

The Use of Learning Communities to Teach Medical Students Teamwork, Professionalism and the Determinants of Health in a Community Setting

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ABSTRACT:

Introduction/Aims: In 2011, the University of Cincinnati College of Medicine implemented an organ system-based curriculum, which included faculty facilitated learning communities (LC) of 12 students and longitudinal courses relating to primary care, interprofessional care and the physician's role in society. The Physician and Society curriculum emphasizes professionalism, ethics, community and population health, the business and law of medicine and medical humanities. To teach first-year medical students about the determinants of health of a community, foster professionalism when working with colleagues and the community, and develop teamwork skills, the Physician and Society course linked each learning community with a neighborhood and community agency in Greater Cincinnati.

Program Description:

In the fall, each LC completed a community health assessment of their neighborhood, focusing on one determinant of health. This culminated in an adjudicated poster session, with each LC presenting. In the winter, each LC rejoined their community partner for a service-learning project, based on the needs of the community and the needs assessment. Learning communities presented the service-learning outcomes to community members, faculty and peers in the spring.

Program Evaluation:

At the end of each module, students completed a Team Climate Survey, reflections, and course evaluations. The initial Team Climate Survey and reflections were discussed in LC's to facilitate development of teamwork. LC scores improved in 11/15 areas on the Team Climate Survey.

Discussion:

Learning community team identity increased through completion of the modules, working through the phases of team development (forming, storming, norming, performing, re-orienting). The modules allowed the course to use experiential learning to teach the determinants of health, professionalism and teamwork in a community setting utilizing the learning communities.

Lessons Learned:

Challenges included coordination and communication with community partners, communication and development of team building skills within the learning community groups, and division of work within teams.

Physician and Society
Community Assessment Poster Session and Service-Learning Module 2011-12

LC	Community Health Module Topics	Service-Learning Topics
1	A Survey of Access to Health Care in Madisonville	Madisonville Education and Assistance Center Cookbook/Food drive/Monthly Health Activities
2	Unemployment as a Determinant of Health in the West End	St. Vincent DePaul Taking Health Awareness to the Home- Home visit program
3	Nutritional Disparities and Health in Over the Rhine	Freestore Foodbank Cooking demo/recipes for Freestore clients
4	Access and Availability of Reproductive Education and Services in Covington, KY	Center for Great Neighborhoods "Greening and Cleaning Covington"- Licking River Project / community garden prep
5	Aligning Teen Pregnancy with Community Assets in Newport, KY	Brighton Center Promoting nutritious choices and use of fresh food choices in Newport Community
6	Characterizing the Northside Food Swamp to Improve Community Health Status	CAIN (Churches Active in Northside) Reorganization of the food pantry supplemented with dietary health information.
7	Nutrition at Springdale Healing Center	Healing Center Nutrition Buying Guide for Food Pantry at Springdale Healing Center
8	A Study of Healthcare Access & Awareness in East Price Hill	Santa Maria Provider and Exhibitor Connections for the Spring Health Fair
9	Transportation and Implications on Health Care Access of the Su Casa Community	Su Casa Culture in Medicine Integrative Pamphlet for Doctor Visits
10	Access to Mental Health Services in the Avondale Community	Urban League Child Teamwork building workshop
11	Determining barriers in transportation to Lincoln Heights Health Center	Lincoln Heights Healthcare Connection Colon cancer patient education and 5K walk
12	Lower Price Hill Health & Education Assessment	Urban Appalachian Council Design and run a Health Education & Awareness health fair
13	Challenges and Opportunities in Secondary Education: An Assessment of the Walnut Hills Community	Mercy Neighborhood Ministries Developing a collection of health recipes/nutrition resources for low-income women and children
14	Nutrition in OTR: A Solvable Problem	Mercy Franciscan St. John Develop a nutrition education curriculum for the Mercy Franciscan St John to use for their clients.
15	Talk About Sex: Barriers to Sexual Health in Roselawn	Community Action Agency Development of a patient education brochure for Pregnant Mom's program

Physician and Society - Excerpts from Team Climate Survey for Service-Learning Module

What do you feel your learning community gained from working on this team project?

