Proven — 4-H is the largest youth development organization in Michigan, with nearly 223,000 youth between the ages of 5 and 19 participating. Through experiential learning, youth acquire skills that will last a lifetime. Research shows that youth who participate in 4-H get better grades, are more likely to go to college, are less likely to use drugs, cigarettes or alcohol, and are more likely to give back to their communities.

Relevant — 4-H Target Life Skills are used to increase awareness of the skills targeted in 4-H programs. It is a way to organize the efforts of 4-H in promoting positive youth development.

Life Changing — 4-H Camps and Recreation Programs help youth develop the skills needed to make good decisions in the future.

4-H Summer Recreation is a summer highlight for many youth. Camps provide youth an opportunity to learn the social skills that are needed to interact well with others, participate in groups, work cooperatively to accomplish goals, value differences in other people, and give and accept praise and criticism, which are important tasks for youth as they mature and become responsible adults.

Out-of-school programs like camps and Summer Recreation help keep youth engaged and develop skills such as teamwork, decision making and goal accomplishment that will enhance their chances of future success. These MSUE youth programs give youth the needed exposure and “hands on” practice in making sound, well-informed decisions.

In Roscommon County, 47 youth participated in summer Recreation programs, and 38 youth attended the 4-H Winter Science Workshop series.
Proven—There is near universal agreement (99%) that teaching 21st century skills is important to our country's future economic success, and 4-H is a proven leader in teaching these skills.

Relevant—Almost nine in ten voters (88%) believe 21st century skills should be part of the school curriculum. The 5-C’s of MI 4-H Global Competencies:
- Culture (competent and engaged with diverse cultures)
- Communication (competent communicators with diverse cultures)
- Character (possess qualities of character and ethical practices)
- Creativity (creative problem solvers/visionary thinkers)
- Citizenship (leaders in a globalized world).

Life Changing—According to Psychology Today, creative people are inventors. They invent problems. They invent solutions. Invention almost always requires them to draw upon ideas, techniques, methods, or resources from other disciplines. This promotes combinations of unexpected elements in novel ways. The ability to connect these seemingly unrelated items is not an exact science. To become creative, you must accept the possibility of failures. When you do witness a youth finding success in solving a dilemma in a creative way, you will know that you have witnessed a life changing event.

SPIN Clubs—The 4-H club structure has changed little in the first hundred years, but there is a new model in Michigan 4-H. It is called a SPIN Club (SPecial INterest short term club). It is a creative solution for volunteers who are not ready to commit to leading a year-long club. Basic 4-H rules apply, but the club only plans to meet six to eight times, and then has many options if they would like to continue.

We tested this new structure with a series of SET (Science, Engineering, and Technology) activities this past winter. It was a collaborative effort with the CRAF Center that included Lego Robotics, Artistic Expressions, Snap Circuits, Roomirates, Slimes, Rockets, and GPS. Two additional SPIN Clubs are scheduled to begin in the near future.
Youth STEM Skills are a National Priority

To address the nation's increased demand for science and technology professionals, 4-H set out to reach a bold goal of engaging one million new young people in science programs by 2018—and we reached it.

What is STEM? It is an acronym for Science, Technology, Engineering, and Math education. The skills and knowledge in these fields are not only essential for individual student success, our nation's future economic prosperity depends on them as well.

Science Blasts are one-day workshops that highlight STEM skills. Youth in Roscommon County have the opportunity to participate in Science Blasts every year.

Our twenty-two GPS Units are used by our 4-H clubs and camps, schools, and other organizations to learn how to find geocaches and other points of interest.

Nearly 169,000 youth explored science, math, engineering and technology through 4-H last year.

Proven—Young people in 4-H are nearly two times more likely to plan to go to college and are 60 percent more likely to participate in science, engineering or computer technology programs.

Relevant—Experts credit technological innovation with almost half of U.S. economic growth over the past 50 years, and nearly all of the 30 fastest-growing occupations in the next decade will require at least some background in STEM.

Life Changing—For more than 100 years, 4-H has been at the forefront of teaching young people about science, technology, engineering, and math (STEM). Our hands-on programs empower youth and provide them with opportunities to grow, learn, and become confident kids.

4-H National Science Experiments Each year, Roscommon County youth participate with more than 5 million youth across the country, in the 4-H National Youth Science Day Experiment. Past experiments have included robotics, agricultural science, wind power, alternative energy, and environmental science.

