

Application of an Education Research Lab (ERL) Model to a Community Sailing Program

Abstract

This presentation showcases the application of a university-based education research lab (ERL) model to the evaluation of a community sailing program for individuals with disabilities. Presenters conceptualize the ERL model as a mutually beneficial relationship between universities and community education agencies.

This paper presents an example of community-based research (Centre for Community-based Research, n.d.) being conducted by faculty and students within an education research lab (ERL) model (Starratt, Goodletty, Fredotovic, Auguste, & Shure, 2014). Within the model, the purpose of the ERL is threefold: (a) to provide training and experience in research and evaluation for university students (Liu & Breit, 2013), (b) to provide access to data and research opportunities for faculty to engage in meaningful scholarship (Boyer, 1996), and (c) to provide service to the community in the form of pro bono research and evaluation services to meet the needs of local agencies (Sadler, Larson, Bouregy, LaPaglia, & Bridger, 2012). Consistent with the tenets of community-based research (Patton, 2011) and the General Evaluation Model (McNeil, Newman, & Steinhauser, 2005), ERLs are guided by research agendas that are cooperatively developed by all stakeholder partners. These research agendas are determined by community need and driven by faculty researcher interest and expertise (Jensen, Hoagwood, & Trickett, 1999). The reciprocal, beneficial nature of this model, as well as the synergy created by the authentic and continuous collaboration among all partners, enhance both value and quality of the work (Starratt et al, 2014). An example of this model and partnership in practice will be explained through the description of one such collaboration between faculty and students from a private, religious non-profit university and a community sailing program for youth with special needs. In this case, faculty work on a pro bono basis, while evaluation funds provide a modest tuition stipend for the student research assistant.

The Community Program

The community sailing program targeted in the current project is designed to offer affordable, fully integrated, and accessible sailing lessons to individuals with disabilities. The program primarily targets individuals with developmental and physical disabilities residing in a South Florida community, but is also available for veterans groups and youth (ages 10-18) from low-income families and the foster-care system. Sailboats are designed to be fully accessible, safe, and modifiable, allowing the program to accommodate individuals with Autism Spectrum Disorder, Cerebral Palsy, Downs Syndrome, Multiple Sclerosis, mental handicap, hearing impairment, vision impairment, and various types of physical disabilities. This program is the only one in the target community to offer affordable sailing lessons, along with environmental education to low-income and/or special needs populations.

Establishing the Community-Based Research Relationship

The program administrator contacted ERL faculty with a request for technical and evaluation support during expansion of the program to serve participants with Autism Spectrum Disorder.

The expansion was funded by a small foundation grant, which included funds for an evaluation component. With the agreement of the program leader, the faculty researcher, who has expertise in quantitative research methods and program evaluation, sought out other education researchers and students who had expertise in other areas that would be beneficial to this project. For example, in this case the research team includes faculty in education research, counseling, school psychology, as well as a doctoral counseling student with experience as a rehabilitation counselor working with persons with special needs. Together the team has research skills in quantitative methods, qualitative methods, and program evaluation, ensuring the ability to meet the community-education agency research and evaluation needs.

In collaboration with the program administrator, the research team convened to develop a plan to evaluate the effectiveness of the sailing program in meeting its goal to expand its services to provide affordable sailing lessons to individuals with Autism Spectrum Disorder, a group not previously targeted by the program. During the evaluation, which is ongoing, the researchers seek to answer three global research questions.

What is the fidelity of implementation of the various components of the sailing program for participants with Autism Spectrum Disorder?

What is the relationship between the various components of the initiative and participant outcomes?

What are the perceptions of staff and participants regarding the effectiveness of the program?

During the first phase of this ongoing evaluation process, the researchers conducted a preliminary assessment to document program activities to inform the evaluation plan and serve as the foundation for future reporting. A set of objectives was identified to guide the evaluation.

- To determine whether the sailing program is reaching its intended population.
- To describe program participants' perceptions of the program.
- To provide program administrators with the information necessary to engage in program improvement and better meet the needs of the target population.
- To provide feedback to funding agencies regarding the progress that the sailing program has made toward its stated objectives.

In order to measure progress toward the stated objectives, a key component of this stage of the evaluation included the development of an instrument to collect both caregiver and participant feedback on their experiences with the program.

The following sections articulate the application of the ERL model with the community sailing program, the building and maintaining of this relationship, the development of the evaluation plan, creation of feedback instruments, observations of program activities, training of staff to administer feedback instruments, and creation and dissemination of interim evaluation reports to the funding entities. Future directions for this ongoing partnership are also discussed.

