

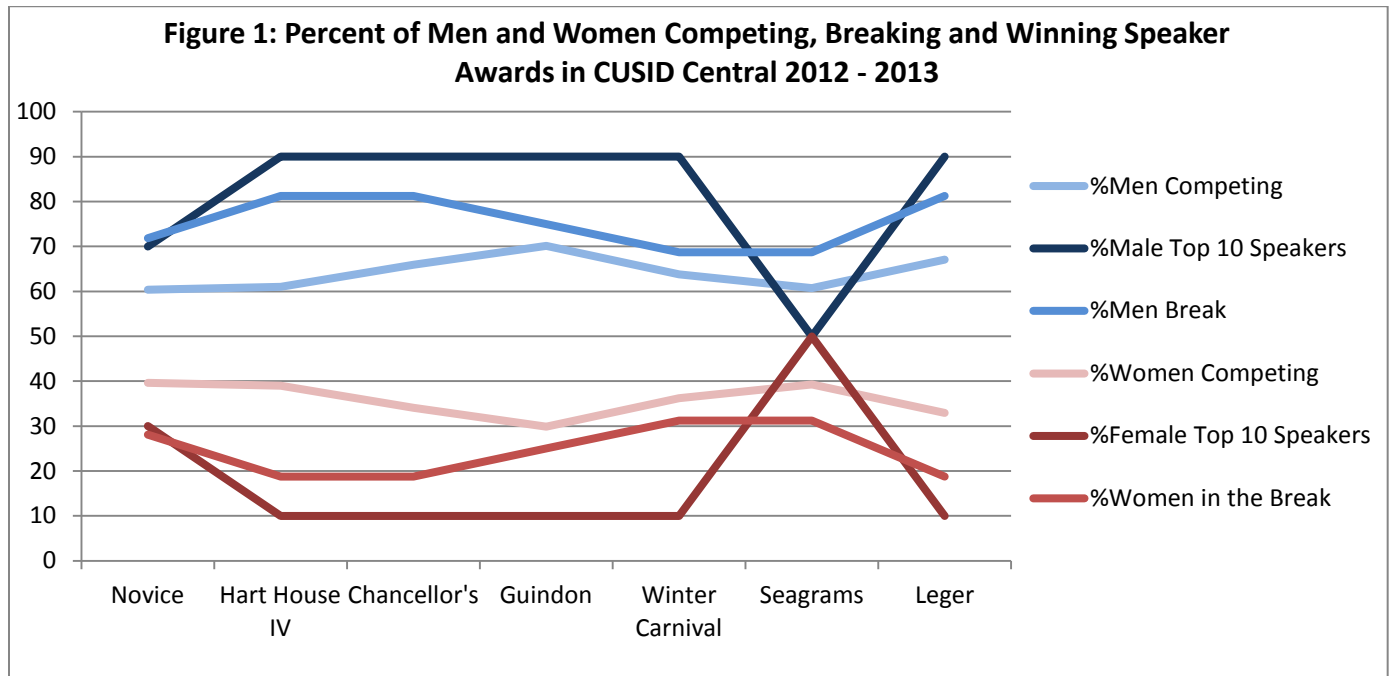
**Is there *really* a gender problem in CUSID Central?**

A Data Analysis of Female Participation and Competitive Success  
in CUSID Central 2012 – 2013

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## I. Competition Statistics by Sex for CUSID Central 2012 – 2013



### Methodology:

- Collated speaker tabs for CUSID Central Novice Champs, HHIV, Yale IV, Chancellor's, Guindon, Winter Carnival, Seagram's, Luebke Cup, Leger and Nationals. Identified which speakers were female as opposed to male through a combination of personal knowledge, heteronormative name assumptions, direct inquiries, and unabashed Facebook stalking. The rest was simple mathematics.

