2020 COVID 19
Pre and Post Student Evaluation

Data Analysis and Report
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2020 COVID 19 Questionnaire (# of Items)

PRE: *Question Blocks:*

- Interprofessional Roles: Questions = 12
- Demographics: Age, Gender, Ethnicity, Military Service. Questions = 4
- Education: College, Degree, Year. Questions = 3
- IPE Experience: Questions = 2

POST: *Question Blocks:*

- Event: Question = 1
- Activity: usefulness = 4, retrospective = 4, effectiveness = 4, student engagement = 1, professional opinions = 4, commitment to profession = 1, engagement in online = 1, student-led facilitation = 1, satisfaction = 1, type of device = 1, technical difficulty = 4 (Total questions = 26)
- IPAS: Questions = 10
- Demographic: age, gender, ethnicity, military service (Questions = 4)
- Education: college, degree, college, degree, year (Questions = 5)
- IPE Experience: Questions = 2

The responses to the following questions are in a separate document

Post: Open-ended Questions

1. What factors seemed to facilitate or hamper interaction within your group?
2. What were the most compelling issues for you?
3. Please explain how the issues were the same or different for your team?
4. Please share what you liked about the event?
5. How would you improve the Pandemic Flu IPE event?
6. Overall, is there anything else you would like to share about your experience?

Pre-Survey Questions

A set of questions was developed to measure student knowledge about the profession(s) responsible for activities involved in planning for and responding to an emergency.

Students' perceptions of role before the activity include:

- *Medicine, Nursing, Pharmacy, and Public Health were identified most frequently for all three roles.*
- *Law and Social Work played an important role in preparing guidelines.*
- *Journalism and Social Work also had a role in public education.*
- *Nutritional Sciences/Dieticians and Physician Assistants played a role in interpreting scientific and evidence-based recommendations.*
- *Each of the therapies (PT, OT, ST) played a role in all areas but to a lesser degree.*

Profession (Students can select more than one profession N=508)	Establish emergency preparedness guidelines for your institution or community N = 508 students	Educate the public on how to prevent the spread of COVID 19 or other infectious disease N = 508 students	Interpret scientific and evidence-based recommendations N = 508 students
Journalism	138	**332**	170
Law	**306**	184	175
Medicine	**436**	**456**	**459**
Nursing	**365**	**428**	**377**
Nutritional Sciences/Dieticians	163	198	**252**
Occupational Therapy	124	166	209
Pharmacy	**307**	**327**	**369**
Physical Therapy	120	168	229
Physician Assistant	249	**329**	**341**
Public Health	**468**	**460**	**410**
Social Work	**295**	**285**	200
Recreational Therapy	109	153	160

The following table addresses additional roles.

- *Medicine (except developing a list of essential services), Nursing, (except for media briefings and developing a list of essential services), and Public Health (except for administering PODs), were selected most frequently for all of the activities.*
- *Journalism played an important role in media briefings along with Medicine and PH.*
- *Law was most often selected for evaluating policies that address safety and developing a list of essential services that impact community health.*
- *Pharmacy was viewed as having the most prominent role in administering PODs compared to other professions.*

Activities by Profession N = 508 (can select more than one)	Jour	Law	Med	Nurs	Phar	PH	Soc Wk
Conduct regular media briefings to provide updates and respond to misinformation or false claims	**358**	186	**369**	198	199	**435**	141
Evaluate policies addressing a set of procedures that protect the safety of healthcare and essential workers	135	**382**	**393**	**289**	258	**441**	203
Establish early warning systems to identify disease clusters	125	114	**362**	**225**	171	**455**	121
Investigate suspected or confirmed disease clusters	131	89	**346**	**187**	149	**457**	96
Administer Points-of-Dispensing (PODs) to provide vaccine, antibiotics, antiviral medications	27	57	**408**	**350**	**411**	321	102
Develop plans on how to implement the isolation of patients and quarantine of their contacts	53	190	**393**	**286**	170	**444**	209
Develop a list of essential services that impact the health of the community: water, power, telecommunications, transportation systems, etc.	142	**254**	210	154	132	**461**	**289**
Provide social, psychological support to affected individuals, families and communities	93	89	**324**	**323**	160	**359**	**465**

The demographic, education, and interprofessional activity questions are at the end of this report.

Post Survey Results

Which event did you attend? N = 487

8:00 am 249 students

2:00 pm 238 students

Summary of the following slides

- *Students found the discussion with the experts (pre-event questions) and the expert Q & A period the most useful. The live polls were slightly less useful and the interprofessional small group discussions were the least useful of the four activities. All four activities were still useful.*

- *Students' understanding of their role and the roles of other professionals in a disease pandemic increased significantly after the activity. The same is true of their understanding of how public health decisions are made and how public health policies impact communities.*

- *The activity was moderately to very effective in teaching students how to a) recognize the social and psychological impact of a pandemic on communities, b) discuss ethical challenges with their team, c) identify or address potential obstacles to teamwork, and d) interprofessionally work together to solve problems.*

- *Students were at least moderately to very engaged with each other in their small groups.*