Lego Robotics combine sensors, motors, and an electronic brain with the familiar Lego bricks, so that even our youngest 4-Hers can successfully build and program complex robots.

TechXcite is a research project partnership with Duke University and 4-H Youth Development. Roscommon County 4-H applied for, and received, one of 15 complete sets of these materials. These kits are used to create TV remotes, solar ovens & cars, rainwater harvesting, Quest for Speed cars, bionic arms, bio-imaging, and burglar alarms.

Electric circuits, are the foundation to understanding how electricity works, but it is not currently included in public school education. This oversight will be corrected when the new science curriculum is adopted, but that will not help the students who are not learning it now. Roscommon County 4-H youth are mastering these concepts using plastic Snap Circuits to build FM radios and burglar alarms, and magnetic littleBits to make creations that can shake, bend, buzz, light up, and make music.
Healthy Families Create Healthy Communities...
Preventing or managing chronic diseases is the top health challenge of the 21st century. Leading a healthy lifestyle can greatly reduce the risk of developing chronic diseases.

Program highlights delivered by SNAP-Ed:

Youth and adults who participate in MSU Extension programs are more active and make healthier food choices. Resulting in 1. lower risk of chronic disease and illnesses 2. increases disposable income by reducing medical expenses and the number of days missed from school and work. This leads to lower long-term medical costs for families and communities.

Senior Market FRESH
MSUE provided nutrition education to low income seniors to improve the quality of their diet by purchasing locally grown fresh fruit and vegetables from Roscommon County farmer’s markets though senior Market FRESH. Participants received $20 in coupons redeemable at farm markets for over $3300 in funds for produce grown by local farmers.

Situation: Knowing our numbers in Michigan
There are a large number of people living at or below the poverty level; high levels of obesity among adults; and low levels of adults consuming the adequate amount of fruits and vegetables in Michigan. These are factors that affect the quality of life for adults and their families, and increase their likelihood of chronic diseases.

Purpose
MSUE programs help children, adults and seniors incorporate healthy and affordable nutrition choices into their lifestyles while increasing physical activity for an overall increased community well-being.

Through educational programs, adults learn about MyPyramid and MyPlate; making the most of their food dollars; menu planning; understanding a recipe; keeping food safe; nutrition and health; improving physical activity and feeding a family.

“I learned that veggies grow in the ground and you can eat different parts. The carrots are roots and those are yummy!”
-Tops & Bottoms Youth Participant
Preventing or managing chronic diseases is the top health challenge of the 21st century. Leading a healthy lifestyle can greatly reduce the risk of developing chronic diseases.

Chronic diseases are among the most prevalent, costly, and preventable of all health issues. Access to high-quality and affordable prevention measures are essential to saving lives, reducing disability, and lowering costs of everyone’s medical care.

Personal Action Toward Health (PATH) The series provides skills and tools to manage chronic health conditions using Stanford University’s Chronic Disease Self-Management Program. Participants learn tools to manage symptoms and set goals that help them reduce stress and feel more confident. Statewide evaluation results of the program show that over 40 percent of participants reported decreased discouragement and frustration, as well as decreased fatigue and shortness of breath.

Dining With Diabetes

Proven: Dining with Diabetes is an evidence-based five-session course designed for people at risk of diabetes or who have diabetes, and their family members. It has been recognized by the Center for Disease Control and Prevention as an effective strategy to support self-management of diabetes.

Relevant: Michigan ranks 15th nationally for prevalence of diabetes and fifth nationally for obesity, according to the latest CDC data. An estimated 10.0% of Michigan adults 18 years and older have been diagnosed with diabetes — about 758,300 people (Michigan Department of Community Health 2011).

Life Changing: The eleven participants in the 2013 Dining With Diabetes class, in partnership with Mercy Hospital Grayling, shared that they felt better prepared to manage their diabetes in the kitchen, and felt that they had a greater understanding of how a diabetes friendly diet impacts their health over time.
Program highlights delivered by SNAP-Ed:

Partnerships include the Community Mental Health, New Beginnings Drop-in Center, Houghton Lake Public Library, Central Michigan District Health Department, and MIWorks.

