Student Engagement During the Clinical Experience

Andrew Baldwin, PT, DPT, Cert-DN
Co-Director of Clinical Education
Assistant Professor
Mary Baldwin University

MARY BALDWIN UNIVERSITY

MURPHY DEMING COLLEGE
OF HEALTH SCIENCES

Objectives

- Participants will learn effective strategies to engage off-campus students in collaboration while utilizing an interactive platform.

- Participants will learn of real experiences that reflect how students are able to make meaningful connections online to supplement their learning experience.

- Participants will learn how data from online interactions can be assessed for student performance metrics.

- Participants will learn how to utilize student engagement activities as related to institutional accreditation processes.

- Participants will learn about students' feedback on the use of an interactive online platform for collaboration.

Students on Clinical Rotations

- Away from their support structure, family, classmates, professors
- Often in an unfamiliar area
- Working in a clinic with new colleagues
- Students often report feeling alone and isolated
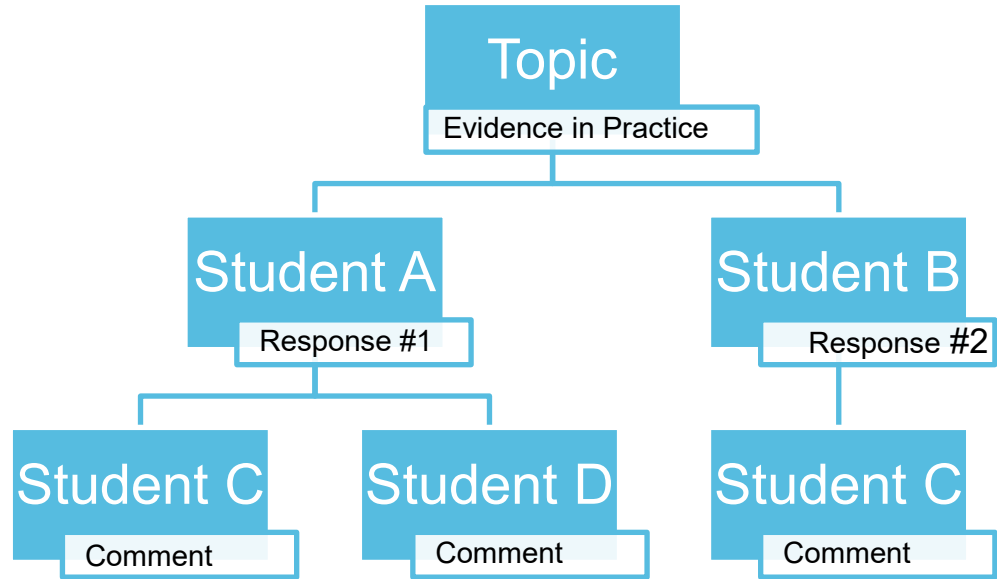 - "Am I the only one experiencing these things at my clinic?"

How to Engage Students During Clinical Rotations

- Discussion Boards
- Yellowdig
- Site Visits/Calls
- Assignments
- Informal communication: text groups, email, virtual
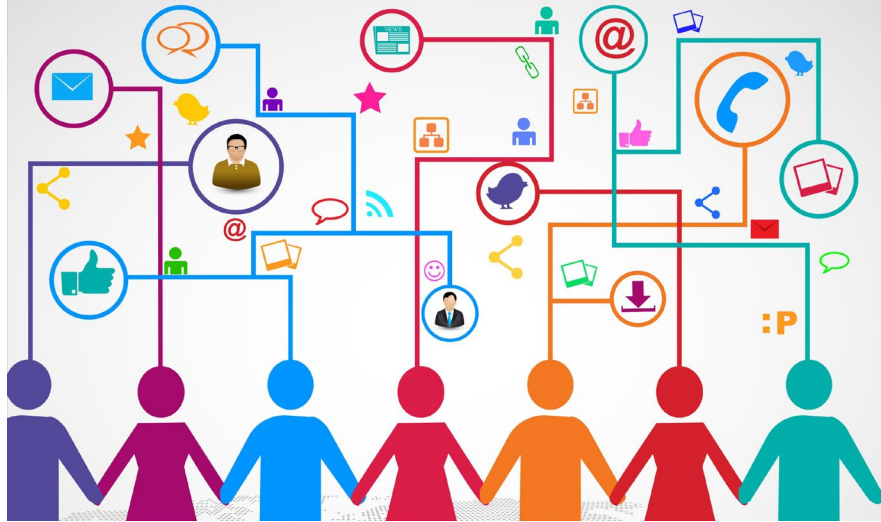
Discussion Boards