- *The small group discussion did not influence or only slightly to moderately influence students' professional opinions about a) self-isolation and quarantine, b) prioritizing patients for treatment, c) reopening of schools, and d) reporting to work. Of the four items, the small group discussion had the least impact on opinions about reopening of schools and self-isolation and quarantine.*

- *Student's commitment to their chosen profession primarily did not change or changed slightly (44% and 18%) because of the impact of COVID-19 on their personal life. It changed moderately for 19% of the students and substantially for 13% and extremely for 6%. For more than 50% of students, it did have some impact on their commitment.*

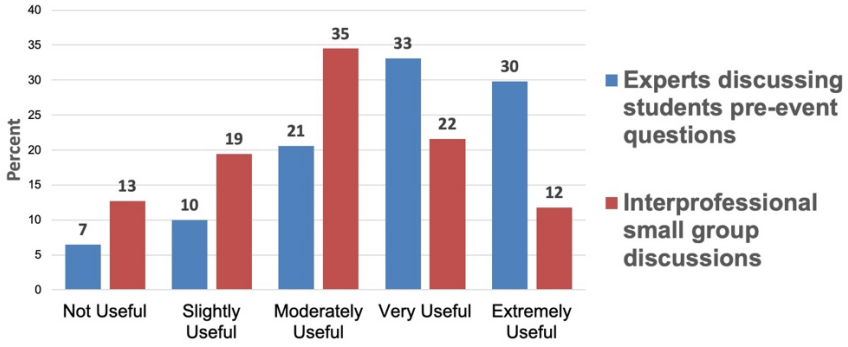
- *Students were moderately to very engaged with the online activity and/or discussion (72%).*

- *There was a small percentage (13%) of students who felt that the student-led facilitation in breakout activities was not effective. Most students found the facilitation slightly to very effective (80%). The smallest percentage of students found it extremely effective (8%).*

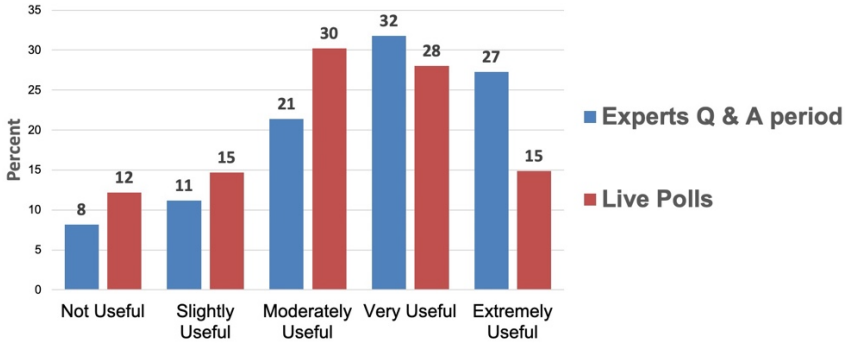
- *The percentage (14%) of students who were not satisfied with the IPE was like the percentage who felt the student-led facilitation was not effective (13%). Most students were at least slightly to very satisfied (76%). Here again, the percentage of students that were extremely satisfied was like the rating for the student-led facilitation (10%).*

- *Overall, technical difficulty did not interfere with students' learning (panelist/speaker audio, IP small group, PowerPoint). Students did report that the live polls did interfere with their learning experience to some degree (23%).*

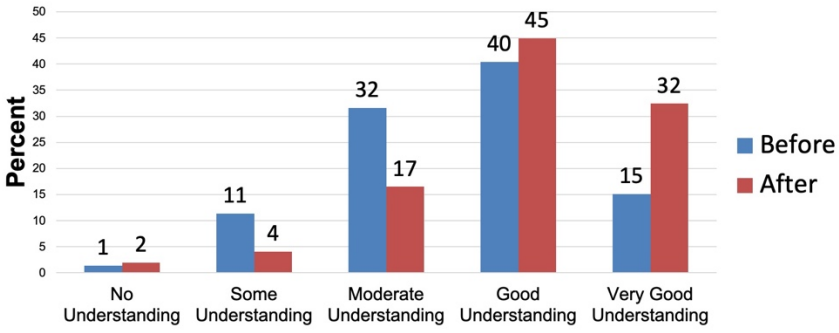
How useful were the following activities (N = 490)



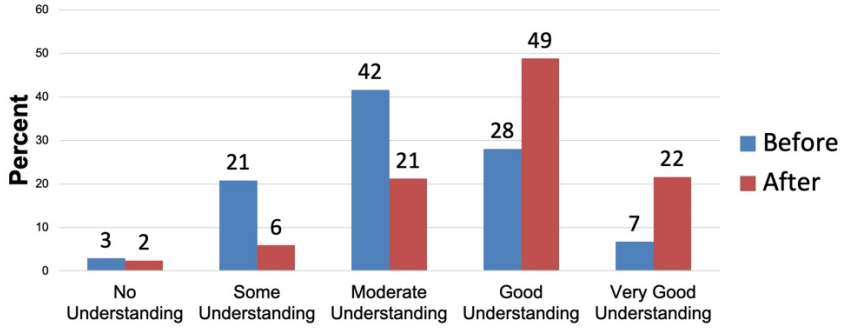
How useful were the following activities (N=490)