### Observations:

- From the beginning of a novice's debate career in CUSID Central 2012-2013, there was a significant gender imbalance. At Central Novice Championships, roughly 60% of the competition was male and 40% of the competition was female.
- Central Novice Championships had the highest female participation rate of all CUSID Central tournaments in the 2012-2013 year (39.63%).
- Female participation steadily decreased across the BP season**, increased at the beginning of CP season, and then continued to steadily decrease. For example, the Hart House IV in October had a 39.3% female participation in comparison to March's Central Canadian Championships (32.9%) and Nationals (28.9%).
- The proportion of women who broke at a tournament never equaled or exceeded the proportion of women who competed at the tournament.** Conversely, the proportion of men that broke at a tournament always surpassed the proportion of men that competed.
- At six of the eight CUSID Central tournaments, **only one woman was in the top 10 speakers.** The two exceptions are Central Novice and Seagrams (which actually only recognized the top five speakers, of which only one was female).
- The tournaments with the highest female participation (Central Novice and Seagrams) were, of course, tournaments whose competitors were primarily novices. This observation, combined with a negatively-sloped participation trend line, suggests that women are disproportionately more likely to drop out of CUSID than their male counterparts. (See Points of Further Analysis)

## II. Distribution of Women Across Performance Quartiles

Okay. So now we know that at any given 2012-2013 CUSID Central tournament, about 30 – 40% of the competition were women (the CUSID Central weighted average of %female participation is 37.1). But in terms of results, where were women on the tab? Were they split evenly amongst the performance quartiles?

**Table 1: Percent Distribution of Women Per Quartile at Each 2012 – 2013 CUSID Central Tournament**

	Central Novice	Hart House IV	Chancellor's	Guindon	Winter Carnival	Seagram's	Leger
1st Quartile	23.1%	17.0%	16.7%	18.5%	21.4%	30.3%	18.5%
2nd Quartile	27.7%	28.3%	26.7%	29.6%	26.2%	24.2%	37.0%
3rd Quartile	27.7%	37.7%	30.0%	33.3%	21.4%	27.3%	14.8%
4th Quartile	21.5%	17.0%	26.7%	18.5%	31.0%	18.2%	29.6%

### How to Interpret This Table:

- *I.e.* 23.1% of the women that competed at the Central Novice Championships were found in the 1<sup>st</sup> Quartile (the top 25%) of the speaker tab.
- Regardless of the low proportion of women competing in tournaments on average, all things being equal, the proportion of women found in each performance quartile should be evenly distributed (25-25-25-25).

### Methodological Note:

- For speaker tabs where the number of speakers was not perfectly divisible by four, the first two quartiles were calculated as being one unit greater than the last two quartiles.

**Table 2: Average Percent Distribution of Women Per Quartile at 2012 – 2013 CUSID Central Tournaments**

Speaker Tab Quartile	Average % Distribution of Women
1 <sup>st</sup> Quartile	21.5%
2 <sup>nd</sup> Quartile	28.3%
3 <sup>rd</sup> Quartile	26.5%
4 <sup>th</sup> Quartile	23.6%

### How to Interpret This Table:

- *I.e.* At the average 2012 – 2013 CUSID Central tournament, 21.5% of the women that competed were found in the first quartile (top 25%) of the speaker tab.

### Methodological Note:

- Average % Distribution of Women is not a weighted average. All tournaments were considered equally important.

### Observations:

1. On average, the lowest percent distribution of women is found within the 1<sup>st</sup> quartile and the highest within the second quartile.
2. **The difference between the percent distribution of women between the 1<sup>st</sup> and 2<sup>nd</sup> quartiles is statistically significant** (whereas the differences between the 2<sup>nd</sup> and 3<sup>rd</sup> quartiles, and the 3<sup>rd</sup> and 4<sup>th</sup> quartiles are statistically insignificant). The Student *t*-Test which compared the data from the 1<sup>st</sup> and 2<sup>nd</sup> Quartiles for all CUSID Central tournaments produced a *p-value* of 0.04, meaning that there is a 4% chance that the difference between the proportion of women found in the first quartile and the 2<sup>nd</sup> quartiles of the tab is totally random.
3. What Observation #2 indicates is that there is some factor that impedes CUSID Central Women's ability to move from the 2<sup>nd</sup> quartile of the tab to the 1<sup>st</sup> quartile of the tab. Women get stuck in the 2<sup>nd</sup> quartile. *This figure at least partially explains why consistently a far higher percentage of women break at a tournament than win speaker awards.*

### III. Statistics by School

Rank	Name of Educational Institution	Average % Female Competitors Entered at a Tournament
1	McMaster University	50
1	University of Ottawa (EDS)	50
3	Queen's University	46.7
4	University of Toronto (Hart House)	40.0
5	Carleton University	34.8
6	Wilfred Laurier University	33.3
7	McGill University	32.4
8	University of Western Ontario	26.5
9	Guelph University	21.4

The 2012-2013 CUSID Central Female Participation Average was **37.1%**.

