

New Jersey's Benchmark Report January 2000

# The Objectives of Reinventing Agricultural Education for the Year 2020

**Reinventing Agricultural Education for the Year 2020** was a three-year visioning/planning project initiated in 1996 by the National Council for Agricultural Education through a grant from the W. K. Kellogg Foundation. It was designed to reposition and strengthen school-based agricultural education for the 21st Century.

The initiative stimulated a national dialogue among a broad array of stakeholders concerning the future of agriculture and the food system. The results include a strategy for achieving the visions for agricultural/food systems education at the local, state and national levels.

Major objectives for the state initiative included:

- Organizing a dialogue on the challenges and opportunities facing the American and global food systems and K-adult agricultural/food systems education:
- Establishing a comprehensive visioning process in which counties or groups of counties developed their own visions for the preferred future for agricultural/food systems education;
- Designing and implementing an on-going strategic planning process in which participating counties and organizations generated new partnerships and initiatives to move toward their visions for the preferred future:
- Empowering stakeholders to implement initiatives developed in their strategic planning processes by sharing information between schools:
- ◆ Following up statewide efforts by combining results into a state vision statement, strategies for implementation, follow-up on priorities and the completion of a state benchmark report;
  - Becoming a viable part of the national initiative;
  - Improving agricultural education programs in New Jersey in preparation for the 21st Century.



## New Jersey Department of Agriculture

Office of Agricultural Education/FFA P.O. Box 330 Trenton, NJ 08625 Phone (609) 984-3732 Fax (609) 633-2421 www.state.nj.us/agriculture

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# "Preparing the Next Generation"

Innovation and creativity have played an important role in New Jersey's history. From Thomas Edison, who developed the incandescent lightbulb, and Elizabeth White, who hybridized the high bush blueberry, to the researchers involved in today's revolution in the state's biotechnology and pharmaceutical industries, New Jerseyans have long been motivated by an entrepreneurial determination to sail uncharted waters.



GOV. CHRISTIE WHITMAN

This same spirit of creativity has been evident in the Garden State's participation in the Reinventing Agricultural Education for the Year 2020 initiative, sponsored by the W.K. Kellogg Foundation and the New Jersey Departments of Agriculture and Education. Over the past two years, more than 1,300 New Jerseyans have been involved in this nationwide effort to ensure that our agricultural education curricultums meet the challenges and the needs of the 21st century.

Each of us has a vested interest in securing New Jersey's agricultural future. The food and agriculture industry is a multi-billion dollar segment of the state economy, generating hundreds of thousands of jobs in agricultural production, food marketing and sales, natural resource management, biotechnology and plant and animal science. Preparing the next generation of agricultural workers to fill these demanding positions can only be accomplished if our agricultural curriculums remain on the cutting edge in the decades ahead.

Here in New Jersey we have undertaken the preservation of one million acres of farmland and open space over the next decade. Preserving the land, however, requires that we also preserve our agricultural industry and our agriculturalists, many of whose families have farmed here for generations. We can only ensure that future by aggressively pursuing the course set for agricultural education through the Reinventing Agricultural Education for the Year 2020 initiative.

My thanks and congratulations to all who gave so generously of their time and talents to provide a more detailed direction for agricultural education - one that is focused on enhancing its basic elements through hands-on learning and a competitive forum in which to test such skills.

" Preparing the next generation of agricultural workers to fill these demanding positions can only be accomplished if our agricultural curriculums remain on the cutting edge in the decades ahead."

## New Jersey's Approach to Reinventing Agricultural Education for the Year 2020

Can you imagine a day when pen and paper no longer serve as standard educational tools in the classroom? Instead, students may one day complete and submit class work and assignments on a voice command computer in "cyber classrooms," where students learn through a computer link at home.

Imagine these possibilities as we explore tomorrow's educational world. It is not likely to resemble our own school days where we sat in assigned seats and diligently took notes with a ballpoint pen in a spiral notebook.

Students of the 21<sup>st</sup> Century will likely be more sophisticated. Even now, students are learning to comprehend computers and related technology at early ages. Third and fourth graders are more familiar with computers than their parents, a generation that did not grow up with a computer in the home.

What will the world look like in the year 2020? Will students continue to be picked up by yellow school buses or walk to school in their hometown? Will the Internet continue to hold an esteemed position in the world of information access or will it too become obsolete as newer and faster technology develops?

Will our mail be delivered completely online? Will a pair of glasses or a wrist watch serve as the source of an immeasurable amount of information? Futuristic – yes. Outlandish – perhaps. Downright impossible, some may say. But at the rate we are going, this could be our world in 20 years or less.

As you read through this report think of the future, perhaps like the one just described. This document reflects all of the possibilities the *Reinventing Agricultural Education for the Year 2020* initiative created in New Jersey.

The next step, the most important step, is implementing the ideas outlined in

this report. Shaping the future of agricultural education will not be an easy task. It will require foresight and the determination to see the *Reinventing Agricultural Education for the Year 2020* initiative completed.

Many positive results emanated from the *Reinventing Agricultural Education for the Year 2020* initiative in New Jersey. A dialogue was created among groups interested in ensuring that agricultural education programs will survive, and thrive, into the next century.

Groups emerged with a clear purpose in mind and developed an action plan that will be realized one step at a time.

When people from all walks of life gathered at consortium meetings, they explored and questioned reality and opened up the world of imagination. "What if ....." served as a starting point for many discussions regarding the possibilities that agricultural education holds for the future of schools currently offering such programs, as well as for those communities starting new programs.