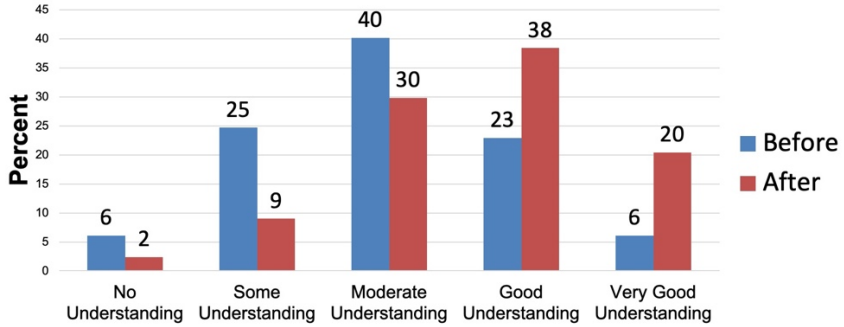
My understanding of the role MY profession plays in a disease epidemic (N = 490)



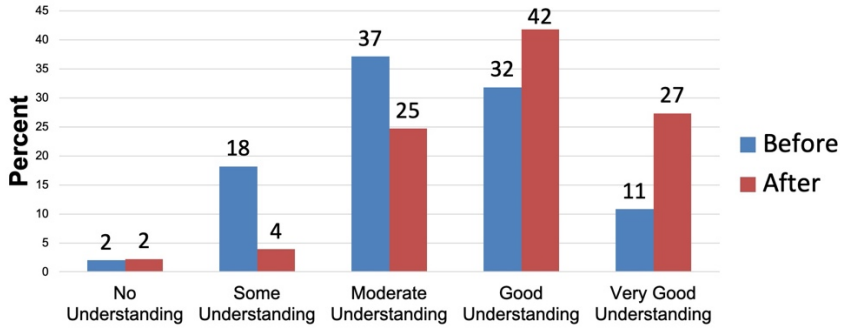
My understanding of the roles OTHER professions play in a disease pandemic (N = 490)



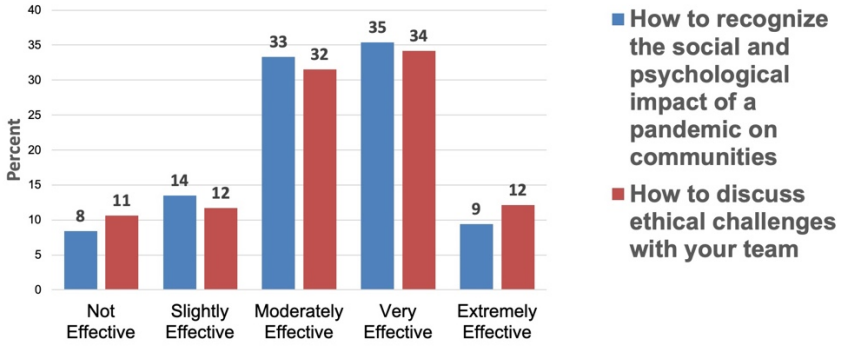
My understanding of how public health decisions are made on a state or national level (N = 490)



My understanding of how public health policies impact communities (N = 490)



Rate how effectively the exercise taught you the following (N = 489)



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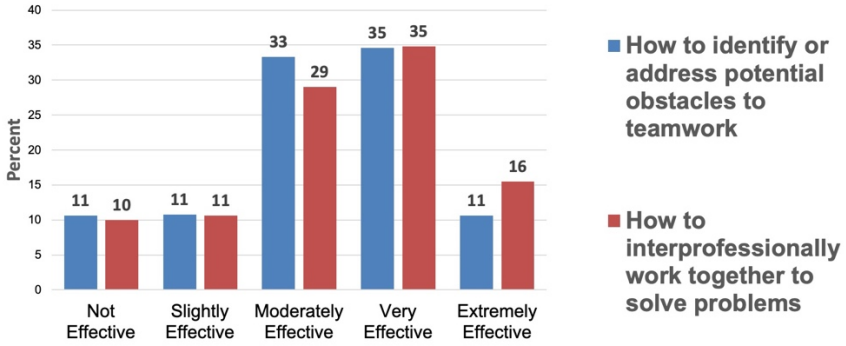
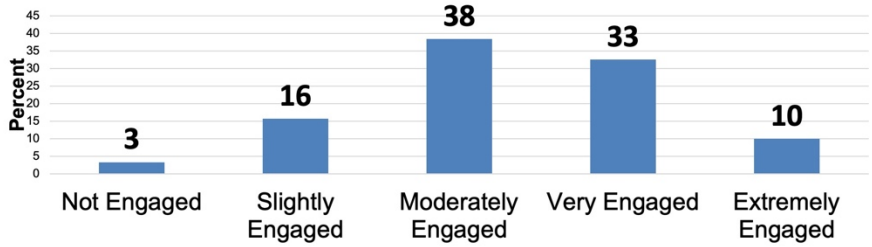
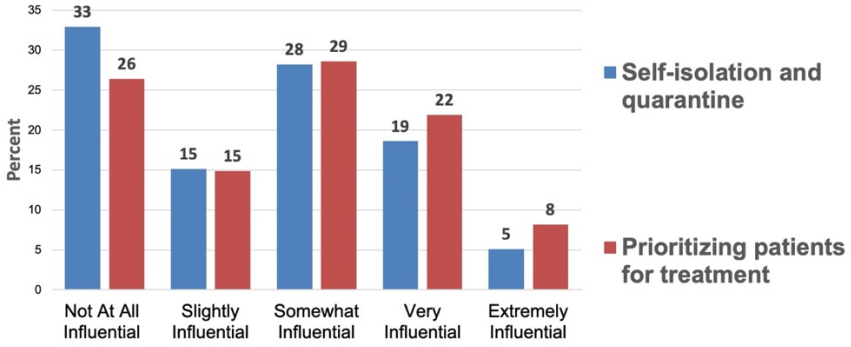


