CREATING AN OPTIMAL LEARNING ENVIRONMENT

Educator Development Forum
March 3, 2021
LEARNING OBJECTIVES

At the end of this session, participants should be able to:

• Define learning environment and understand its impact on learners

• Understand the key elements of a positive learning environment

• Incorporate some best practices to promote effective learning environments
LEARNING ENVIRONMENT

What is it?

The social interactions, organizational cultures, and structures, and physical and virtual spaces that surround and shape participants’ experiences, perceptions and learning.

What influences it?

Interactions with peers, staff, faculty, patients, curriculum, facilities, and organizational infrastructure.

Why does it matter?

It is a significant determinant of trainees’ attitudes, knowledge, skills, academic achievement, sense of wellbeing, and behaviors.

A positive learning environment helps learners succeed, affects their moral development, and models a humanistic approach to medicine.
<table>
<thead>
<tr>
<th>Study</th>
<th>Learners Studied</th>
<th>Conclusions</th>
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<tbody>
<tr>
<td>Wayne, et al. 2013</td>
<td>Survey completed by 267 first year medical students from 5 consecutive classes that related LE perception to performance on USMLE Step 1, taken approximately six months later.</td>
<td>Three of the five LE subscales statistically associated with Step 1 performance ( (p &lt; 0.05) ): meaningful learning environment, emotional climate, and student–student interaction. A one-point increase in subscale rating associated with increases of 6.8, 6.6, and 4.8 points on the Step 1 exam.</td>
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<td>SN van Vendeloo, et al. 2018</td>
<td>Cross sectional survey of 1,231 residents from 33 specialties training in Denmark assessing perceptions of LE (via SPEED score) and resident burnout.</td>
<td>Strong and consistent inverse association between the perceived quality of the learning environment and burnout among residents ( (OR 0.54 CI 0.46 to 0.62, p &lt; 0.001) )</td>
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<td>N Lee, et al. 2017</td>
<td>276 surgery resident across 50 programs surveyed regarding academic support and resources.</td>
<td>Residents perceiving adequate support to succeed had less burnout, better resilience, better job satisfaction, better organizational support, and were more likely to have high performance on in-service exams.</td>
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Safety

- Learners must feel welcomed, respected, and assured of safeguards to protect their physical and psychological safety.

Engagement

- Learning environments (LEs) should facilitate learner engagement and promote collaborative learning.

Connectedness

- LEs must facilitate a sense of belonging within the learning community and promote the social construction of learning that happens when learners and educators feel connected.

Infrastructure

- Spaces require infrastructure support to optimize resources, including support staff, hardware and software, facilities improvement and maintenance, leadership, financial support, and accountability structures.

Access

- Learners and educators need access to a variety of spaces, technology, and resources to support learning. ADA compliance and health equity issues must be addressed.

Climate

- In the design of facilities and virtual spaces, sensory cues of art, music, institutional symbols, history, and collaboration all create a tone. These should represent diverse perspectives that promote a feeling of inclusion.
SMALL GROUP DISCUSSION

- Take one element and discuss your experiences and recommendations for improvement
Model for Exemplary Learning Environments

Learning Environments

Health Professionals Education

- Patients and families
- Health professionals & students
- Faculty, staff, administrators

Health care Organization

Optimal Health for Individuals, Populations, Communities
EXEMPLARY LEARNING ENVIRONMENTS

“Exemplary learning environments prepare, support, and inspire all involved in health professions education and health care to work toward optimal health of individuals, populations, and communities.”

Everyone who participates in health professions learning environments shares the same goal: better health for all.

Exemplary learning environments—and the organizations of which they are part—are fully committed to diversity, equity and inclusivity.

In exemplary learning environments, all participants—including organization leaders, administrators, practitioners, educators, staff, and students as well as patients, families, and community members—are teachers and learners.

Exemplary learning environments support the well-being of all participants.
SMALL GROUP DISCUSSION

- Is there an ideal learning environment for the medical profession?
  - Does that vary…
    - By individual learner?
    - By level of training?
    - By clinical specialty or practice site?

- As educators — what can we control and not control in learning environments?
KNOW YOUR LEARNERS

- Understand the course/residency expectations for trainees in clinical settings and criteria for assessment and/or grading
- Determine where a trainee is in their clinical experience to calibrate expectations
- Take interest in trainees’ background, current learning goals, and future career plans
- Observe the learner engaging in bedside clinical assessments and patient care.
- Recognize learner distress
SET EXPECTATIONS

- Ensure trainee knows location, meeting time, expected hours, dress code, equipment needed

- Make your expectations explicit
  - Time limit for patient assessment
  - Presentation style
  - Role on team
  - When/how feedback will be given
BUILD COMMUNITY

Engage with learners during day outside of clinic visits or inpatient rounds (for teaching, feedback, coffee run, etc.)

Include trainees in E-Chat and email conversations regarding their patients’ care.

Have team members make introductions and orient new learners to others' roles.

Incorporate ice breakers

Model the inclusion of patients, families and other health team members in medical decision making.

Be an ally
Be deliberate about what is being taught and why it is important

Formulate 1-2 teaching points per clinic session or rounding day

During learner presentations, make eye contact, use a supportive tone of voice, and appreciative facial expressions to create a sense of safety

Observe the learners engaging in clinical care

Be available/approachable and willing to pitch in with workload

Avoiding interrupting learners before they finish presenting case

Engage in artful questioning
Be Learning Centered

Be willing to say “I don’t know”.

Debrief mistakes and challenging situations.

Empower learners to teach you.

Welcome questions and dissenting voices. Be willing to adopt a different but equal plan.

Avoid work without education- make the value of a task clear.

Be committed to continuous improvement- accept and give feedback as the norm.
REFERENCES


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Johns Hopkins Learning Environment Scale

Scan of Postgraduate Educational Environment Domains (SPEED)

MEASURING THE QUALITY OF THE LEARNING ENVIRONMENT
JOHNS HOPKINS LEARNING ENVIRONMENT SCALE

Community of Peers

- How connected do you feel to other SOM students?°
- How supported do you feel in your personal and professional pursuits by other SOM students?°
- It’s been easy to make friends at the SOM.
- I feel a sense of community at the SOM.
- To what extent have you felt a sense of belonging during your time as a student at the SOM?°
- I’ve encountered an abundance of positive, inspiring role models among fellow students at the SOM.

Faculty Relationships

- I feel that the SOM faculty I encounter are supportive of my professional goals.
- I feel that SOM faculty members have taken the time to get to know me.
- I feel that the SOM faculty I encounter genuinely care about my well-being.
- I’ve encountered an abundance of positive, inspiring faculty role models at the SOM.
- There are faculty members that I feel comfortable confiding in when important concerns come up.
- The faculty advisors in the Colleges Advisory Program are readily accessible and interested in students.

Inclusion and Safety

- I am concerned that students are mistreated at the SOM.†
- I sense there is discrimination based on gender, race, ethnicity, or sexual identity at the SOM.†
- I feel concerned at times for my personal safety at the SOM.†