Such discussions generated the kind of enthusiasm and desire to create more agricultural education programs, branching out into more communities, towns and cities in the Garden State. One vision that took shape was that agricultural education is part of every student's learning experience from their first day of school in kindergarten.

We are confident that, through the *Reinventing Agricultural Education for the Year 2020* initiative, stronger agricultural education programs will prevail.

And just as importantly, more students will benefit from this more complete educational program, as have thousands of students who have already trained for careers in agriculture.

## Coming Together to Reinvent Agricultural Education

The world has changed dramatically in just the last 10 years. Advances in technology, for example, have enabled medicine to preserve life in ways never imagined.

Technological advances in agriculture have moved rapidly as well. American agriculturalists today plant seeds and harvest crops differently than their forefathers did. They have an arsenal of tools that includes computerized machinery, genetically-engineered seed, and global-positioning satellite systems.

These are the kind of changes that came to mind when the *Reinventing Agricultural Education for the Year 2020* initiative began in New Jersey.

In recent years agriculture in the Garden State has been challenged by the state's abundant population and high land values. Production agriculturalists here in New Jersey must employ skillful strategies to maintain their viability in the most densely populated state in the nation.

Similarly, agricultural education must update instruction to meet the needs of an ever-changing student population. Agricultural education can and must serve a broader spectrum of students in the future, from those living in rural areas to those living in highly urbanized areas; from those interested in entering the workforce immediately after high school to those who will eventually pursue post-secondary education. By the year 2020, we expect to see more non-traditional students and agricultural education programs.

More than 1,300 people participated in New Jersey's *Reinventing Agricultural Education for the Year 2020* initiative on the local and state levels over the course of two years.

The W.K. Kellogg Foundation pro-

vided the seed money to begin the initiative in 1996. In 1998 and 1999, the New Jersey Departments of Agriculture and Education stepped up to the challenge and allocated funds to counties through grant programs for local consortium meetings. Counties, working individually or teaming up with other counties, could apply for a \$2,500 grant per county for each of the two years. This helped counties work through their county boards of agriculture to hold visioning and strategic planning meetings.

Bringing a variety of stakeholders together was the responsibility of each county consortium. County consortium leaders gathered those people most interested in supporting agricultural education, especially those with a vested interest such as agricultural employers seeking quality employees.

Stakeholders included school principals and superintendents, guidance counselors, agricultural education students, parents, alumni, agricultural leaders, business and industry representatives and county Extension agents.

The stakeholders embarked on a three phase process which included: visioning, strategic planning and implementation.

#### **Phase 1: Visioning**

Visioning was introduced first as a way for participants to declare their goals for local agricultural education programs.

What is vision and how does one inspire vision?

A vision must be three things:

- It must be legitimate.
- It must be shared.
- It must express the highest aspirations of a person or group.

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A variety of exercises were incorporated into the meetings, normally held in a two-part series, and included:

- "What Does Agricultural Education Mean to Me"
- "Trends and Emerging Developments Shaping Food Systems"
- "Implications for Agricultural Education"
- "Removing Constraints On Visionary Thinking"
- ♦ "Creating a List Vision"
- ◆ "Small Group Vision Development"
- "Strengthening Vision Themes"
- "Setting Vision-Based Goals"

These exercises helped participants explore ideas not generally thought of as, or believed to be, achievable. The discussions generated by such diverse groups, however, allowed and encouraged such ideas.

#### **Phase 2: Strategic Planning**

Strategic planning was tackled in the second phase of meetings held in the spring of 1999. Participants, many of whom had been involved in the visioning phase of the initiative, were asked to map out specific actions that would accomplish a certain purpose, whether it was educating guidance counselors on the value of agricultural education and the many career opportunities agriculture offers students or educating the community on the impact of agriculture on society.

First, however, participants reviewed local, state and national vision statements and goals. Stakeholders were given a list of 10 to 15 goals that had been developed at the previous visioning meetings. From this list, participants decided on the top four goals.

Next, the process of strategic planning was introduced. Each of the goals was assigned to groups of participants. Objectives based on specific goals were developed with the notion of devising a specific project. Stakeholders mapped out the yearly events of the project and how

they planned to accomplish a project over a five-year time frame.

Through this process, stakeholders identified objectives that were meaningful, measurable and achievable. They gave their work a project name, taking ownership of their future. Specific events were detailed in their work such as meeting with guidance counselors; implementing a local survey to assess curriculum needs; establishing or strengthening advisory boards for an agricultural education program, and researching funding options and determining if staff would be needed to manage a project.

When all of this was completed, resources needed, both institutional and human, were determined, and the question "Who will take the initiative?" on the project was answered.

Examples of specific projects developed in the strategic planning phase are included in the pages of the county consortium highlights later in this report.

### **Phase 3: Implementation**

At the completion of these meetings, each county consortium had developed specific projects to implement, had a list of stakeholders to contact for their involvement, and most importantly, a timeline for implementation.

No county or consortium can continue this initiative alone. The same groups of people who were part of the visioning and strategic planning process must be part of the implementation process.

An agricultural education teacher cannot be the only one trying to implement a strategic planning project. These visions must be shared. They must be legitimate, and they must represent the highest aspirations of a given agricultural education program.

Along with the myriad of positive results gained from this initiative, stakeholders have a renewed vision and purpose for agricultural education. The work that was started will surely have a lasting impact on the lives of students everywhere.