- Structured

- Top-down flow

- Restrictive

- Narrow scope

- Non-incentivized

- Isolated discussions

Topic
Evidence in Practice

Student A
Response #1

Student B
Response #2

Student C
Comment

Student D
Comment

Student C
Comment

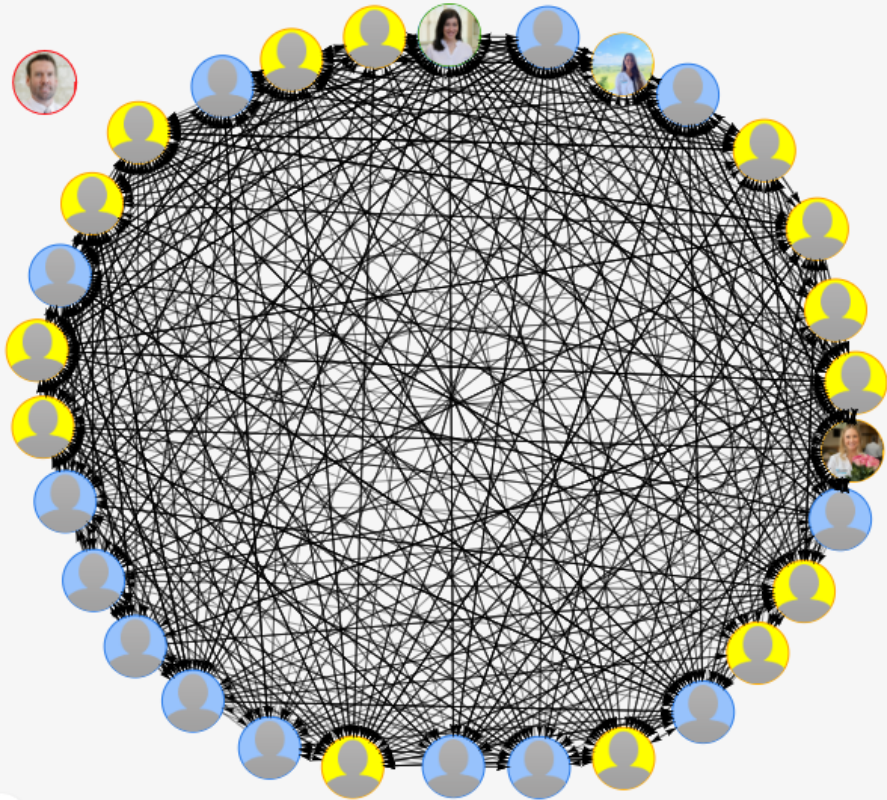# Interactive Platform- Yellowdig

Clinical Education: Fall 2022
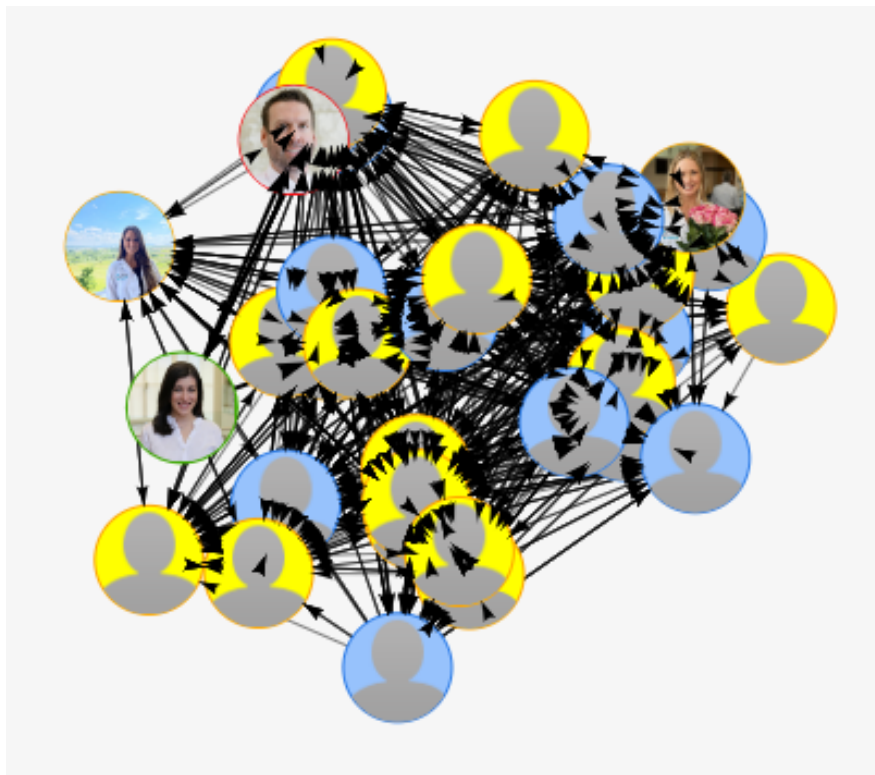
Interactive Platform- Yellowdig

