

Heartland Innovations in Interprofessional Practice and Education Summit • July 17-18, 2025 **ONLINE**

Transforming Futures:
Innovation and Disruption in Interprofessional
Health Care and Education

DES MOINES UNIVERSITY
MEDICINE & HEALTH SCIENCES



1

**Strategies for Health: Using A
Game-Based IPE for Students**

Kay Rudnitsky, OTD, OTR/L, CLT
Assistant Professor, Occupational Therapy
Des Moines University
Kay.Rudnitsky@dmu.edu

Diana R. Feldhacker, PhD, OTD, OTR/L, BCPR
Program Director and Department Chair,
Occupational Therapy, Des Moines University
Diana.Feldhacker@dmu.edu

Julie Ronnebaum, PT, DPT, PhD, FNAP
Program Director and Department Chair
Physical Therapy, Des Moines University
Julie.Ronnebaum@dmu.edu

2

Disclosure

We do not have any financial relationships with ineligible
companies to disclose.

3

3

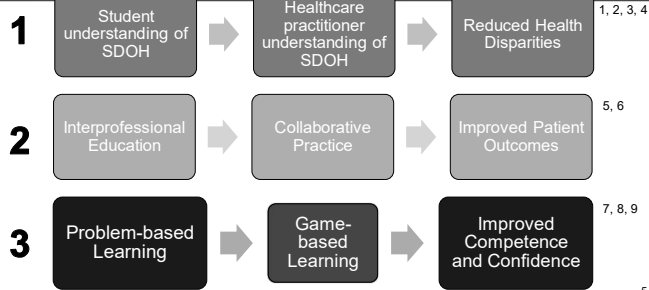
Learning Objectives

1. Participants will be able to describe implementation of the Strategies for Health game as a student interprofessional education event, including general game operation, logistical considerations, and intended learning outcomes.
2. Participants will be able to describe quantitative changes in knowledge and interprofessional attitudes and qualitative feedback observed by presenters using the Strategies for Health game with first-year occupational therapy and physical therapy students, and second-year occupational therapy students acting as table facilitators.
3. Participants will be able to identify considerations and next steps for implementing the Strategies for Health game in their own professional setting.

4

4

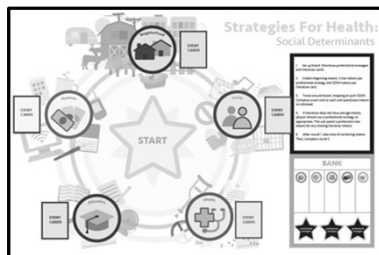
Strategies for Health - Background



5

Strategies for Health - Background

- Didactic module: SDOH, place matters (rural, urban, reservation)
- Game Play:
 - Incorporates social determinants (drivers) of health
 - Awareness of multidisciplinary roles
 - Interprofessional team skills
 - Collaborative support of characters through life and health events
- Debrief: Structured reflection and debriefing (PEARLS technique¹⁰)



6

6

Acknowledgements

- Susan M. Anderson, MD, FAAFS
- Katharine M. Bloom, MSW, LCSW-PIP
- Teresa D. Egan, MSN, MS
- Diana R. Feldhacker, OTD, OTR/L, BCPR
- Betty A. Hulse, PA, MS
- JoAnn Kim, PhD, RN, CNE
- John W. Korkow, PhD, MA
- Angela Landeen, MS

- June C. Peterson Larson, EdD, MS, RN, ANEF
- Qiuwen Li, MFA
- Kimberly Nerud, PhD, RN
- Debra S. Norris, EdD, MSW, CSW
- Kari Potter, MS
- Ramu Sudhagoni, PhD
- Chelsea A. Wesner, MPH, MSW
- K.L. Jean Yockey PhD, FNP, RN, CNE

UNIVERSITY OF
SOUTH DAKOTA

7

7

Strategies for Health - Pilot Findings

Evidence of effectiveness

11- Feldhacker et al. (2021)

Module + Game

Knowledge SDOH

Group	Pre-Test	Post-Test	Follow-Up
Control	72	74	70
Game	74	76	72
Didactic Module	76	78	74
Game + Module	78	82	78

Module + Game

Interprofessional Attitudes Scale (IPAS)

Group	Pre-Test	Post-Test	Follow-Up
Control	40	42	40
Game	42	44	42
Didactic Module	44	46	44
Game + Module	46	48	46

