

Table 1: The enhancement of scientific rigor in research through community engagement
Prepared by: Collaborative Peer Review Workgroup Member Yvonne Joosten (Vanderbilt University)

Different research approaches and methodologies are appropriate to answer different questions. Conventional research methods, such as randomized clinical trials, are the best way to answer certain questions, but do not effectively address questions of health care and health outcomes, or the translation of research into interventions and policies to address health issues related to socioeconomic and minority status. Community-engaged strategies, such as Community-based Participatory Research, can address such issues more effectively. A variety of scientific methodologies and research designs can be used within a community-engaged approach. Rigor, defined traditionally, is therefore more dependent on the particulars of the research design than on whether the research is implemented as part of a community-engaged strategy. However, we argue in this section that we should think about the ways that rigor and scientific benefit can be increased as a result of the engagement of communities. Below we present, organized by key phases in the research process, ways that engagement enhances the scientific process and ideas for activities and methods of documenting those activities that would illustrate for a RPT committee the rigor of a candidate's engaged work.

RESEARCH PHASE	BENEFITS OF COMMUNITY ENGAGEMENT	EVIDENCE
<p><u>Identify key issues/research questions</u></p>	<ul style="list-style-type: none"> With behavioral/community health issues, it can be difficult to identify the research question. Community involvement can help define the research question or confirm its validity. When community members feel involved and perceive equity in power and decision-making they are invested in seeing the right questions be addressed. 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> Conduct community focus groups or surveys (environmental scans) that document community health needs and concerns Create mechanisms for two-way communication between investigators and community members. Serve as a resource to community representatives requesting assistance on specific health issues. Their issues can generate research questions. <p>Ways to document the activity in dossier:</p> <ul style="list-style-type: none"> Include statements in personal narrative about situations in which community input helped define or changed the research question. Include statement in personal narrative that illustrate how relevance was improved as opposed to similar types of work conducted in alternative settings Explain in personal narrative why your research questions can be addressed with greater validity than in alternative research settings – include findings obtained from alternative settings (if available and relevant).

		<ul style="list-style-type: none"> • Include in the personal narrative statements that compare your level of subject/patient/client participation to results obtained with other research settings or methods • Letter from community that includes statements about community commitment and the community's role in defining the research questions
<u>Proposal development and funding</u>	<ul style="list-style-type: none"> • For questions with socio/economic/cultural elements, community can identify issues, barriers etc. unknown to researchers • Community members may provide accurate information on existing interventions, services, policies, barriers, that could affect study, etc. • For agencies or RFPs that require community participation, showing funders how such participation will be woven throughout project and how much the community supports the project can increase likelihood of funding. 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> • Include community members on planning or working committees • Form a Community Advisory Committee • Include in grant proposal letters of support from community documenting their participation in designing the study so that it will be most appropriate to that community • Ask that community partners take an active role in the writing process of the proposal whenever possible • Budget for line items that support community activities or resources <p>Ways to document the activity in dossier:</p> <ul style="list-style-type: none"> • Letters of support from community organizations or leaders documenting commitment and their role in developing the project or what their role will be in implementing project. • Meeting rosters and minutes that document community participation in discussions about proposal. • Document in personal narrative situations in which community input helped identify issues or barriers, or provided information that researchers would not otherwise have had • Include in dossier, pink sheets or communications from funders/reviewers that include comments about value of community involvement
<u>Grant management; fiscal control and accountability</u>	<ul style="list-style-type: none"> • Shared funding and control increases community commitment to research success 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> • Subcontracts with community or faith-based organization • Memorandum of Understanding • List community partners as Co-PIs on grant proposal whenever possible <p>Ways to document the activity in dossier:</p>

