# Creating Collaborative Classroom Ideas

Alyssa J. Pasquale, Ph.D. March 20, 2024

# Group work: labs 🧟

- Students work with a different lab partner every week
- Lab groups are assigned in a round-robin fashion
  - Student one stays put
  - Everyone else rotates around



# Round robin lab partners 👫



Lab 1					
Name	Group				
Student 1	1				
Student 2	2				
Student 3	3				
Student 4	4				
Student 5	5				
Student 6	6				
Student 7	7				
Student 8	8				
Student 9	9				
Student 10	10				
Student 11	10				
Student 12	9				
Student 13	8				
Student 14	7				
Student 15	6				
Student 16	5				
Student 17	4				
Student 18	3				
Student 19	2				
Student 20	1				

Lab	Lab 2				
Name	Group				
Student 1	1				
Student 2	3				
Student 3	4				
Student 4	5				
Student 5	6				
Student 6	7				
Student 7	8				
Student 8	9				
Student 9	10				
Student 10	10				
Student 11	9				
Student 12	8				
Student 13	7				
Student 14	6				
Student 15	5				
Student 16	4				
Student 17	3				
Student 18	2				
Student 19	1				
Student 20	2				

Lab 3					
Name	Group				
Student 1	1				
Student 2	4				
Student 3	5				
Student 4	6				
Student 5	7				
Student 6	8				
Student 7	9				
Student 8	10				
Student 9	10				
Student 10	9				
Student 11	8				
Student 12	7				
Student 13	6				
Student 14	5				
Student 15	4				
Student 16	3				
Student 17	2				
Student 18	1				
Student 19	2				
Student 20	3				

Lab 4					
Name	Group				
Student 1	1				
Student 2	5				
Student 3	6				
Student 4	7				
Student 5	8				
Student 6	9				
Student 7	10				
Student 8	10				
Student 9	9				
Student 10	8				
Student 11	7				
Student 12	6				
Student 13	5				
Student 14	4				
Student 15	3 2				
Student 16	2				
Student 17	1				
Student 18	2				
Student 19	3				
Student 20	4				



#### Pleasant lab environment 🎶

- The presence of an instructor is important
- I like to play background music



#### Peer evaluations **I**



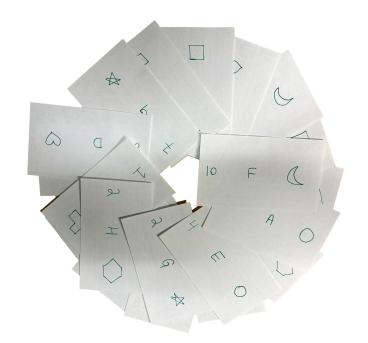
- I used to require students to complete a peer evaluation form as part of their lab score
- Students would receive their feedback in anonymized form at midterm and again at the conclusion of the semester



#### Group work: classroom 👰



- Seat inertia is a real thing!
- Don't let students select their own groups!
- Use cards to group students together
  - Shuffle the cards
  - Distribute
  - Randomly select one of the three items
  - Students have to find the person with the matching symbol





## Group work: projects 🌉

- Group projects have weighted scores based on student feedback
- Students divvy up 100 points to each member of the group and must justify their answer
- Group work is multiplied by each weighted score



### Weighted group work score example



A	В	С	D	Е	F	G	Н	I	J
1 2	Score from	Δ	В	C	D				
3	Given to					min(sum of scores,1)	raw project score	weighted project score	
4	A	0.25	0.25	0.30	0.23	1.00	80	80	
5	В	0.20	0.23	0.25	0.25	0.93	80	74.7	
3	С	0.30	0.25	0.30	0.30	1.00	80	80	
7	D	0.25	0.27	0.15	0.22	0.88	80	70.7	
3									
		each column				this value		this value is the	
0		should sum				cannot exceed 1		effort score *	
1		to 1						raw project score	
2						Excel:		Excel:	
3						=MIN(SUM(C4:G4),1)		=G4*H4	
4						do this for each row		do this for each row	
5									回網

### Group work: observed outcomes 🤳

- Students will be texting each other within a few weeks of class starting
- Students form study groups
- Students work together in the library
- Students go to tutoring sessions together



# Thanks! Any questions?