Schools highlighted in orange consistently sent teams with female contingents higher than 37.1%.

Schools highlighted in blue did not.

#### Note:

- York University, Brock University and the University of Waterloo were not ranked because they institutionally (as in, not a hybrid or independently) attended too few tournaments to generate an adequate sample size. All universities listed in the above table competed in at least four CUSID Central tournaments with contingents of more than one team.
- However, it should be noted that York, Brock and Waterloo would all have been highlighted in blue for falling below the 37.1% national average.

#### Methodology:

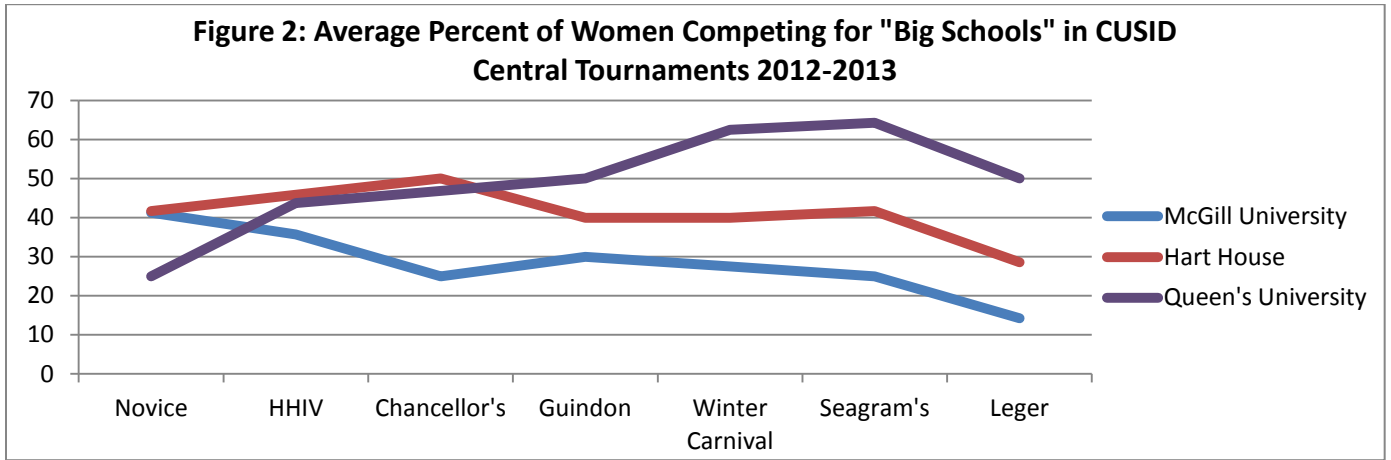
- Average % Female Competitors was calculated as a **weighted average** (the total number of women an institution sent to all Central tournaments 2012-2013 was calculated as a percentage out of the total number of debaters that institution sent to all Central tournaments).
- Due to financial or other various constraints, some institutions only sent one or two teams to a given tournament. Thus, a weighted average was used so that no single tournament disproportionately inflated or deflated an institution's % Female Competitors score.
- Statistics for contingents sent to the Yale IV are available within the data set I have attached but are not figured into the Average % Female Competitor score.
- **Hybrid teams were not factored into % Female Competitor** score because their institution was not responsible for entering them into the competition or, presumably, funding them.

#### Disclaimer:

- I may be wrong about the sexes of some debaters. I did the best that I could. Additionally, the Seagram's Tab did not have school names. However, I think I correctly identified every debater's institution.

#### Observations:

1. On average, "**Big schools**" have higher female participation (the notable exception: McGill University). This observation supports the contention that instituting mandatory female quotas for *all* schools would initially reduce the number of teams that "small schools" could enter in a tournament.
2. Heralded as the home of competitive female debating, **Queen's University's** 46.7% Female Competitor statistic was significantly deflated by their 25% female contingent at the Central Novice Championships. However, Queen's generally boasted a 50% female contingent at all CUSID Central tournaments.
3. **McGill University's** percent female participation dramatically decreased across the school year. McGill's 32.4% Female Competitor score, which in itself is comparatively low, is almost entirely due to its 41% female contingent at Central Novice in which McGill sent 23 teams. At all other tournaments, McGill sent a female contingent below the tournament's female participation average. McGill concluded the school year with a 25% female contingent at Seagrams and a 14% female contingent at Leger.



**Methodological Note:**

- For tournaments in which McGill, Hart House or Queen's were the hosts, the data point represented for that school's results in their own tournament is merely the means of the adjacent two tournament values (with the exception being Central Novice Championships which McGill hosted and in which McGill novices competed).

**Observations:**

- Besides Central Novice Championships, in which Hart House and McGill had nearly identical proportions of female debaters and Queen's had less than both schools, McGill's proportion of competing women was lower than both Hart House and Queen's at every CUSID Central tournament.
- Both McGill and Hart House experienced a similar rate of decline (slope) in the percent of women competing at CUSID central tournaments in the latter half of the 2012-2013 debate year.
- Queen's University steadily increased its percent female participation over the course of the school year.

## IV. Female Novice Retention by School

### Focus Question:

- The initial 40 to 60 %Female to %Male Participation ratio at Central Novice Championships demonstrates that from the very beginning of university debate careers, there is a gender imbalance. Thus, it is extremely important to retain female novices. Are CUSID Central Institutions retaining their female novices to a sufficient degree? **Most importantly, are CUSID Central Institutions retaining their female novices to the same degree that they are their male novices?**

### Methodology:

- To determine the extent to which CUSID Central Institutions retained male and female novices, I identified the sex of each competitor at the 2012 CUSID Central Novice Championships.
- I name-searched each novice at all subsequent CUSID Central tournaments. I identified which novices had attended one tournament *in addition to Novice*, and novices that had attended *more than one tournament in addition to Novice* (therefore competing at 3+ tournaments in the CUSID year). In the spirit of measuring emerging governments by the two-turnover tests, I determined regularly-competing novices by a **two-tournament test** (excluding Central Novice Champs, which is really just their debut).
- To determine the percent gender retention of novices by institutions, I calculated the percent of male novices and female novices that were sent to tournaments by their institution as a percentage out of those male and female novices that competed at Central Novice. For example, if eight women competed for the University of CUSID at the 2012 Central Novice Championships and four of those women competed at more than one additional tournament, the University of CUSID Central would receive a 50% score for the Female Category of %Sent to 1+ Tournaments. **This number reflects the percentage of women that initially competed for an institution that were retained across the CUSID year.**
- Not all an institution's novices compete at Central Novice. Thus, I put the gender breakdown of new novice recruits in its own column entitled "% New Novices."
- I included the Luebke Cup** in novice retention calculations. I did not include Luebke results in earlier calculations because the speaker tab was small and would have skewed results (19% women?!! Scary.)

**Table 3: Percent Female Novice Retention by Institution as Determined by the Percent of Female Novices and Male Novices that Competed at One or More Than One Tournaments After the 2012 Central Novice Championships**

Institution	Sex	#Competing at Central Novice	#Sent to 1+ Tournaments	% Sent to 1+ Tournaments	#Sent to 2+ Tournaments	% Sent to 2+ Tournaments	% New Novices
Carleton University	Male	4	2	50%	0	0%	0%
	Female	6	3	50%	2	33%	100%
U of Ottawa (EDS)	Male	4	0	0%	0	0%	0%
	Female	4	2	50%	1	25%	0%
University of Guelph	Male	7	4	57%	3	43%	100%
	Female	3	2	67%	1	33%	0%
Hart House	Male	14	7	50%	5	36%	67%
	Female	10	4	40%	3	30%	33%
McGill University	Male	27	10	37%	8	30%	75%
	Female	19	3	16%	2	11%	25%
McMaster University	Male	8	4	50%	3	38%	0%
	Female	4	3	75%	2	50%	100%
Queen's University	Male	8	4	50%	3	38%	33%
	Female	4	3	75%	2	50%	67%
Wilfred Laurier	Male	5	1	20%	0	0%	0%
	Female	3	1	33%	1	33%	0%
Western University	Male	N/A	N/A	N/A	N/A	N/A	83%
	Female	N/A	N/A	N/A	N/A	N/A	17%

### How to Interpret This Table:

- I.e.* At Carleton University, 50% of their female novices were sent to one tournament after Central Novice, 33% were sent to two tournaments or more. 100% of their new novice recruits were women.

Are female novices being retained at the same rate as male novices?

