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Community-Engaged Pedagogy: A Strengths-Based Approach to Involving Diverse Stakeholders in Research Partnerships

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Abstract

Background—To help build community capacity to partner in translational research partnerships, new approaches to training that incorporate both adult learning models and community-based participatory research (CBPR) are needed.

Objectives—This article describes the educational approach—“community-engaged pedagogy”—used in a capacity-building training program with community partners in Boston. Drawing from adult learning theory and CBPR community-engaged pedagogy embraces co-learning and is rooted in a deep respect for the prior knowledge and experiences that community partners bring to the conversation around CBPR. This approach developed iteratively over the course of the first year of the program. Participating community partners drove the development of this educational approach, as they requested the application of CBPR principles to the educational program.

Methods—The dimensions of community-engaged pedagogy include (1) a relational approach to partnership building, (2) establishment of a learning community, (3) organic curriculum model, (4) collaborative teaching mechanism with diverse faculty, and (5) applied learning.

Conclusions—Using a community-engaged pedagogical approach helps to model respect, reciprocity, and power sharing, core principles of CBPR. Although community partners appreciate this approach, traditionally trained academics may find this method unfamiliar and uncomfortable.

Keywords

Education; community-based participatory research; community health partnerships; community health research; power sharing; process issues

Community engagement is a critical vehicle by which to assure that clinical and translational research is trans formative and translational.¹ Engaging communities has the potential to reduce the cultural distance between academic researchers and the communities in which they work, improve the relevance of research questions to a variety of community needs, diversify the pool of potential research participants, and increase the uptake of research findings into both clinical practice and public health programming.^{2,3} As such, facilitating community engagement is a priority area for universities with Clinical and Translational Science Awards (CTSAs). This paper describes Building Your Capacity: Advancing Research through Community Engagement (BYC), a training program developed by academic researchers and community leaders that was designed to improve the research readiness of community-based organizations and community health centers.

BACKGROUND OF THE BYC

Boston-area CTSAs sites (Tufts University, Harvard University, and Boston University) collaborated with two community partners, the Center for Community Health Education Research and Services, Inc., and the Somerville Immigrant Services Providers Group/Health to develop and implement BYC, a novel educational program for community leaders. The community engagement components of these three CTSAs sites consisted of researchers from across the universities and representatives from CTSAs community partner organizations.

Both the Tufts and Harvard CTSAs had facilitated conversations with community organizations to share CTSAs news and events and to gain community perspectives on priority areas. In addition, the Tufts Clinical and Translational Science Institute (CTSI) conducted a qualitative study examining community conceptualizations of clinical and translational research and barriers to community research partnerships. This research indicated that community partners were interested in research partnerships that are participatory, community driven, and address pressing concerns faced by the community.⁴ Furthermore, bi-annual community conversations and academic–community steering committee meetings brought to light a fact that has been documented in the literature: research partnerships require effort, including capacity building, among both community and academic stakeholders.^{5–9} The Somerville Immigrant Services Providers Group/Health advocated that developing a program to enhance community capacity was a logical next step of these conversations. Funded by the National Center for Research Resources, BYC was implemented to build the research related knowledge of local community leaders and to promote community engaged research partnerships.

COMBINING CBPR AND ADULT EDUCATION: A FRAMEWORK FOR EMPOWERMENT EDUCATION

Development of the BYC Curriculum

Twelve representatives from the three Boston area CTSAs and two community organizations made up the BYC Steering Committee (BYC-SC). BYC-SC members included individuals who identified as African American, Jamaican, White American, and Chinese American. The BYC-SC brought experience in medicine, social policy, public health, urban planning, education, and community organizing. Some of the academic

partners identified as being from underrepresented communities and some had extensive experience in community work as community organizers, educators, and community-based clinicians. Both of the community partners had actively participated in CBPR projects with academic researchers as co-investigators. The focus on capacity building reflected what many of them had learned through prior work with urban communities.