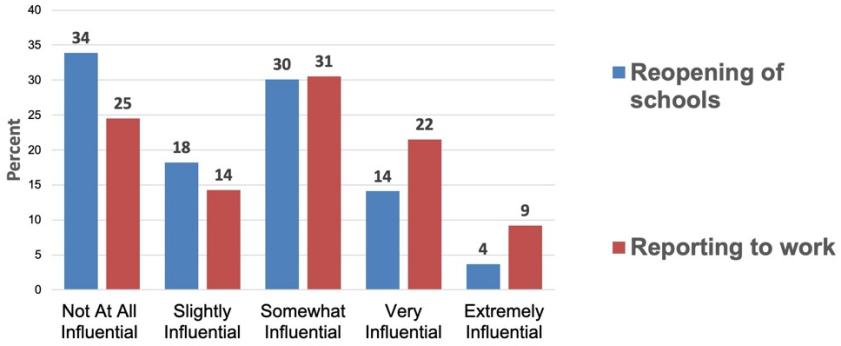
To what degree were students in your small group engaged with each other ? N=489



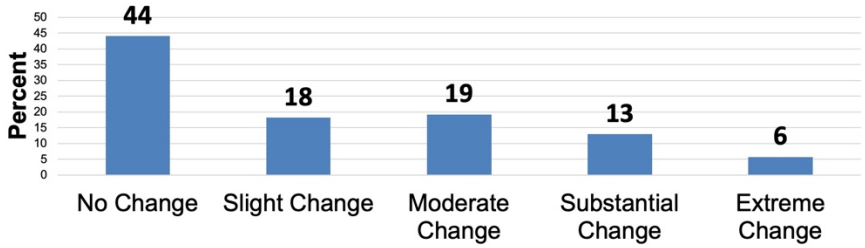
To what degree did the small group discussion influence your professional opinions about (N=489)



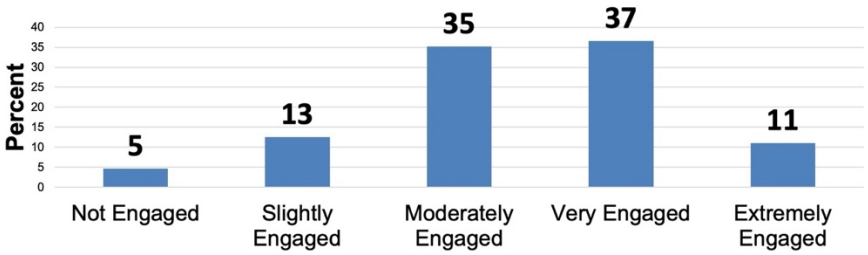
To what degree did the small group discussion influence your professional opinions about (N=489)



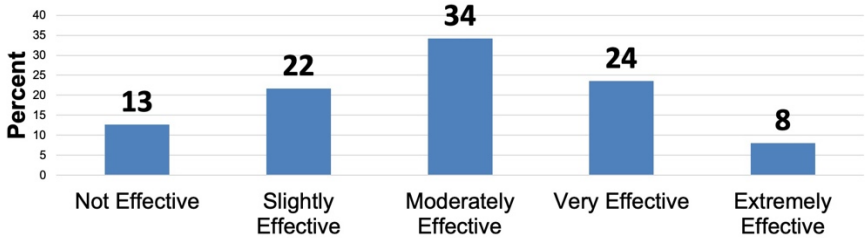
To what degree has our commitment to your chosen profession changed as a result of the impact of COVID-19 on your personal life (not this event)? N=489



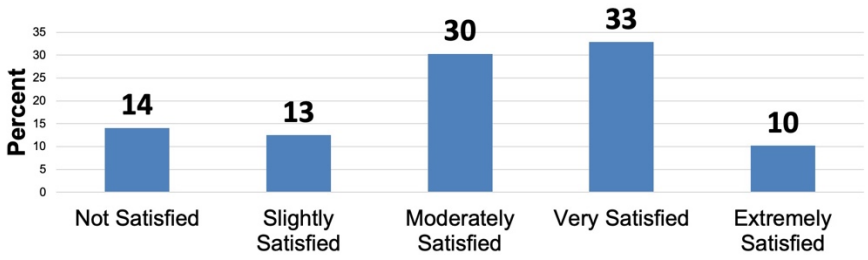
To what degree were you engaged in the online activity and/or discussion? N = 489



