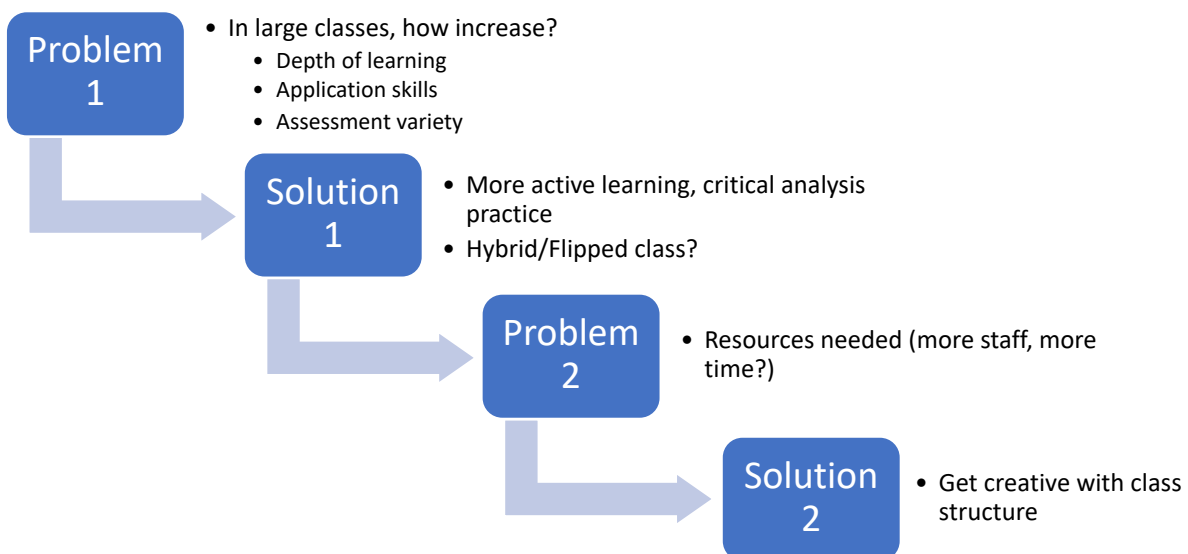# Integrating Discussion Sections in Large Classes with Limited Staff/Time

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Problems & Solutions

Problem 1
- In large classes, how increase?
  - Depth of learning
  - Application skills
  - Assessment variety

Solution 1
- More active learning, critical analysis practice
- Hybrid/Flipped class?

Problem 2
- Resources needed (more staff, more time?)

Solution 2
- Get creative with class structure

Hybrid Class/Flipped Designs Literature

- Flipped classrooms stimulate active learning (Mazur, 2009)
- Meta-analyses – learning improved in hybrid vs. traditional courses (Bernard et al., 2014; Vo et al., 2017)
- But:
  - Larger effects in STEM vs. non-STEM courses (Vo et al., 2017)
  - Mixed results in social sciences (Luck, 2015; Roehling et al., 2017)

Example: Abnormal Psychology Course

- Course Info:
  - 200 student cap
  - 200-level, no prerequisites, elective
  - 22% psych majors, 12% minors, 14% pre-majors, 53% non-majors/minors
  - 1 professor, 1 professional TA
  - 75 minute class periods, 26 per semester

- Goals:
  - Increase student concept application and case analysis skills
  - Increase student-faculty interactions
  - Increase variety of course requirements used for grading
  - No increase in staffing, face-to-face time

Class Structure Solution

5 in-person lectures ➡ 5 online lectures w/learning checks

5 lecture class periods ➡ 5 discussion section class periods

Discussion sections
- 1 instructor (professor/TA), 20 students, 35 minutes
- 2 discussion sections/class period x 2 instructors = 4 discussion sections/class period
- Each student attended 2 of 5 discussion periods

Time
- Instructors: class time neutral
- Students: ~5 hours less in class, 6.25 hours online added

Based on Steven Luck's Intro to Cognitive Psych model   https://psc100y.faculty.ucdavis.edu/