		<ul style="list-style-type: none"> • Include statements in personal narrative about how funding was shared with community • Include letters from the community that include statements about perceived equity in decision making, trust, commitment of the community to the process • Highlight community Co-PIs on grants listed in CV
<u>Study design and methodology</u>	<ul style="list-style-type: none"> • Deeper understanding of a community's unique circumstances can result in a more accurate conceptual framework and understanding of important independent, moderating and dependent variables. • Community input can help create a design and methods that are most acceptable to the community, most valid given the unique circumstances of the community and that are most culturally appropriate and respectful 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> • Include community members on planning or working committees • Form a Community Advisory Committee • Tap these working groups and advisors for information that will improve conceptualization, design, methods, validity, acceptance, cultural appropriateness, etc. • Evaluate, modify and adapt your design and methods in response to community feedback • Include community members as Co-PIs whenever possible in order to deeply involve them in design <p>Ways to document the activity in dossier:</p> <ul style="list-style-type: none"> • Include statements in personal narrative describing the involvement of community partners in development of research design and how their participation contributed to improved research design and methods • Document in personal narrative situations in which better understanding of the community resulted in a more refined conceptual framework • Meeting rosters and minutes that document community participation in discussions about proposal. • Highlight community Co-PIs on grants listed in CV
<u>Recruitment and retention of participants</u>	<ul style="list-style-type: none"> • Community relationships increase trust, which leads to increased participation and retention • Community knowledge of their culture and circumstances can inform development of most effective 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> • Partner with community or faith organizations to assist with recruitment • Hire and train community members as recruiters, outreach workers and data collectors • Include community members on <u>planning or working committees</u>

	<p>recruitment strategies and incentives and barriers to participation</p> <ul style="list-style-type: none"> • Community more likely to participate if they have had input and feel heard. • Increased acceptability of the research methods in community knowing that peers contributed to and approved the methods and design • Hiring community members to recruit participants and collect data increases trust. More willing to join and to stay in the project 	<ul style="list-style-type: none"> • Form a Community Advisory Committee • Use the working group and advisors to inform you about potential barriers to participation, effective recruitment and retention strategies. <p>Ways to document the activity in dossier:</p> <ul style="list-style-type: none"> • Include statements in the personal narrative about the involvement of community partners in ways that increased community acceptance, created more effective ways to recruit, offered information about effective incentives for participation and retention, etc. • Document in the personal narrative your recruitment and retention rate as compared with similar projects (in design, participants, geographic location) that do not engage community members, if that data is available. • Within personal narrative, include anecdotes from participants about their reasons for joining or staying with a project. • Ask community letter writers to include information about ways that recruitment and retention were likely improved via their input
<p><u>Design of measurement instruments and collection of data</u></p>	<ul style="list-style-type: none"> • Community input fosters development of more culturally appropriate measurement instruments, making projects more effective and efficient, data collection more accurate • Using local staff to administer surveys and conduct interviews, and as survey helpers fluent in the languages of the target group increases authenticity of responses and accuracy of data collected. • Mutual trust enhances both the quantity and the quality of data collected • Increased opportunity for field-testing instruments improves reliability 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> • Include community members on planning or working committees • Form a Community Advisory Committee • Ask these working groups and advisors to evaluate instruments, give feedback on language, cultural sensitivity. <p>Ways to document the activity in dossier:</p> <ul style="list-style-type: none"> • Within the personal narrative discuss how community participation increased cultural appropriateness, validity and reliability of instruments that were developed. How were instruments improved as a result of community input? • Within personal narrative include statements from community participants about their perceptions of cultural responsiveness, their willingness to share personal information, etc.
<p><u>Interpretation of findings</u></p>	<ul style="list-style-type: none"> • Limited role for community in statistical interpretation of data, but community input in research design 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> • Include community members on planning or working committees • Form a Community Advisory Committee