## These themes emerged from the local consortia discussions during the visioning process:

- Update of agricultural education curriculum
- Guidance counselor/school administrator training
- Motivated agricultural education teachers
- Agricultural literacy in elementary schools
- ◆ The sharing of resources between school districts for education in food, agriculture and natural resources
- Agricultural education awareness
- Building community-based partnerships
- Agricultural education from cradle to grave
- Teacher training programs

# This is a sampling of the projects devised by stakeholders during strategic planning:

- "Model Curriculum Development for Agricultural Education"
- "Agricultural Resource Information Center"
- ◆ "Life Science for a New Millennium"
- "Educate the Educators"
- "Modify Agriculture's Perception (M.A.P.) The Future"
- "Curriculum for Career Conquest: Cultivate The Future"
- "Agriculture Career Tour"

# "Creating a Preferred Future"

Creating a preferred future for agricultural education is an important effort that requires close partnerships with many other sectors of our economy and our community. To this end, the New Jersey Departments of Education and Agriculture have joined together with other stakeholders in the nationwide Reinventing Agricultural Education for the Year 2020 initiative.

Just like the world around us, agricultural education has become increasingly complex. The demand for development, dissemination and interpretation of information grows faster than most of us would ever have imagined possible.



ARTHUR R. BROWN, JR. Secretary of Agriculture

Every facet of agricultural education -- from curriculum development to teacher preparation to state guidance -- has been challenged to keep pace with these rapid changes. That=s why New Jersey=s emphasis throughout our "reinventing" process has been on setting clear goals for the 21<sup>st</sup> Century. We have taken advantage of this unusual opportunity to thoroughly examine the instructional methods and teaching tools we use in our agricultural education classrooms. As a result, we have created an unprecedented dialogue on agricultural education among education professionals and students, agriculturists, and others in the private sector, a dialogue that has provided a broader perspective on the needs of our youth, our educational systems, our communities, our environment and the food and fiber industries.

Throughout our work on this initiative, we have kept our primary goals in sight: preparing young people for productive careers, offering workers advanced training in their fields of choice, building public awareness of the industry and developing leadership for the food, fiber and natural resource systems of the future. We will revise and improve our agricultural education programs to insure that these goals, and others we set along the way, are met.

We are now entering the implementation phase of our work, the time when the plans developed through the Reinventing Agricultural Education for the Year 2020 initiative become reality. Because local interest will determine the success of agricultural education programs in the years ahead, plan implementation must be accomplished within each community under the guidance of local stakeholders and local educational systems. In this way, we can be sure that agricultural education will continue to produce well-qualified, competent leaders for New Jerseys production agriculture and related agricultural industries.

I offer my personal thanks to the hundreds of citizens around the state who participated in this important endeavor. With your continued interest, our effort cannot fail.

"Creating the preferred future for agricultural education is an important effort that requires close partnerships with many other sectors of our economy and our community."

# NEW JERSEY'S VISION STATEMENT

"Agriculture is a dynamic and vital aspect of New Jersey society with a foundation rooted in educational excellence and the practical application of knowledge and resources.

Premier educational programs in food, agriculture, and natural resources that provide career opportunities and a positive quality of life shall be recognized, supported and promoted as a foundation for agriculture's future."

### JOINING TOGETHER

New Jersey held three state conferences to address the *Reinventing Agricultural Education for the Year 2020* initiative. The conferences were held in September 1997, May 1998 and September 1998.

The first two conferences addressed the initiative through visioning and strategic planning, which brought together a variety of people interested in planning for the future of agricultural education.

New Jersey Secretary of Agriculture Arthur R. Brown, Jr. unveiled the state vision and the eight state goals at the implementation conference in September 1998.

The *Reinventing Agricultural Education for the Year 2020* initiative led to increased exposure for agricultural education programs in the state. It also created new alliances and strengthened existing relationships with government agencies, secondary and post-secondary institutions and the agricultural community. Funding from the New Jersey Departments of Agriculture and Education made it possible for county consortia to receive grants to hold visioning and strategic planning meetings.

## **NEW JERSEY STATE GOALS**

#### Goal #1

By 2005, every person in New Jersey will have the opportunity and resources to increase their knowledge and skills concerning food, agriculture, natural resources and the use of production systems for human existence and improved quality of life.

#### Goal #2

By 2006, regional centers for excellence in food systems, agricultural production and marketing, natural resource management and agricultural science education will be established.

### Goal #3

By 2008, resources for education in food, agriculture and natural resources will be shared between states, regions and school districts.

#### Goal #4

By 1999, the New Jersey Department of Agriculture, in cooperation with the New Jersey Department of Education, will establish an office to facilitate and promote agricultural education/FFA initiatives and programs throughout New Jersey.

#### Goal #5

New Jersey's system of learning about food, agriculture and natural resource management will be recognized nationally and internationally for its effectiveness and visionary delivery systems.

#### Goal #6

The New Jersey FFA Association will be recognized as a model state FFA association.

#### Goal #7

By 2015, agricultural education will help New Jersey be recognized as a model in natural resource management using acceptable management practices for air and water quality, soil conservation, wildlife management and recreation.

#### Goal #8

There will be a direct linkage between all secondary and post-secondary education programs in agriculture by 2006.

INVOLVEMENT IN THE REINVENTING AGRICULTURAL EDUCATION FOR THE YEAR 2020 INITIATIVE:

September 1997 Visioning conference 148 stakeholders

May 1998 Strategic planning conference

77 stakeholders

September 1998 Implementation conference

163 stakeholders

A total of **388 stake-holders** attended the three statewide conferences.

Vision themes and goals may look good on paper, but a clearcut plan on how to accomplish a goal must exist, ensuring that the goal of the project is shared by all. The following strategic planning project was developed on the state level and later used as an example when county consortia gathered to conduct strategic planning.

