Values, Principles & Practices for Collaborative Learning

— Lessons learned implementing TeamLEAD at Duke University, 2010-2012

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- **1st Year Doctor of Medicine (MS1) Curriculum**
  - *Brain & Behavior* 2011 ($n = 104$)
  - *Brain & Behavior* 2012 ($n = 110$)

- **1st Year Doctor of Physical Therapy (DPT1) Curriculum**
  - *Body & Brain I & II* 2010-2011 ($n = 61$)
  - *Body & Brain I & II* 2011-2012 ($n = 68$)

- **Senior Baccalaureate (undergraduate) University Students**
  - *Functional Anatomy of the Human Brain* 2010 ($n = 18$)
  - *Neurobiology of Learning & Memory* 2010 ($n = 16$)
  - *Neurobiology of Learning & Memory* 2011 ($n = 16$)
  - *Psycho-neuroimmunology* 2011 ($n = 16$)

[Total # learners = 425]
‘Practices’ for Brain & Behavior

Learner Preparation (before class—core knowledge is acquired through assigned readings, guided (online) tutorials, and voice-annotated presentations) [3:1 model*]

Readiness Assessment (in class—core knowledge is assessed individually, then in teams with consensus responses and immediate feedback) [50 min]

Tutorial (in class—faculty expertise reinforces acquisition of core knowledge through lecture or moderated discussion) [20-50 min]

Team Application (in class—core knowledge is applied through diverse learning experiences, including hands-on laboratory work (dissection, exploration, palpation), clinical case analysis, or experimentation) [120 min]

Peer Assessment (after class—daily or weekly—timely and specific feedback is provided through simple mechanisms that are used to weight teamwork credit to individual learner

* For every hour of scheduled time, plan on ≥3 hours for learner preparation.
Motivation for TeamLEAD at Duke

[Duke MS1 Curriculum]
Motivation for TeamLEAD at Duke
Upon reflection after our first year of experience with TeamLEAD...

What have we learned?

Values  Principles  Practices
TeamLEAD practices flow from principles, which embody our values.

Core beliefs & assumptions concerning the identity and responsibility of our learning community
TeamLEAD practices flow from principles, which embody our values.

Concerning **who we are** as a learning community of faculty, staff and professional students, we value …

- optimal health status for ourselves and our patients
- community
- diversity
- cultural competency
- interprofessional competency
- life-long learning
- global citizenship

Concerning **what we do**, we value …

- learner readiness
- collaborative learning
- depth of knowledge within core disciplines
- synthesis of knowledge across core disciplines
- real-time application of knowledge & skill
- effective communication
- responsibility for knowledge & behavior
- professionalism
- expertise
- advocacy
- joy in learning
TeamLEAD practices flow from principles, which embody our values.

Curriculum guidelines that embody our values
In delivering our curriculum, we will …

- promote **well-being, integrity & trust** among members of the learning community
- optimize **learner readiness**
- provide means for timely & specific **learner accountability**
- create diverse learning experiences for real-time **application of core knowledge**
- demonstrate **flexibility & innovation** when putting principles into practice
- role model **professionalism & life-long learning**
- infuse learning with **fun!**

TeamLEAD **practices** flow from **principles**, which embody our **values**.
TeamLEAD practices flow from principles, which embody our values.

Team Application

- diverse learning experiences for real-time application of core knowledge
- demonstrate flexibility & innovation when putting principles into practice
- role model professionalism & lifelong learning
TeamLEAD practices flow from principles, which embody our values.

Values ➔ Principles ➔ Practices

Peer Assessment

- means for timely & specific learner accountability
- promote well-being, integrity & trust among members of the learning community
Learner Satisfaction with TeamLEAD at Duke

- 1st Year Doctor of Physical Therapy (DPT1) Curriculum (3 academic terms)

[unpublished data removed from slide for sharing purposes]
Learner Satisfaction with TeamLEAD at Duke

- Senior Baccalaureate (undergraduate) University Students (Fall 2011)
  - Functional Anatomy of the Human Brain 2011 (n = 16)
  - Neurobiology of Learning & Memory 2011 (n = 16)
  - Psycho-neuroimmunology 2011 (n = 16)

- Recognized by the Dean of Arts & Sciences as among top 5% of all courses in Trinity College (Fall 2011; n ~700), as evaluated by learner course evaluations
Values flow from principles that embody shared values.

Learning was most productive and learner satisfaction was highest when educators and learners shared common values and understood the principles from which the educational practices were derived. Conversely, when values were in conflict and principles opaque, our practices were less productive.

Practices reinforce principles and values.

Learning is most successful when what we do illustrates what we value. Conversely, learning is jeopardized when what we do challenges the principles of our approach and the values that we wish to nurture in our learners.

Learners are responsible what they know and do.

The education of future health professionals demands responsibility for both knowledge and behavior.