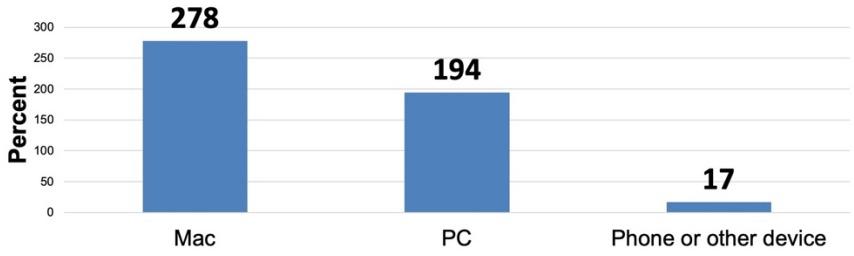
How effective was the student-led facilitation in breakout activities? N = 489



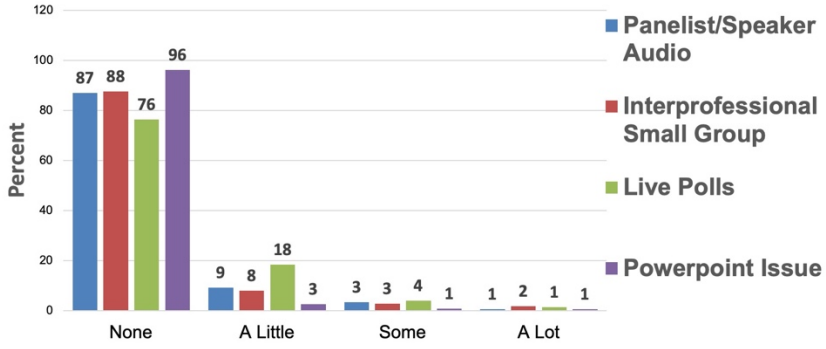
Overall, how satisfied were you with the IPE? N = 489



What type of device did you use during the event? N = 489



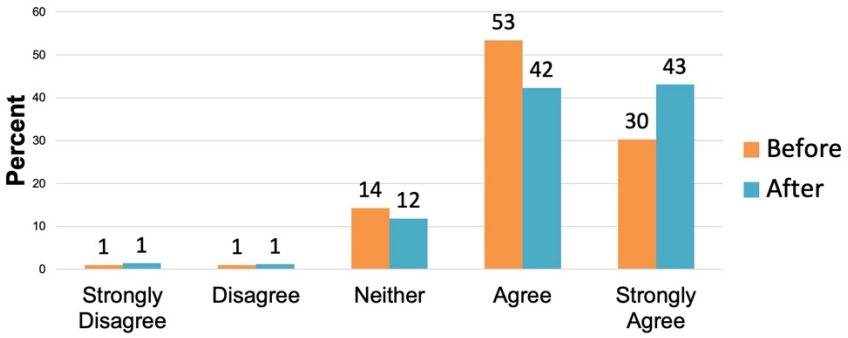
Did any technical difficulty interfere with your learning experience? (N = 489)



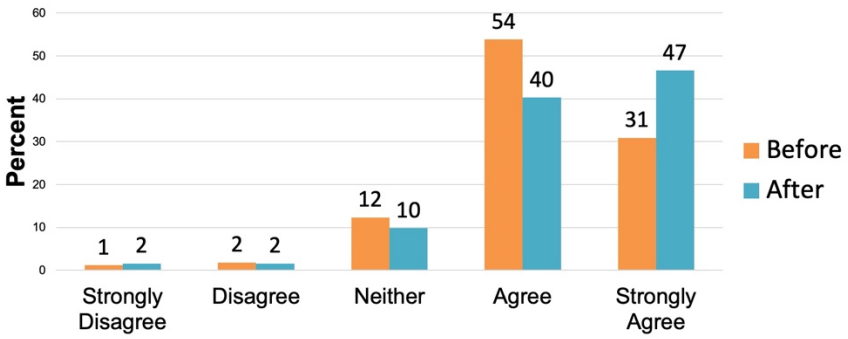
IPAS Questions

The IPAS questionnaire consists of 27 questions. Ten were selected for this activity. The slides represent the percentage of each response BEFORE and AFTER the activity. The table at the end of the slides show that for each question, the change from pre to post was statistically significant at <.001.

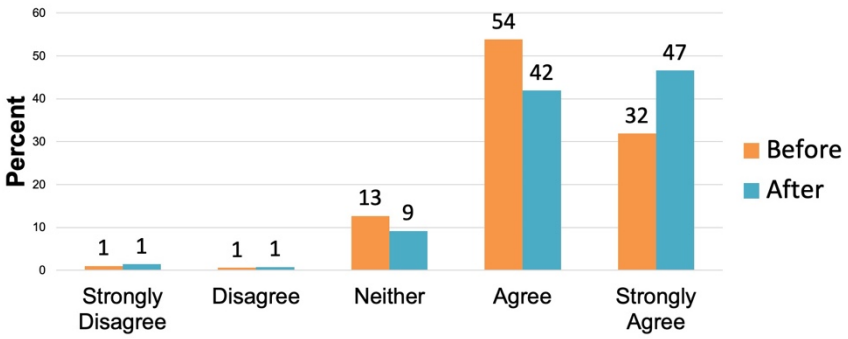
Learning with other students will help me become a more effective member of a health care team (N = 489)



