the total average score of the Oregon competitor. The numbers are as follows: the average score of a non-teleconferencing round was 33.5, the average score of the same competitors in the video round was 35.66, and the average score from Oregon was 34. There is speculation as to what causes this change. The Hawthorne Effect is one theory to explain the change in performance. Another theory is that through the program used, competitors were able to view their performance in real time. It is possible that this allowed them to correct their non-verbal during their speeches.

D. Room Requirements and Position of Competitors

Initial plans included the judge and a competitor in the same room with a display showing the Oregon competitor. This was abandoned in favor of isolating both competitors from the judge thus offering a level field in how the judge views the competitors. By requiring both competitors to appear on the display, there is no bias in how the judge awards the round or speaking points. Further, it was determined that the competitors verify that there was no one else in the rooms with them as they competed. This way, there was no way an individual could interact with a competitor during a round outside of the view of the judge. All audience members were asked to view the round from the room with the judge to ensure the highest ethical standards. This unfortunately required two rooms and not the usual one room for each debate, stretching the physical resources of the tournament.

E. Scratching

Scratching, because it is done publicly, was viewed as an opportunity to showcase the technology and systems in use. A display screen was set up so that everyone could view the Oregon competitor as he scratched and so he could communicate effectively with his opponent. One beneficial feature of the program we used was the ability to simultaneously text chat with video chat. The topics were typed in the computer but were not sent until the topic list was handed to the opponent. This eliminated any unethical or unfair situations. The competitors would then simply state the number they wished to scratch, and the competitors would disregard it on their individual lists.

Software

A. Initial Programs

The first program that was tested for use as a teleconferencing medium was iChat. Because the full version is included in all the iMacs used, it was determined to be the best at the time. It was abandoned because it does not allow video chat with individuals on a PC. Because Oregon State did not have access to an Apple computer they were not able to participate through iChat. The second program examined was Skype but was abandoned because it did not have a multi-feed feature in its free version.

B. ooVoo

The program ooVoo was determined the best for the format. Its features include multi-feed chat included in the free version, simultaneous text and video chat, it has the ability to record the round from the view of the program, and it is universally compatible between the iMac and a PC. There were issues when attempting to use ooVoo on the iMacs because the program for Apple is still in the beta stage of development. All of these issues were resolved by switching computers or were not of issue enough to disrupt the tournament.

Minimum Hardware Requirements

These requirements come directly from ooVoo.com via their download page.

For the PC:

- Pentium 4 1Ghz with 256MB of RAM
- 20MB Hard disk space
- Webcam and Headset
- Broadband connection (Cable, DSL etc...)
- Microsoft Windows 2000, XP or Vista

For the Mac:

- Power Mac G5 (1GHz) or Intel Mac with 256MB of RAM
- 20MB hard disk space
- Mac-compatible Webcam and headset
- Broadband connection
- Tiger, Leopard (OSX 10.4 and up)

Optional Equipment

A. Video

Cameras: Most iMacs and Laptops come with a camera included. While these are adequate to perform all required functions, they may not produce the level of quality needed for a successful round of debate. Tournament Directors should consider the use of a USB camera to improve video quality.

Projectors & Screens: Tournament Directors may consider including projection screens in both scratching and in the judges room. For the scratches, it gives a more person-to-person feel than text chat. In the judge's room, it allows the audience to view the round without being close enough to the judge to view or effect the ballet.

B. Audio

Microphones: Like cameras, microphones come standard in most laptops and iMacs; however, they often lack certain features that can enhance the dynamic of debate. Because a competitor may be several feet from the microphone when standing and speaking, a more advanced microphone with ambient noise reduction and echo reduction may be required.

Speakers: Speakers compliment the use of projection systems in that they overcome low quality and volume outputs from standard computer speakers. Also, many low volume speakers will produce an audible hum when adjusted to their highest settings.

C. Connection

Ethernet: Most computers have wireless cards installed prior to purchase. The first video round at Henderson utilized a wireless connection for both computers on Henderson's campus. There were issues with consistency of connection and at one point a large section of a speech was lost and a competitor was forced to start from the beginning of the speech. The use of CAT 5 cables connected directly to a wall connection resolved the issue immediately. Because of this, Tournament Directors are strongly encouraged to use constant Ethernet connections in every round.

