

DESIGN AND IMPLEMENTATION OF CASE-BASED COLLABORATIVE LEARNING (CBCL) TEACHING COMMUNITIES AT THE UNIVERSITY OF KANSAS SCHOOL OF MEDICINE

Melissa Quearry, MPA, Giulia Bonaminio, PhD, Joseph Fontes, PhD, Gary Doolittle, MD
University of Kansas School of Medicine

Purpose

In 2017, the University of Kansas School of Medicine implemented an Active, Competency-Based, Excellence driven (ACE) curriculum. A unique self-directed instructional method in the ACE curriculum is case-based collaborative learning (CBCL), where students work collaboratively in small groups, applying previously acquired scientific and clinical knowledge to address clinical cases. Facilitation of CBCLs by non-content-expert faculty led to the creation of CBCL teaching communities. This poster describes the process of developing and measuring the success of these teaching communities.

Methods

Initial facilitator recruitment was by outreach to basic science and clinical departments by members of the planning committee for the new curriculum. Recruitment in subsequent years has been by email solicitation (Figure 1). Small groups of 7-8 students align with 29 facilitator groups (teaching communities). With a total of 49 CBCLs in the first year, each faculty member facilitates 7 CBCLs (Figure 2). Second year is similar. Faculty were intentionally placed into groups to achieve a mix of both basic scientists and clinicians as well as a diversity of disciplines and specialties. Faculty assess student competencies, evaluate each case they facilitate and are evaluated by students at the end of each session.

Figure 1. Faculty Recruitment

Dear Colleague:

The Case-Based Collaborative Learning (CBCL) small groups in the ACE Curriculum have been extremely well received by both students and faculty. We thank the faculty on all three campuses who have participated in this teaching activity.

We are recruiting early for next year's facilitators and ask that you please indicate your availability below.

Please indicate (X) your 2020-21 commitment to facilitate by December 13, 2019:

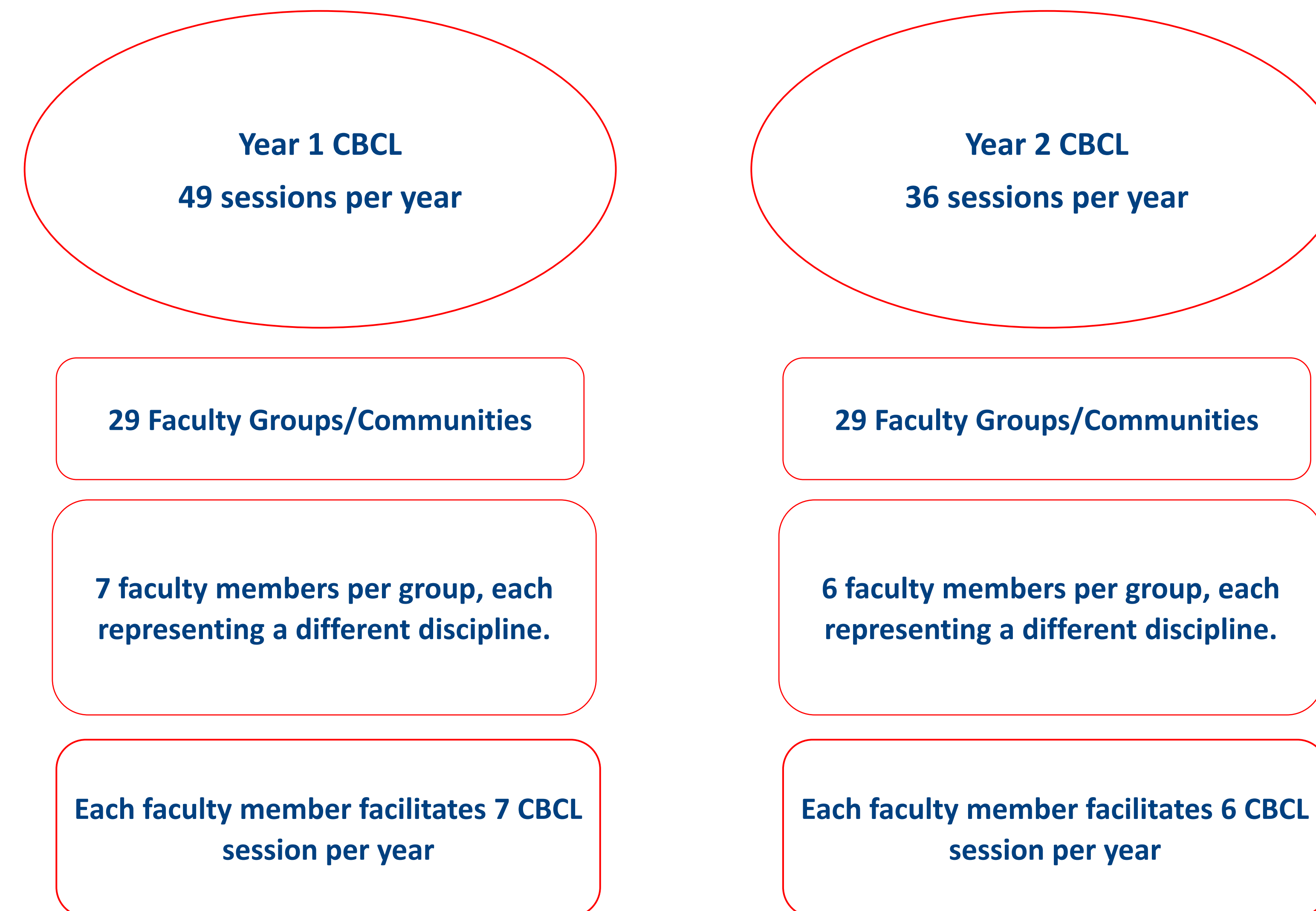
Year 1 CBCL sessions (7 sessions)
 Year 2 CBCL sessions (6 sessions)
 Both Year 1 and Year 2 CBCL sessions (13 sessions)

