Women's Leadership in Physics Education Laura McCullough University of Wisconsin-Stout





AAPT Summer 2022

Research Question

Does the leadership of physics education show a proportional representation of females?

Women in Leadership

- Women are under-represented in many leadership positions in the STEM areas (http://www.catalyst.org/researchinsights).
- One possible way to support women's participation in STEM fields is to increase the number of female leaders as role models and mentors.
- Very little is known about women in leadership positions in STEM; only one study has examined women's leadership in physics education. (McCullough, AAPT Poster, SU2018)

Women in Physics Education

- Women are more strongly represented in physics education than among physics.
 - ♦ APS Membership overall is at least 18% female (self-reported)
 - ♦ AAPT Membership is ~ 25-30% female (self-reported)
- Approx. 50% of PER grad students are women; comparable sample of trad. physics was 19%¹

Gender* among AAPT Leadership

Data collected from AAPT website Summer 2022

	Men	Women
AAPT President	72	15 (17%)
	Men	Women
AAPT EO	11	2 (15%)
	Men	Women
AAPT Treasurer	Men 16	Women 1 (6%)
AAPT Treasurer		

Gender* among AAPT Fellows

	Men	Women
AAPT Fellows (inaugural cohort)	127	30 (19%)
AAPT Fellows (total)	161	48 (23%)

Gender* among PERLOC officers (current)

	Men	Women
PERLOC	1	6

Gender* among APS Comm. on Ed. chair

	Men	Women
COE Chair	16	6 (27%)

Gender* among AAPT Award recipients

Data collected from AAPT website Summer 2022

Two awards named for women; seven awards named for eight men

	Men	Women
Jackson	4	0
Halliday & Resnick	22	5 (19%)
Zitzewitz	21	6 (23%)
Klopsteg	22	6 (21%)
M. N. Phillips	12	4 (25%)
Oersted	79	6 (7%)
McDermott (Millikan)	56	4 (7%)
Richtmyer	67	6 (8%)
Homer Dodge (2000-2022)	103	52 (34%)

Conclusions

Women are under-represented in AAPT/physics education leadership positions compared to the number of women in the general physics education population.

References

1. R. S. Barthelemy, B. Van Dusen, and C. Henderson, PER: A research subfield of physics with gender parity. Phys. Rev. ST Phys. Educ. Res. 11, 020107 (2015).

Gender* among Journal Editors (current/active, not historical)

Data from PRPER, TPT, AJP and AAPT websites Summer 2022

	Men	Women
PRPER Editor	1	0
PRPER Assoc. Editor	1	1
PRPER Editorial Board	2	4

	Men	Women
AJP Editors	0	1
AJP Assoc. Ed. (started 2017)	5	2
AJP Column Ed.	6	0
AJP Consulting Ed.	8	1

	Men	Women
TPT Editors	1	0
TPT Managing Ed.	0	1
TPT Assist. Ed.	2	3
TPT Editorial Bd.	6	6
TPT Column Ed.	10	2