Procedure

A. Set-up

Tournament Directors are encouraged to adjust layouts to fit their individual rooms. One major principle must be followed when designing a layout: both competitors and the judge must be in full view of the camera at all times during the round. The computer needs to be placed far enough away from the competitor that they can be viewed both while standing during their speeches but also as they are taking notes during the

opponents speeches. Some computer settings that need to be noted. Be sure to turn off screen savers, automatic sleep timers and other energy saving processes as they will turn off the display or the connection in the middle of the round without warning.

B. Pre-Round

Instruct the competitor and the judge on where to stand and sit. Allow them to see the range of the camera through the "Test Webcam" window on the "File" menu. Assure them they will not be required to adjust the computer. We removed the mouse and keyboard during the rounds to remove the urge to adjust settings. Initiate the connection, and do sound checks. Have the competitors verify there is no one in the rooms with them. Then begin the round.

C. Post-Round

Double check all of the settings. Manually initiate screen savers or turn of the display to avoid damaging the equipment. Be sure to turn off any projectors as the bulbs are expensive to replace.

Troubleshooting

No sound from speakers:

- 1. Check if speakers are muted
- 2. Check that correct speakers are selected
- 3. Mute then un-mute speakers (Recommended)

Opponent and judge cannot hear your microphone:

- 1. Check if microphone is muted
- 2. Check that correct microphone is selected
- 3. Mute then un-mute microphone (Recommended)

Screen shows picture instead of video on screen:

- 1. Check if webcam is on at bottom of window (Recommended)
- 2. Check if correct webcam is selected

Screen says video cannot be displayed:

This is the result of poor connection. **Recommend using Ethernet cables or more consistent internet connection if available.**

Audio is choppy or cuts out completely:

This is the result of poor connection. **Recommend using Ethernet cables or more consistent internet connection if available.**

Camera has a blue tint:

This is an issue discovered in the Mac Beta Version. **Recommend using another computer if available.**

Program fails when call is ended: This is an issue discovered in the Mac Beta Version. This issue was not detrimental enough to require a change in computers. **Recommend setting the program to login when started; restart the program after each call.**

There is a low roar throughout the round:

This is most likely the result of ambient noise. For us, the culprit was the air conditioning systems. **Recommend locating and removing the source of the noise** (usually related to the air flow in the room). It may not be possible to completely remove this issue.

There is a pervasive delayed echo:

This is a combination of mixed sensitivity of a participant's microphone with the volume of their speakers. **Recommend lowering the volume of the other participants speakers till the problem does not inhibit clarity of the round.** It may not be possible to completely remove this issue.

Future and Concerns

A. Opportunities

The opportunities made available by this technology are limited only by the imaginations of those using it. Not only does this allow schools to participate in times of budget constraints or excessive time or distance barriers, it will also allow schools to run free, efficient practice rounds against competitors from other schools without disrupting a normal team meeting. This will allow IPDA to spread to areas of the country not within travel distance by most competing schools, allowing IPDA to spread across the country and possibly in other countries, putting the International in IPDA.

B. Concerns

The largest concern as a result of this tournament is that this new system will remove person-to-person debate in favor of this less expensive format. This is unlikely due to the fact of all the different variables that become involved when considering such an option. As the budget shows, it cost Henderson State University over \$7,000 for one competitor. None of these costs were incurred by the debate team because all the technology used was already readily available. This is not the case with large numbers. There were approximately 100 competitors that attended the Reddie to Rumble Tournament. If half of the competitors had chosen to compete via teleconference, the total overall cost on Henderson would be \$372,419.00 to run a tournament of the same quality. Even if a tournament were to use only the Acer Laptop with stock parts, it would require 100 laptops; fifty for the competitors present, and fifty for the judges. This would place the cost at \$76,250.00; still outside the bounds of most universities. Further compounding this is the need for up to 100 available rooms, one for each competitor and judge. Once again this is outside the resources of most universities. Another issue is if all debates were to be held via teleconference, the tournaments would have no way to monitor the rounds. Under the current standard a Texas competitor may face a Louisiana competitor before a Mississippi judge, all within the bounds of an Arkansas tournament. Compare this to a teleconference tournament and you see that with no part of the round being run in or through Arkansas, the Arkansas tournament is no longer in control of the round. Also because the Arkansas tournament was not directly involved in the round the teams

would have no reason to pay registration fees. Because of this, it is unlikely that teleconferencing will ever fully overtake person-to-person debate; however, it is the recommendation to The Governing Board of IPDA that a provision be placed in the bylaws of IPDA that prohibits official tournaments from removing person-to-person debate as a system in their tournament.