	<p>increases researcher's insight and cultural sensitivity.</p> <ul style="list-style-type: none"> Community members can comment on researcher's interpretation of data in a way that helps the researcher determine if his/her conclusions have incorporated his/her increased understanding of the community's circumstances. Community members can comment on how the findings are likely to be perceived within the community and how they should be framed to help community members best understand the implications 	<ul style="list-style-type: none"> Ask these working groups and advisors to comment on interpretation of findings. Conduct a community/public forum for reviewing and commenting on results Develop summaries for the community in which information is accessible, clear, understandable, with key points summarized. <p>Ways to document the activity in dossier:</p> <ul style="list-style-type: none"> Within the personal narrative describe how members in the community were involved in interpretation of findings and brainstorming about application to community problems/issue being investigated. Within personal narrative, include ways that the community expanded, deepened, contextualized or qualified the interpretation of findings
<p><u>Translation of findings into recommendations for policy change or intervention; design of recommendations; implementation</u></p>	<ul style="list-style-type: none"> Community members can provide information about what will work, what is culturally appropriate Increased appropriateness of interventions can result in more positive/successful application. Productive and on-going partnerships between researchers and community members increases the likelihood that research findings will be incorporated into ongoing community programs, providing the greatest possible benefit to the community from research. Community members are more effective advocates for public policy change 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> Include community members on planning or working committees Form a Community Advisory Committee Ask these working groups and advisors to generate intervention ideas, give feedback on cultural sensitivity and to give ideas about translating the research into action and application. Partner with community members to develop programs or interventions based on the research findings Accompany community members to hearings or other meetings about policy making <p>Ways to document the activity in dossier:</p> <ul style="list-style-type: none"> Describe through personal narrative, annotations in your CV, acknowledgment sections, etc how members in the community were involved in interpretation of findings and their application to community problems/issue being investigated. Within the personal narrative cite policy changes or program development resulting from the research If the community exhibits signs of empowerment/increased civic engagement (e.g., community problem-solving, volunteerism,

		<p>contacting officials, contacting media, signing petitions, etc.) or perhaps around a particular health issue, discuss in personal narrative or provide evidence such as community stats, newspaper articles, etc.</p> <ul style="list-style-type: none"> • Discuss in personal narrative the steps taken by both the investigators as well as community leaders to use results of scholarly work to improve and inform public policy decisions. • Explain in the personal narrative why the results obtained are more useful in this arena than results that might have been obtained (or have in the past been obtained) by other methods. • Within personal narrative and community letters of support, document ways that the research has been used to make local change
<p><u>Dissemination</u></p>	<ul style="list-style-type: none"> • Community involvement provides opportunity for broader relevance and impact beyond academic arena • Community environment more accurately depicted in publications and presentations. 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> • Give presentations/educational events in community settings (schools, churches, community clinics, community health fairs, etc.), and disseminate through media that reaches community members (radio, TV, church bulletins, school newsletters, etc). • Co-present or co-author scholarly articles • Co-author pieces with community members for local distribution – community newspapers, newsletters, etc. <p>Ways to document the activity in dossier:</p> <ul style="list-style-type: none"> • Highlight community co-authors or co-presenters in CV • Include examples of community dissemination products such as newspaper articles. Discuss in personal narrative evidence of reach or impact on the community, if known • In the personal narrative discuss how dissemination through non-academic channels has contributed to application of the findings obtained to the betterment of the communities involved.
<p><u>Ethics</u></p>	<ul style="list-style-type: none"> • Greater ethical credibility for research since it works <i>with</i> people to address their health concerns versus experimenting <i>on</i> them. 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> • Devote faculty and staff time to outreach and relationship building on an on-going basis • Develop mechanisms for two-way communication and accountability between investigators and community members • Form a Community Advisory Committee • Utilize advisors to comment on their perceptions or possible

		<p>community perceptions of motives of researchers, appropriateness and respectfulness of research, etc.</p> <p>Ways to document the activity in dossier:</p> <ul style="list-style-type: none"> • Include community letters which speak to the integrity of the researcher, the ethical conduct of the research, etc.
<p><u>Bias</u></p>	<ul style="list-style-type: none"> • Working in community setting can reduce selection bias. • Including multiple and diverse voices increases objectivity by giving weight to opinions and insights other than those of a single individual-the researcher 	<p>Activities that would create the benefits:</p> <ul style="list-style-type: none"> • Use grass roots recruitment strategies that do not select just for those who read newspaper classifieds, seek to be civically involved or who are in other ways different that the general population • Include community members on planning or working committees • Form a Community Advisory Committee • Integrate the opinions, suggestions and expertise of these working groups and advisors to understand the diversity of viewpoints <p>Ways to document the activity in dossier:</p> <ul style="list-style-type: none"> • Document in personal narrative or though Sample Characteristics sections of manuscripts data that demonstrates representativeness of the sample based on community characteristics. There should be documentation as to how the methods employed in the study actually reduced selection bias. • Document in personal narrative ways that community input has expanded the thinking of the researcher, helped the researcher understand his/her own biases