Wk	Date		Date	Thursday
1	1/31	Course Overview Defining Abnormality	2/2	Abnormal Psychology: Past and Present **Chapter 1**
2	2/7	Abnormal Psych: Past and Present **Rosenhan, 1973**	2/9	Research in Abnormal Psychology **Chapter 2** **Adams et al., 2004** **DeRubeis et al., 2005** **Schauer et al., 2004** **Quiz 1**
3	2/14	Models of Abnormality **Chapter 3**	2/16	Models of Abnormality **Leahy, 2009** **Frances, 2016** **Quiz 2**
4	2/21	Assessment, Diagnosis, Treatment **Chapter 4**	2/23	Assessment, Diagnosis, Treatment **Quiz 3** **Kupfer, 2012; Frances, 2012**
5	2/28	Catch Up	3/2	**MIDTERM EXAM I**
6	3/7	Anxiety Disorders **Chapter 5**	3/9	Anxiety Disorders
7	3/14	Trauma and Stress Disorders **Chapter 6 (pages 177-196 only)** **Quiz 4**	3/16	Dissociative Disorders **Chapter 6 (pages 196-213 only)**
	3/21	**Spring Break**	3/23	**Spring Break**
8	3/28	Mood Disorders **Chapter 7** **Quiz 5**	3/30	Mood Disorders & Suicide **Chapters 8, 9**
9	4/4	Catch Up **Quiz 6**	4/6	**MIDTERM EXAM II**
10	4/11	Eating Disorders **Chapter 11**	4/13	Eating Disorders
11	4/18	Schizophrenia & Severe Mental Illness **Chapter 14** **Quiz 7**	4/20	Schizophrenia & Severe Mental Illness **Chapter 15**
12	4/25	Personality Disorders **Chapter 16** **Quiz 8**	4/27	Personality Disorders
13	5/2	Childhood Disorders **Chapter 17**	5/4	Wrap up
		FINAL EXAM Wednesday May 17, 2 – 5 pm		

Week #	Date	Tuesday	Thursday	Online
1	1/29	Course Overview Defining Abnormality	Abnormal Psychology: Past and Present (Part 1) **Chapter 1** **Rosenhan, 1973**	Lecture 1: Abnormal Psych: Past and Present (Part 2) **due Tues 2/6 at 11:45 am**
2	2/5	Models of Abnormality **Chapter 3** **Leahy, 2009**	Models of Abnormality	Lecture 2: Research in Abnormal Psychology **Chapter 2** **Schauer et al., 2004** **Adams et al., 2004** **DeRubeis et al., 2005** **due Tues 2/13 at 11:45 am**
3	2/12	Models of Abnormality **Frances, 2016** Assessment, Diagnosis, Treatment (Part 1) **Chapter 4**	Anxiety Disorders **Chapter 5** **Quiz 1 (Models)**	Lecture 3: Assessment, Diagnosis, Treatment (Part 2) **Kupfer, 2012** **Frances, 2012** **due Tues 2/20 at 11:45 am**
4	2/19	Anxiety Disorders	Catch Up **Quiz 2 (Anxiety)**	
5	2/26	**MIDTERM EXAM I**	Trauma and Stress Disorders **Chapter 6 (pp 177-196)**	
6	3/5	Mood Disorders **Chapter 7**	Mood Disorders & Suicide **Chapters 8, 9** **Quiz 3 (Trauma, Mood)**	
7	3/12	Mood Disorders & Suicide **Chapters 8, 9**	**DISCUSSION SECTION** **Mood Disorders**	Lecture 4: Dissociative Disorders **Chapter 6 (p 196-213)** **due Tues 3/27 at 11:45 am**
	3/19	**Spring Break**		
8	3/26	Eating Disorders **Chapter 11**	**DISCUSSION SECTION** **Dissociative Disorders**	
9	4/2	Eating Disorders **Quiz 4 (Eating D/Qs)**	**DISCUSSION SECTION** **Eating Disorders**	
10	4/9	**MIDTERM EXAM II**	Schizophrenia & Severe Mental Illness **Chapter 14**	
11	4/16	Schizophrenia & Severe Mental Illness **Chapter 15**	**DISCUSSION SECTION** **Schizophrenia**	
12	4/23	Personality Disorders **Chapter 16** **Quiz 5 (Schizophrenia)**	Personality Disorders	Lecture 5: Childhood Disorders **Chapter 17** **due Fri 5/4 at noon**
13	4/30	Personality Disorders Class Wrap Up	**DISCUSSION SECTION** **Personality Disorders**	
		FINAL EXAM Tuesday May 15, 9 – 12 noon		

Class & Time Breakdowns

	Original	New			Original	New
Class Enrollment	200	200	**For Each Student**			
# students per discussion section	0	20	Total in person lecture hours		30	23.75
# Class Periods (includes midterm exam dates)	26	26	Total in person discussion section hours		0	1.25
			Total in person hours		30	25
Lectures			Total online lecture hours		0	6.25
# In person 200 person lecture periods	24	19	Total class time hours		30	31.25
Length per 200 person lecture period	1.25	1.25				
			For Professor and TA (per person)			
Discussion Sections			Total in person lecture hours		30	23.75
# In person 20 person discussion sections	0	10	Total in person discussion section hours		0	6.25
# In person 20 person discussion sections per student	0	2	Total in person hours		30	30
# In person 20 person discussion section periods	0	20				
Length of each 20 person discussion section (hours)	0	0.625				
Length of each 20 person discussion section (mins)	0	35				
Online Lectures						
# Online lectures equivalent to 1.25 classes	0	5				
Length of each online lecture (hours)	0	1.25				

Evaluation Results

- Post student ratings statistically higher post-change vs. pre on:
  - Opportunities to
    - Learn course material
    - Apply course material
    - Critically analyze information
    - Engage in meaningful discussion
  - Amount of
    - Ways to demonstrate my learning
    - Exposure to written case examples
  - Classroom atmosphere
  - Preference for hybrid course structure
  - But *not* sufficient amount of interaction with professor & TA
- Final Exam
  - Higher scores on case study short answer
  - Higher scores for material presented online
  - No difference in overall grades

Lessons Learned

- High time investment: about 17 – 21 hours per 75 min lecture
  - 7-10 hours scripting and recording
  - 1-2 hours editing
  - 7 hours closed captioning (ADA requirement, but maybe better tech? outsource?)
  - 2 hours creating, inserting online quizzes
- Helpers, helpers, and more helpers (grant money)
- Don't have to fully flip to gain big benefits, can do incrementally
- Sustainability of lectures – choose which lectures carefully!
- Thoughtful, careful planning of use of in person time
- Ask student input before changes
- Students liked choice of topics

Think-Pair-Share

- How might you use or adapt this model for one of your classes?
- What benefits would you anticipate in that class?
- What potential barriers do you foresee?

Questions????

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References

Bernard, R. M., Borokhovski, E., Schmid, R. F., Tamim, R. M., & Abrami, P. C. (2014). A meta-analysis of blended learning and technology use in higher education: from the general to the applied. *Journal of Computing in Higher Education*, *26*(1), 87.

Luck, S. (2015). *Case Study of a Hybrid-Format College Course.* Retrieved from http://psc100y.faculty.ucdavis.edu

Mazur, E. (2009). Farewell, lecture? *Science, 323,* 50-51. doi:10.1126/science.1168927

Roehling, P. V., Root Luna, L. M., Richie, F. J., & Shaughnessy, J. J. (2017). The benefits, drawbacks, and challenges of using the flipped classroom in an introduction to psychology course. *Teaching of Psychology, 44*, 183-192. doi:10.1177/0098628317711282

Vo, H. M., Zhu, C., & Diep, N. A. (2017). The effect of blended learning on student performance at course-level in higher education: A meta-analysis. *Studies in Educational Evaluation*, *53*, 17-28. doi:http://dx.doi.org/10.1016/j.stueduc.2017.01.002

Acknowledgments

Section Instructor: _____ **Topic:** _____
Session (1 or 2): _____

Name	Active Engmt (1.5)	Small Grp	Big Grp	Particip (3.5)	Respect	Notes	Total (5)

TA PARTICIPATION RATING INSTRUCTIONS

Active Engagement:
Did the student listen attentively and avoid distractions?
Most people will get full credit here. Take off points in .25 increments based on the amount of time that they are not actively engaged and the severity of it (e.g., did they distract others).

Small group:
Place a tally for each of the small group discussions they participated in. If time permits, there should be three opportunities per section (one for diagnosis, one for etiology, one for treatment). Note at the bottom of that column how many opportunities were available in that section.

Big group:
Add a numerical rating for each contribution to the overall section discussion. The rating is based on the level of meaningful input the contribution makes. We are looking for them to:
- further the understanding of the class regarding an issue
- make connections, illustrate points, demonstrate insights, apply concepts in novel ways

    Use this rating scale for each contribution:
    1   Asked a clarification question, demonstrated basic comprehension
    2   Demonstrated application of topic (will be most contributions)
    3   Demonstrated analysis/synthesis (contributions that really address the two bullet points above)

Respect of others:
Did their comments and non-verbal behaviors demonstrate sensitivity to others?
Note +   if a contribution was particularly respectful (e.g., demonstrated good insight into issues of diversity, stigma)
Note –   if a contribution was particularly disrespectful
You can note more than one + or – per section for a specific student.

Notes
Feel free to include a brief note if you observe something specific about a student. If you have time, it is helpful to have a brief reminder of a major contribution the student made.

Leave the Participation and Total columns blank. After class the Section Instructor will assign a grade in the participation column and the total column.