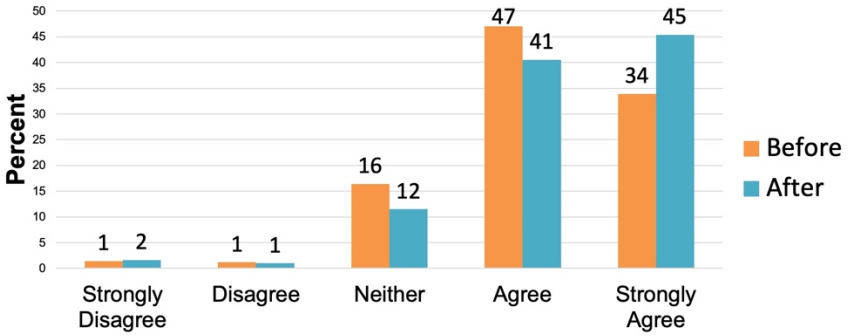
Shared learning experiences with other health care students will increase my ability to understand clinical problems (N = 489)



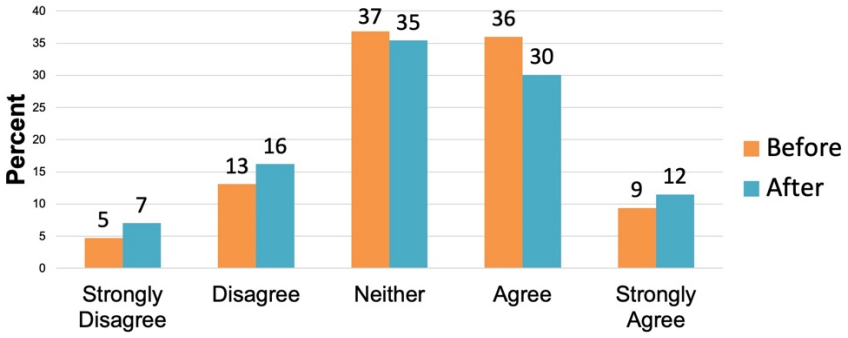
Shared learning experiences with other health care trainees will help my communication with patients and other professionals (N = 489)



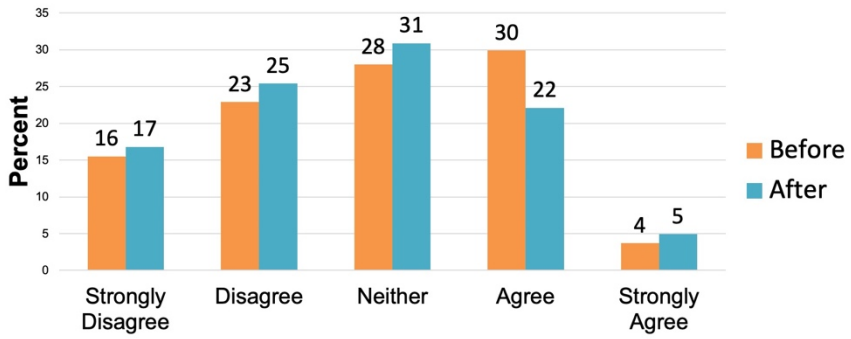
I welcome the opportunity to work on small group projects with other health care professions (N = 489)



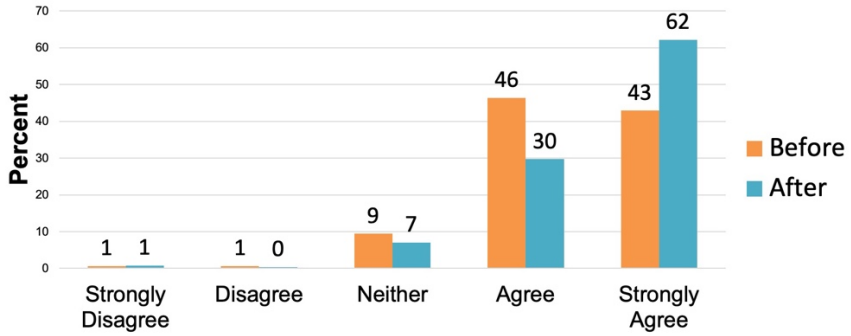
Health professionals/students from other disciplines have prejudices or make assumptions about me because of the discipline I am studying (N = 489)



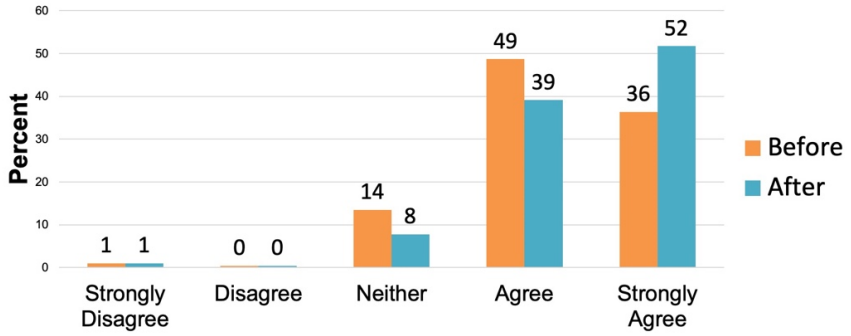
I have prejudices or make assumptions about health professionals/students from other disciplines (N = 489)



