

Energy Express

ABSTRACT

Energy Express, under the leadership of West Virginia University Extension 4-H Youth Development, is a research-based summer reading and nutrition program for children living in rural and low-income West Virginia communities. Each summer Energy Express serves 3,000 school-age children in 80 communities. Professional educators supervise almost 500 summer AmeriCorps members in their 300 hour service assignments. A county collaborative provides leadership for Energy Express locally and raises 30% of the site cost. At each community site, four to eight college-student AmeriCorps members serving as mentors each work with a small group of eight children. The group eats breakfast and lunch served family-style and engages in reading-related activities that make reading meaningful. Each child receives a weekly take-home book related to the "place-based" curriculum. AmeriCorps members serving as volunteer coordinators recruit, train, supervise and recognize community youth and adult volunteers who support children's learning. Not only is the typical summer slide halted, children's reading scores increase and they receive much-needed nutrition. Energy Express has developed an outstanding reputation for meeting the needs of children, for involving the community in children's learning, and for delivering a high quality program with demonstrated impact.

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Program of Distinction Category

Leadership, Citizenship and Life Skills Categories

- Caring Relationships, Community Spirit

Healthy Lifestyles Categories

- Health & Fitness

Organizational Strategies Categories

- Partnership & Grants

Sources of Funding that Support this Program

- Funding for 2007:
- AmeriCorps (\$1,239,840 plus \$492,000 for educational awards)
- West Virginia Department of Education and the Arts (\$470,000)
- The Greater Kanawha Valley Foundation (\$8,000)
- Verizon (\$18,264)
- In-kind through West Virginia University (\$240,000)
- USDA Summer Food Service Program (\$343,400)
- Generated locally (\$822,000) the county collaborative must generate 30% of the site cost locally, and the additional 70% is paid for through the state office from funding listed above.

Program Content

Knowledge and Research Base

We know that it is poor children who are most affected by the typical “summer slide.” A study by Alexander, Entwisle and Olson (2007) found that the disparate achievement between high- and low- income elementary school children was due almost entirely to the summer. In fact, two-thirds of the achievement gap can be traced to the summer. Poor children also lose ground nutritionally during the summer and many have few opportunities for summer activities. Given the large number of poor children living in rural West Virginia communities, the need for summer programming is evident. Energy Express has combined reading through a print rich environment; small groups; family style meals; and family and community involvement to successfully address the summer slide challenge. The knowledge and research base not only identifies the issues facing children, families and communities during the summer, it also demonstrates solutions to the problems.

A review of 30 studies indicates that achievement test scores decline during the summer and that low-income children experience greater losses than their middle-income peers (Cooper et. al., 1996). Studies also indicate that both academic programs and out-of-school-time enrichment activities can have positive effects on the achievement of low-income children (Cooper et. al., 2000; Lauer et. al. 2003).

Poor children suffer nutritionally during the summer. Without school breakfast and lunch, children lose ground nutritionally and return to school in the fall less healthy than they were in the spring. Poor families must provide an additional 10 meals each week for each school-aged child, but they have no additional food resources. The U.S. Department of Agriculture’s (USDA) Summer Food Service Program (SFSP) can help fill the gap by providing meals to children in low-income areas. However, only about one-fifth of eligible children in the United States are receiving these summer meals (Food Research and Action Center, 2005). In rural areas, SFSPs cannot stand alone; to be effective, they must be paired with educational or recreational summer programming.

Child and youth development activities are limited in rural communities, and rural youth have fewer safe places with caring adults and constructive activities (Nadel and Sawaga, 2002). Child care is almost nonexistent, and many children are left home alone, in the care of older siblings, or in caregiver roles themselves. Low-income communities have fewer playgrounds and other places for children to play. Children spend their days in sedentary activities.

Human capital is eroding in rural communities across the country, with detrimental effects on children and families living in poverty. According to Nadel and Sagawa (2002), communities can build human capital by training, attracting, and keeping people serving rural America through programs like AmeriCorps.