#### IMPLEMENTING A STRATEGIC PLANNING PROJECT

The Key to Implementation is Stakeholder Buy-in

#### **New Jersey Vision Statement**

AAgriculture is a dynamic and vital aspect of New Jersey society with a foundation rooted in educational excellence and the practical application of knowledge and resources. Premier educational programs in food, agriculture, and natural resources that provide career opportunities and a positive quality of life shall be recognized, supported and promoted as a foundation for agriculture=s future.@

#### **Strategic Planning Project:**

**GOAL**: By 2008 resources for education in food, agriculture, and natural resources will be shared between states, in regions, and school districts.

**OBJECTIVE**: New Jersey school districts with agricultural education programs will agree to develop and share specific resources for the benefit of each participating program.

#### PROJECT: ACollaborative Agreement Programs in Agricultural Education@

By 2002, develop three pilot programs wherein school districts with complete agricultural education programs share resources, faculty, and students to provide expanded programs in food, agriculture, and natural resource management.

**By 2001,** develop a program proposal to obtain \$100,000 in incentive grants for school districts that develop an approved program to share agricultural education resources.

By 2000, investigate needs, benefits, strengths, weaknesses, and trends for collaborative agreement programs.

#### **EVENTS:**

- 1. The office for Agricultural Education/FFA takes the initiative.
- 2. A team of interested parties meets to develop program parameters.
- 3. Suggested parameters are presented to stakeholders.
- 4. Funding is obtained by the New Jersey Department of Agriculture (NJDA) for incentive grants.
- Agreements between school districts are facilitated by the office for Agricultural Education/ FFA.

#### **RESOURCE NEEDS:**

- 1. Staff assigned from NJDA.
- 2. Interest parties and stakeholder participation.
- 3. School district participation.
- 4. \$100,000 in funding for incentive grants.
- 5. Leadership to make this program happen.



DAVID C. HESPE Commissioner of Education

# "A Model for All of Education"

The success the United States has experienced since its founding can be directly linked to its efforts to build and maintain a strong agricultural industry. Although the agricultural revolution has long since passed, we continue to reap the benefits of the value we place on agriculture.

In an effort to ensure the continued success of agriculture in our state, our department joined with the Department of Agriculture two years ago to explore industry needs as we enter the next century. A key goal of the Reinventing Agricultural Education for the Year 2020 initiative was to ensure a constant supply of young people selecting agriculture as their career. More than 1,300 stakeholders organized into county consortia to conduct these visionary meetings. The result of these meetings is a compilation of the strategic plans developed by the county consortia.

The key to the success of this initiative, however, is not the plans that have been developed. Rather, success lies in the steps we take to implement these goals. The Department of Education is committed to being an essential partner in this important task. Through the implementation of these plans, agricultural education will continue to serve as a model for all of education as we prepare young adults to meet the future.

"Through the implementation of these plans, agricultural education will continue to serve as a model for all of education as we prepare young adults to meet the future."

## THE PROGRESS OF COUNTY CONSORTIA

A key component in the *Reinventing Agricultural Education for the Year 2020* initiative was the involvement of community members, whether people represented business and industry, the educational field or the student population.

Agricultural education programs in New Jersey have already benefited from the input received through this initiative. Comments, ideas, suggestions and visions were the creation of local stakeholders, which was especially important to the process.

In the pages that follow each county that participated in the initiative is featured. Highlighted are the county vision statements, along with examples of several exercises completed in the visioning portion of the initiative such as "What does agricultural education mean to me?" and "Trends and emerging developments in agriculture."

More importantly, specific projects were developed by those counties who completed the strategic planning portion of the initiative. These specific projects are designed to help local county consortiums continue the work that was started. Each project identifies clear objectives and goals in a timeline set up for the next five years.

#### Interesting to note:

- Fourteen of New Jersey's 21 counties were involved in the Reinventing Agricultural Education for the Year 2020 initiative.
- There were 49 teachers of agricultural education involved.
- More than 25 staff members from the New Jersey Departments of Agriculture and Education actively participated in the initiative.
- Funding generated as a result of the *Reinventing Agricultural Education for the Year 2020* initiative totaled \$210,000.

### A SNAPSHOT OF NEW JERSEY'S AGRICULTURAL EDUCATION PROGRAMS

New Jersey has 51 agricultural education programs that have approved programs of instruction. Of those 51 programs, 40 have FFA chapters in place.

Areas of instruction include:

- ♦ Horticulture
- Landscaping
- Environmental Studies
- ♦ Veterinary Assistant
- Agricultural Business Management
- ♦ Animal Science
- Greenhouse Operations
- Agricultural Biotechnology

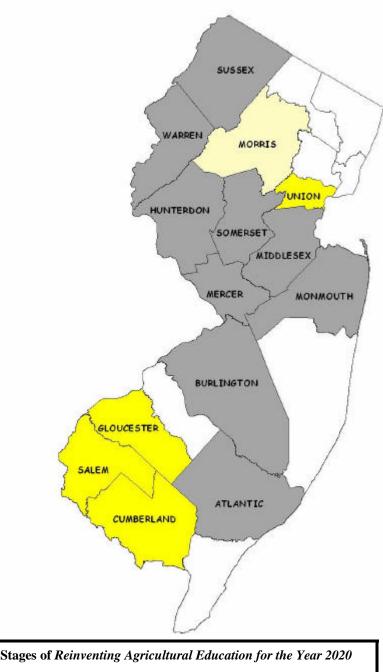
1998-99 student enrollment in agricultural education was 2,623.

1998-99 FFA Membership totaled 2.092 members.

