LACE it up!
Strategies for Optimizing the Learning and Caring Environment

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University of California San Francisco
Objectives

1. Describe key elements of the learning environment and characteristics of optimal learning environments.
2. Develop a plan to optimize the participants’ own learning environment.
3. Identify resources at UCSF to help with optimization of learning environments.
Outline

• Introduction
• Conceptual framework and pillars of exemplary learning environments
• Example from Internal Medicine
• Creating an action plan for your own learning environment
• Overview of LACE: Learning and Caring Environment
• What can LACE do for you?
AAMC Statement on the Learning Environment
A moment to reflect:

What words come to mind when you think of the learning environment you are engaged in?

Take a few minutes to write down the ideas that come to mind on sticky notes, then pair share with your neighbor.
Learning environment refers to the social interactions, organizational cultures and structures, and physical and virtual spaces that surround and shape participants’ experiences, perceptions, and learning.
Definition of “Learning Environment”

Learning environment refers to the social interactions, organizational cultures and structures, and physical and virtual spaces that surround and shape participants’ experiences, perceptions, and learning.

Definition of “Learners”

In a continuously learning and improving health system, every participant is both a learner and a teacher. Participants include undergraduate and graduate health professions students, trainees, and researchers enrolled in formal educational programs as well as practitioners, educators, administrators, staff, patients, families, and community members.
Conceptual Framework

Larry Gruppen, David Irby, Steven Durning, Lauren Maggio
Personal Dimension

- Personal growth and goal direction
- Engagement and emerging autonomy
- Identity formation
- Resilience, well-being

Personal
Social Dimension

- Scaffolding relationships with others
- Becoming part of a community
- Interactions for teaching, learning, patient care
Organizational Dimension

Organizational culture, practices, policies
Curriculum resources, structure, placements
Accreditation rules
Information technology infrastructure
Physical/Virtual Dimension

Adequacy of physical space for learning and practice

Adequacy of virtual space for online learning
Vision for exemplary learning environments

Prepare, support, and inspire everyone involved in health professions education and healthcare to work toward optimal health of individuals, populations, and communities

Sandrijn van Schaik, Susan Reeves, Linda Headrick
Four pillars for clinical learning environments

1. Shared goal of healthcare and health professional education: improving health
2. Learning is work and work is learning
3. Collaboration with integration of diverse perspectives
4. Focus on continuous improvement and innovation
Pillar 1: Shared goal

Healthcare and health professional education share a goal of improving health for individuals, populations, communities.
Pillar 1: Shared goals – actionable ideas

Align structures of care and education

Let go of assumptions about what learners need to learn and can contribute

Engage patients in teaching and healthcare
Pillar 2: Learning is work, work is learning

In exemplary learning environments learning is work and work is learning; they are learning-centered
Pillar 2: Learning is work; work is learning – actionable ideas

Emphasis on meaningful work, and meaningful learning

Intentional attention to learning in the workplace

Elimination of work that does not lead to learning
Pillar 3: Collaboration and diversity

Collaboration with integration of diverse perspectives, learners are prepared to care for diverse patients, populations, and communities.
Pillar 3: Collaboration and Diversity – actionable ideas

Promote collaboration

Increase diverse representation through deliberate inclusion of underrepresented groups

Institutional attention to diversity, equity and inclusion
Pillar 4: Continuous improvement and innovation

The organizations and agents in the learning environments learn from and about themselves to achieve continuous improvement and innovation.
Pillar 4: Continuous improvement and innovation – actionable ideas

Collect outcome data on individuals, teams and institutions

Engage in cyclical process of data collection, reflection, adaptation/improvement

Promote growth mindset and curiosity

Cutrer Acad Med 2017
Dweck Educ Hor 2014
Improving your learning environment: Example

**Problem:**
Different and unequal clerkship experiences

**Solution:**
Improve equity and inclusion in clerkship learning environment
Environmental needs assessment: Listening to diverse perspectives of students-> Under-valuing patient advocacy skills

"Because we can speak a different language, there's an added responsibility... how does that fit into [evaluations]? Is that not valued?"

"Do I spend more time learning or do I spend more time making (minority) patients have a better experience?"
NEEDS ASSESSMENT
Conducted literature review & local data collection with underrepresented in medicine (UIM) students

PHASE 1

PHASE 2
STAKEHOLDER MINI-RETREAT
Reflected on findings from needs assessment, & proposed solutions (pilot initiatives)

PHASE 3
PILOT INITIATIVE DEVELOPMENT
Checked summary of needs assessment & pilot proposals with UIM student members

Recognition for equity role models

Advocacy curriculum, team report-back

“Health equity bundle” in oral presentations

Implementation of pilots
Four components of the learning environment

Adapted from Gruppen, Irby, During and Maggio. Improving the LE in the Health Professions: A scoping review. Josiah Macy Jr. Foundation, 2018
Four pillars for clinical learning environments

1. Shared goal of healthcare and health professional education: improving health
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Back to your reflections

Look at your sticky notes, the words that came to mind when you were thinking about the learning environment you are engaged with:

• Why did these words come to mind? What does that mean for your learning environment?

• What opportunities for improvement do they bring up?

• What pillar might these ideas belong to?
Create a plan for your own environment

Use the worksheet to identify a goal and create an implementation plan

*Small group work:*

* Take a few minutes to discuss your ideas and then select one idea to work on per small group; 20 min total
Vision
Support clinical faculty to co-create learning environments that optimize learning and wellbeing for all involved

LACE = Learning and Caring Environment

- Data driven
- Team-oriented
- Innovation focused
- Diverse, Inclusive, Equitable

LACE = Learning and Caring Environment
LACE is part of the Center for Faculty Educators

Research in Education  Academy of Medical Educators

Faculty Development for Career Educators  Faculty Development for LACE

CFE
LACE Faculty Development

- Clearing house for faculty development resources
- Innovation Hub
- Experts Bureau
- Coaching for Continuous Improvement
Recommendations:
• Required resources and support
• Space, technology
• Organization, workflow
• Education and training

Faculty Development:
Develop, implement and sustain workplace-based faculty development

Learning environment assessment

Report to chair, health system and education leadership

LACE
LACE Assessment: Multisource Data Collection

• Routine evaluations (Clerkship evaluations, GME surveys, Faculty surveys)
• Ad-hoc surveys and reports (wellbeing, rounding project, SAFE reporting)
• Direct observations
• Focus groups and interviews

And: data on diversity, evaluation and assessment processes, learner participation in QI projects
LACE Assessment: Pediatric Experience

• Setting – UCSF Department of Pediatrics
  • Selected sites: Mission Bay BCH, ZSFG

• Assessment of clinical learning environment
  • Not focused on intervention

• Data sources
  • Departmental reports and evaluations
  • Qualitative – gathered by ...

• LACE Assessment Team
  • 4 faculty members – senior/junior faculty
Qualitative data collection

• Clinical learning environments examined:
  • MB BCH – inpatient wards, well baby nursery
  • ZSFG – inpatient wards, intensive care nursery, urgent care

• Methods:
  • Observations – rounds, patient staffing, conferences
  • Individual Interviews – medical students, residents, faculty
  • Focus groups – residents, faculty
  • Email responses
## Observation rubric

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<th>Perceptions of climate (inclusive, respectful, supportive)</th>
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Observation sample

The team consists of pediatrics R3s and family medicine R1s. Since there are no family medicine R3s, there is an inherent hierarchy here.

There is discussion about the nursery RNs, in general positive, but also some blaming like:

“In a baby who had conjunctivitis in one eye, the nurse was using the same towel to wipe both eyes, so now the baby has both eyes red.”

There is discussion about RNs having some implied favoritism. The day R3 says to the night R3, “they like you!” with the reason given that the night R3 spent some time discussing common cultural interests with the RNs:

“The night RNs are a tight crew who frequently have elaborate potlucks … huge … but [with] good Philippine food.”
## Qualitative analysis

<table>
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<th>Quality</th>
<th>Site / Activity / Observer</th>
<th>Opportunities to collaborate/work in (interprofessional) teams</th>
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<tbody>
<tr>
<td>detracting</td>
<td>Site 1 / Observation / Observer A</td>
<td>lack of congeniality, teaching, and collaboration between NPs and learners</td>
</tr>
<tr>
<td>supporting</td>
<td>Site 2 / Observation / Observer B</td>
<td>sought RN input, bedside RN included in rounds</td>
</tr>
<tr>
<td>detracting</td>
<td>Site 2 / Observation / Observer B</td>
<td>not all names known of interprofessional team</td>
</tr>
<tr>
<td>supporting</td>
<td>Site 2 / Observation / Observer C</td>
<td>[no data]</td>
</tr>
<tr>
<td>detracting</td>
<td>Site 2 / Observation / Observer C</td>
<td>primary team with less accountability, deferring to consultants, interprofessional staff did not volunteer impressions - only spoke when asked questions</td>
</tr>
<tr>
<td>supporting</td>
<td>Site 3 / Observation / Observer C</td>
<td>reviewed orders with RNs, RTs made suggestions, included MD and RN perspectives when deciding to “withdraw care”</td>
</tr>
<tr>
<td>detracting</td>
<td>Site 3 / Observation / Observer C</td>
<td>teaching not directed towards nursing, RNs not introduced by name</td>
</tr>
<tr>
<td>supporting</td>
<td>Site 4 / Focus Group / Observer A</td>
<td>important for all staff to be &quot;on the same page&quot;</td>
</tr>
<tr>
<td>detracting</td>
<td>Site 4 / Focus Group / Observer A</td>
<td>“mixed messages” can happen w/o good communication</td>
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Qualitative conclusions: brief, negatives redacted

• Shared goal of healthcare and health professional education: improving health
  • (+) Recognize and value the contribution of learners to patient care

• Collaboration with integration of diverse perspectives (climate)
  • (+) Devote attention to inclusivity, learner viewpoints, and professionalism

• Learning is work and work is learning
  • (+) Create meaningful learner roles via appropriate autonomy and systems support

• Focus on continuous improvement and innovation
  • (+) Promote inquiry and clinical reasoning via innovations in feedback and conferences
Our hope: LACE as a Catalyst for Change

Dialogue between health system and educators

Attention to learner/faculty workload, work content and workflow

Innovative approaches to learning and practice
LACE and you

In your small group, discuss

• How might LACE help you?
• What other resources do you need?