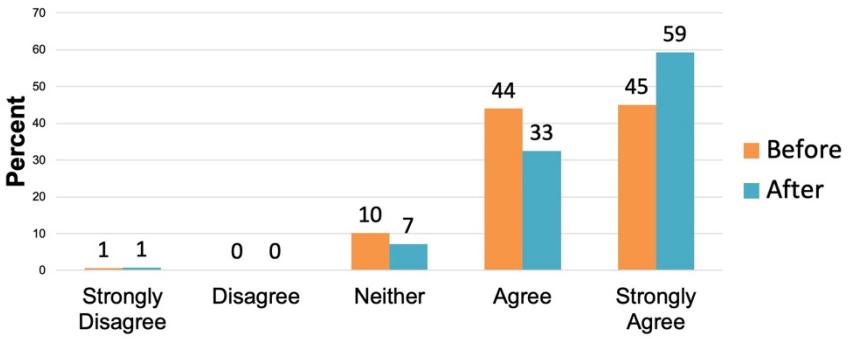
It is important for health professionals to work with public health administrators and policy makers to improve delivery of health care (N = 489)



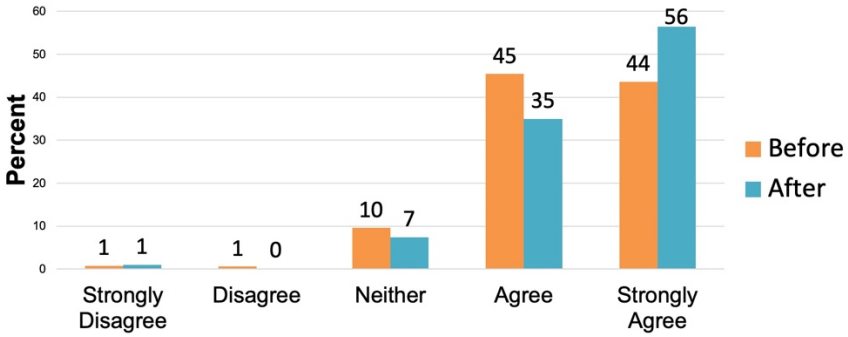
It is important for health professionals to work with non-clinicians to deliver more effective health care (N = 489)



It is important for health professionals to work on projects to promote community and public health (N = 489)



It is important for health professionals to focus on populations and communities, in addition to individual patients, to deliver effective health care (N = 489)



Interprofessional Attitudes Scale (IPAS)
COVID-19: Pre and Post Student Means

Question/Item Strong Disagree to Strongly Agree (values of 1 to 5)	**N**	**Pre Mean**	**Post Mean**	**t**	**Sig (2-tailed)**
1. Learning with other students will help me become a more effective member of a health care team.	489	4.11	4.25	-5.70	<.001
2. Shared learning experiences with other health care students will increase my ability to understand clinical problems.	489	4.11	4.29	-6.79	<.001
3. Shared learning experiences with other health care trainees will help my communication better with patients and other professionals.	489	4.15	4.31	-7.16	<.001
4. I welcome the opportunity to work on small-group projects with other health care professions.	489	4.11	4.27	-6.66	<.001
5. Health professionals/students from other disciplines have prejudices or make assumptions about me because of the discipline I am studying.	489	3.32	3.23	3.66	<.001
6. I have prejudices or make assumptions about health professionals/students from other disciplines.	489	2.83	2.73	4.50	<.001
7. It is important for health professionals to work with public health administrators and policy makers to improve delivery of health care.	489	4.30	4.52	-9.26	<.001
8. It is important for health professionals to work on projects to promote community and public health.	489	4.33	4.49	-8.10	<.001
9. It is important for health professionals to work with non-clinicians to deliver more effective health care.	489	4.19	4.40	-8.98	<.001
10. It is important for health professionals to focus on populations and communities, in addition to individual patients, to deliver effective health care.	489	4.30	4.46	-7.23	<.001

Student Demographics for Pre and Post Survey

Age Range	**Pre-Survey**	**Post-Survey**
19-29	395	380
30-39	86	85
40-49	19	15
50-59	2	2
60-69	2	2
Over 70	0	1
n/a	0	6
Total	**504**	**491**

Gender	Pre-Survey	Post-Survey
Female	337	327
Male	162	153
Non-binary, not exclusively male or female	2	1
Transgender Male/Trans Man	1	1
Transgender Female/Trans Woman	0	0
Additional gender category you prefer	0	4
I don't want to say	3	1
Other:		Apache Helicopter, Woman, Masculine-of-center gender apathetic, sdfas
Total	**508**	**487**

Ethnicity

Pre-Survey = 503
Hispanic or Latino = 126 (25%)
Non-Hispanic or Non-Latino = 377 (75%)

Post-Survey = 486
Hispanic or Latino = 123 (25%)
Non-Hispanic or Non-Latino = 363 (75%)

Which best describes how you identify or see yourself (you may select more than one)

	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or Pacific Islander	Hispanic or Latinx/o/a or Chicano/a	White or European	Other
Pre-Survey N=508	19	80	24	5	102	316	See below
Post-Survey N=491	16	77	19	5	102	317	See below

Other (Pre): Akimel O'othan and Tohono O'odham, Asian Indian, Beautiful Race, Human, Indian, Mayan, Me, Middle Eastern, Mix of White with Native Brazilian, Mixed, Multi-racial, Sicilian

Other (Post): Afro-Peruvian/Native Peruvian, Albanian, Human, Mestizo, Middle Eastern, Mixed, plasma.