Clinical Education: Fall 2022
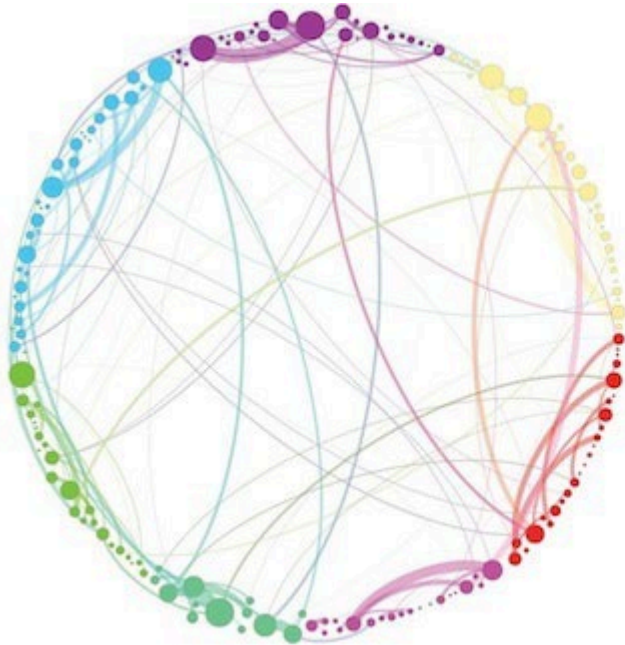
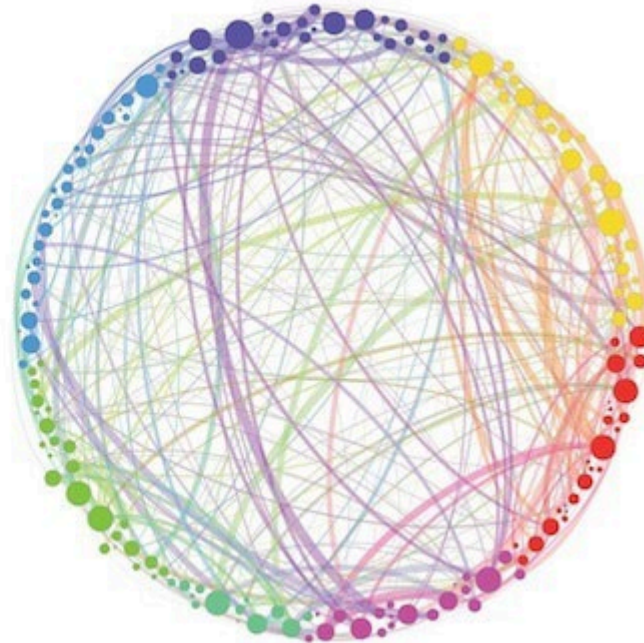# This is Your Brain on Discussion Boards

Discussion Board

Yellowdig*

*Greater Integration
*Different and higher proportion of links

PETRI G, EXPERT P, TURKHEIMER F, CARHART-HARRIS R, NUTT D, HELLYER PJ, VACCARINO F. HOMOLOGICAL SCAFFOLDS OF BRAIN FUNCTIONAL NETWORKS. *J. R. SOC INTERFACE. 2014*. 11: 20140873. ACCESSED DEC 20, 2022. HTTP://DX.DOI.ORG/10.1098/RSIF.2014.0873

Interactive Platform- Yellowdig

- Specific topics created by course coordinator
  - Related to accreditation requirements
  - Tying the didactic courses to clinical experiential learning
  - Allow for other "General Questions" or "Undefined" posts
    - Off-Topic: students can connect
  - Supplement the clinical learning experience

- Student-led discussions
  - Course coordinator takes a hands-off approach
  - Let the students guide the conversations
  - Less pressure that the student is being "graded"
  - Interactive and engaging

Who Is Interacting?

Student A
- Responded to 72% of Members.
- Received responses from 69% of Members.
- Last connected 5 days ago.
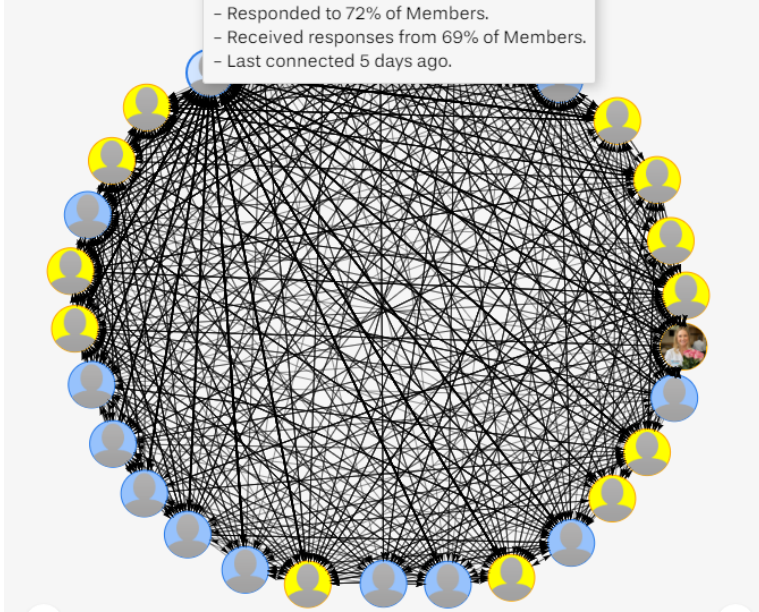
Student B
- Responded to 63% of Members.
- Received responses from 94% of Members.
- Last connected 8 days ago.

Students should earn >1000 pts/week
- Initial posts >40 words are given 380 pts
- Comments to an initial post >20 words are given 310 pts

- If people comment on your post, you earn 70 pts per comment, 55 pts per reaction