**Table 4: Ratio of Percent Male Novice Retention to Percent Female Novice Retention by Institution as Determined by the Percent of Female Novices and Male Novices that Competed at One or More Than One Tournaments After the 2012 Central Novice Championships**

Institution Name	Ratio of Male to Female Novices Competing at 1+ Tournaments		Ratio of Male to Female Novices Competing at 2+ Tournaments	
	Male	Female	Male	Female
Carleton University	1	1	0	1
University of Ottawa (EDS)	0	1	0	1
University of Guelph	1	1.18	1	0.77
Hart House	1	0.8	1	0.83
McGill University	1	0.43	1	0.35
McMaster University	1	1.5	1	1.32
Queen's University	1	1.5	1	1.32
Wilfred Laurier University	1	1.65	0	1
Western University	N/A	N/A	N/A	N/A

**How to Interpret This Table:**

- *I.e.* If you were a female novice at the University of Guelph in 2012-2013, you were 18% more likely than a male novice to be sent to one tournament, but 23% less likely than a male novice to be regularly competing (2+ tournaments).
- **The desired %male : %female retention ratio is 1:1 or higher.** A 1:1 ratio means that while universities may be losing very different numbers of male and female novices, they are still preserving the initial ratio of men to women sent to Central Novice Championships. A higher ratio means that they are more forcefully working towards creating a 50% male / 50% female competitive team.
- **Schools with a value of less than 1 in the 'Female' columns are retaining women at a lower rate than they are retaining men.**

**Methodological Note:**

- For schools that had raw values of 0 men or 0 women for %males competing at 1+ tournaments or %males competing at 2+ tournaments, the ratio given of men : women is given as 0:1.

**School-Specific Observations**

1. Some of the universities that ranked low on %female participation at CUSID Central Tournaments (Carleton, Wilfred Laurier, and Guelph) demonstrate a relatively equal degree of retention between male and female novices.
2. McMaster and EDS (which had ranked equally high on %female participation by institution) demonstrate their difference in gender retention ratios. While McMaster retains women at a higher rate than they do men, EDS does not appear to retain male novices at all.
3. Undeniably, the **worst place to be a female novice is McGill University.** If you were a 2012-2013 McGill novice, you were nearly two-and-a-half times more likely to be sent to a tournament after Central Novice if you were male than if you were female, and three times more likely to be given competitive access if you were male. In raw figures, the ratio of male : female regularly competing debaters is even worse – 4:1. For a 'big school' with sufficient resources, this problem should be taken seriously.

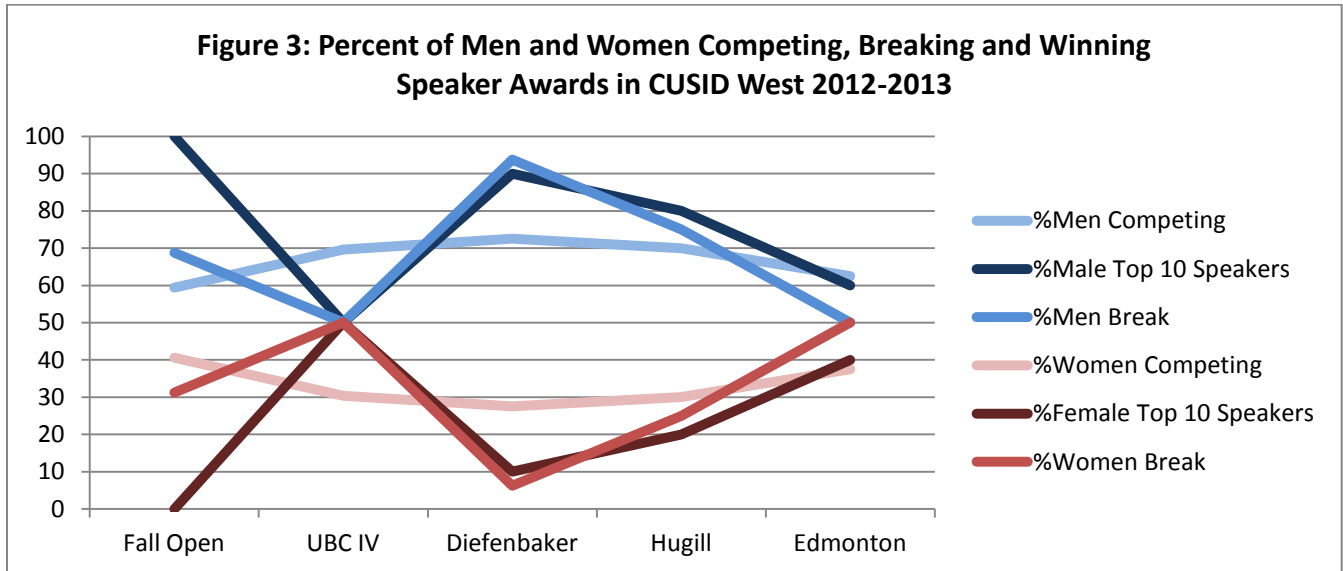
**Table 5: Ranking Institutions by %Male : %Female Novice Retention Ratios by of Tournament Access**