Learning from each other and future patients

I think our learning community gained in two main ways. The first is that we functioned better as a team by listening to each other and being willing to assume responsibility. I think we also gained an insight into the teamwork between us as physicians and our patients in the future. Through one focus group interaction we were able to see the importance of the focus group (or patients) believing in our treatment plan, or in this case being willing to try our food. I feel that was a valuable learning experience for us as a learning community.

Communication with colleagues

I think we learned communication skills and came to better understand one another. While we are all "medical students," we are still very different. This project helped us for the future collaboration we will have with colleagues.

Communicating with patients

I think we gained a better understanding of how to tailor health information to an underprivileged population. I think we learned what is important to them when talking about health information and about nutrition. We learned that on some topics our audience was more informed than we thought, but with each presentation we presented some information that was unfamiliar to them.

Learning about the lives of patients

Going on the home visits was without a doubt an eye-opening experience and I think we all learned a great deal about the factors that cannot affect one's health status that often aren't considered (living situation, socioeconomic status, familial commitments, employment status, etc.) There are many pieces to the puzzle.

Dealing with problems

I think that one of the most important driving forces for bringing a team together is shared adversity in some way. While this project was certainly not an adverse experience in any way, there were times in this project that things did not run as smoothly as they could have regarding communication with our community partner. In this way, we were forced for a couple of weeks to really brainstorm and incorporate ideas from the group at large so that if this situation did not improve, we would have a backup plan of action. These are the kinds of things that are really effective at fostering trust and mutual respect among the members of the group, even if we don't all get along all the time.

Friendships

I think our LC became closer to each other. Since this project started, we have started to see each other more outside of class. I think we all really had fun working on this project together and really enjoy each other's company. I think this project allowed us to meet in a non-academic environment that fostered our friendships.

Did anything surprise you about working as a team on this project?

Stages of forming a team

I was surprised how cohesively we worked together. With all of our med school type A personalities, I expected to be butting heads a lot more. Instead, we built off of each other's ideas.

Learning from each other

We got to know each other better, including our leadership and teamwork styles. We realized our personal strengths and weaknesses when working in a large group dynamic.

Barriers

I was surprised that some of my teammates could be so oblivious to the dynamics of the project and working as a team and were unable to consider other team members' experience of the project.

What strengths did you bring to the team and its outcome?

I feel that I brought a strong team first attitude to our team by being willing to pick up whatever job needed to be done. I also provided some mediation within the team by attempting to provide reason when a disagreement arose.

Regarding teamwork, which skill areas do you think you need to improve upon?

The area where I think I could improve the most upon would be to have an increased patience when dealing with different ideas acknowledging that everyone is at a different point of their lives and as such brings different opinions.

**Physician and Society 2011-12
Team Climate Survey Scores for the
Community Health Module (CH) and the Service-Learning Module (SL)**

Strongly Agree 5 to Strongly Disagree 1	All LC CH Module 1st Semester	All LC SL Module 2nd Semester	P value
In our team we took the time needed to develop new ideas	4.41	4.41	.968
People felt understood and accepted by each other	4.37	4.43	.201
People in our team cooperated in order to help develop and apply new ideas	4.43	4.49	.508
We had a 'we are in it together' attitude	4.42	4.50	.646
People kept each other informed about work-related issues in the team	4.45	4.53	.571
People in our team were always searching for fresh, new ways of looking at problems	4.11	4.09	.898
There were real attempts to share information throughout the team	4.62	4.58	.976
The team was effective at sharing the workload	4.14	4.32	.018*
Completely Agree 5 to Completely Disagree 1			
How far were you in agreement with your team's objectives for the project?	4.28	4.45	.005*
To what extent do you think your team's objectives were clearly understood by other members of the team?	4.27	4.29	.519
To what extent do you think your team's objectives could actually be achieved?	4.03	4.23	.001*
How worthwhile do you think these objectives were to the project?	4.16	3.94	.253
Were team members prepared to question the basis of what the team was doing?	4.22	4.27	.336
Did the team critically appraise potential weaknesses in what it was doing in order to achieve the best possible outcome?	4.13	4.23	.309
Did members of the team build on each other's ideas to achieve the best possible outcome?	4.41	4.42	.761

*P < 0.05 using Mann-Whitney U t-test