Student Training in Research and Evaluation

With one of the primary goals of the ERL to provide hands-on research experience for students, the three faculty researchers identified a doctoral student in the Counseling program with relevant background in rehabilitation counseling, and approached her with an invitation to participate in the research. At the point at which the student agreed to participate, the fiscal relationship was established between the community agency and the university grants office to allow the student to receive a modest tuition stipend paid through evaluation funds from a small foundation grant obtained by the community sailing program. Consistent with other graduate assistantships, the student logs contracted hours and submits timesheets.

Through her expertise in working with individuals with special needs, the student researcher was able to advise faculty members, the program leader, and program staff about appropriate terminology and techniques utilized when working with individuals with special needs. In addition, the student further developed valuable research, technical, and scholarly skills through engagement in research and evaluation design, developing Institutional Review Board (IRB) documents, applying research methodology, gathering and analyzing data, academic writing skills, and grant reporting skills, making this experience vital to her doctoral career.

The opportunity to apply her professional expertise within this research project also empowered the student to proactively respond to a community need utilizing her level of expertise and professional and personal experiences. Additionally, the research experience on this project provided the student an opportunity to meet one of her doctoral program graduation requirements. This requirement states that each student must submit either a scholarly paper to a counseling or counseling-related journal or a workshop proposal to a state, national, or international counseling or counseling-related conference.

Faculty Scholarship

Benefits of involvement in this project for faculty researchers include access to research participants and program data. While this kind of research and evaluation can be especially valuable in its ability to impact positive change in the local community, in the spirit of “think globally, act locally,” research and evaluation to determine the efficacy of educational programs and explore best educational practices often have broader, more generalizable applicability of interest to national and international academic audiences. This can enhance faculty scholarship and assist in the advancement of faculty careers. Scholarship in the form of academic presentations and publications is an expected element of university faculty workload and crucial in securing tenure and moving up the rungs of the rank and promotion ladders at institutions of higher learning. This presentation is one example of how ERL projects can facilitate faculty scholarship. Additionally, through the mentorship of student research assistants, faculty researchers are able to maximize their research engagement and productivity, while student researchers conduct much of the hands-on work, yielding synergistic, beneficial effects.

Meeting Community Program Needs for Research and Program Evaluation

Through a collaborative relationship with faculty and students, leaders of community programs are able to benefit from the expertise of researchers while contributing their own knowledge about program goals and objectives, allowing the team to most efficiently evaluate the

effectiveness of the program and ensure that the program is functioning at its full potential (McNeil et al., 2005). In this case, these services were useful in sustaining funding for the program. The collaborative nature of the relationship helps ensure that the services provided are sustainable and relevant.

As dictated by a general evaluation model (McNeil et al., 2005), education research lab members met with the community program leader to learn about the program and identify program evaluation needs. The program leader provided researchers with a scope of the sailing program and his expectations of the program evaluation. After collaborating on the selection of evaluation objectives, a program evaluation proposal was created that reflected the steps that would be carried out in the program evaluation process. This proposal documented program activities during summer 2014, rudimentary assessment of fidelity of implementation (e.g., effectiveness, participation, and content) of the activities conducted in conjunction with the grant-funded program, development of staff/volunteer curricula and training tools related to program services for participants with Autism Spectrum Disorder, documentation of stakeholders' (participants, volunteers, and community partners) knowledge and perceptions of the initiative, and analysis of data related to program outcomes.

After the evaluation proposal was reviewed and approved by all stakeholders, ERL members visited the program site and attended sailing program sessions to collect preliminary data on program activities and from program participants and their caregivers. In order to begin addressing proposed evaluation objectives and research questions, ERL members developed participant and caregiver interview guiding questions. They attended several sessions of the community sailing program for the purpose of interviewing participants and caregivers about their expectations of and experiences with program activities. ERL members conducted two interviews with two caregivers and developed a feedback/satisfaction survey and protocol appropriate for use with program participants and caregivers. Development of the survey was met with several challenges related to the special needs of the program participants, particularly related to communication and social/emotional reciprocity.

While taking into consideration the participant's skills, abilities, and challenges, ERL members discussed potential approaches to solicit feedback directly from participants about their subjective experiences with the sailing program. In order to accommodate potential difficulties with the identification and expression of feelings, ERL members discussed the possibility of utilizing various facial expressions (i.e. happy, neutral, and sad) drawn on paper plates to allow participants to identify their moods at different points during the sailing sessions. Due to the variance in participants' verbal, communication, and socialization skills, ERL members, program leaders, program staff, and volunteers agreed that assessing the effectiveness of the program, as well as participant and caregiver satisfaction with the program would be conducted via a survey developed specifically for this community sailing program to gather feedback from both the participants (when possible) and their caregivers. By comparing participant reports with the feedback provided by caregivers, the validity of this format of participant response can be evaluated. This system of collecting participant feedback will be utilized for ongoing evaluation purposes.