Table 2: The enhancement of teaching through community engagement

Prepared by: Collaborative Peer Review Workgroup Member Sharon L. Shields (Vanderbilt University)

Different curricular teaching/learning approaches and strategies are appropriate for the dissemination of knowledge, skill, and professional competencies. Conventional teaching methods such as lecture, discussion, and in-classroom activities are effective in disseminating certain content and developing an understanding of theoretical foundations. These teaching approaches however, do not always effectively convey the personal, sociological, environmental, political, and community issues that come into play when trying to understand interventions and policies that address health issues in local and national cohorts. A variety of pedagogical strategies can be used within a community-engaged approach including: experiential learning, service-learning, field schools, internships, independent study work, and practica. Below is a way to organize key steps in the teaching process, ways that engagement enhances the teaching process and ideas for activities and methods of documenting those activities that would illustrate for a RPT committee the scholarship of a candidate's engaged work.

Curriculum Development	Benefits of Community Engagement	Evidence	Ways to Document the Activity in RPT Portfolios
<p><u>Identify theoretical framing and practical integration for curriculum development.</u></p>	<ul style="list-style-type: none"> Faculty and community partners working on connecting course content with service related activities can insure reciprocity of benefit and deepening of the learning experience. When community members are involved in course planning there is a perception of equity of engagement and student learning. 	<p>Activities that would create benefit:</p> <ul style="list-style-type: none"> Identify community partners that would benefit from knowledge, skill, and professional objectives learned by the students through course content. Conduct focus/training sessions w/ community partners to share course content, objectives, and outcomes. Conduct joint planning for community 	<ul style="list-style-type: none"> Name a community partner teaching advisory committee. Report this committee formulation. Create a folder related to focus/training sessions with community partners and supply agendas for each of the meetings. Keep log of joint planning meetings with outcomes reported. Keep log of hours devoted to community resource contributions.

	<p>engagement activities and field learning experiences.</p> <ul style="list-style-type: none"> • Serve as a resource and volunteer within the partner organization so that more understanding of need and contributions can be incorporated into the coursework. 		
<p><u>Curriculum development and potential funding support.</u></p>	<p>Activities that would create benefit:</p> <ul style="list-style-type: none"> • Include community members on curriculum development committees and engage them in specific course planning. • Jointly budget for course needs that may exceed the average resources available. • Explore w/community members avenues for funding such joint efforts. 	<ul style="list-style-type: none"> • Cultural, community specific, socioeconomic, etc. inform students regarding theoretical underpinnings of course content can be provided by community partners that may be unknown to the teacher. • Community members may provide updated information on current policies, services, interventions, assets/barriers that could affect or alter students understanding of course materials. • Community/university teaching partnerships could open avenues for course development funding and support from foundations, internal course development grants, and other avenues of potential funding support. 	<ul style="list-style-type: none"> • Letters of support from community partners. • Meeting rosters and minutes that document community participation. • Faculty reflection on process of curriculum development.

<p><u>Implementation: Teaching of the Course</u></p>	<ul style="list-style-type: none"> • Final syllabus and class schedule. • Identification of community based learning activities. • Identification of theoretical – applied learning processes. 	<p>Activities that would create benefit:</p> <ul style="list-style-type: none"> • List participating community partners on syllabus and have them engaged in various activities within the university classroom. • Reflect with community partner on the learning activities in the class i.e.: assignments, community learning experiences, readings, evaluation tools etc. • Work with the community partner to “connect” course content and theoretical underpinnings with community based learning. 	<ul style="list-style-type: none"> • Present syllabus, reading lists, and all course support materials. • Create a teaching journal that records personal notes and reflections on the teaching experience and how this affirms and/or informs new ways of integrating community engaged work into the curriculum. • Enlist the community partner as a reviewer of student assignments. • Utilize a random selection of student assignments for review by the community partner(s) so that there is a confirmation that connection between theory and practice is formed by the student. Review report forms/assignment comments etc. can be part of the portfolio reporting.
<p><u>Outcomes: Student Learning</u></p>	<ul style="list-style-type: none"> • Course products created by the students: i.e.: reflection journals and summaries, course assignments, exams, etc. • Community partner field assessments. 	<p>Activities that would create benefit:</p> <ul style="list-style-type: none"> • Shared reading of assignments and summary evaluation/observations 	<ul style="list-style-type: none"> • Summary of final evaluation/observations related to student learning as jointly assessed. • Summary of field supervisor assessment of