Members of the BYC-SC actively participated in all aspects of the program including outreach and recruitment of participants (termed “Fellows”), curriculum development, selection of Fellows, consultation, and evaluation of the overall program. The two community partners actively participated in these subcommittees and shared equal decision-making authority over the curricular and program development with the academic partners.

Further community input was gathered with respect to the format and content of the BYC program through feedback from members of the Tufts CTSI's Community Advisory Council and focus groups with additional community members. This input emphasized the importance of respecting the prior knowledge and skills of the BYC Fellows and bidirectional learning.

Theoretical Basis of BYC Curriculum

The BYC-SC drew on principles of CBPR and adult learning theory to guide the curricular model. Adult learning principles acknowledge that adult learners bring a wealth of experience to the classroom and build on personal self-direction.¹⁰ Self-directed learning theory recognizes that adult learners want the knowledge gained in the classroom to be relevant to their life and work.^{11,12} Therefore, to make learning relevant for adults, these perspectives argue that learners must be part of the learning process as actors, not as passive recipients.¹³ In adopting this approach, adult education becomes a transformative process that contributes to community empowerment.¹⁴

Because CBPR also embraces principles of community empowerment, it can provide the opportunity for using education to promote social action.^{15,16} CBPR, as an approach to research, attempts to draw on the strengths and resources inherent in academicians and community partners to create a research partnership defined by mutual trust, participation, and respect.¹⁷ In building these partnerships, CBPR embraces principles of co-learning and attempts to equalize the uneven power relationships between academics and community partners while creating actionable knowledge.¹⁸⁻²⁰

Using the process of critical reflection in learning environments can challenge adults to rethink previously held assumptions and beliefs.²¹ In this process, learning can become a transformative process as adult learners learn to interpret their experiences in ways that guide appreciation, understanding and action.²² Through critical reflection, new systems of meaning and understanding can be created.

Over the first year of the program, BYC-SC crafted the curricular framework “community-engaged pedagogy” in dialogue with the Fellows. Community-engaged pedagogy embraces grounding in the theory, methods, and language of research while engaging openly in dialogue about shifting the power differentials between academic institutions and

community partners. This educational approach to training teaches the principles of CBPR as the trainers model principles of respect, reciprocity, and power sharing, making the BYC training sessions a laboratory for CBPR.

Description of BYC

We used a competitive application process to select the community Fellows for the first cohort of BYC. A request for applications was distributed through various local and national list-serves. This generated broad interest. Of the 38 applications received from throughout the New England region, 14 individuals representing 10 community-based organizations were chosen by a subcommittee of the BYC-SC. Attention was paid to race/ethnicity, location/neighborhood, level of research readiness, and the health focus of the organization with the goal of producing a group that represented the diversity of the greater Boston area.

Fellows and their respective organizations were paid an honorarium for participating in the program. Fellows received \$1,500 and their organization received \$3,500. At the start of the training program, the Fellow and the organization signed a memorandum of understanding stipulating expectations for participation in the program and what the Fellows and their organizations could expect from the BYC-SC.

Core Components of Community-Engaged Pedagogy

Relational Approach to Partnership Building—One month before the training began, members of the BYC-SC conducted site visits at the participating organizations. The purpose of these site visits was two-fold: To begin to establish a working relationship with the participating organizations and to collect the baseline data for the evaluation. Those present at these initial meetings included the executive director, the Fellow(s), other staff members, and two members of the BYC-SC. During site visits, some organizations cited prior negative experiences in working with researchers. As such, BYC-SC members sought specifically to establish a sense of mutual partnership, encourage open communication, and acknowledge the impact of past experiences on present-day perceptions of researchers.

When the BYC program started, Fellows were paired with a research consultant, who was also a member of the BYC-SC. Both academic and community partners from the BYC-SC participated as research consultants. The research consultant met monthly with the Fellow(s) to provide support and technical assistance around research planning and design.