Connecting parents and the community to children’s learning is critical to children’s educational success. Parental involvement in education has a positive impact on children’s academic achievement, attitudes toward learning, and aspirations for the future. Communities offer a wide range of resources that are valuable to schools and the families they serve. These resources include people who volunteer their time organizations that offer enrichment opportunities. “Communities too are rich in untapped resources that can benefit children. When families and community members

volunteer their time and talent in the schools, both schools and students increase their capacity to do more and to do it better" according to DeKanter, Ginsburg, Pederson, Peterson and Rich (1997).

Needs Assessment

Energy Express was introduced in 1994 to address the two identified needs of reading loss and nutritional declines for low-income children in the summer. The program was piloted in response to urging from the Governor's executive assistant who lamented that West Virginia was not making adequate use of USDA's summer food program. Program developers were well aware of the typical summer slide and knew that pairing reading and nutrition would meet the needs of poor, rural children. Communities who then identified children's decline in academic achievement or childhood hunger as needs were encouraged to apply for Energy Express sites.

West Virginia is a poor, rural state. According to the West Virginia Kids Count Fund (2007) 22.6% of West Virginia's children live in poverty. West Virginia is in a region where rural poverty is "most persistent." There are areas where families have lived in poverty for decades and the child poverty level is two to three times the national average. 2005 data indicates that 52.8% of the state's children in grades K-12 have been approved for free or reduced-price school meals, a 6.7% increase from 2000. It's estimated that it takes about two months in the fall for children to return to the nutritional status they enjoyed in the spring. In 2007, WEST VIRGINIA ranked 44th on measures indicating children's well being. Low-income children lose about 2 months in reading achievement during the summer, despite the fact that their middle-class peers make slight gains (Cooper, Nye, Charlton, Lindsay and Greathouse, 1996).

Program Goals and Objectives

Goal: To promote the school success of children living in low-income rural communities by providing summer learning experiences.

Objective: Children participating in Energy Express will maintain or increase reading achievement as indicated by pre-post measures on a standardized test using a stratified random sample.

Objective: Children participating in Energy Express will be provided 58% of their daily nutritional requirements as determined by the USDA-approved menus and site monitoring visits.

Target Audience

The target audience for Energy Express is children entering first through sixth grades in poor rural communities since academic achievement is highly correlated with children's socio-economic status. In 2007 Energy Express was held in 78 low-income communities across West Virginia. Energy Express is located in communities that have a school with fifty percent or more children eligible for free and reduced meals, with many sites having an eligibility rate ranging from 80% to 95%. Communities give preference to children who are eligible for these meals, are struggling with reading or need a safe and secure summer environment. The program is open to all religions, races, and backgrounds. Sites are located in rural towns under 10,000 people and small towns with populations between 10,000 and 50,000.

Type of Program

Special interest/Short-term program/Day Camp

Delivery Methods

Energy Express is located in schools, churches, or community centers. Each site team is managed by a site supervisor, who is a classroom teacher, Title I teacher, or principal. This individual is under the guidance of a county contact, typically a West Virginia University Extension agent, and a county collaborative. The site supervisor oversees a group of five to eight mentors and one volunteer coordinator, who are all serving as AmeriCorps members. Each mentor works with a small group of eight children to create a print-rich enriching environment that makes reading meaningful in their lives. Volunteer coordinators connect parents and community members to the site. They recruit, train and supervise community and teen volunteers who help with various site activities.

Each day 40-64 children spend 3½ hours completing a variety of activities related to the weekly theme and take-home book—creating books, reading aloud, writing and performing plays, reading silently, journaling, reading one-on-one with others, and exploring creative and exciting art activities. Each week every child receives a free take-home book, related to the theme, to keep. Children enjoy two family-style meals each day; these encourage responsibility, cooperation, and conversation. Children entering first through six grades are placed into groups of eight using vertical age grouping. These small groups are maintained throughout the program. Energy Express implements a cooperative environment where children work together and do not compete. Family and community involvement is woven throughout the program. Family visits are done by AmeriCorps members at the beginning of the program, weekly connections are made with parents; parents are included in special events and are recruited to volunteer.