Year 1 sessions
 Wednesday afternoon from 1-3 pm
 Friday morning from 9-11 am
 7 faculty per Teaching Community, each facilitating 7 sessions

Year 2 sessions
 Wednesday morning from 9-11 am
 Thursday morning from 9-11 am
 6 faculty per Teaching Community, each facilitating 6 sessions

Faculty effort for CBCL facilitation is included in SOM departmental budget allocations.

Figure 2. Creating Faculty Groups/Communities



Results

Facilitator attrition is low, with more than 80% remaining in the program since its implementation in 2017. More than 80% of CBCL faculty facilitate cases in both years 1 and 2. Basic science faculty members representing 10 basic science departments make up 39% of facilitators and clinical faculty members from 19 clinical departments make up 61%. Faculty interest in joining communities is high through encouragement from current facilitators and department chairs, and faculty effort for CBCL participation is included in departmental budget allocations. Faculty participation in CBCL faculty development opportunities is high with 83% of medical school faculty participating in facilitation workshops between August 2016 and September 2018.

Facilitators are regularly asked to provide feedback on CBCL cases, providing input on content, case authenticity and student faculty with tasks. This feedback supports continuous quality improvement efforts and provides case authors with information necessary to ensure that appropriate learning objectives are identified and addressed in case material.

The continuity of facilitators in each group provides an opportunity for faculty to build close relationships with their students over the course of the year, or years. This enables facilitators to more accurately assess student competencies and growth over time.

"I really enjoy facilitating CBCLs. The process is engaging and interaction within the small group fosters mutual learning relationships."
- Facilitator, M1 & M2

An important element of the ACE curriculum is the integration of basic and clinical sciences. By intentionally creating faculty groups with a mix of both basic scientists and clinicians from diverse disciplines and specialties, faculty are afforded the opportunity to collaborate with colleagues across disciplines.

"It (CBCL) is also a great opportunity for me to brush up on foundational medical knowledge while giving the students a peek into how certain disease processes pertain to my every day life as a palliative care physician."
- Facilitator, M1 & M2

Student evaluations show across academic years and different classes, the majority of students (80% or >) were satisfied with the overall value of CBCLs in the curriculum (Figure 3).

Figure 3

Overall value of the CBCL large group					
1190	3.81	4	4	1.00	
Overall value of CBCL session(s)					
1190	4.11	4	4	0.80	

Conclusions

Participation in CBCL teaching communities has produced a large and committed cadre of faculty invested in the ACE curriculum and CBCL. Faculty satisfaction with CBCL has increased interest in facilitation and in the curriculum as a whole.

References

Krupat, E, Richards, J, Sullivan, A, et al. Assessing the effectiveness of case-based collaborative learning via randomized controlled trial. Acad Med. 2016 May;91(5):723-9.

For questions or comments, please contact Melissa Quearry, mquearry@kumc.edu.