Tap To Togetherness: Community-based participatory research using kinesthetic learning among families and their young children

Overview
We seek to conduct multidisciplinary, engaged, community-based participatory research aimed at building resilience in vulnerable families through a theoretical and research-based approach to positive family development with tap dance instruction as the vector for family engagement (called, “Tap To Togetherness” or T3°). The project for which we seek support has been in the pilot stage, and is now ready to move to the first step of formalizing the curriculum and expanding the reach of the program across the State of Kansas. This multidisciplinary applied, developmental, community-based participatory research and practice project includes faculty from the School of Music, Theater, and Dance (Associate Professor Julie L. Pentz) and the School of Family Studies and Human Services (Dr. Bradford Wiles) at Kansas State University, as well as practitioners with Parents As Teachers (an organization that provides home visits to pregnant mothers and families with children ages birth to three) with field faculty in the Kansas State Research and Extension network (e.g. Lisa Newman, Nora Rhodes, and others). This proposal aligns with the legacy of previous CECD Engagement Grant awards in the following domains: a) Design and piloting of multidisciplinary, engaged curricula across departments and colleges b) Community-based participatory research c) Training and educational programs that will strengthen the economic and/or social well-being of people, and d) Programs aimed at bettering the lives of underserved populations, and e) Applied interdisciplinary research aimed at addressing important public issues.

Need
The need being addressed in Kansas focuses on available resources for families with children who have not entered the formal systems in their communities (e.g. preschools, organized sports, schools). Families with young children between the ages of birth to five (pre-kindergarten) years old are limited to very few activities. This has been an identified need by the Parents as Teachers Program, which operates throughout the State of Kansas. Their current planning for group connections include weekly playgroups and special programs that attempt to fulfill this community need. Our Parents as Teachers (PAT) program partners believe that giving its families with young children the opportunity to participate in this proposed program will fulfill a great need in our state. In Manhattan alone, PAT serves 63 low-income families, another 46 have English as a second language, some 18 are single parent households, and more than 30 have multiple children under age five. Further, 34 of the PAT families are children with at least one parent in the military. While PAT is not need-based, many of the families PAT serves are disadvantaged, and thus our partnership to reach vulnerable families is strategic.

Our Approach
Decades of research have demonstrated the importance of physical development in the context of cognitive and social-emotional development (see Ginsburg, 2007 for a full review). This program leverages the expertise of Kansas State’s most accomplished professors of dance to construct meaningful opportunities that contribute to all facets of child development. Moreover, framing this program within a comprehensive family and child developmental framework provides opportunities for families to engage with their children with specific, evidence-based guidance on facilitating positive learning and social outcomes for children, both with adults and same-age peers. This program’s novel contribution to the research and programming field includes combining these frameworks, creating a replicable program to be accessed by anyone, and access to the Cooperative Extension network to expand and sustain the program. Participatory Action Research (PAR) seeks to both understand the current state of affairs while making efforts to change it (Baum, MacDougall, and Smith, 2006). This approach is different from many research endeavors in that it allows researchers to optimize their delivery of material as they move forward. While, much of the programming and research conducted seems to remove any subjectivity, and keep the participants as uniform as possible, PAR allows for participants to mold and shape the program to meet their needs, which can be extraordinarily helpful when developing novel research and programming. While experience of the program’s staff and researchers can be helpful, allowing families to proceed at their own pace, while meeting the needs and desires of their children, provides a tremendous ability to incorporate participant feedback into the program to advance optimization timelines and aid in attractiveness for future program participants as part of the reproducibility and sustainability aims of the program.

Project Description
The proposed program involves a multidisciplinary approach to family and child development, and the core developers of the program have already been working together as a team successfully. Below are the collaborative partners on both the research team and the community liaisons we will include as part of this program:
**Research and Development Team**

*Bradford B. Wiles, Ph.D. – Assistant Professor and Extension Specialist, Early Childhood Development
*Julie L. Pentz, M.F.A. – Associate Professor, School of Music, Theater, and Dance.
*Janice Schroeder – Parent Educator, Parents as Teachers

**Community Partnership Team**

*Janice Schroeder – Parent Educator, Parents as Teachers
Lisa Newman, M.S. – Extension FCS field faculty, KSRE
Elizabeth Brunscheen-Cartagena – Extension FCS field faculty, KSRE
Patricia Gerhardt – Extension FCS field faculty, KSRE
Nora Rhodes – Extension FCS field faculty, KSRE

*Note – Janice Schroeder has been extensively involved in both the R&D and Community Partnership aspects of this effort.
*Note – Bradford Wiles and Julie L. Pentz serve as Primary Investigators for the IRB

Engaged activities will include bi-weekly tap dance sessions for children ages 12 month old to Pre-Kindergarten with special invitations to children and their family’s children who are birth to 11 months old. These sessions will encourage family interaction, challenge body movement coordination, facilitate adult and child listening skills and discipline, and encourage family relationships. In these sessions we will be teaching from developed lesson plans by the primary investigators Julie L. Pentz and Dr. Bradford Wiles. Lesson plans will be developed with the following concepts as the primary focus; we will enhance adult-child engagement, increase positive family development, assess and improve body movement and coordination, identify sensory needs and collaborate on ways to meet children’s sensory needs through tap dance sessions, and strengthen family relationships. Occasionally a performance by the K-State Tap Dance Ensemble will encourage all of the above elements. All of these developmental processes will be measured using both qualitative and quantitative methods.