"Promote and preserve agricultural education. The future depends on what you do this day, this week, this year."

Randy Trivette New Jersey Department of Education

## County Involvement in the Reinventing Agricultural Education for the Year 2020 initiative in New Jersey



Visioning

Visioning and Strategic Planning

Visioning, Strategic Planning and Implementation

### WHO WAS **INVOLVED?**

- **Agricultural** business and industry
- **County Extension** offices
- Post-secondary institutions
- State agencies
- **School** administrators
- Agricultural education teachers
- Agricultural education students and parents
- **FFA Alumni**
- **County boards** of agriculture
- Guidance counselors
- **Educational** interests such as board of education members
- Other agricultural organizations



# **Atlantic County**

## Consortium Vision Statement

"To create a community supported and balanced interrelationship between agriculture profitability, technology, and the environment which provides mandated, progressive agricultural programs for all citizens to insure the education of the public as to the global impact of agriculture on Atlantic County's life, health and economic welfare."

## What Agricultural Education Means to Me

- Economic viability for farming
- Productivity—self sufficiency
- Quality of life
- ◆ Balance between environmental issues and production
- Reaching a whole new level, bioengineering
- Helps students with critical thinking
- Institutes of higher education
- The beauty of teaching

To learn more about the Reinvent Initiative in Atlantic County, contact: Steve Bouchard Oakcrest High School 1824 Vienna Avenue Mays Landing, NJ 08330-2206

## **Atlantic County Consortium Specific Project**

Theme: Agricultural Awareness

### "Living History Agricultural Farm"

*In 2004*, a comprehensive educational program from pre-kindergarten through adult will be in place for Atlantic County at the county Living History Farm.

*In 2003*, educational curriculums for high school students and adults will be developed along with guest demonstrations.

*In 2002*, education programs for pre-kindergarten through eighth graders will be developed and curriculum will be written, as well as elementary school contacts established.

*In 2001*, open farm, install sanitary facilities and parking lots, and acquire livestock and equipment through donations.

*In 2000*, form a taskforce to locate property and determine the usability of the Living History Farm.

**Resources Needed:** Task force, county school boards, land, money, staff, county board of agriculture, livestock, 4-H clubs, historical societies, county parks commission, equipment, insurance.

## Trends and Emerging Developments

- Sustainable agriculture
- Move towards economic viability
- ♦ Global marketing
- Biotechnology/Genetics
- Food safety issues
- Decline of farmland
- Computer technology in classrooms



# **Burlington/Mercer County**

## Consortium Vision Statement

"By the Year 2020, Agricultural Education will enhance the perception and image of agriculture and the environment by providing meaningful knowledge and improving the quality of life through the use of improved management and production methods that incorporate current science and technology research skills. Programs will be available to all learners, be broad in scope and provide premier leadership through the FFA to maintain our position in the world market."

### What Agricultural Education Means to Me

- Gives direction for future
- Opportunity for all levels of learning
- Good leadership training
- ♦ Learn by doing
- Environmental protection
- Preparing students for appreciation of agriculture
- Agricultural careers

To learn more about the Reinvent Initiative in Burlington and Mercer County, contact:
Mike Hlubik
Northern Burlington
Regional High School
160 Mansfield Road East
Columbus, NJ 08022

# **Burlington/Mercer County Consortium Specific Project**

Theme: Maintaining High Quality Agricultural Educators

### "Developing Enthusiastic Quality Educators of Agricultural Science at All Levels"

*In 2004 and 2003*, offer agricultural based in-service training and staff development for school staff, Grades K-12.

*In 2002*, develop the curriculum, materials and resources that will drive the staff development program and present it to key policymakers.

*In 2001*, develop core curriculum based on the results of the community surveys.

*In 2000*, establish an advisory board made up of local and county educators and members of the farm and business community.

Who Takes the Initiative? Board of education and county board of agriculture in collaboration with local schools.

**Resources Needed**: Money, facilities to produce materials for inservice workshops, facilities to teach the teachers.

## Trends and Emerging Developments

- ♦ Availability of land
- "Greening" of Society
- New Technology
- World Marketplace
- Agricultural Research
- Need for a basic understanding of agriculture
- Woodlot management and forest products
- Public Relations for agriculture



# **Hunterdon County**

## Consortium Vision Statement

"Through a combination of education and public outreach, create an informed public and knowledgeable workforce that supports and nurtures the technologically diverse and lucrative agriculture industry in Hunterdon County."

To learn more about the Reinvent Initiative in Hunterdon County, contact:
David Ritter
South Hunterdon
Regional High School
301 Mt. AiryHarbourton Road
Lambertville, NJ 08530

"Agricultural Education is the future of Hunterdon County. We need students to pursue agricultural careers. Today, there are a variety of opportunities from production agriculture to research and development."

> John Hargreaves III, President, Hunterdon County Board of Agriculture

# Morris County



## Consortium Vision Statement

"The public will understand the importance of local, national and global agriculture through appropriately prepared teachers that will integrate agricultural education into the K-12 curriculum and the Core Curriculum Content Standards."

### **VISION THEMES:**

- Develop the understanding that human existence depends on biological systems throughout the world
- Training for teachers and staff development
- Change perception of agricultural education to stress science for everyday

To learn more about the Reinvent Initiative in Morris County, contact: Barbara Barbour Morris County Vocational Technical School 400 East Main Street Denville, NJ 07834



# Middlesex County

## Consortium Vision Statement

"Through active working partnerships, establish an Agriscience Center whose function would be to develop, market and provide instruction in a comprehensive Agriscience curriculum encompassing K-adult with a twelve month secondary program."

## What Agricultural Education Means to Me

- Knowing where food comes from
- ♦ Hands-on learning
- Growing plants
- Farming is family oriented and a diverse industry
- ◆ Agricultural education should be shared with everyone
- Many levels of agriculture and industries

To learn more about the Reinvent Initiative in Middlesex County, contact: Cindy Von Thun Middlesex County

Vocational Technical School 21 Sutton Lane Piscataway, NJ 08854

## **Middlesex County Consortium Specific Project**

Theme: Community agricultural literacy

### "Agricultural Information Resource Center"

**In 2004**, have a fully functional resource center in cooperation with Rutgers Cooperative Extension.

**In 2003**, develop an effective marketing campaign and distribution campaign for the resource center.

In 2002, develop a listing and biography of successful agriculture education students. Continue expansion of the resource center and have political leaders involved on the local level.

In 2001, have a resource center network established. Determine what new resources are needed and identify potential sources for grant.

In 2000, initiate a program to educate local school administration and guidance counselors about the importance of agriculture and agricultural education.

**In 1999**, establish a committee to collect and evaluate available information. Research, identify, and evaluate current available resources. Research and establish a resource center location.

Who Takes the Initiative? The Agriculture Information Resource Center Committee.

**Resources Needed:** An Agricultural Information Resource Center Committee, Cook College, Rutgers University, the New Jersey Education Association and the New Jersey Department of Agriculture.

## Trends and Emerging Developments

- ♦ Computer technology
- Increased crop yields
- Decreased amount of land for crop production
- Produce plants which reduce nitrates
- Agricultural literacy
- Genetic engineering in plants and animals



# Monmouth County

## Consortium Vision Statement

"Monmouth County will be the leader in disseminating agricultural education in our schools and communities."

## What Agricultural Education Means to Me

- Educational awareness
- Leadership from education drives understanding of life cycle
- Constant learning
- Preservation of land
- Improvement of quality of life
- Knowing where food comes from
- Hands-on involvement

To learn more about the Reinvent Initiative in Monmouth County, contact: Jack Roszel Allentown High School 27 High Street Allentown, NJ 08501

## **Monmouth County Consortium Specific Project**

Theme: Update Curriculum for Agricultural Education

### "Model Curriculum Development for Agricultural Education"

*In 2004*, have a unified curriculum used throughout the state—applied within existing agricultural education programs as well as being distributed to all secondary schools without agricultural education programs.

*In 2003*, incorporate this model curriculum into 10 Monmouth County high schools without agricultural education programs.

*In 2002*, implement model programs into existing agricultural education programs.

*In 2001*, develop a core curriculum with the New Jersey Department of Agriculture and New Jersey Department of Education as some part of a science course or other course.

*In 2000*, collect, analyze and draft new curriculum for agricultural education programs.

Who Takes the Initiative? Agricultural education teachers, Upper Freehold Regional Board of Education liaison for curriculum, Allentown director of Curriculum, with invitations for Freehold High School and Monmouth County Career Center to join.

**Resources Needed**: Someone to create curriculum, participating agricultural education teachers, funding, list of existing and potential science programs receptive to the program.

## Trends and Emerging Developments

- Farming on the moon
- Increasing yields through precision farming
- Greater use of technology
- The ability to feed the world's people
- Genetically engineered crops



# Somerset County

# Consortium Vision Statement

"With an ever increasing demand for food, supplies and finite natural resources, it is imperative that all citizens appreciate the significance of agricultural science and the agricultural economy.

By the Year 2020, agriculture's positive effect on the lifestyle of contemporary American communities will be accepted truth in Somerset County, New Jersey.

This understanding will facilitate and motivate the best, brightest and hardest working students to consider meaningful careers in agriculture and related careers."

Reinvent Initiative in Somerset County, contact: Nick Polanin Rutgers Cooperative Extension of Somerset County P.O. Box 3000 Somerville, NJ 08876

To learn more about the

"The needs of students have changed. Lifelong learning is necessary and we are trying to instill this in students."

Kim Zajack, 4-H Program Associate, Rutgers Cooperative Extension of Somerset County

## **Somerset County Consortium Specific Project**

Theme: Further develop specialized youth development educational programs

"Building Agriculture and Natural Resource Partnerships Through School and Community-Based Youth Programs"

*In 2004*, seventy-five percent of Somerset County's elementary/middle schools will utilize specialized youth development educational programs that help build personal and leadership development skills based on food systems and resource management.

*In 2003*, the partnerships in the 4-H/FFA education development program in four school districts have been successfully demonstrated in four elementary/middle schools in Somerset County.

*In 2002*, the 4-H/FFA partnership program is initiated through collaborative agreements between school districts, Somerset County 4-H, and the FFA chapter, in cooperation with the New Jersey Departments of Agriculture and Education.

*In 2001*, request for proposals is offered to all elementary/middle schools in Somerset County.

*In 2000*, human and financial resources are obtained, program parameters are modified and marketing efforts are implemented.

**In 1999**, a working committee is organized to structure a program that will make a specially designed 4-H program available as a school-based educational activity to foster student development skills with a focus on food systems and natural resource management. Will start a 4-H club in the classroom during the school day.

Who Takes the Initiative? Rutgers Cooperative Extension of Somerset County in cooperation with the Somerset County Board of Agriculture and educational interests in Somerset County.

**Resources Needed**: A core group of stakeholders willing to develop a program that will initiate a specially tailored 4-H youth program in elementary/middle schools that will foster FFA involvement at the high school level. Incentive grants for four school districts to demonstrate the program feasibility.

