

What are the Highly Valued Elements of a Medical School Learning Community Experience and do they Impact Student Outcomes?



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Overview

- Background
- Aim of Study
- Methods
- Results
- Conclusions
- Questions

Background

- ▶ Medical school learning communities (LCs) are designed to optimize student learning or development in a variety of ways
 - ▶ Clinical skills, professional growth, wellbeing, community service, advising, etc.
- ▶ However, we know very little about student outcomes in this regard or even what students value most in a LC
- ▶ We were interested in learning if there is a difference among students who value aspects of the LC highly vs. those that value it less highly (dose-response), in terms of personal, professional outcomes

JHSOM Colleges Advisory Program

Clinical Skills

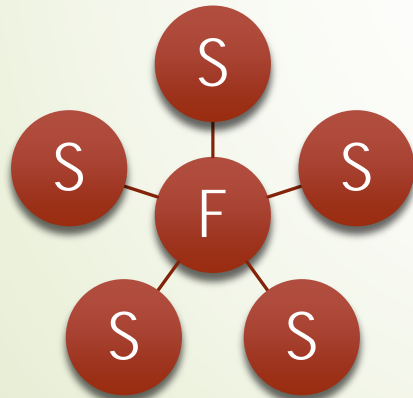
Advising

Professional
Formation

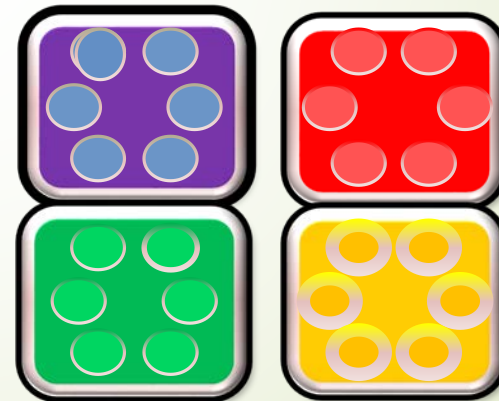
Wellness &
Service

Longitudinal Relationships

Advisory Molecule



Four Colleges



Founded -2005, 24 faculty, 120 students/class; total : 480 students
Focus: academic/career advising, clinical skills instruction

Range of CAP LC Activities



1:1 Academic/
Career Advising



School-wide Events
Inductions, Olympics,
Holiday/End of Year
Parties, Happy Hours



Quarterly
Molecule
Reflections



Class-wide-
Transitions and
Milestones

Aims of Study

- What are the highest value elements of a multi-faceted LC experience for students?
- Is there a correlation between perceived value of LC elements, and:
 - Empathy,
 - Burnout, and
 - Quality of Life?

Methods

- JHSOM CAP annual on-line survey of actively enrolled students
 - Data collected- end of 2015-16 academic year
- Included validated measures:
 - JH Learning Environment Scale¹(JHLES)
 - Burnout (2 questions)
 - Quality of Life^{2,3}
 - Interpersonal Reactivity Index⁴ (IRI) (2 domains)

Survey: Value of LC Components

- *What is the 'value to you' of each of these aspects of the CAP LC?*
 - 5-point Likert scale: Exceptional, A lot, Somewhat, A little, Not at all
 - Components:
 - Peers in molecule, college, outside of college
 - Relationship with advisor
 - Clinical Foundations course
 - Reflective discussions in molecules
 - Social and leadership activities
 - Sense of pride in your College
 - College room

Methods

- Assessed associations between value of LC factors and other student variables.
- Adjusted for individual characteristics and perceptions of the overall learning environment.
- Looked at odds ratios of those who highly valued LC components with empathy, burnout, and QoL scores.

Results- Demographics

Overall Response Rate: 368/480 = 77%

	All N (%)	MS-1	MS-2	MS-3	MS-4
Respondents	368 (100)	98 (26.6)	93 (25.3)	89 (24.2)	88 (23.9)
Ave Age (SD)	26 (4.7)	24.1 (1.9)	26.2(8.2)	26.4 (2.5)	27.4 (2.4)
Male	192 (53)	48 (49.5)	56 (61.5)	49 (56.3)	39 (44.8)
African-Amer	23 (6.4)	6 (6.2)	5 (5.6)	5 (5.8)	7 (8.1)
Latino	25 (6.9)	4 (4.1)	9 (10)	7 (8.1)	5 (5.8)
Asian	122 (33.9)	35 (36.1)	26 (28.9)	37 (42.5)	24 (27.9)
White	172 (47.8)	52 (53.6)	43 (47.8)	31 (35.6)	46 (53.5)
Other	16 (4.4)	0 (0)	6 (6.7)	6 (6.9)	4 (4.7)
Marital Status					
Single	290 (80.1)	88 (90.7)	74 (81.3)	67 (77.0)	61 (70.1)

Results- Value to You of LC Components

% Exceptional (5) and A lot (4)

LC Component	MS-1	MS-2	MS-3	MS-4	p
Peers in Molecule	73%	71%	44%	55%	0.000
Peers in College	55%	71%	34%	48%	0.000
Peers Outside of College	77%	66%	52%	78%	0.000
Colleges Advisor	76%	80%	72%	74%	0.671
Clinical Foundations	86%	83%	74%	78%	0.212
Reflective discussions	36%	48%	35%	47%	0.126
Social activities	49%	55%	25%	47%	0.000
Leadership activities	28%	27%	17%	22%	0.279
Colleges room	68%	80%	58%	57%	0.021
Sense of pride in your college	43%	58%	36%	57%	0.005

Results

The most important aspect of the Colleges experience for you has been (one answer)

LC Component	MS-1	MS-2	MS-3	MS-4	p
Feeling a sense of community at school	23%	26%	16%	23%	0.001
Close relationships with peers	15%	24%	9%	15%	
A trusting, longitudinal relationship with an advisor	32%	29%	60%	42%	
Having a molecule of peers to learn with	26%	15%	12%	14%	
Social activities with peers	3%	1%	3%	5%	
Other	1%	5%	0%	2%	

Results- Highly Valued LC Aspects – Odds Ratios with Empathy, Burnout, & Quality of Life

Bolded # - p < .05

LC Component	IRI empathy	IRI pers	Burnout emotion	Burnout deperson	Good QoL
Peers in Molecule	1.9	1.4	0.9	0.7	2.7
Peers in College	1.9	1.5	0.9	0.6	2.4
Peers Outside of College	1.2	1.2	0.6	0.6	1.8
Colleges Advisor	2.6	1.6	0.6	0.5	1.3
Clinical Foundations	2.1	1.8	0.4	0.3	3.7
Reflective discussions	2.5	3.2	0.9	0.7	1.7
Social activities	1.0	0.9	0.8	0.9	1.9
Leadership activities	0.7	0.8	0.7	0.7	2.1
Colleges room	1.6	1.4	0.8	0.7	1.4
Sense of pride in your college	1.6	1.5	0.8	0.8	2.8



Conclusions

- Several LC elements were associated with better empathy and quality of life and less burnout
- Clinical Foundations course (in molecules) and longitudinal advisors were highly valued and among those valuing these highly, were associated with higher empathy and QoL scores, and lower burnout scores.
- Having a peer molecule (as a social network), social activities, and a colleges room were not as important to these outcomes
- Study Limitations:
 - One institution
 - Cross-sectional design



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