The expectation is to have the collected data submitted for publication at conferences such as the National Council on Family Relations, National Association for the Education of Young Children, and American Educational Research Association Annual Conferences, as well as peer-reviewed research journals, Extension Publications, and other dissemination avenues.

**Theoretical Perspective**

We take socio-cultural, and participatory action research approaches to creating this applied developmental research program. The socio-cultural perspective frames human development as a necessarily social endeavor, with adults serving as the primary means for children’s learning about how to interact with their worlds (Rogoff, 1990; Vygotsky, 1978). Through applying a technique called scaffolding, this research program will provide specific strategies for adult-child interactions to extend thinking and learning as part of participating in the dance program. An applied theoretical perspective called Mindful Mindedness (Wiles, 2013) will be used as a frame to encourage parents and caregivers to think about their children’s thinking while they are learning to dance, as well as to be creative in responding to their children’s contributions to the activity, in this case, tap dancing.

**Objectives, Activities, and Benchmarks**

The proposed program takes a two-pronged approach to optimizing and sustaining the existing programming, and expanding the program throughout the state via the Extension network. Because the existing program in place continues to inform the formalizing of the curriculum, maintaining this success is crucial as we proceed. While Parents As Teachers has been quite generous to date, in order to build on the program’s success, and maintain the positive momentum we have developed, we need to provide support to PAT staff for their work after hours. However, we also recognize the need to expand across the state with an evidence and research-based curriculum. Thus, we request support from the CECD to maintain our staffing needs with Parents As Teachers in Manhattan, and to provide funds to create the curriculum, allow for travel of the Principle Investigators, dance instructors, and research assistants to provide trainings in both the curriculum and evaluation protocols. Our specific aims are as follows:

1) Sustain the Manhattan pilot program to inform the curriculum development, participatory action research, and partnership with Parents As Teachers.
2) Develop a formalized curriculum to be used by Extension field faculty and their partners to provide a positive family engagement opportunity for vulnerable families with young children across the state.
3) Develop an online platform to provide resources to participating families such as dance song playlists, dance instruction, and quality resources for expanding their family interactions
4) Provide technical assistance to partners throughout the state on both the programming and evaluation components of the project
5) Involve participants in the research through soliciting their feedback on what is working and what is not to continually improve and optimize the program
Outcomes
Outcomes resulting from the program's development and application include multiple domains of both academic and practice modalities of the project. These are outlined below:
1) The existing pilot program in Manhattan will continue to function and be used as the research and development model for optimization and expansion
2) An Extension curriculum, developed from analysis of the pilot site's results, will be created for use across the state of Kansas
3) Extension field faculty, and their community partners will provide T^3 in their communities
4) The program's evaluation, as well as process implementation, and program development activities will be disseminated through academic research journals, applied developmental journals, Extension publications, and national and international conference presentations.
5) The research team and community partners will have the results and proof-of-concept data to successfully pursue large scale external funding to support further expansion and sustainability of T^3 in Kansas communities.

Timeline
Our proposed timeline is as follows:

Summer 2015 (June, July, August)
• Analysis of results of pilot program (in progress) will result in publications in applied journals
• Formalizing of curriculum for dance instruction to allow for Extension field faculty and their community partners to conduct the sessions will begin. This includes written, online, and video instruction and demonstration.
• Developing an online presence to provide resources to participating families such as dance song playlists, dance instruction, and quality resources for expanding their family interactions
• Recruit and provide training to Extension field faculty and community partners across the state to both provide the instruction to families, and conduct the evaluation piece of the work
• Assist Extension field faculty and their partners in recruiting participants and scheduling Tap To Togetherness sessions in their areas

Fall 2015 to Spring 2016 (September - March)
• Provide technical assistance to programs throughout the state, including both delivery of the curriculum, and collecting evaluation data for analysis and future publications
• Collect data from programs throughout the state
• Involve participants in the research through soliciting their feedback on what is working and what is not to continually improve and optimize the program

Summer 2016 (June, July, August)
• Disseminate findings in the form of conference presentations, Extension Publications, and refereed academic journal publications
• Seek and secure external funds to sustain and expand the program across the state of Kansas.