Curricula and Educational Materials

The Energy Express program model focuses on: a place based curriculum, print-rich environment, nutritious family style meals, service, small groups, cooperative environment, and family and community involvement. The place-based curriculum consists of six weekly themes (myself, family, homeplace, community, and ideal world) which focus on the child and the people and places to which the child is connected. Energy Express immerses children in a print-rich environment, which includes literature, language experience, writing, art and drama which are all connected to a book. Each room has either a word wall or work books, which aid children in writing activities and building phonemic awareness and vocabulary. Following daily read alouds, graphic organizers are completed to reinforce comprehension. They are displayed in the room so that children can look back on them and recall the details of a given story. Children also have one-one-one reading daily with a teen or adult reading partner using shared reading strategies. During the fifth and sixth weeks of the program, themed “community” and “making my world a better place” mentors work with children to develop a meaningful community service project. To successfully complete the project, mentors: provide an orientation to the concepts of volunteering and community service, help children select a project related to Energy Express, help children develop and implement their project, celebrate the children’s contributions, and encourage children to reflect on their service contribution. Examples of past children’s community serve projects include: reading stories and performing plays for senior citizens; writing and illustrating books donated to public, school, or hospital libraries; writing and recording radio public service announcements about the importance of reading.

Energy Express has produced a variety of educational materials to assist and facilitate program implementation, and on-site training and management. The Energy Express Policy Manual, Mentor Manual, and Volunteer Coordinator Manual are core components of the Energy Express curriculum. These three manuals serve as a guides, training tools, and instructional pieces to assist in guiding the program. The manuals include such topics as policies and procedures, volunteer recruitment and management, and strategies to connect children to reading through reading, writing, and art. Energy Express has also produced two training videos. The “Connecting Children to Reading” video helps train AmeriCorps members and volunteers on how to use shared reading strategies when reading with children. “Where Breakfast, Lunch, and Learning Don’t Take a Summer Break” is used to train site team members on the curriculum.

Each site is provided a Resource Box complete with the videos, print materials for cooperative games, print-rich environments and reflection, testing materials, and a parachute. The materials are of high quality and are based on the latest research. The materials serve as an ongoing resource for site teams throughout the summer.

Training is a significant component of the program each year. Grant Implementation and Accountability Training is held in February for Energy Express county contacts, who are primarily West Virginia University Extension Service 4-H Youth Development agents. This training focuses on program model, updates, grant policies and procedures, and fair and equitable hiring procedures. Site Leadership training is held in April with site supervisors. At this training, new and experienced site supervisors focus on a variety of topics including: program model and updates, connecting with the community, supervision, and guidance. During the first week of the program in June, statewide site team training is held. At this training approximately site teams from across the state gather to kick off the summer with the AmeriCorps swearing-in ceremony. Participants then spend the rest of their time training on the program model, participating in team building activities, and participating in tracks for mentors and volunteer coordinators.

Teamwork and Collaboration

Energy Express is built on the premise of teamwork and collaboration. The Literacy Team, through the 4-H Youth Development Unit of the West Virginia University Extension Service, provides support and leadership to Energy Express. This team provides ongoing guidance including assisting in decision making of program policies and procedures, creating and training on program curriculum, and providing leadership to research studies focused on Energy Express.

Energy Express has an advisory board that is a sub-committee of the West Virginia Partnerships to Assure Student Success (WVPASS), sponsored by the Office of the Secretary of the West Virginia Department of Education and the Arts. This group works to provide ongoing leadership and assistance to the program as needed. When the Energy Express program was recently notified that local collaborative could no longer use Title I funds for their local 30% match, this group worked with the Department of Education and Governor’s office to reestablish funds for the program year.

In order to have an Energy Express site, a county collaborative of parents, groups and organizations is formed. Local partners differ from site to site but include boards of education, libraries, community- and faith-based organizations, community action agencies, parks and recreation, youth-serving organizations and national service

programs. Collaborative members represent individuals, groups, and businesses within a county that are concerned about children's needs in the summer, including academic loss, poor nutrition, and lack of a safe place for children to spend their time. The county collaborative works to develop a proposal, generate a required local match, and fills a variety of support roles. Examples include serving on hiring committees, identifying volunteers, and securing found objects for art activities.

