Making each other smarter:
Assessing success factors for online peer mentoring groups as support for learning system dynamics

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Presentation video: https://www.youtube.com/watch?v=swEag2DnTzE
A brief (autobiographical) history of Peer Mentoring Groups
1974-1978
Friday Morning Group (PhD Student group at MIT)

1978-1981
Various Groups at UAlbany

1981-2010
Decision and Policy Sciences Thursday Brown Bag at UAlbany

2010-ongoing
2010 – “The Thursday Morning Group” (online)

2015
Richardson et al, “Reflections on peer mentoring for ongoing professional development in system dynamics”, System Dynamics Review

2016
Laura Black and Larry Gottschamer organize online peer mentoring within the Student Chapter

2017
Faculty advisors invited to join
What are online peer mentoring groups?
A typical online peer mentoring group’s beginning

It was formed at the International System Dynamics Conference by attending a:

Student Chapter meeting
Peer mentoring group formation meeting
A great opportunity to get to know each other!
A typical online peer mentoring group
A great chance to learn different time zones
A typical online peer mentoring meeting

- Casual group chat
- One member presenting
- Group discussion
How is peer mentoring embedded within the field of learning system dynamics?
Novice learning of system dynamics
What research methods were used in the study?
Mixed methods research design

- **ONLINE SURVEY** targeted GROUP MEMBERS
- **ONLINE INTERVIEWS** targeted GROUP LEADERS
- **ONLINE INTERVIEWS** targeted FACULTY ADVISORS
Inventory of peer mentoring groups (PMGs)

- Total PMGs: 9
  - Existing: 5
  - No longer existing: 4

- 24 survey respondents
- 9 group leader interviews
- 5 faculty advisor interviews
Distribution of survey participants per:

Continents

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Countries

- Germany
- Spain
- France
- United States
Profiles of participants

- 46% I am a PhD student
- 29% I work in industry or consultancy
- 21% I work in academia but not as a PhD
- 4% Other

- 37% I attended a full SD university program
- 29% I attended SD university course(s)
- 17% I attended short SD course(s)
- 17% I am self-taught
Is PMG participation helpful?

How helpful was participation in PMGs in solving your SD problems?

0 - not helpful at all; 10 - extremely helpful
Why is peer mentoring important?
Importance of peer mentoring: Group leaders' thoughts

- This peer group has been pivotal in me maintaining connection with and enthusiasm for SD in my work. It has underpinned much of the professional progress I have made in the last 2 years.

- Talking about SD and giving each other feedback has definitely built confidence and taught us a lot. I believe that confidence is a key word here.

- Knowing that you are not alone in this journey makes all the difference. It was a very motivational point for me when I started travelling through the SD jungle.

- This group has been vital to me starting to build a career in SD (since joining the group I have started a PhD program with a SD-focused project).

- I would most probably not be able to finish my PhD if it were not for these meetings.

- Regular feedback and exchange on work in progress help to spark new ideas and fill in the knowledge gaps.

- Practicing presenting SD work is very useful as it is a pilot test before the work is presented to a more formal audience.

- Given that many people are self-taught, it is helpful to get recommendations for further SD reading.

- Making friends and creating personal ties makes all the difference. Every year I am looking forward to attending the conference and seeing their faces in real life, rather than just staring at a small icon on my screen.

- Knowing that you are not alone in this journey makes all the difference. It was a very motivational point for me when I started travelling through the SD jungle.
Many of the students in our peer mentoring groups are “locally lonely”, possessing both a passionate interest in system dynamics coupled with an inability to connect with working partners, colleagues, and mentors in their immediate work environment. This is a fate not only of PhD students but also of a large fraction of those seeking to pursue academic and other professional work in our field.

There seems to be the idea growing out there that you can harangue or browbeat students into doing excellent work. No reasonable theory of human development or learning would indicate that this behavior supports learning and professional development. We need interactions such as those supported by peer mentoring to counter these tendencies and support another kind of student learning.

Peer mentoring groups are both more powerful and less fragile than one-on-one expert-to-novice mentoring relationships. And this is especially true for doctoral students. Our current practice of having the experts “beat up” our students with corrective feedback, especially when they are in this vulnerable and “locally lonely” situation just does not work. We need strong, more powerful, and less fragile approaches to these important mentoring tasks.

Importance of peer mentoring: Faculty advisors’ thoughts
What makes a successful peer mentoring group?
• Having a strong **group leader**

• Creating a **schedule** for presentations

• Treating each other with **respect**

• Forming a group with people who could be potential **friends**

• Being **highly motivated**

• **Celebrating** each other’s **achievements** within the group

• **Having cameras on.** Human relationships keep such groups going
What are the benefits of joining a peer mentoring group?
PEER MENTORING

GOALS  COACHING  GUIDANCE  SUCCESS  MOTIVATION  KNOWLEDGE  SUPPORT
How can you become engaged?
Join the roundtable

Online peer mentoring groups –
Give and receive feedback on your system dynamics work

12:00 Bergen time
23:00 Bergen time,
Zoom (check conference schedule)

EVERYONE IS WELCOME!
Students
Practitioners
Faculty advisors

THU, JULY 23rd

Thank you for your attention!

https://www.student-systemdynamics.org/