Community Topics

- Topics

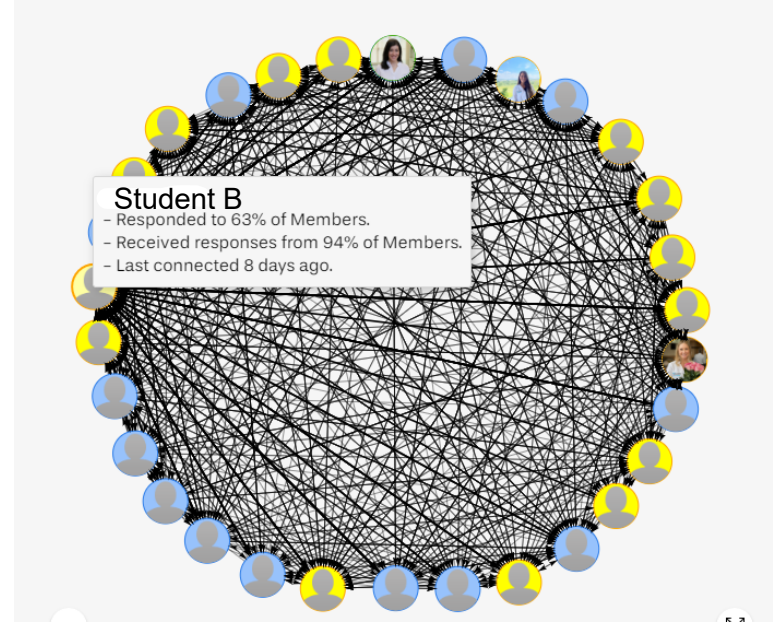| Topic	Count of Posts with Topic	Percentage of Total Posts
General Question	59	23%
Undefined	57	22%
Evidence into Practice	37	14%
Mentor Relationships	29	11%
Variety of Care and Billing	27	10%
Interview	26	10%
Health Disparities	24	9%

- Topic Activity Per User

Health Disparities	Evidence into Practice	Mentor Relationships	Interview	Variety of Care and Billing	General Question	Undefined
8%	3%	13%	8%	4%	11%	3%
4%	6%	6%	4%	4%	1%	1%
1%	1%	1%	1%	1%	1%	8%
4%	14%	6%	4%	4%	1%	3%
4%	3%	4%	4%	4%	4%	1%
4%	1%	4%	4%	4%	4%	3%
4%	6%	4%	4%	4%	1%	8%
1%	3%	1%	1%	1%	1%	3%
4%	6%	4%	4%	4%	4%	3%
4%	6%	1%	4%	1%	3%	1%
4%	2%	3%	4%	4%	6%	1%
4%	6%	3%	4%	4%	8%	3%
1%	2%	1%	4%	3%	3%	8%
4%	2%	3%	4%	3%	3%	1%
4%	2%	3%	4%	3%	3%	8%
4%	2%	3%	4%	3%	1%	1%
4%	2%	3%	4%	3%	3%	1%
4%	6%	3%	3%	3%	1%	1%
1%	2%	3%	1%	3%	6%	5%
0%	1%	1%	3%	1%	3%	1%
0%	1%	1%	3%	3%	3%	5%
0%	1%	1%	1%	1%	1%	3%
4%	2%	3%	3%	3%	1%	1%

Community Topics

- Topics

Topic	Count of Posts with Topic	Percentage of Total Posts
General Question	59	23%
Undefined	57	22%
Evidence into Practice	37	14%
Mentor Relationships	29	11%
Variety of Care and Billing	27	10%
Interview	26	10%
Health Disparities	24	9%

Additional Topics:
- **Cultural Competence**
- **Job Search**
- **Quality Improvement**
- **Interprofessional practice**

- Topic Activity Per User

Students

Health Disparities	Evidence into Practice	Mentor Relationships	Interview	Variety of Care and Billing	General Question	Undefined
8%	3%	13%	8%	4%	11%	3%
4%	6%	6%	4%	4%	1%	1%
1%	1%	1%	1%	1%	1%	8%
4%	14%	6%	4%	4%	1%	3%
4%	3%	4%	4%	4%	4%	1%
4%	1%	4%	4%	4%	4%	3%
4%	6%	4%	4%	4%	1%	8%
1%	3%	1%	1%	1%	1%	3%
4%	6%	4%	4%	4%	4%	3%
4%	6%	1%	4%	1%	3%	1%
4%	2%	3%	4%	4%	6%	1%
4%	6%	3%	4%	4%	8%	3%
1%	2%	1%	4%	3%	3%	8%
4%	2%	3%	4%	3%	3%	1%
4%	2%	3%	4%	3%	3%	8%
4%	2%	3%	4%	3%	1%	1%
4%	2%	3%	4%	3%	3%	1%
4%	6%	3%	3%	3%	1%	1%
1%	2%	3%	1%	3%	6%	5%
0%	1%	1%	3%	1%	3%	1%
0%	1%	1%	3%	3%	3%	5%
0%	1%	1%	1%	1%	1%	3%
4%	2%	3%	3%	3%	1%	1%

Community Topics: Examples

EVIDENCE INTO PRACTICE

12/08/2022

Hey everyone,

I recently used the CPR for thoracic manipulation for neck pain by Cleland on one of my patients who met 4/6 rules. I was able to successfully reduce his neck pain after performing a thoracic supine thrust manipulation and his pain was actually completely gone the next visit after a following up with his exercises. This was the first manipulation CPR I have used on my patients and thought was pretty cool to share. Have anyone else tried to use any CPR's recently to support your interventions?

cef637bc-9ee7-44d...   1 / 12   —   89%   +

Research Report

Examination of a Clinical Prediction Rule to Identify Patients With Neck Pain Likely to Benefit From Thoracic Spine Thrust Manipulation and a General Cervical Range of Motion Exercise: Multi-Center Randomized Clinical Trial

J.A. Cleland, PT, PhD, is Professor, Physical Therapy Department, Franklin Pierce University, 5 Chenell Dr, Concord, NH 03301 (USA), and Physical Therapist, Rehabilitation Services, Concord Hospital, Concord, New Hampshire. Address all correspondence to Dr Cleland at: joshcleland@comcast.net.

P.E. Mintken, PT, DPT, is Assistant Professor, Department of Physical Therapy, School of Medicine, University of Colorado, Aurora, Colo-

INTERVIEW

12/08/2022

Hey guys, hope everyone is having a good final week. Yesterday, I interviewed my CI about any tips he would give a future PT for the rest of the career. He said that one of the most important traits for a PT to have is to truly care about their patients. He said a PT should approach the relationship between them and their patients like they would if the PT were treating a family member. He said this can help a PT be more invested in the outcomes of their patients and avoid simply going through the motions. What do you guys think about this advice? I found it very useful and wholeheartedly agree with his statement about important PT traits.

VARIETY OF CARE AND BILLING

11/27/2022

In Inpatient rehab, we mainly target functional activities or a break down of a task to meet our patients goals for discharge to home or to the next level of care. Our top three billing codes we apply are Therapeutic Activities (97530), Therapeutic Exercise (97110), and Neuroreducation (97112). We bill gait/ambulation, bed mobility, transfers, stair, and wheelchair mobility all as therapeutic activities. We bill all exercises under therapeutic exercises of course and then balance interventions or strategies to promote weight bearing strategies, and increased mid-line, etc. under Neuroreducation. We've been applying high intensity gait training into our interventions as of recent and we bill that under therapeutic activity as well.

👍 3

Community Topics: Examples

MENTOR RELATIONSHIPS

12/05/2022

What has contributed to my CI and I's relationship founded on respect and a collaborative partnership has been from maintaining an honest and constructive communication style that seeks each other's input without judgement and maintaining an open mindset to new ideas. We have not come across any challenges in our relationship because we maintain this communication style and work as a team. I hope everyone else has had a good experience with their CIs' and has been able to feel supported and encouraged by their CI.

👍 1

HEALTH DISPARITIES

12/06/2022

Hello!

I hope everyone is enjoying their last week of this clinical!

Regardless of the setting and geographic location. I want to know what type of clinical practice (OP, acute, IPR, etc.) and location (urban, suburbs, etc.) you are placed in and the transportation difficulties your patients may have that effect therapy.

I am currently placed in   in an outpatient department . There is a public transit system that offers bring patients to our clinic but it is not readily available and the bus stop is still a good walking distance from the therapy office. This can cause late visits or no shows due to lack of transportation services in the area.

What are some difficulties with transportation you have experienced in your clinic?

Analyzing Student Interaction

- Community Connections
  - Analyze incoming and outgoing connections between community members

	Graph			Table	
Number of Incoming Connections	Percentage of Members Received Responses From	Number of Outgoing Connections	Percentage of Members Responded To	Most Recent Connection	Course Role
20	0.4	50	0.7	4 days ago.	learner
0	0.0	0	0.0	Never connected.	facilitator
18	0.4	49	0.7	6 days ago.	learner
14	0.3	53	0.8	4 days ago.	learner
27	0.5	61	0.7	4 days ago.	learner
14	0.3	28	0.5	70 days ago.	learner
66	0.9	33	0.6	9 days ago.	learner
57	0.8	47	0.8	16 days ago.	learner
2	0.0	3	0.1	75 days ago.	owner
19	0.5	45	0.7	18 days ago.	learner

Students

Analyzing Student Interaction

16565 Cumulative Total	/	16000 Cumulative Target	=	100% (+) Grade ?

Period Ends: Dec 9, 2022, 10:00pm EST

By Week

Period 16
12/02 – 12/09
Period Total: 1235
Cumulative Total: 16565
Cumulative Target: 16000

Period 15
11/25 – 12/02
Period Total: 1350
Cumulative Total: 15330
Cumulative Target: 15000

Period 14
11/18 – 11/25
Period Total: 1240
Cumulative Total: 13980
Cumulative Target: 14000

Period 13
11/11 – 11/18
Period Total: 1350
Cumulative Total: 12740
Cumulative Target: 13000

Period 12
11/04 – 11/11
Period Total: 0
Cumulative Total: 11390
Cumulative Target: 12000

Period 11
10/28 – 11/04
Period Total: 1350
Cumulative Total: 11390
Cumulative Target: 11000

Period 10
10/21 – 10/28
Period Total: 1350
Cumulative Total: 10040
Cumulative Target: 10000

Points	Last interaction w/ points	Role
15755	12/08/2022	Member
16565	12/08/2022	Member
8180	11/07/2022	Member
17780	12/03/2022	Member
15815	12/08/2022	Member
16705	12/09/2022	Member
19405	12/06/2022	Member
15590	12/05/2022	Member
17510	12/08/2022	Member
18355	12/04/2022	Member
20920	12/09/2022	Member
19130	12/09/2022	Member
16325	11/27/2022	Member
18780	12/09/2022	Member
18005	12/09/2022	Member

Total Points	Participation Grade
15755	0.9846875
16565	1
8180	0.51125
17780	1
15815	0.9884375
16705	1
19405	1
15590	0.974375
17510	1
18355	1
20920	1
19130	1
16325	1
18780	1
18005	1
19945	1
18250	1
19930	1
17300	1
15570	0.973125
17340	1
19945	1
9450	0.590625
20215	1
16475	1
17865	1
16630	1
17230	1
18960	1
0	0
785	0.0490625
17860	1

End of Semester Points are converted to a Grade in Canvas

Community Health

Course Activity

Total Posts
259
Posts Per Active Member
8.35

Total Comments
1175
Comments Per Active Member
37.90

Total Reactions
864
Reactions Per Active Member
27.87

4.54
Conversation Ratio
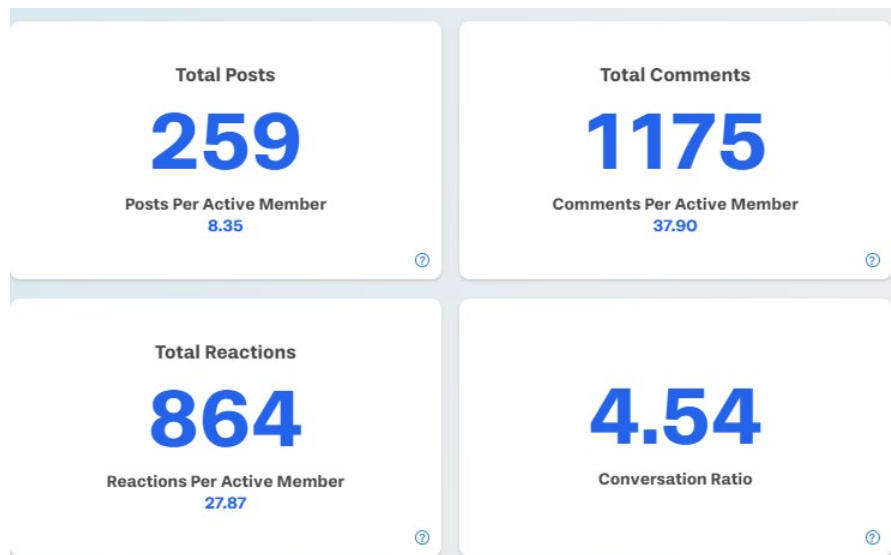
Monitor throughout the semester and to summarize the end of the semester

Activity Log

Week	Post	Comments	Accolades	Reactions
All Time	259	1175	0	864
Week 1 08/19	22	61	0	89
Week 2 08/26	21	85	0	52
Week 3 09/02	18	89	0	54
Week 4 09/09	22	82	0	84
Week 5 09/16	17	80	0	77
Week 6 09/23	14	90	0	69
Week 7 09/30	16	75	0	44
Week 8 10/07	10	70	0	33
Week 9 10/14	19	66	0	36
Week 10 10/21	13	90	0	74
Week 11 10/28	16	74	0	63
Week 12 11/04	11	72	0	42
Week 13 11/11	18	62	0	60
Week 14 11/18	11	70	0	36

Community Health
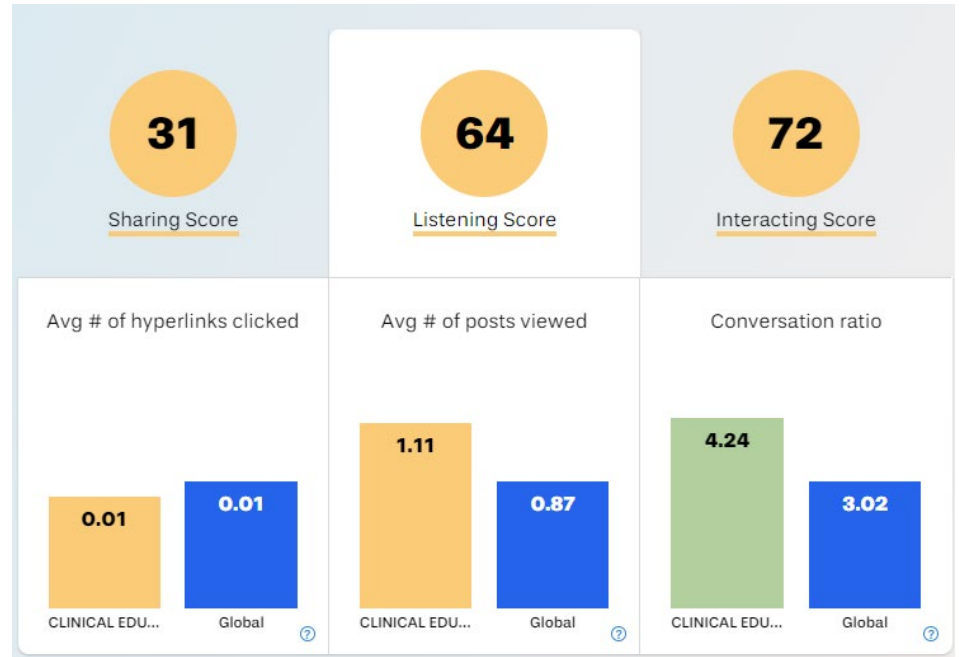
- Sharing Score
  - how well students are synthesizing information.
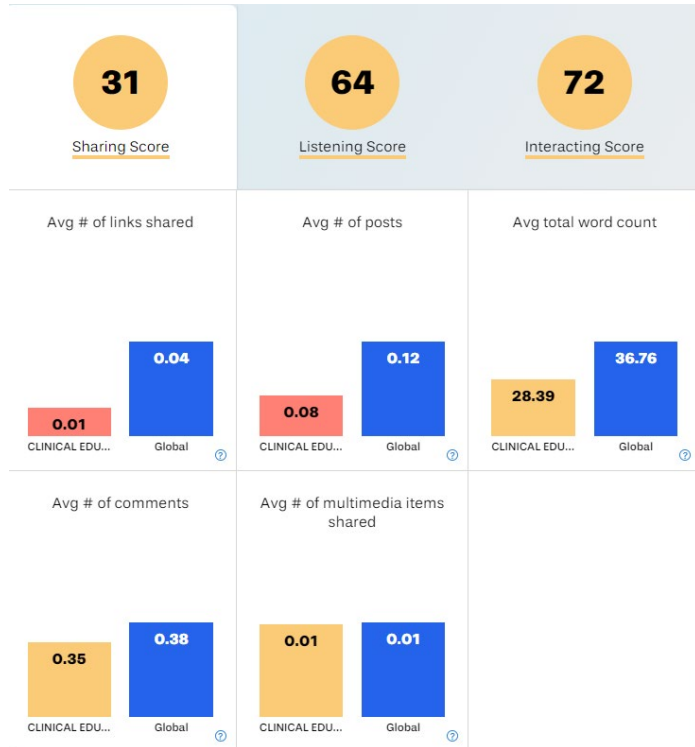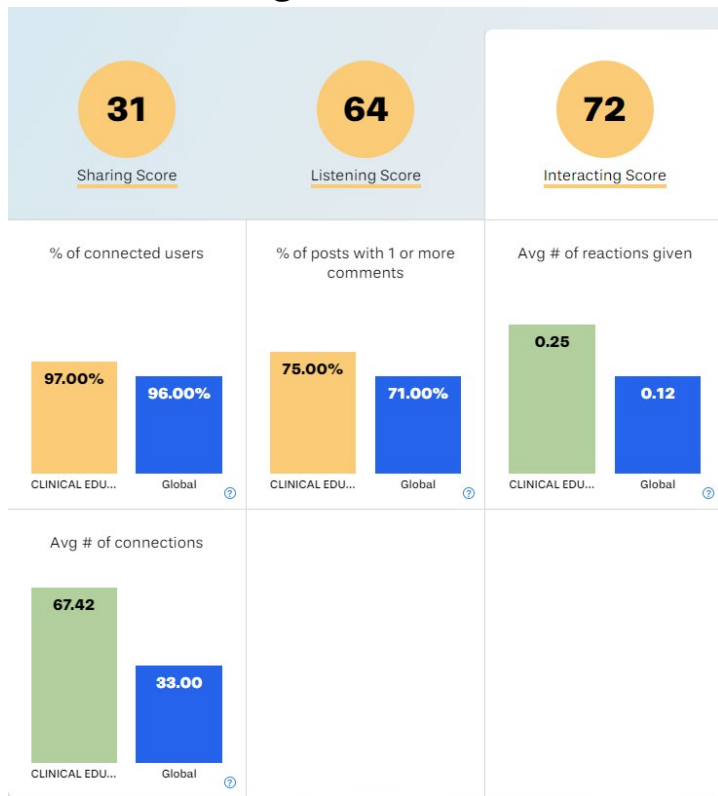

- Listening Score
  - how much students are consuming content.

Conversation Ratio = The total number of comments in the course divided by the total number of posts in the course

yellowdig.co

Community Health

- **Interacting Score:** how connected your community is.

Avg # of reactions given: The total number of reactions added to posts in the course, divided by the number of members in the course, divided by the number of days since the course start date

Avg. # of connection: The total number of (comments, reactions and mentions) divided by the number of members in the course

yellowdig.co

How to Track "Community Health" in a Traditional Discussion Board

Student Engagement Related to Accreditation Standards

- How to use this data to reflect that the program is achieving specific and measurable goals
  - Outcome measures
  - Curricular standards
  - Organized, sequential, and integrated courses

Yellowdig and Accreditation Documentation

- Physical Therapy (CAPTE) and Occupational Therapy (ACOTE) have accrediting agencies that grant specialized accreditation status to qualified entry-level education programs for PTs/PTAs and OTs/OTAs.

CAPTE
Commission on Accreditation
in Physical Therapy Education

ACOTE.
Accreditation Council for Occupational Therapy Education

Yellowdig and Accreditation Standards

TOPICS

- MENTOR RELATIONSHIPS
- EVIDENCE INTO PRACTICE
- HEALTH DISPARITIES
- INTERVIEW
- VARIETY OF CARE AND BILLING
- GENERAL QUESTION

Other upcoming topics:

- CULTURAL COMPETENCE
- QUALITY IMPROVEMENT
- JOB SEARCH
- INTERPROFESSIONAL PRACTICE

How can this relate to accreditation standards?

Yellowdig and Accreditation Standards

- "The **clinical education** component includes organized and sequential experiences coordinated with the didactic component of the curriculum."
  - "Describe how the didactic and clinical experiences are organized, sequenced, and integrated."
  - Behavioral (measurable and observable) terms.

EVIDENCE INTO PRACTICE

Yellowdig and Accreditation Standards

- "The didactic and **clinical** curriculum includes intraprofessional and interprofessional education learning activities that are based on best practice and directed toward the development of intraprofessional and interprofessional competencies including, but not limited to, values and ethics, communication, professional roles and responsibilities, and teamwork."
  - "... describe the intentional learning activities that: involve students, faculty, and or PT and PTA clinicians ... values/ethics, communication, professional roles and responsibilities, teamwork ..."

🏷 INTERPROFESSIONAL PRACTICE

🏷 MENTOR RELATIONSHIPS

🏷 INTERVIEW

Yellowdig and Accreditation Standards

- "The physical therapist professional curriculum includes content and learning experiences in justice, equity, diversity, inclusivity, belonging, anti-racism, communication, personal finance, law, clinical reasoning, evidence-based practice, and applied statistics."

🏷 CULTURAL COMPETENCE

🏷 JOB SEARCH

🏷 MENTOR RELATIONSHIPS

🏷 EVIDENCE INTO PRACTICE

🏷 INTERVIEW

Yellowdig and Accreditation Standards

- "Engage in professional development, leadership, and service activities to advance … Health care disparity mitigation … knowledge and skills to become a CI … "
- "Participate in efforts to meet the health needs of people locally, nationally, or globally that work to ameliorate health inequalities and disparities through advocacy, service delivery, and/or community collaboration."

🏷 HEALTH DISPARITIES

🏷 MENTOR RELATIONSHIPS

🏷 INTERVIEW

Application of Interactive Platforms in Higher Education

Other applications outside of Clinical Education:
- Online Programs
- Hybrid Programs
- In-Person Programs

Students Connecting, Not Just "Discussing"

Is anyone else watching the world cup? If so, who do you think will win? I would not mind seeing CR7 (Ronaldo) take it. Best game so far probably Japan vs Germany. Worst game so far that I've seen may have been US vs England. Anyway, just a couple more weeks to go on this rotation. Finish strong guys / gals!

👍 4   ⚽ 3

😊   🎖   🕐   🚩   ⭐   💬 Comment

Hey everyone,

I hope you all enjoyed your thanksgiving. I definitely ate good and had a great time spending time with my family. Did any of you have to work on thanksgiving? Also, what was your favorite thanksgiving dish this year?

Mine was once again the mac and cheese lol

👍 1   😄 1   🙂 1

😊   🎖   🕐   🚩   ⭐   💬 Comment

# Students Connecting, Not Just "Discussing"

Hey everyone!

Hope you all have had a great week! I was just checking in to see how everyone is doing now that we are past the half way point of CE3. Do you know what setting you would like to start applying for jobs, or do you need to get through CE4 before deciding? How has it been working as a professional?

Wishing everyone the best for the last few weeks!

👍 3

😊 👤 ⏱ 🚩 ☆   💬 Comment
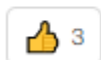
What are you all doing for halloween?? My clinic is dressing up as GOAT athletes, and I have volunteered to dress up as an actual goat. Are you clinics doing anything? Are you going to a halloween costume party? Or are you watching a scary movie every night?

👍 3   😆 1
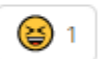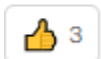
😊 👤 ⏱ 🚩 ☆   💬 Comment

Yellowdig Student Comments: Do You Dig It?

How did Yellowdig supplement your clinical education learning experience?

- "I thought it was a **creative platform** that was more **engaging and interesting** to partake in compared to discussion boards in the past."
- "I think Yellowdig is a better idea than the discussion board. It allows us to **speak more freely** about our experiences instead of having a post to reply to. We are able to start conversations with other classmates which **helps with our learning experience**. I also like it because we are able to **easily see if we have met our target for the week with the point system**. I think it is more interesting than the discussion post because we are **able to talk about more things** than what we are prompted to talk about which **encourages us to have more of a conversation**."
- "… much **more engaging** than discussion boards. The layout makes it feel **like social media and less like an assignment** …"
- "It's **nice to respond to posts about unrelated things**, such as movies and events going on in the world."
- "I also appreciate how it seems to be a **platform mainly for the students**; it feels professional and open for people to **share their mistakes/experiences**. (but we also appreciate the DCE's for being there for us when we need it!)"

Yellowdig Student Comments: Do You Dig It?

- "I *enjoy seeing other people's experiences* and I think because there's not huge pressure in the requirements *we can be more authentic*. As a result I've learned more from this style than past discussion boards because in those situations I think most of us were more focused on giving a response that fit the requirement and were less concerned with learning from each other."
- "I really enjoyed Yellowdig. I thought it allowed more *flexibility of discussion*. I would prefer to use it for my next clinical instead of typical discussion boards"
- "I thought Yellowdig was *much more fun* than using the original discussion post. It was *easier to view more posts quickly*, and I like that we had more *freedom to post topics* which applied to our week or related to subjects we were seeking guidance in."
- "I liked that we were able to *share and review research articles*."
- "It was a lot more *engaging*. I liked hearing from other classmates."
- "It was nice to see other people going through the same things. ***I didn't feel as alone*.**"

Yellowdig: The Director of Clinical Education Perspective

- "A student highlighted a piece of adaptive equipment at an inpatient rehab facility in [Virginia] that is the *only* facility in the northern hemisphere to have this piece of equipment. Not only did this student benefit from getting to experience this cutting-edge technology, but her **classmates also got to learn** about this equipment."
- "Students have **collaborated on how to improve work/life balance** on fieldwork, **shared resources** they have created or received from their educators and **brainstormed** treatment ideas and interventions with one another."
- "We are able to use **examples of discussions and conversations for our reaccreditation** evidence, so there's the added bonus of having those discussions archived."
- Able to "observe from afar" without interfering: true **facilitation**!

Thank you!

Andrew Baldwin, PT, DPT, Cert-DN
agbaldwin@marybaldwin.edu