#### **VISION THEMES:**

- Parents will grasp the value agricultural careers bring to society and to their children
- Develop curriculum on global agriculture
- School personnel and other educators will appreciate the diversity of opportunities in the agricultural field



# Southern Tri-County

**Cumberland, Gloucester and Salem Counties** 

# Consortium Vision Statement

"Agricultural Education will be fully recognized and respected as an academic program that is a key component of a successful school system that provides agricultural literacy, practical application of knowledge and skills, community partnerships and the use of state-of-the-art technology.

These components will be enhanced by student involvement in related intracurricular activities and opportunities provided through participation in FFA to instill teamwork, communication, work ethic and other workplace readiness skills that insure the development of premier leadership and personal growth which will provide each student with the best potential for intelligent career choices and the foundation for a successful, productive life."

### What Agricultural Education Means to Me

- The necessary foundation for students
- Business, marketing, science skills
- Communications to computer technology
- Potential for career opportunities
- Involvement in and out of the classroom
- ♦ A lifestyle
- Prepares people for a future in agriculture

To learn more about the Reinvent Initiative in Southern Tri-County, contact: Cheryl Lowe Woodstown High School 40 East Main Street Woodstown, NJ 08098

## **Southern Tri-County Consortium Specific Project**

Theme: Agricultural Education at the Elementary Level

"Modify Agriculture's Perception (M.A.P.) For Life"

*In 2004*, implement a 5th grade through 8th grade agricultural education program; introduce a K-4 agricultural education program.

*In 2003*, introduce a 5th grade through 8th grade agricultural education program, including a junior FFA chapter.

*In 2002*, promote agricultural education in the sending school districts and elementary schools by using specific programs such as Partners in Active Learning Support (PALS).

*In 2001*, increase the number of full-time agriculture education teachers and offer a broader selection of course offerings.

*In 2000*, educate school administrators, boards of education and the community about the value of agricultural education.

Who Takes the Initiative? Alumni, Advisory Committee.

Resources Needed: Support from community groups and agribusiness.

## Trends and Emerging Developments

- Technology in all forms of agriculture
- Preservation of open areas
- Environmental concerns
- Genetically designed crops
- Underwater farms
- Lunar farming
- Weather resistant crops



# Sussex/Warren County

### Consortium Vision Statement

"The mission of the Sussex/Warren Agriscience Consortium is to assure that all students learn to think clearly and communicate effectively as they demonstrate an appreciation for the agriculture industry and recognize the dignity and worth of every individual. It is the accepted responsibility of the Agriscience Curriculum to guide each student in the education of the mind, in the determination of personal standards of achievement and work, in the development of a sense of personal responsibility and in learning to value excellence, hard work and perseverance."

## What Agricultural Education Means to Me

- Life skills
- Practical knowledge
- A haven or niche for students
- Consumer awareness
- Computer innovation
- Job preparation
- Opening eyes to a variety of agricultural careers

To learn more about the Reinvent Initiative in Warren and Sussex-County, contact: Worth Christian Newton High School 44 Ryerson Avenue Newton, NJ 07860

### **Sussex/Warren County Consortium Specific Project**

Theme: Educating Guidance Counselors About Agricultural Education

### "Agriculture Career Tour"

*In 2004*, advanced agricultural education classes will be offered with double periods, along with a smaller teacher student ratio in place.

*In 2003*, the number of students enrolled in an agriculture education course will have increased by 30 percent.

*In 2002*, provide opportunity for administrators and guidance personnel to attend the National FFA Convention.

*In 2001*, provide opportunity for administrators and guidance personnel to attend the State FFA Convention.

*In 2000*, develop a program for the consortium that will enable administrators and guidance counselors to be introduced to agricultural education and agricultural careers.

Who Takes the Initiative? Alumni, agricultural education teachers, FFA advisors, followed up by administrators.

**Resources Needed**: Funding such as state grants, county boards of agriculture, Alumni, State FFA Office, New Jersey Department of Agriculture and local businesses.

## Trends and Emerging Developments

- Land and resource preservation
- Intensive production methods
- Plant diseases and plant extinction
- Reduction of farmland
- Diversified agriculture classes
- Food safety issues
- Genetic engineering



# **Union County**

## Consortium Vision Statement

"In order to enhance the quality of life in Union County, all residents will have opportunities to explore and to appreciate the wide range of interactions among themselves, agriculture and the environment."

# Trends and Emerging Developments

- Increased population
- International trade
- Genetic engineering
- Urban planning
- Lack of space for food production
- Urban forestry
- Increased environmental awareness

To learn more about the Reinvent Initiative in Union County, contact:
Bonnie Baldasare
Union County
Vocational
Technical School
1776 Raritan Road
Scotch Plains, NJ 07076

### **Union County Consortium Specific Project**

Theme: Promote agricultural education in elementary schools

### "Community Demonstration Gardens"

**Objectives**: By 2020, provide all county school district teachers with agricultural education curricular resources. By 2010, K-12 students will have completed an agricultural-related project on an annual basis such as community beautification.

*In 2004*, the original pilot schools will have written a plan for marketing and distribution of their garden produce, both food and ornamental crops.

*In 2000*, at least five schools in Union County will have established a community garden.

Who Takes the Initiative? A committee composed of interested stake-holders.

**Resources Needed**: Five locations for gardens, plants, curriculum, tools, instructors, business partners, funds, and support groups such as parents of students enrolled in agricultural education.