Establishment of a Learning Community—During the first training session, Fellows collectively generated ground rules for group discussions. Team-building activities, such as ice breakers, were employed to facilitate relationship building and trust among Fellows and BYC-SC members. The diversity of the group proved to be a rich and fertile environment for lively discussion and debate throughout the five months of the program. An additional goal of the BYC-SC was to create an interactive learning community because we were committed to developing a milieu in which Fellows could be resources to each other and us. In their evaluations, Fellows repeatedly pointed to their peers and the learning community as some of the key strengths of the program.

Organic Curriculum Model—Table 1 outlines the specific learning objectives of each training session as well as the major activities. The BYC-SC used information gained from the baseline interviews to prioritize curricular components, develop group activities, and frame the discussion for the first few training sessions. At the end of each training session, verbal feedback and a 2-page, written evaluation were gathered from the Fellows, asking for the strengths of the training to date and seeking suggestions for improvement. Feedback from the first session confirmed the importance of continuing this method of garnering feedback to guide subsequent curricular development. The BYC-SC met monthly as a group to discuss the feedback and make curricular adjustments.

Collaborative Teaching Mechanism With Diverse Faculty—Early in the training program, the BYC-SC learned a very important lesson. The Fellows cared about how they were being taught. One session had incorporated a didactic presentation by a group of outside trainers. The immediate feedback from the Fellows was that they felt “talked down to” by the presenters. They maintained that they wished to be treated as equals to those who were presenting the training content.

The BYC-SC incorporated a mix of teaching tools: readings, a film, and group activities, in addition to didactic presentations. For example, one of the training sessions included discussion of the film “Miss Evers’ Boys”²³ to talk about research ethics. Another session consisted of a role play between a BYC-SC member and one of the Fellows modeling how to think through a research question. Most trainers came from BYC-SC academic and community institutions and were diverse in terms of race/ethnicity, gender, and prior education and training.

Applied Learning—Participation in BYC required that the Fellows develop a proposal for a research plan for their organizations. The research plan was an opportunity for Fellows to think about how best to build capacity for research into their respective organizations. With this flexibility, Fellows developed a range of strategies, such as co-writing CTSI pilot research grants with their research consultants, developing program evaluation tools, or establishing a set of guidelines for working with academic researchers. Table 2 outlines the Fellows’ proposed plans for research projects and next steps for implementing the plans.

Evaluation Methods

Human subjects approval was obtained from the Tufts Medical Center Institutional Review Board. Four mixed methods approaches were used: (1) Pre- and post-survey data, (2) pre- and post-qualitative interviews, (3) participant observation and narrative reflection of training sessions and BYC-SC meetings, and (4) evaluations at the end of each training session, which included a short survey and open-ended questions. Survey and interview data was collected from Fellows one month before the start of the training session and one month after the training by two members of the BYC-SC. The evaluation data were used throughout the training program in a continual feedback loop to make curricular and programmatic adjustments based on the needs and priorities of the Fellows.

Sample—Table 3 provides basic demographics of the first cohort. We note that the high proportion of community partners with masters and doctorate degrees may not be representative of the larger community.

Measures—Four measures were used for evaluative purposes. First, a survey was developed. All competencies queried are listed in Table 4. Fellows were asked to rate such competencies on scale of 1 (*low*) to 5 (*medium*) to 10 (*high*). Second, semistructured, qualitative interviews were conducted with Fellows that asked about their prior experience with academics and research partnerships, goals and expectations of the training, and confidence in approaching and being approached by researchers. Third, session evaluations asked Fellows to rank the speakers and activities, to comment on one to two lessons they learned, and indicate what else they wanted to learn in relation to the day's topic. Last, the BYC program manager recorded observational field notes and wrote narrative reflection logs. This was useful in documenting the process of engagement and the bidirectional learning of both Fellows and the BYC-SC. Field notes were particularly useful in documenting the learning of the BYC-SC.

Analysis—Survey data was analyzed using SAS Version 9.2 (Cary, NC). Because of the small sample size ($N = 11$) and non-normally distributed data, we used the exact binomial sign test and report medians and the 25th to 75th percentiles rather than reporting means.

All interviews were tape-recorded and transcribed for analytic purposes. A team of four members of the BYC-SC collaboratively developed the codebook and each transcript was coded by two people using a process of consensus coding. Field notes were also coded using a process of thematic coding. Once the coding scheme was agreed upon by the two coders, the codes were entered into NVIVO. Themes from the interviews and field notes were compared with each other and summary reports of themes were generated. These themes were presented to a group of BYC Fellows who concurred with the analysis and provided feedback to the research team.

RESULTS

In this pilot year of BYC, research capacity building for health improvement was defined as strengthening the ability of the participating Fellows to do health research. Table 4 indicates the Fellow's perceptions of gains in knowledge and research skills. Fellows gained knowledge and skills through the training sessions as well as by working on their respective organizational research plan. Although certain knowledge and skills were not part of the original curriculum, Fellows gained skills in most aspects of research by doing this plan. For example, several learned how to develop surveys and code qualitative data. Because of multiple ways of learning skills, Fellows indicated a significant change in most domains in their perceived ability to conduct a task related to research. The domains in which Fellows did not indicate a significant change were conducting a literature review, recruiting participants into a study, and using research to inform policymaking. Given that the curriculum changed during the training program owing to Fellows' feedback, some of the competencies the BYC-SC initially set out to incorporate into the training did not become the curricular priorities of the Fellows.

In addition to technical research skills, Fellows gained confidence and fluency in a variety of other skills necessary for successfully engaging in research partnerships with academics. Six themes emerged from the data and are described briefly below with sample quotes by the Fellows listed in Table 5.

Confidence

Before BYC, many Fellows had expressed hesitation and a feeling of being intimidated in working with academic researchers. In the post-interviews, most of the Fellows described feeling more confident conducting research themselves and collaborating with academic investigators on projects. Even for those individuals who seemed to indicate no change or a decline in confidence level, they also indicated an increase in knowledge that enabled them to be more discriminating in their decisions to enter research partnerships.

Research Competency

Fellows felt that they had gained an overall understanding of the research process and how research works. They also noted that their participation in BYC demystified the research process, and they learned the language of how to talk about research with academics. One noted that she felt “armed with knowledge” about both how to talk to her community about the benefits of research and how to talk to researchers about the benefits of involving communities.

Negotiation Skills

By gaining research knowledge and skills, Fellows felt they had learned to “hold their own” in discussions with researchers. Fellows reported learning important negotiation skills that would enable them to engage in more equitable partnerships because they felt they had learned what questions to ask, where the potential pitfalls might exist, and how to negotiate research relationships that could benefit their communities.

Responsiveness

Most Fellows agreed that the BYC-SC was “responsive” to their needs, with one Fellow noting, “The best part of [the program] was it allowed us to develop what we wanted.” This flexibility provided the opportunity for each Fellow to appropriately apply the course content to his or her respective community.

Seeing Fellows as Equals

At the outset of BYC, one Fellow admitted, “I thought it was going to be very didactic and lecture based, like a classroom.” Instead, throughout BYC, the Fellows found themselves to be “actors in the process.” After the first session, one Fellow remarked that she had been made to feel like “an expert,” and another commented that he felt as though the program was “community centered.” The Fellows felt empowered by the process when they were treated as peers and felt that the experience, knowledge and skills they brought valued.

Bidirectional Learning

Fellows commented on the successful creation of a learning environment that embraced co-learning. Emphasis was placed on the understanding that Fellows themselves could be co-teachers to each other and to the BYC-SC. The Fellows became comfortable challenging those members of the BYC-SC who conducted the individual training sessions and driving the conversation and curricular content.

Last, participant observation highlighted changes in the BYC-SC's planning processes and the teaching styles of some of the academic partners. Monthly meetings of the BYC-SC included lively discussion during which the BYC-SC gradually came to a common understanding that the training approach must be bidirectional. Although this was not an explicit intention of the BYC-SC when we conceived the training, we quickly adopted this perspective because of what we were learning from the Fellows. For some members of the BYC-SC, the community-engaged pedagogical approach was a new concept and approach to teaching. This process of developing and implementing an organic, responsive curriculum encouraged them to create a teaching approach that embraced co-learning. As learners as well, the BYC-SC practiced openness and transparency with each other and with the Fellows when things did not go well or as planned. As one Fellow observed, "You used evaluation in every session that we had. . . . It was a good model showing us how evaluation can work to develop something. It was like a laboratory almost. We saw you developing your own piece with you [BYC-SC] being a learner."

RECOMMENDATIONS AND LESSONS LEARNED FOR MOVING FORWARD

Because the BYC-SC did not anticipate the extent to which they themselves would be changed by this program, we did not collect pre and post data about the BYC-SC. Others seeking to create a similar program are advised to do so, because this may more substantially illuminate how programs like BYC can foster a bidirectional relationship between academics and community partners.

Second, this experience demonstrated to the BYC-SC that additional work must be done to build the capacity of academics to work with communities. Members of the BYC-SC have done in-service training for physicians on CBPR, whereas other members have begun to develop curriculum that trains academics how to work with communities around research.

Last, another unanswered question for the BYC-SC is how to sustain the relationships built between the three CTSA sites and the Fellows as well as between the Fellows After the training is over. Some of the Fellows have gone on to successfully collaborate with researchers from one of the three CTSA sites on funded grant opportunities. Additionally, the BYC Program Manager is currently engaging the Fellows in conversations about the dissemination of the findings from BYC. Some Fellows have volunteered to co-author more practitioner and policy-oriented documents for distribution beyond academic venues. Less intensive models are also being considered and alternative funding mechanisms sought that target specific neighborhoods or specific clusters of organizations with similar missions. Clearly, funding opportunities must also be available to support the development and maintenance of these types of partnerships.

CONCLUSION

The Importance of Combining CBPR and Adult Learning for Community Capacity Building and Empowerment

With the increasing attention, focus, and emphasis on community-engaged research to address health inequities at the national level, community-engaged pedagogy offers a framework for thinking about how to build the capacity among community organizations to participate in research partnerships in ways that foster mutual respect and demonstrate the power of co-learning. Community leaders learn to see academics as allies and academics learn to see community partners as co-equals. This process of learning draws on the strengths and assets of both academic and community partners.

Community capacity building for research involves more than training community partners in the mechanics of research. It also involves engaging academics and community partners in an educational process that pays attention to both what is learned, as well as how that learning is happening. In this approach, academicians need to relinquish the control they are often accustomed to having in traditional academic research settings. Although this may be uncomfortable for researchers who are accustomed to assuming the role of the expert, letting go of this control opens up the possibility of fostering the type of “productive power” necessary in community academic research partnerships.²⁴ Mutually respectful and beneficial engagement can help to shift the culture of research and form genuine and meaningful research partnerships that lead to better informed, more relevant research, and by extension the potential for improved health outcomes.

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REFERENCES

1. Researchers and their communities: The challenge of meaningful community research. National Institutes of Health; Washington, DC: 2008. The Clinical and Translational Science Award

Consortium's Community Engagement Key Function Committee and the CTSA Community Engagement Workshop Planning Committee.. Summary Report