Rank	Institution Name	%Male : %Female Access Ratio (1+)	%Male : %Female Competitiveness Ratio (2+)
1	McMaster University	1 : 1.5	1 : 1.32
1	Queen's University	1 : 1.5	1 : 1.32
3	Wilfred Laurier	1 : 1.65	0 : 1
4	Carleton University	1 : 1	0 : 1
5	Hart House	1 : 0.8	1 : 0.83
6	University of Guelph	1 : 1.18	1 : 0.77
7	EDS	0 : 1	0 : 1
8	McGill University	1 : 0.43	1 : 0.35

## V. How Central Compares to the Rest of Canada

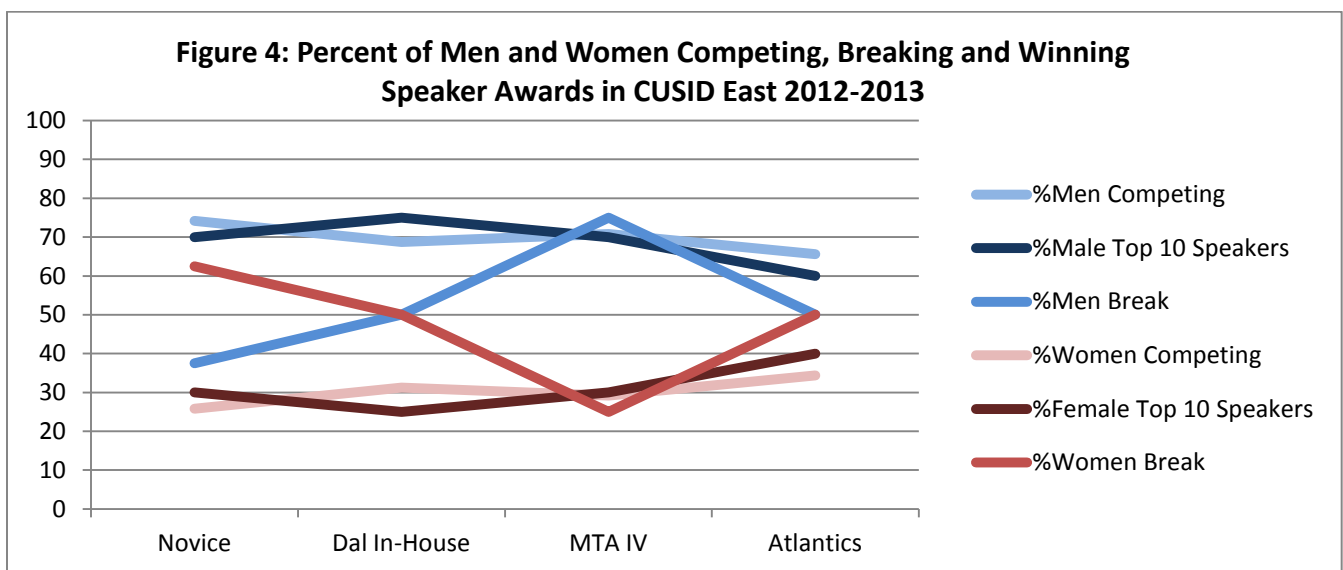
### Notes:

- All tournament data is displayed chronologically according to the CUSIDnet 2012-2013 schedule.
- Data for CUSID West and CUSID East was compiled by Michael Warren and Brendan Martin respectively.



### Observations:

- While the fish-shaped data might look funny, the results are promising. Achievement statistics gradually converge at the Edmonton Open.
- At 40% of CUSID West tournaments, a greater proportion of women broke than competed. Percentage of Top 10 Speakers was closely correlated with Percentage of Women Breaking.