Program Evaluation

Methods

Evaluation of Energy Express includes the following:

1. Woodcock Johnson Tests of Achievement's reading subtests are administered to a random stratified sample of children to discern any change in reading ability.
2. Monitoring reports issued by the USDA evaluate the nutritional requirements of Energy Express to children.
3. Child registration and attendance logs gather demographics to insure local sites are targeting the appropriate children.
4. Volunteer logs report volunteer demographics.

Process Evaluation

In the summer of 2007 Energy Express was held at 78 sites in 41 counties across West Virginia. Two thousand nine hundred (2,900) children entering first through 6 grades participated 15 days or more. Sixty-nine percent (69%) were eligible for free and reduced priced school meals. Twenty percent (20%) received special services through Individual Education Plans during the school year. Twelve percent (12%) of the children were minority. 168,200 meals were served, and 17,400 books were given to children for their personal libraries.

Five hundred and twelve (512) college students and community members were engaged in service; 430 college students served as mentors to children and 82 college students and community members served as volunteer coordinators. Four hundred and forty-eight (448) of the service participants were in their first or second year of service and were supported by AmeriCorps funding; 64 were in their third year or beyond of service and were supported by other funding. Seventy-eight (78) classroom teachers, Title I teachers and principals served as site coordinators.

Four thousand four hundred forty-eight (4448) family and community members volunteered, contributing more than 65,998 hours for an average of 846 hours contributed by 58 volunteers at each site. The volunteers were divided between youth (2621) and adults (1827). Volunteers assisted with children's reading and writing, helped with the food service, managed the site office, and prepared materials for use with children. Forty-four percent (44%) of volunteer time was devoted to children's reading and writing.

Outcome Evaluation

Energy Express has consistently been able to demonstrate gains in reading score results. In 2007 eighty percent (80%) of the children maintained or increased in reading scores. This is in contrast to the typical decrease in reading achievement over the summer. Children's reading on the three subtests (word identification, reading fluency, and passage comprehension) and on broad reading increased significantly ($p < .02$) as assessed by the Woodcock Johnson test of Reading Ability. Extrapolating

from the gain scores, it is possible to describe that the “average” child made a gain of about six months in reading skills during the six weeks of the program.

Fifty-eight percent (58%) of daily nutritional requirements were provided to children through daily breakfast and lunch.

Communication to Stakeholders

AmeriCorps members communicate with parents weekly via good news notes, phone calls or family visits. Parents are encouraged to visit and participate at the site and an open house featuring the children’s work occurs during community week. The children’s work from the first week through the sixth week is sent home on the last day as a portfolio documenting child progress.

Program evaluation results are shared through an annual release to the West Virginia University Extension Service, West Virginia Commission for National and Community Service, the West Virginia Governor’s office, WVPASS, Energy Express county collaboratives, and funders. At the state level there is ongoing communication through involvement in AmeriCorps program director meetings, WVPASS meetings, and West Virginia University Extension Service meetings. Local contacts communicate with stakeholders on an ongoing basis through collaborative meetings. Workshop, research, and poster sessions have been conducted at the state and national level events for youth educators.

Evidence of Sustainability

During its first summer in 1994 Energy Express had 2 sites, in 2 counties, 85 children, and 13 college student mentors. In 2007 Energy Express had 78 sites in 41 counties, 2900 children, 448 AmeriCorps members and 64 AmeriCorps alums.

Through the model of diversified funding, the program has been able to steadily grow and maintain a strong support network. The program has strong statewide supporters including the West Virginia Department of Education and the Arts (which funds Energy Express through a line item in the state budget), the West Virginia Governor’s office, Verizon, and The Greater Kanawha Valley Foundation. In addition, by requiring the county collaboratives to acquire the 30% match (an average of \$8685 per site) of site costs, counties have a vested interest in seeing the positive growth and outcome of their investment.