The Supplemental Nutrition Assistance Program-Education (SNAP-Ed), provides nutrition education to Bridge-card eligible adults and children in group settings. This program aims to create behavior change around dietary quality and increasing physical activity while stretching food dollars. Our program is accountable to the United States Department of Agriculture (USDA) and the Michigan Dept. of Human Services (DHS) with the ultimate goal of promoting healthy weight management and obesity prevention.

Proven

199 adults and 110 youth in Roscommon County received nutrition education in a variety of venues through partnerships with schools, the health department and senior centers from January 2013 to December 2013. There were a total of 851 participant contacts (333 adult/518 youth).

Relevant

Roscommon County ranks 71st out of 82 in the state based on health behaviors. These statistics show 33% of Roscommon adults are obese and 30% of adults reported no leisure-time physical activity. SNAP-Ed nutrition programs seek to make classes accessible to these audiences at no cost to the participant. http://www.countyhealthrankings.org/app/michigan/2014/rankings/roscommon/county/factors/overall/snapshot

Life Changing

55% of adults who have completed a nutrition education series reported an increase in fruit and vegetable consumption.

28% of youth who have completed a nutrition education series have increased their intake of vegetables, as well as 24% reporting an increase in fruit consumption.

"I didn't think I liked vegetables until we made the pizza recipe (The Works Vegetable Pizza). It's my favorite kind now!" - Eat Healthy, Be Active Participant

DID YOU KNOW.....77.4% of Michigan adults do not consume adequate amount of fruits & veggies. 48% of all SNAP participants are in working families.
Ten percent of Roscommon County is covered in high quality water resources, ranging from beautiful lakes to pristine rivers and streams. The quality of these lakes and streams depends on the continued health of the surrounding forest, which grows on nearly 80% of the County’s land base. As an Extension Educator, I work to forge relationships as well as maintain partnerships dedicated to improving the quality of our forest and water resources.

**Proven**
- Trained with DNR’s Oak Wilt Expert on recognizing and treatment
- Visited 4 properties with potential oak wilt; positively identified on 3 sites
- Worked with MI Department of Agriculture to confirm that new invasive species was NOT present on Roscommon property

**Relevant**
- Serve on Advisory Council for Roscommon Conservation District Forester
- Hosted over 30 foresters for DNR Forest Stewardship Program meeting at Au Sable River Center
- Gave presentations at the following meetings:
  - Michigan Association of Timbermen
  - Michigan Area Conservation Districts
  - North East Cooperative Weed Management District (Huron Pines)

**Life Changing**
- Participated in Cross Country Ski Tree Identification Session in February
Community Vitality

MSUE providing citizens with training that will lead to financially responsible workforce which will lead to more businesses to locate in Michigan, boosting the tax base and strengthening local, state and regional economies.

Financial Literacy

Proven: Homeownership and personal finance education from MSU Extension is designed to provide individuals and families with the tools necessary to secure their financial future. The Dollar Works II workshop helps residents...

- Make sound financial decisions
- Create financial goals
- Pay down debt and use credit wisely
- Create a spending plan and save more

Relevant:

The Urban Digest finds foreclosures reduce property values in neighborhoods. Crime, social disorder, and population turnover increase, and put fiscal stress on local governments. Not to mention the adverse consequences it has on families.

Life Changing

12 county participants said that they have made the following changes after participating in the Dollar Works II training:

- "I have learned how to save and manage my money better than I used to"
- "I don't buy stuff I don't need or that isn't important"
- "I pay car insurance and the phone bill"
- "I am tracking my monthly spending"

Extension Provides practical information you can trust to help people, businesses and communities solve problems, develop skills and build a better future.
A multitude of additional tasks
Assisting with promotion of programs
Maintaining civil rights files
Maintaining registration and participation data
Maintaining evaluation data
Inventorying program supplies
Assisting with grant purchases and reports
Compiling resources

Volunteers at 888-678-3464.

The MSU Gardening Hotline staffed by Advanced Master Gardener Volunteers is available at www.mifargardens.msu.edu.

Within 48 hours: www.mifargardens.msu.edu/extension/faq

A diagnostic lab tests the soil and provides recommendations to keep your lawn and garden healthy. Visit www.mifargardens.msu.edu for more information.

Providing the following services:
- Soil testing for lawns, gardens, and fields
- Crop scouting
- Crop scouting
- Pest control
- Plant identification

The MSU Spark Support office is a benefit to the public by providing MSU and MSU Extension support to citizens and businesses with practical information they can use.