Military Service	Pre Frequency/Percent N=502	Post Frequency/Percent N=486
No military service	485 (97%)	470 (97%)
Current active duty	5	5
Current active reserve	1	1
Prior military service – veteran status	11	10
Retired non-combat	0	0

What is your college: Pre N=505, Post N=489

University of Arizona = 504 (Pre), 485 (Post)
Northern Arizona University = 1 (Pre), 0 (Post)
Arizona State University = 0 (Pre), 4 (Post)

What is your degree program Pre N=505, Post N=487

Degree	Frequency (Pre)	Percent (Pre)	Frequency (Post)	Percent (Post)
BSN	47	9%	43	9%
MEPN	117	23%	118	24%
MD	106	21%	103	21%
PharmD	131	26%	127	26%
MPH	80	16%	74	15%
DrPH	2	.4%	1	.2%
Recreational Therapy			1	.2%
Other or combo degree (please specify)	22	4%	20	4%

Other Degree Programs

PRE	POST
B.S. in Public Health = 1	Asdf = 1
Biology and PH = 1	
BS = 1	BS = 2
BS in PH = 2	BS in PH = 5
BSHS, BS PH; anticipated MD = 1	
BSN-IH = 2	BSN-IH = 3
BSPH = 2	
Clinical and Translations Research Graduate Certificate = 1	Clinical and Translations Research Graduate Certificate = 1
MD/PhD = 3	MD/PhD = 2
MD/MPH = 1	
MDP = 1	
MS = 1	MS = 1
PhD = 1	PhD = 1
PH = 2	PH = 1
	Master's in Development Practice = 1
	Undergraduate = 2

What is your college and campus? (Only in Post-survey)

	Frequency	Percent
UA College of Medicine -Phoenix	3	.6
UA College of Medicine – Tucson	104	22
UA College of Nursing	157	33
UA College of Pharmacy – Phoenix campus	37	8
UA College of Pharmacy – Tucson campus	89	18
UA Zuckerman College of Public Health	91	19
Other UA College	2	.4
	Total N = 483	

What is your degree program? (Only in Post-survey)

	Frequency	Percent
MD	90	20
MD/MPH	1	.2
MD/PhD	3	.7
BSN	41	9
MEPN (Phoenix)	52	11
MEPN (Tucson)	57	12
PharmD	124	27
BS	14	3
Certificate	1	.2
MPH	65	14
MPH/MA	2	.4
MPH/MBA	1	.2
MPH/MS	2	.4
PhD	3	.7
Graduate degree	2	.4
	Total =458	

What year are you in your current degree program Pre N=504, Post N=486

Year	Frequency (%) Pre	Post Frequency (%) Post
One	151 (30%)	149 (31%)
Two	166 (33%)	159 (33%)
Three	139 (28%)	133 (27%)
Four	42 (8%)	42 (9%)
Five	6 (1%)	2 (.4%)
Six		
Seven		1 (.2%)

Interprofessional Education Experience

Have you participated in any other interprofessional education (IPE) activities?

Pre: N = 505
Yes = 422 students (84%)
No = 83 students (16%)

Post: N = 487
Yes = 415 students (85%)
No = 72 students (15%)

In what other interprofessional education (IPE) activity or activities did you previously participate? Select all that apply. UAHS = University of Arizona Health Sciences

Interprofessional Activity	***Frequency (Pre)***	***Frequency (Post)***
UAHS Pt Safety	256 + 2	268
UAHS Pandemic Flu	22	106
UAHS Disabilities	228	224
UAHS CPR Team Behavior	177 + 3	179 +1
UAHS CLARION Case Competition	10	8
UAHS Opioid	37	34
UA Milagro	2	5
UA Poverty Simulation	3	3 + 1
Interprofessional Rural Health Professions Conference	22	21
IPE activity at another institution	11	10
Pre: Other IPE at UArizona (some are listed here). 2019 case study about diabetic patient, disaster preparedness through FHWA, IP health professions conference, IP scenario, IPE online MPH, social justice symposium (3), public policy what bones simulation with Dr. Kirk Emerson, rural health, UAHS team interactions POST: Other IPE at UArizona Health Care Delivery course, Code Situation, I think there was one other I can't remember, ID communication, IP team behavior (2), food safety, Justice Symposium (4), online IPE for MPH program, Rural Health Service Learning, Whale Bones Simulation with Dr. Erikson, Working interprofessionally with other medical disciplines	31	26

Students may not remember the actual name of the activity (i.e., CPR and Code Situation)