	<ul style="list-style-type: none"> • Specific attention to learning outcomes achievement as evidenced in student work. 	<p>provided by community partner.</p> <ul style="list-style-type: none"> • Community partner assessment through field observation over the course of the semester. • A meeting w/community partner to assess observed student learning outcomes. 	<p>student learning in the field.</p> <ul style="list-style-type: none"> • Meeting report of assessment of professor/community partner observations of student overall learning outcomes.
<p><u>Teaching Effectiveness</u></p>	<ul style="list-style-type: none"> • Course evaluations by students. • Assessment by students of “community based” learning experience. • Class observations by peer faculty. • Class observation by community partner. • Peer faculty assessment of course curriculum, content, activities, and student learning as assessed through potential pre-post assessments. 	<p>Activities that would create benefit:</p> <ul style="list-style-type: none"> • Community partner could give clear feedback on teaching effectiveness as observed in an appropriate teaching lesson that relates to community work/assignments/engagement. • Community partner could give feedback on the community based learning experience and how to improve based on student assessment. • Peer faculty could interview community partners related to the effectiveness of the “team” engagement process. 	<ul style="list-style-type: none"> • Reporting of student evaluation scores especially in the areas of teacher effectiveness, learning gained from the course, etc. • Faculty observation(s) are included in the portfolio. • Community partner assessment is reported. • Final faculty/community partner assessment is reported.

<p><u>Translation of feedback regarding Student Learning and Teaching Effectiveness on course design</u></p>	<ul style="list-style-type: none"> • Professor and community partner can rework areas that would improve student learning and teaching effectiveness. • Appropriateness of field placements and activities in the field can result in more positive/successful learning. • Productive and sustained relationships in the community increase the likelihood of continued academic/community engaged teaching. • Community members/university personnel are more inclined to see the benefits of reciprocity of such partnerships. 	<p>Activities that would create benefit:</p> <ul style="list-style-type: none"> • Include the community partner on reworking the course syllabus and learning activities. • Ask advisors to generate ideas, give feedback, and give ideas about new approaches that may be necessary to enhance the learning experience. • Create recognition and rewards for community partner work within the university. 	<ul style="list-style-type: none"> • Describe through personal narrative, reflections, annotations in the CV, etc. how members in the community were involved in course development, implementation, co-teaching, evaluation, etc. • Within the personal narrative cite curricular changes developed from the process and the input of community partners. • Document the reciprocal benefits attained through such a teaching partnership. • Partner letters of support that document ways the course/students/ teaching has been used to improve/enhance organizational/community effectiveness.
<p><u>Dissemination</u></p>	<ul style="list-style-type: none"> • Community involvement provides opportunity for broader relevance and impact beyond academic arena. • Community environment is more accurately depicted in presentations and publications. 	<p>Activities that would create benefit:</p> <ul style="list-style-type: none"> • Presentations by students regarding community work are presented not only in the academic arena but also to the community impacted by the work. 	<ul style="list-style-type: none"> • Highlight community co-authors and co-presenters in CV. • Include examples of community dissemination products. • In personal narrative discuss how community partnering has enhanced

		<ul style="list-style-type: none"> • Presentations that include both the faculty member and the community partner both within academic/professional associations and community organizations help to disseminate information that enhances practical application of theoretical learnings. • Co-authored publications in “teaching journals”, “journals related to community development” are more authentic when written from both perspectives. 	<p>the scholarship of teaching.</p>
<p><u>Ethics</u></p>	<ul style="list-style-type: none"> • Greater ethical credibility for teaching since it is community based versus an isolated classroom theoretical learning experience. 	<p>Activities that would create the benefit:</p> <ul style="list-style-type: none"> • Devote faculty, graduate assistant time, and staff time to outreach and relationship building. • Develop mechanisms for structural/financial/ and institutionalized support of such partnerships. 	