2. Syme SL. Social determinants of health: The community as an empowered partner. *Prev Chronic Dis.* 2004; 1(1):A02. [PubMed: 15634364]
3. Wallerstein N, Duran B. Community-based participatory research contributions to intervention research: The intersection of science and practice to improve health equity. *Am J Public Health.* 2010; 100:S40–46. [PubMed: 20147663]
4. Martinez LS, Rubin CL, Russell B, Leslie LK, Brugge D. Community conceptualizations of health: Implications for transdisciplinary team science. *CTS-Clin Transl Sci.* 2011; 4(3):163–167.
5. Hawe P, Noort M, King L, Jordens C. Multiplying health gains: The critical role of capacity-building within health promotion programs. *Health Policy.* 1997; 39(1):29–42. [PubMed: 10164903]
6. Griffith DM, Allen JO, DeLoney EH, et al. Community-based organizational capacity building as a strategy to reduce racial health disparities. *J Prim Prev.* 2010; 31(12):31–39. [PubMed: 20127281]
7. Ferman B, Hill TL. The challenges of agenda conflict in higher-education-community research partnerships: Views from the community side. *J Urban Aff.* 2004; 26(2):241–257.
8. Freeman ER, Brugge D, Bennett-Bradley WM, Levy JI, Carrasco ER. Challenges of conducting community-based participatory research in Boston's neighborhoods to reduce disparities in asthma. *J Urban Health.* 2006; 83(6):1013–1021. [PubMed: 17103339]
9. May M. CBPR as community health intervention: Institutionalizing CBPR within community based organizations. *Prog Commun Health Partnersh.* 2008; 2(2):1–15.
10. Merriam, SB.; Caffarella, RS. *Learning in Adulthood: A comprehensive guide.* Jossey-Bass Inc; San Francisco: 1999. The learning transaction with adults.; p. 267-340.
11. Garrison DR. Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly.* 1997; 48(1):18–33.
12. Knowles, M. *Self-directed learning.* Follett; Chicago: 1975.
13. Bryan RL, Kreuter MW, Brownson RC. Integrating adult learning principles into training for public health practice. *Health Promot Pract.* 2009; 10(4):557–563. [PubMed: 18385488]
14. Mayo, P. *Gramsci, Friere and adult education: Possibilities for transformative action.* St. Martin's Press; New York: 1999.
15. Shalowitz MU, Isacco A, Barquin N, et al. Community-based participatory research: A review of the literature with strategies for community engagement. *J Dev Behav Pediatr.* 2009; 30(4):350–361. [PubMed: 19672162]
16. Minkler M. Community-based research partnerships: Challenges and opportunities. *J Urban Health.* 2005; 82(2 Suppl. 2):3–12.
17. Israel BA, Schulz AJ, Parker EA, Becker AB. Review of community-based research: Assessing partnership approaches to improve public health. *Annu Rev Public Health.* 1998; 19:173–202. [PubMed: 9611617]
18. Goldberg-Freeman C, Kass NE, Tracey P, et al. “You've got to understand community”: Community perceptions on “breaking the disconnect” between researchers and communities. *Prog Community Health Partnersh.* 2007; 1(3):231–240. [PubMed: 20208285]
19. Leung MW, Yen IH, Minkler M. Community based participatory research: A promising approach for increasing epidemiology's relevance in the 21st century. *Int J Epidemiol.* 2004; 33(3):499–506. [PubMed: 15155709]
20. Horowitz CR, Robinson M, Seifer S. Community-based participatory research from the margin to the mainstream are researchers prepared? *Circulation.* 2009; 119(19):2633–2642. [PubMed: 19451365]
21. Mezirow, J. How critical reflection triggers transformative learning. In: Mezirow, M., editor. *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning.* Jossey-Bass; San Francisco: 1990. p. 120
22. Taylor, EW. Fostering transformative learning. In: Mezirow, J.; Taylor, EW., editors. *Transformative learning in practice: Insights from community, workplace, and higher education.* Jossey-Bass; San Francisco: 2009. p. 3-17.

23. Sargent J. Miss Evers boys. HBO Home Video. 2001
24. Wallerstein, NB.; Duran, B. The theoretical, historical and practice roots of CBPR. In: Minkler, M.; Wallerstein, N., editors. Community-based participatory research for health: From process to outcomes. Jossey-Bass; San Francisco: 2008. p. 25-46.

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Table 1**BYC Learning Objectives and Major Activities**

Session	Learning Objectives	Major Activities
Introduction to Research: Full-Day Session	<ul style="list-style-type: none"> • Network and build a learning community • Identify key features of community-academic collaborative research • Identify potential research projects for your organization 	<ul style="list-style-type: none"> • Ice-breakers • Ground rules • Drawing activity about research and activism • Pair-share on prior experiences with research • Presentation on Community Collaborative Research • Meetings with research consultant
Academic-Community Partnerships: Half-Day Session	<ul style="list-style-type: none"> • Identify the similarities and differences between traditional research and CBPR • Identify how to create a collaborative research partnership • Define appropriate roles within partnership • Identify the benefits and challenges of CBPR 	<ul style="list-style-type: none"> • Temperature check • Presentation on “Doing Community-Minded Research in Lawrence, MA” • Presentation on CBPR project: “Accessing and Controlling Occupational Safety and Health in Somerville, MA”
Institutional Review Boards and Ethics: Half-Day Session	<ul style="list-style-type: none"> • Understand how voluntary informed consent is at the center of research ethics • Learn what an IRB is and why they exist • Identify how the community looks at ethics • Learn knowledge and skills to advocate for one's community regarding ethical research 	<ul style="list-style-type: none"> • Discussion of “Miss Evers Boys” • Group discussion: What is ethical research in communities? • Presentation: Human Subjects and Institutional Review Boards
Research Design: Full-Day Session	<ul style="list-style-type: none"> • Identify how research fits into community work • Learn the basic elements of research design • Apply the lessons learned about research design to your own projects 	<ul style="list-style-type: none"> • Ice-breaker: Perception • Group discussion: Pros and cons of using research to address community problems • Small group activity: CBPR case studies • Presentation: Research design • Meeting with research consultant
Research Design II: Half-Day Session	<ul style="list-style-type: none"> • Expand the discussion on research design • Provide peer feedback about their research plans 	<ul style="list-style-type: none"> • Role play: Refining research questions • Small group activity: Peer feedback on research projects
Policy and Graduation: Full-Day Session	<ul style="list-style-type: none"> • Learn about a successful CBPR example • Learn about the national role of CBPR 	<ul style="list-style-type: none"> • Presentation: CBPR project on diabetes and hypertension • Presentation: CBPR and policymaking

Table 2

BYC Fellows' Research Plan

Description of Fellows' Organization	Proposed Plan	Next Steps
Community-Based Organization Focused on Asian American Children and Families in Boston Chinatown	Survey and focus groups to better understand perceptions that parents and youth have about parent involvement	Survey results used to inform programming for how to involve parents in youth work
Community-Based Organization Focused on the Brazilian Community in Greater Boston	Historical narrative of health issues identified by Brazilian women	Submission of a grant application to Harvard Catalyst CBPR seed grants
Community-Based Organization Serving the Latino Community in Rhode Island	Survey and key informant interviews to better understand HIV/AIDS-related risk and protective attitudes and behaviors in the area of sexual health among Latino men.	Submission of a grant application to the Tufts CTSI Pilot Grants
Coalition of Community Partners in Central Massachusetts	Plan to create a similar program to BYC in Worcester, targeting service providers in the area	Plan to organize a legislature's breakfast to raise the level of conversation about CBPR in the community.
Community Development Organization in Roxbury, MA	Surveys to assess organizational success in fulfilling its purpose and mission	Additional conversations about how to respond to academics who approach the organization for research partnerships
Community-Based Organization Focused on Asthma in Boston's Low-Income Communities	Research project to better understand the extent to which in-home health hazards inhibit healthy and safe learning environments in family childcare facilities	Submission of a grant application to the Tufts CTSI Pilot Grants
Community Based Organization Focused on HIV/AIDS in African American and African Immigrant Communities	Create a set of guiding documents (based on the Lawrence MA example) for engaging with academic researchers	Development of guiding documents that the organization uses as talking points when outside researchers approach them to collaborate on research
Community Health Center in Dorchester, MA	Research methodologies that will help with the design and evaluation of programming that addresses health needs of clients	Submission of a grant application to Harvard Catalyst CBPR seed grants
Community-Based Organization Focused on Depression in Low-Income Women in Cambridge, MA	Program evaluation to better understand needs and decisions of program participants	Survey results used to inform current programming
Community-Based Organization Focused on Immigrants in Somerville, MA	Use social networking as a tool to promote immigrant health	Continued planning of how to strengthen existing research partnerships with Tufts

Table 3Demographics of BYC Fellows ($N = 14$)

	<i>n</i>	%
Gender		
Female	13	93
Male	1	7
Ethnicity		
Black	3	21
Latino/Hispanic	2	14
Asian American	3	21
White	4	30
Other	2	14
Highest Education Level Attained		
Some college	4	30
Bachelor's degree	3	21
Master's degree	5	35
Other professional degree	2	14

Table 4

Perceptions of Knowledge and Skills Gained

Item	<i>n</i> (Population)	PRE Score (Median) 25th-75th Percentile	POST Score (Median) 25th-75th Percentile	<i>p</i> Value from Exact Binomial Sign Test
Describing community academic collaborative research	10	6.0 (5.0-7.0)	9.5 (8.0-10.0)	< 0.001
Identifying a research question	9	6.0 (4.0-6.0)	7.0 (7.0-8.0)	0.04
Conducting a literature review	10	5.0 (4.0-7.0)	7.5 (4.0-9.0)	0.34
Identifying ethical issues that may arise in a research study	11	5.0 (4.0-7.0)	9.0 (7.0-9.0)	0.01
Recruiting participants into a study	11	7.0 (5.0-10.0)	9.0 (5.0-10.0)	0.23
Designing a survey	11	5.0 (4.0-5.0)	8.0 (6.0-9.0)	< 0.001
Developing a codebook	11	2.0 (1.0-3.0)	7.0 (2.0-8.0)	0.01
Coding data	11	2.0 (2.0-4.0)	7.0 (3.0-9.0)	0.01
Developing a data management plan	11	2.0 (1.0-4.0)	8.0 (5.0-9.0)	< 0.001
Writing a research proposal	11	4.0 (2.0-5.0)	8.0 (7.0-9.0)	0.01
Writing a research report	11	4.0 (2.0-5.0)	8.0 (4.0-9.0)	< 0.001
Disseminating research results to an academic venue	10	3.5 (2.0-4.0)	8.5 (7.0-9.0)	< 0.001
Using research to inform policymaking	11	7.0 (5.0-9.0)	8.0 (5.0-9.0)	0.55

Table 5

BYC Fellows Perspectives and Voices

Theme	Quote
Confidence	I feel like listening and learning from my colleagues at the Fellowship has given me a voice that I thought that I didn't have but I did and I feel that I can talk more with colleagues who are doing the same work and I can find ways and avenues in which we can collaborate . . . and I feel that I can talk to collaborators and academics and even community partners who are doing similar work but maybe in different fields and engage in a conversation with them as it relates to CBPR.
Research Competency	I sat in a meeting yesterday talking about the research project, and I found myself asking questions that I probably wouldn't have asked before. I probably would have sat there and said, "Okay, I'll ask somebody else after the meeting." But I felt comfortable asking the questions of the academic researcher. So that was really good.
Negotiation Skills	I think I would say negotiation in terms of coming to the table and the expectations, what to ask for in regards to the partnership, research partnership among communities and not on terms of financially but in terms of like, you know, data sharing and information sharing, those types of things, and not being afraid in terms of not being limited due to lack of understanding of institutional terms, research terminologies and understanding the scientific aspect of research.
Responsiveness	A big strength was the efforts on your guys' part to keep it relevant and respond to our needs. It seemed you were taking into account our evaluation. It seemed you had a plan and when it was realized, there were adjustments made. It was flexible to meet the needs of the participants. The openness and willingness for the researchers to listen to the community actively. You had a vision and the vision wasn't static. It was organic.
Seeing Fellows as Equals	Empowerment is being heard, being respected, being listened to. Knowing that even though individuals came from different organizations and had different titles, we were there to learn and receive knowledge. That was a big thing for me. No one disrespected anyone else. That meant a lot.
Bidirectional Learning	You had the wisdom or recognized that those coming to the training were not first time students. There were people who had different knowledge and training and had a lot of experience and things they were working on. . . . When you train someone, you set out the skills and this is how you do it. Here, there was the possibility of change.