To facilitate the sustainability and practicality of the administration of the feedback/satisfaction survey, ERL members developed a tool and protocol (see Figure 1) for training community

sailing program staff and volunteers to administer the survey to program participants and caregivers. Program staff and volunteers were trained to ask incoming participants and their caregivers about their expectations of the community sailing program and to document information about each of the new participants. On the survey, caregivers were asked to provide a subjective rating of the participant's mood at the beginning, middle, and end of the day's activities as well as their own expectations for and satisfaction with program activities.

During the first year of the sailing program, two participants and their caregivers completed participant feedback/satisfaction surveys, with one of these participants and his/her caregiver responding to the survey on four different program dates. Three additional surveys were completed anonymously on a separate date. This resulted in a total of eight completed surveys. On all eight surveys, caregivers indicated that the participant evidenced a happy mood before program activities as well as at the end of the activities. Responses on five of the surveys also indicated that the participant was in a happy mood at the midpoint of program activities, while the other responses indicated that the participant was indifferent, anxious, or bored. All surveys indicated that the participant both looked forward to and enjoyed the day's activities. With the exception of one, all respondents also indicated feeling satisfied with the program. These results were organized into a formative evaluation report (Ney, Shure, Broffee, & Starratt, 2014) that was provided to the funding agencies by the program leader. Program staff and volunteers continue to collect data using the feedback/satisfaction survey.

Next Steps and Conclusion

Upon submission of the formative evaluation report (2014), funding for the sailing program was maintained for another fiscal year. Next steps in the program evaluation include: (a) continuing to administer and analyze data from the feedback/satisfaction surveys, (b) ongoing training for program staff and volunteers to administer participant feedback surveys, (c) obtaining Institutional Review Board (IRB) approval to support expansion of the research aspects of the project and presentation of findings, and (d) creating an annual evaluation report to link outcomes to objectives established in the original evaluation proposal (Starratt, Shure, Ney, & Broffee, 2014). Ongoing collaboration between the ERL faculty and students and the sailing program proves to be mutually beneficial by providing research and scholarship opportunities for faculty and students and pro bono program evaluation services for the program. These evaluation services have assisted with the maintenance and sustainability of program funding. This paper illustrates one application of the ERL model rooted in the principles and practices of community-based research and the general evaluation model with the aim of meeting community program needs while utilizing and enhancing faculty and student researcher expertise and experience.

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Figure 1

Sailing for Success Satisfaction Survey Administration Procedures

Prior to dismissal for the day, the Satisfaction Survey should be completed by a parent or guardian of each child in attendance. If more than one parent/guardian is present, each one may complete the survey. It is best to find a time when the parent is not busy with the child or getting ready to leave.

1. It is important that the date be recorded on each survey, however the inclusion of the participant name is optional.
2. On the next item, the parents are asked to rate how they observed their child’s mood to have been at three points in time throughout the day. First they are to indicate how they believe their child’s mood was prior to beginning the day’s activities. Next, they are to indicate how they believe their child’s mood was about halfway through the activity. Finally, they are to indicate how they believe their child’s mood was toward the end of the activity (not after the activity when they are told that they have to leave).

Caregiver Report of Participant Mood (Before, During, and After Session/Activity)		
Before Activities Begin: <input type="radio"/> Happy <input type="radio"/> Sad <input type="radio"/> Indifferent <input type="radio"/> Other: _____	At Midpoint of Activities: <input type="radio"/> Happy <input type="radio"/> Sad <input type="radio"/> Indifferent <input type="radio"/> Other: _____	At End of Activities: <input type="radio"/> Happy <input type="radio"/> Sad <input type="radio"/> Indifferent <input type="radio"/> Other: _____

3. The next question, “How many times has your child attended this program? _____” simply asks how many sessions the child has attended.

4. The next three questions ask the parent to indicate the extent with which they agree with each statement. Their responses are to be on a scale of 1 to 5, with 1 indicating that they disagree and 5 indicating that they agree. A score of 3 would indicate that they are neutral. The questions are as follows:

My child looked forward to coming to today’s activities.				
5	4	3	2	1
Agree				Disagree
My child enjoyed today’s activities.				
5	4	3	2	1
Agree				Disagree
I was satisfied with today’s session. This session met my expectations.				
5	4	3	2	1
Agree				Disagree

5. The remaining questions are free response questions in which the parents can communicate what they hope for their child to gain from the program, what aspects of the program are most beneficial, how the program could be improved, and any other feedback that they might have. These questions are as follows:

What did your child learn today? What do you hope and expect your child will learn from these activities?

What was the best part of the day?

What would have made the day better?

Comments, Suggestions, and Other Feedback: