



Activate! Digest

Train Your Brain.

Welcome to the first *Activate!* Digest. The purpose of this Digest is to:

- provide a brief historical overview of the project
- update you on the ongoing work related to the aims of the project
- update you on areas of potential policy implications from project findings

This Digest covers year 1 of the project. Future Digests will be provided quarterly.

Activate! : A Historical Overview

Activate! is the applied research project of the West Virginia Prevention Research Center (WVPRC) funded by the Centers for Disease Control and Prevention. *Activate!* focuses on children's physical activity at school and at home, their academic performance, behavior, and overall health. Project partners include: state and local health departments, state and local departments of education, RESA V (Regional Educational Service Agency), the CARDIAC Project, and members of the WVPRC's Community Participatory Board (CPB). The project spans five years, beginning in the fall of 2014 and ending in the fall of 2018.

Activate! Aims:

Activate! has three study aims, including:

- (Aim 1) Define and document current school physical education and recess practices among elementary schools in WV and compare student health and academic outcomes based on school practices (statewide focus).
- (Aim 2)* Compare added benefits and cost-effectiveness of two emerging strategies (one school- and one family-based strategy) to current physical education and recess practices based on their individual contribution to children's physical activity, health, and academic outcomes and school socio-demographic information (RESA V and MOVHD service areas).
- (Aim 3) Translate research results into environmental and policy recommendations at the local, regional, and state levels to increase student access to effective physical activity and education.

*Aim 2 consists of three one-year cohorts. Each cohort includes three study arms (control, school intervention, and family intervention).



Year 1, Quarter 1, Sept- Dec 2014

Summary of Activities

Data and Methods

The first quarter primarily focused on Aim 1. This included understanding the data that were available through public sources (such as the National Center for Education Statistics-NCES) and those which required a data sharing agreement (such as data available through the WV Department of Education (WVDE), and individual schools who would be invited to participate in the study). The team discussed WV Policy 2510, what changes in its implementation and evaluation meant to our project, and what information was missing from existing data sources. To meet these data gaps, the *Activate!* team created an online survey for 5th grade Principals and PE Teachers to be disseminated statewide.

We also began to identify schools eligible to participate in the Aim 2 study within RESA V and the MOVHD service area, and discussed appropriate stratification for randomization into study arms.

Action Steps:

- Submitted a data request to the WVDE.
- Pre-tested Aim 1 online survey questions with 5th grade PE teachers and principals and submitted the online survey protocol to the West Virginia University Institutional Review Board (IRB) for approval.
- Identified eligible school personnel to complete the online survey and collected contact information for potential participants via public sources.
- Used data from NCES and WVDE, school websites, and knowledge from our field team to identify potential schools eligible to participate in the Aim 2 study.

Research to Policy (R2P) Advisory Council

The team discussed the most effective ways to engage national, state, regional and local subject matter experts in order to inform best practices as the intervention development moves forward and to guide policy recommendations long term.

Action Steps:

- Developed operational framework for the research team and the R2P (Aims 1, 2, 3).
- Identified potential members for the R2P.
- R2P invitations sent by e-mail and regular mail - December, 2014.

Intervention

The research team began Aim 2 study arms planning (school intervention, family intervention, control).

Action Steps:

- Developed processes and forms for obtaining Superintendent approval to approach schools.

Meetings/Presentations/Reports/Publications

Presentations

- WVPRC's CPB
 - September 23 – Applied Research Project (Lesley Cottrell, Karen Northrup)
 - December 9 – Applied Research Project (Lesley Cottrell, Nancy O'Hara Tompkins)



Data and Methods

Quarter 2 centered on acquiring the data from multiple sources in order to address Aim 1. The online survey was finalized and the team sent links directly to PE Teachers and principals. The team developed a subgroup to identify empirically supported measures for Aim 2 assessments (baseline, midpoint, and post-intervention) of each key study participant group (principal, PE teachers, 5th grade classroom teachers, parents, 5th grade students).

Action Steps:

- Consulted with representatives from the WVDE to formalize the data agreements and to acquire the statewide data needed to address the research questions related to Aim 1.
- Received approval for IRB protocols for Aim 1 and Aim 2.
- Received approval of Research Proposal Application (RPA) and Data Disclosure Agreement with WVDE (February 9, 2015).
- Data agreement confirmation with CARDIAC (February 19, 2015).
- Formalized Aim 2 inclusion criteria for schools to participate in the study and created a randomization scheme for the eligible schools by cohort and study arm group.
- Developed and administered the Aim 1 online survey to all eligible schools in the state.
- Conducted a literature review of scales, items and measures to include in the Aim 2 study.

R2P Advisory Council

The team focused on engaging members of the R2P.

Action Steps:

- First R2P meeting scheduled and agenda created focusing on identifying key areas of policy, current activity to meet Policy 2510 guidelines, complementary interventions, best practices, challenges, and goals of the group (pod discussion format).

Intervention

The team started gearing up with a number of activities related to study recruitment, intervention development, branding, measurement, and evaluation of progress. We created subgroups to better work toward meeting the goals of Aim 2.

Action Steps-Recruitment:

- Approached Superintendents in the 9 counties of the RESA V and MOVHD service areas – to date, 6 counties have committed to the Aim 2 study.
- Developed processes and forms for obtaining principals approval for schools' participation in the study.
- Developed Guiding Principles for the Aim 2 study phase.

Action Steps- Measurements:

- Identified evidence-based family, individual, school and social context variables that have been shown to be associated with levels of physical activity in elementary school children.
- Conducted a literature review of measures.
- Drafted baseline, midpoint, and post-intervention surveys for principals, 5th grade classroom teachers, PE teachers, parents and students.



Action Steps- Intervention Development:

- Formed school and family intervention sub-groups and began drafting interventions (Aim 2).
- School Intervention trainers attended a Power Up for 30 training in GA.
- School Intervention trainer attended the Shape America National Conference (Seattle) to gather evidence/resources for intervention development.
- Identified resources currently available to schools and teachers to promote PA in their classrooms.

Action Steps- Branding:

- Discussed potential branding possibilities.
- Decided to support a contest with 5th grade students in Monogalia County to name and brand the project.

Meetings/Presentations/Reports/Publications

Presentations:

- WVPRC CPB
 - March 19 – Applied Research Project (Lesley Cottrell , Nancy O’Hara Tompkins)



Year 1, Quarter 3, April- June 2015

Data and Methods

In Quarter 3, work on cleaning data, creating linked databases, and developing data analysis protocols for Aim 1 data was continued. Analysis of Aim 1 data from the WVDE began. The team assessed the response rate associated with the Aim 1 online surveys and came up with alternate strategies to bolster participation, and focused on finalizing the randomization plan for schools in the study.

Action Steps:

- Submitted a supplemental paper survey option mirroring the Aim 1 online survey to the IRB.
- Paper surveys were mailed to the principals and PE teachers who were non-respondents in the Aim 1 online survey.
- Re-randomized schools for the Aim 2 study following recruitment. Randomization was completed across 3 years/cohorts and 3 groups (family, school, control).

R2P Advisory Council

Held our first R2P meeting in Charleston and integrated the advice of the R2P into the action steps throughout the project.

Action Steps:

- The April 10, 2015 meeting in Charleston focused on pod discussions related to policy environment, social and community environment, best practices, policy implications, and group goals.
- Integrated guidance from R2P into the project.

Intervention

The team continued to develop the school and family group interventions, acquired principal agreement letters, and completed the contest to name the project. We developed an intervention-wide Master Spreadsheet to facilitate communication among the research team and to track and monitor progress.

Action Steps-Recruitment:

- Gained letters of support from principals to conduct research in their schools; to date, 23 schools agreed to participate.
- 14 schools are participating in Cohort 1: 5 in school intervention, 5 in family intervention, 4 in control (5th school deferred to another year due to change in principal and administrative practices).

Action Steps- Measurements:

- Survey development for Aim 2 began (principals, PE teachers, 5th grade classroom teachers, parents and 5th grade students).

Action Steps- Intervention Development:

- School intervention developed a toolkit for teachers to implement classroom-based physical activity.
- Family intervention planned family fun nights, technology plan, and communications with families.
- Control group began planning for baseline data collection and communication with control schools.



Action Steps- Branding:

- The team implemented the name the project contest among 5th grade classrooms in Monongalia County.
- The WVPRC's CPB narrowed the contestants down and a winner was selected!
- Our winner hailed from Mason-Dixon middle school and was awarded a new bike from Pathfinder and was interviewed in a feature story about the project in the Dominion Post.
- Our new project name, *Activate!*

Meetings/Presentations/Reports/Publications

Presentations:

- WVPRC CPB, June 9 – *Activate!* (Lesley Cottrell, Nancy O'Hara Tompkins)

Meetings:

- R2P
 - April 10 (Charleston)



Year 1, Quarter 4, July- September 2015

Data and Methods

Data analysis from the Aim 1 data continued. The team developed consent procedures for all groups of participants (Aim 2), finalized survey instruments, and discussed FitnessGram data collection.

Action Steps:

- Pre-tested all surveys with representatives from each group (principals, 5th grade classroom teachers, physical educators) and parent-student dyads.
- Developed consent booklets.
- Finalized protocols for survey distribution including paper and web-based formats.
- Aim 2 IRB developed (approved August).
- Created a fitbit workgroup to solidify distribution and data collection.
- Developed timeline for Aim 2 consent and data collection.
- September 14 – Designee (research team members who called on schools for the consenting process) consent training (Parkersburg) (Traci Jarrett, Lesley Cottrell, Karen Northrup).
- September 14 – October 1 – Consenting of potential Cohort 1 participants (Designees).
- September 18 – Cohort 1 Superintendents’ update by e-mail and USPS (Karen).

R2P Advisory Council

This final quarter of Year 1 we continued the conversation with our R2P, including reviewing progress, how the team utilized recommendations from the council in intervention development, and obtaining feedback on the school and family intervention plans.

Intervention

The school intervention planning group finalized plans for school toolkits and training, and the family intervention group hired and trained AmeriCorps volunteers to assist with the family intervention, and planned family fun nights.

Action Steps:

- September 22 - School Intervention training (Parkersburg) (Mary Weikle, Sue Childers)

Meetings/Presentations/Reports/Publications

Presentations:

- WVPRC CPB
 - September 24 - Activate! (Lesley Cottrell, Karen Northrup)

Meetings:

- Research to Policy (R2P)
 - August 26 (Webex)

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