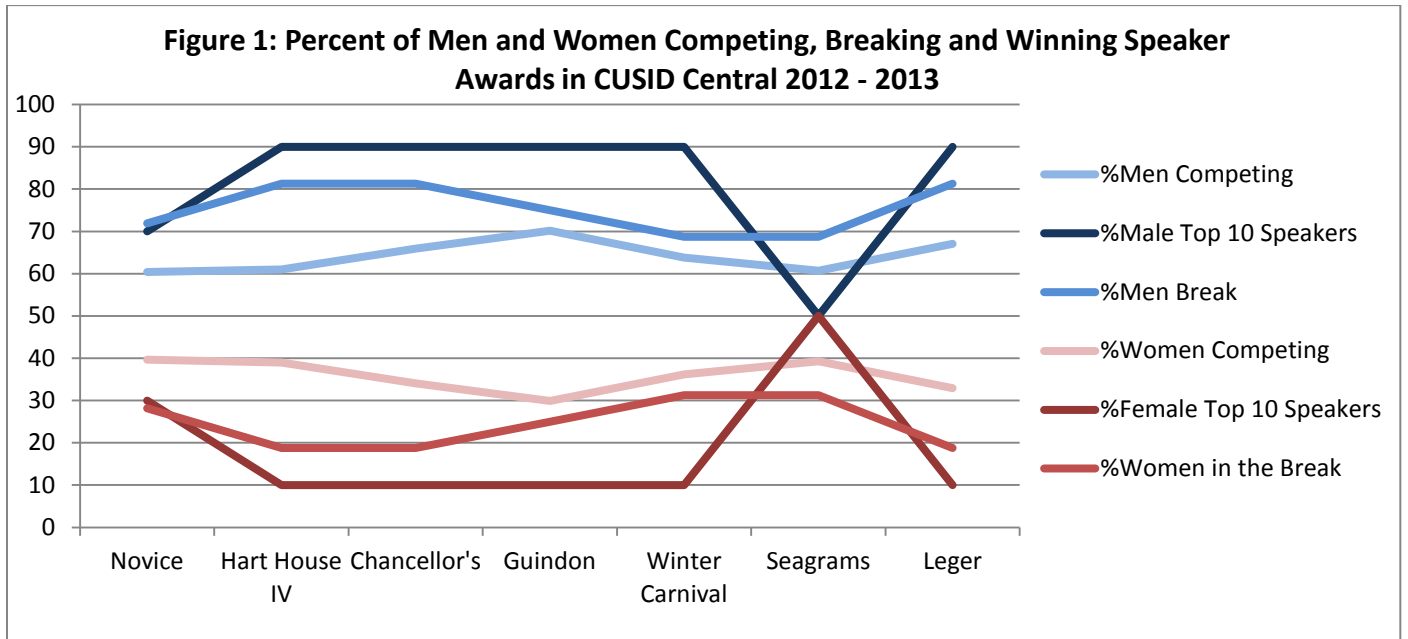


### Observations:

- By far the most sex-equal region of the three, on average a higher proportion of women in Canada East break than that which participates in a tournament. The percent of female top speakers is closely correlated with the percent of women competing at a tournament.



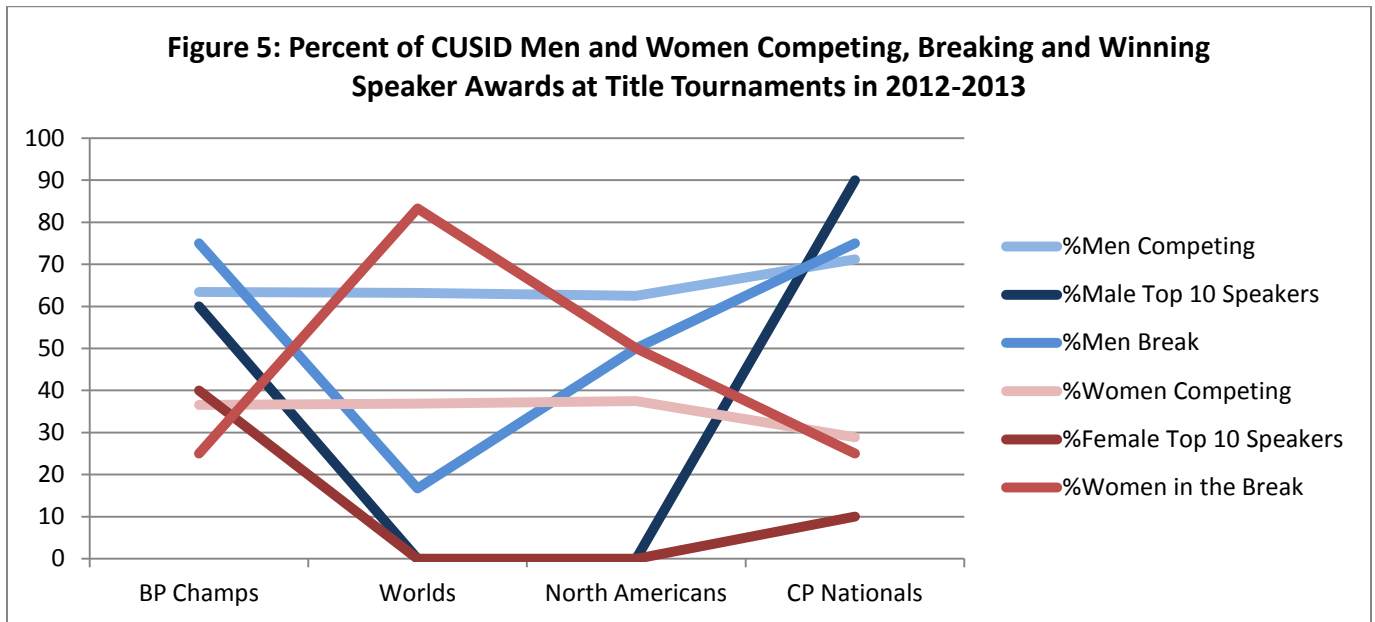
And once again:



**Observations:**

- In comparison to CUSID West and CUSID East, CUSID Central consistently **has the widest performance gap** between the sexes despite possessing essentially very proportions of men and women competing in its regional tournaments.
- Unlike in CUSID East and CUSID West, the proportion of women that break at a tournament **never exceeds or equals** the proportion of women that compete at a tournament.

## VI. Title Tournaments



### Observations:

1. Say what you will about the performance of women at CP Nationals, but it was the only title tournament in the 2012 – 2013 CUSID year where the % of breaking women was roughly equal to the % of women competing.
2. The % gender composition of competitive delegations to BP Champs, Worlds and North Americans was almost entirely consistent; delegations maintained the CUSID Central average participation rate of 37%. This statistic disproves the theory that when the competition gets tough, the women get going. Women are as likely to be sent to title tournaments as they are any other tournament.
3. According to this range of observations – which, admittedly, is extremely limited – women are more likely to punch above their weight (break in a higher percentage than that in which they are competing) at tournaments that are not held in Canada. 83% of the Canadian delegation that broke at Worlds were women, and 50% of the delegation that broke at the North American Debating Championships in Syracuse were women.

## VII. Points of Further Analysis

### What can we do with this data?

1. Have a real discussion about the problems that face women in CUSID. Why is the female break percentage in CUSID Central *always* lower than the female participation percentage? Why do CUSID women then do so well at international title tournaments?
2. Create a discourse on how to retain female novices. Some institutions, like McMaster or Queen's, retain women way better than other institutions do, like McGill. If we can determine the factors that lead to a greater inclusion and development of female debaters, then we can try to implement those programs in other institutions.
3. Make policies. In my opinion, CUSID is scared to introduce gender quotas – either for institutions, or for judge breaks, etc. Inaction seems better than ill-action. But policies can be undone if they do not work. And even better, their efficacy *will be reflected in the data*. Within as little as one year or two years, we can observe whether gender quotas for delegations above four teams actually increases the proportion of women that break at a tournament, or if increasing the gender quota of female judges increases the proportion of women that win speaker awards.
4. Realize that women are disadvantaged within CUSID. We're not "there" yet.

### Recommendations & Further Studies

1. From now on, **we should record the sex of tournament competitors**. It's important to measure progress, and we should save people (like myself) from having to resort to all sorts of unorthodox unreliable methods of determining the sex of a debater. When schools register and list the names of their debaters, we should make them list genders.
2. **We should record the names (and subsequently, sex) of judges and breaking judges**. That data should be available on cusidnet for studies relating to female performance at those tournaments.
3. **We should do longitudinal studies of women's participation and break records within CUSID**. This data set was just the 2012-2013 year. We should invest the time in observing the numbers as far as the data historically extends. With some volunteers to help, I would be happy to lead that study.
4. **We should assemble data on Debate Executives**. Who is in charge administratively and, especially, who adopts the powerful tutorial role for novices and the club would be an interesting analysis.