Continuous improvement is a guiding principle of Energy Express; the program has a well developed system for this process. Staff members, West Virginia University Extension Service’s literacy team members, evaluators, and site supervisors participate in a yearly continuous improvement retreat where they analyze multiple evaluation data sets. Local collaboratives are required to undergo the same process and address continuous improvement issues in the following year’s site application. These continuous improvement steps at the state and local levels assist in assuring program sustainability.

Replicability

Many components of Energy Express are highly replicable. Evidence of this is seen as an increased number of summer school programs in West Virginia are utilizing the Summer Food Service Program (SFSP) through the USDA. This program was not as widely used before Energy Express demonstrated its importance. Components of the

print rich environment including word walls and graphic organizers are now used in the public schools after having been introduced and emphasized by Energy Express.

Organizations in Louisiana, Tennessee, and Ohio have expressed interested and received technical assistance in replicating the program; day camps for young 4-H members patterned after Energy Express have been offered in several West Virginia communities; shared reading strategies are used throughout West Virginia; best practices have been taught at numerous national conferences. Energy Express manuals, videotapes, and website facilitate replication.

Replicating Energy Express on a statewide basis requires the development, nurturing and maintenance of partnerships and shared ownership at the highest levels in the state.

Rationale and Importance of Program

According to Carol Rasco, executive director of Reading is Fundamental, Energy Express is lauded as the country's only statewide reading-focused summer learning program. Energy Express promotes the school success of school aged children living in low-income and rural West Virginia communities by bridging the gap during the summer months. Research has shown that children who participate in Energy Express enter school in the fall more academically and nutritionally ready than they would have been if they had not participated in the program. Children have consistently had significant increases in reading scores. Historically, the "average" child has gained from three to six months in broad reading during the six week program. Energy Express builds on the strong history of 4-H programming and meets identified community needs each summer.

AmeriCorps members serving with Energy Express receive valuable experiences while being provided an opportunity to return home to a summer position in a rural community where they likely would not have found an opportunity to work. In addition they earn money for college, while making gains in personal efficacy and commitment to community service. This is building much needed human capital in poor, rural communities.

Energy Express offers opportunities for parents and community members to actively support children's learning. Energy Express provides an opportunity for community members who are worried about summer learning loss, nutrition, or children having a safe place to spend their summer days to join in a county collaborative to address their concerns.

The Center for Summer Learning at Johns Hopkins notes that as our nation struggles to meet the myriad of current challenges and demands, it is critical to discover ways to help low-income children develop the academic skills needed to be successful. We cannot let the achievement gap between poor children and their more affluent peers continue to widen. Energy Express is part of the solution.

References

- Alexander, K., Entwisle, D., & Olson L. (2007). Lasting consequences of the summer learning gap. *American Sociological Review*, 72, 167-180.
- Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research*, 66(3), 227-268.
- Cooper, H., Charlton, K., Valentin, J. C., & Muhlenbruck, L. (2000). Making the most of summer school: A meta-analytic and narrative review. *Monographs of the Society for Research in Child Development, Serial No. 260*, 65(1).
- DeKanter, A., Ginsburg, A., Pederson, J., Peterson, T., & Rich, D. (1997, December). *A compact for learning: An action handbook for family-school-community partnerships*. Retrieved August 12, 2008 from <http://www.ed.gov/pubs/Compact/index.html>
- Food Research and Action Center. (2005, October). *Obesity, food insecurity, and the federal children nutrition programs: Understanding the linkages*. Retrieved May 8, 2007, from http://www.frac.org/pdf/obesity05_paper.pdf.
- Lauer, P. A., Akiba, M., Wilkerson, S. B., Apthorp, H. A., Snow, D., & Martin-Glenn, M. (2003). *The effectiveness of out-of-school-time strategies in assisting low-achieving students in reading and mathematics*. Aurora, CO: Mid-Continent Research for Education and Learning.
- Nadel, W., & Sawaga, S. (2002). *America's forgotten children: Child poverty in rural America*. Retrieved May 8, 2007, from http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/27/a3/d5.pdf.
- West Virginia Kids Count Fund (2007). *2007 West Virginia kids count data book*. Charleston, WEST VIRGINIA.