8

8

2025 OTD & DPT Student Event Details

1 st -year DPT	1 st -year OTD	2 nd -year OTD	Total Students
25	32	21	78

- 2-hour in-person lab, January 2025
 - 10 groups of 7-8 students
 - Introduction/instruction, game-play, debrief
- Pre- and post-surveys in Qualtrics
- 1st-year OTD and DPT:
 - Nebraska Interprofessional Education Attitudes Scale¹²
 - 10-question SDOH knowledge quiz
- 2nd year OTD – serving as facilitators:
 - Rated perception of their IPE skills and attitude statements

2

9

9

Quantitative #1: 1st-Year OTD and DPT Students

- Statistically significant increase in IPE attitudes
 - 11% mean increase
 - $p < 0.001^{**}$
- Increase in SDOH knowledge
 - 5% increase in mean
 - $p = 0.021$
 - Students performed well on the pre-test
 - Baseline SDOH knowledge could be impacting degree of change

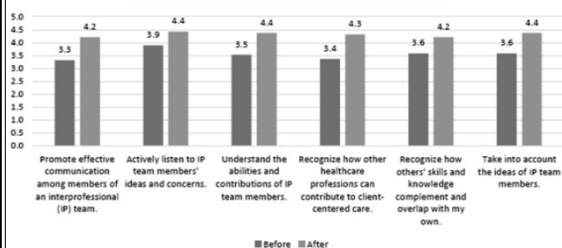


10

10

Quantitative #2: 2nd-Year OTD Students

Before and After Mean Values for IPE statements



- Self-rating of abilities (5-point scale)
- Increase of 0.5 – 0.9, with average being +0.77 or 15% increase per item

11

11

Quantitative #3: 2nd-Year OTD Students

Compared to the time before the learning activities, would you say your ability to collaborate interprofessionally is



- 94.7% felt they improved their IPE skills

12

12

Qualitative #1:
1st-year OTD and DPT Student Takeaways

“It is important to work as a team. This event highlighted how important it is to communicate well.”

“It was interesting to see how everyone thought differently, and how people started to get more creative when there were not easy solutions.”

“I feel like this game accurately demonstrates real-life situations and depending on the person’s resources, they will need support in different ways. It was important to understand all the professions and talk through our plans.”

“It is crushing to me just how different circumstances can impact someone’s health, and striking just how much having access to health care professionals can change someone’s outcomes.”

“I feel like this activity opened my eyes up more to so many aspects of healthcare.”

“Education is SOOO important.”

“I learned a lot.”

Multiple comments: fun, insightful, enjoyable, powerful, or relevant way to learn

13

13

Qualitative #2
2nd-year OTD Student Takeaways

“It was great to work with the PT students specifically because our professions will overlap frequently in clinical settings. I feel more informed on their scope of practice and where ours overlaps.”

“Working in teams helped improved my competency and confidence in working within the interprofessional team. In addition, I felt that I was able to improve my communication skills as well.”

“It was great being able to hear other’s ideas and opinions and to learn from their expertise working alongside other professions. The other students were able to bring up ideas I hadn’t thought of and could learn from.”

“It was beneficial to have a team leadership view and be able to facilitate conversation and lead a vital role in the ability to work together as an IP team. It helped learn new communication styles and ways of working through new scenarios and adapting based on needs and skills.”

“I thought it was very beneficial to work with individuals of different disciplines and it helped me practice being more confident in my role as a leader. I felt excited to explain the game and provide encouragement and additional thoughts to think about throughout the experience with other students.”

“I understand the scope of other professions’ roles much better than before this SDOH game.”

14

14

Discussion

Subjectively, students enjoyed/valued this!


Impacted SDOH and IPE knowledge, attitudes, skills

Baseline SDOH knowledge prior to event may have been a factor

Impact for 2nd-years was greater-than-expected

Inter- and intra-professional opportunity for OTD students

Some material cost and time investment required



15

15

Areas for Improvement

- Streamlining directions and greater 2nd-year facilitator preparation
- Would have like to have measured:
 - Congruence between 1st and 2nd-year measurements of skills and attitudes
 - 1-10 rating of perceived value and enjoyment
 - Suggestions for event improvement
- Barriers to brining in more professions



16

16

Using *Strategies for Health*

- Obtain permission and materials from Diana Feldhacker
 - Diana.Feldhacker@dmu.edu
- Learn materials
- Create physical game board kits
- Consider strategic plan and accreditation standards
- Consider potential collaborators and structure
 - Mandatory vs. optional, schedule, room, table groupings, AV display ideal, use of facilitators
- Consider data collection
- Consider snacks and photography day-of



17

17

Our Next Steps

- 140 OTD & DPT students in January 2026
- Seeking ways to involve more DMU programs
- Received USD permission and DMU research grant to develop a digital version



18

18

Heartland Innovations in Interprofessional Practice and Education Summit • July 17-18, 2025 ONLINE

Transforming Futures:
Innovation and Disruption in Interprofessional
Health Care and Education

Questions?

19

References

1. Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved 3/20/2025 from <https://odphp.health.gov/healthypeople/objectives-and-data/social-determinants-health>
2. Committee on Educating Health Professionals to Address the Social Determinants of Health; Board on Global Health; Institute of Medicine; National Academies of Sciences, Engineering, and Medicine. (2016). *A framework for educating health professionals to address the social determinants of health*. <https://www.ncbi.nlm.nih.gov/books/NBK355959/>
3. Thomas, Buelow, J. (2020). The role of social determinants in health care: Student reflections on patient needs, community resources, and interprofessional development. *Health, Interprofessional Practice, and Education*, 4(1), Article eP2113. doi: 10.7717/2641-1148.2113
4. Mohammad, F. & Samouel, R. (2023). Social determinants of health: Awareness and attitude of students and professors in medical sciences universities. *Journal of Education and Health Promotion*, 12(155). doi: 10.4103/jehp.jehp_349_22
5. Reeve, S., Perrier, L., Goldman, J., Freeth, D., & Zwarenstein, M. (2013). Interprofessional education: effects on professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*, (3), Article CD002213. <https://doi.org/10.1002/14651858.CD002213.pub3>
6. Cadet, Timmo, J., McKeamey, S., Horvath, J., O'Neal, C., Taheri, R., Uhley, V., Zhang, Y., Dreker, M., & Cohn, J. S. (2023). Describing the evidence linking interprofessional education interventions to improving the delivery of safe and effective patient care: A scoping review. *Journal of Interprofessional Care*, 38(3), 476-485. <https://doi.org/10.1080/13561820.2023.2293119>
7. Vazquez-Coladay, M., Garcia-Garcia, R., Regalado-Martinez, E., & Gomez-Urquiza, J. (2024). Real-world and game-based learning to enhance decision-making. *Nurse Education Today*, 140, Article 106276. <https://doi.org/10.1016/j.nedt.2024.106276>
8. Lee, C., Lee, C., Lai, H., Chen, P., Chen, M., & Yu, S. (2025). Emerging trends in gamification for clinical reasoning education: A scoping review. *BMC Medical Education*, 25(435). <https://doi.org/10.1186/s12908-025-07044-7>
9. Xu, M., Luo, Y., Zhang, Y., Xia, R., Qian, H., & Zou, X. (2023). Game-based learning in medical education. *Frontiers in Public Health*, 11, Article 1113682. <https://doi.org/10.3389/fpubh.2023.1113682>
10. Eppich, W., & Cheng, A. (2015). Promoting Excellence and Reflective Learning in Simulation (PEARLS): Development and rationale for a blended approach to health care simulation training. *Simulation in Healthcare*, 10(2), 106-115. doi: 10.1097/S1533-0000000000000022
11. Feldtacker, D. R., Wesner, C., Yockey, J., Larson, J., & Norris, D. (2021). *Strategies for Health: a game-based, interprofessional approach to teaching social determinants of health: a randomized controlled pilot study*. *Journal of Interprofessional Care*, 36(1), 75-83. <https://doi.org/10.1080/13561820.2020.1850660>
12. Delligan, G. L., B. Lyden, E., Meza, J., Shokland, H., Benti, C., Collier, D., ... Nickol, D. (2016). The Nebraska Interprofessional Education Attitudes Scale: A new instrument for assessing the attitudes of health professions students. *Journal of Interprofessional Education & Practice*, 4, 33-39. <https://doi.org/10.1016/j.jep.2016.05.001>

20