# Ideas for Agricultural Education Programs

- Foster entrepreneurial skills
- Work/study programs
- Urban forestry
- Industry professionals as agricultural mentors
- Internships
- Business and community involvement

#### School Districts Involved in Reinventing Agricultural Education for the Year 2020

- ❖ Atlantic County
  - Greater Egg Harbor Regional School District Oakcrest High School, Mays Landing, NJ
- Burlington County
  - Northern Burlington Regional School District Northern Burlington Regional High School, Columbus, NJ
- Cumberland County
  - Cumberland Regional High School District—Cumberland Regional High School, Seabrook, NJ
- Gloucester County
  - Gloucester County Vocational School District Gloucester County Institute of Technology, Sewell, NJ
- Hunterdon County
  - Hunterdon County Vocational School District Hunterdon County Polytech, Voorhees Campus, Glen Gardner, NJ and Central Campus, Flemington, NJ
  - South Hunterdon Regional School District South Hunterdon Regional High School, Lambertville, NJ
- Middlesex County
  - Middlesex County Vocational School District East Brunswick Campus, East Brunswick, NJ and Piscataway Campus, Piscataway, NJ
- Monmouth County
  - Upper Freehold Regional School District Allentown High School, Allentown, NJ
- Salem County
  - Penns Grove-Carneys Point School District Penns Grove High School, Penns Grove, NJ
  - Woodstown-Pilesgrove School District Woodstown High School, Woodstown, NJ
- Somerset County
  - Somerset County Vocational School District Somerset County Vocational Technical School, Bridgewater, NJ
- Sussex County
  - Newton Town School District Newton High School, Newton, NJ
  - Sussex County Vocational School District Sussex County Vocational Technical School, Sparta, NJ
- Warren County
  - Belvidere Town School District Belvidere High School, Belvidere, NJ
  - Hackettstown Town School District Hackettstown High School, Hackettstown, NJ
  - North Warren Regional School District North Warren Regional High School, Blairstown, NJ
  - Phillipsburg Town School District Phillipsburg High School, Phillipsburg, NJ
  - Warren Hills Regional School District Warren Hills Regional High School, Washington, NJ
- Union County
  - Union County Vocational School District Union County Vocational Technical School, Scotch Plains, NJ

# AGRICULTURAL EDUCATION GOALS FOR THE FUTURE OF NEW JERSEY

In agricultural education's more than 70 year history, changes have come at a fast pace. Distance learning, virtual centers, and cyber centers could be in place and readily available to students in five years' time. Agricultural education in this day and age has progressed to new levels, yet still faces many challenges. Fortunately, the *Reinventing Agricultural Education for the Year 2020* initiative made those involved in agricultural education refocus and rethink priorities and action plans for the future.

The goals set during the *Reinventing Agricultural Education for the Year 2020* initiative will help to lead agricultural education/FFA to a better future. In five years, thanks to this state and nationwide initiative, we will have better instructional programs and an improved status of agricultural education due to the visioning, strategic planning and implementation of local and state visions and goals.

Instructional programs will continue to change to meet the needs of the industry through constant evaluation. Professional development activities and extended contracts for teachers, as well as the development of Supervised Agricultural Experience (SAE) programs for students that reflect local industry needs and new modes of thinking, yet prepare students for a global environment, will be in place.

Agricultural education teachers will enjoy improved programs of professional development to meet the new state requirements of 100 hours of training over a five year timeframe. Instructional equipment will continue to be updated to serve students in all agricultural instruction areas, including traditional and urban programs of agricultural education.

The status of agricultural education will also improve rapidly.

- Graduates will be better prepared for the industry.
- An office of agricultural education/FFA will be established at the state level with additional agricultural education/FFA staff to serve schools, teachers, students and the agriculture industry.
- Continued funding from the state legislature will be pursued.
- Statewide, FFA membership will increase to include 100% of students enrolled in agricultural education and all students enrolled in agricultural education will have SAE programs.
- Professional development opportunities for agriculture teachers will build a stronger, more viable profession of agricultural education teachers.

The goals outlined in the strategic planning process are only the beginning. These goals will continue to evolve to meet the needs of a changing educational and agricultural environment.

Continued ...

# New Jersey's Strategic Planning Goals for Agricultural Education

**Centers of excellence -** Regional centers of excellence in food systems, agricultural production and marketing, natural resource management and agricultural science education will be established.

Programs of agricultural education must be successfully promoted to meet employer demands of the agricultural industry. Ten percent of professional jobs in agriculture go unfilled each year, because there are more jobs available than people who understand agriculture. Nationally, there are 48,000 projected openings each year for agriculture college graduates. To fill those professional jobs, to meet the needs for future employers and to lead people into careers in agriculture, there must be greater access to programs for students and a highly trained qualified teaching force.

Instruction will be improved and increased technology for agricultural education will be used to deliver instruction. Affordable and high tech centers for agricultural education, including distance learning, virtual centers and cyber centers, will be a means to provide "quality agricultural education for everyone, every school, everyplace, and all the time."

**Shared Resources** - Resources for education in food, agriculture and natural resources will be shared between states, regions and school districts.

One of the strengths of this initiative has been the collaboration of state staff and university faculty in Maryland, Pennsylvania, Delaware, West Virginia and New Jersey. Career Development Events and teacher and student leadership workshops are already being conducted jointly between states. This cooperation between Mid-Atlantic states will serve as a model for schools within these participating states.

State Leadership in Agricultural Education/FFA - The state Department of Agriculture, in cooperation with the state Department of Education, will establish an office to facilitate and promote agricultural education/FFA initiatives and programs throughout New Jersey. State level leadership for all three components (instruction, supervised agricultural experience, SAE or work-based learning, and FFA) of a statewide Agricultural Education Program is being "reinvented" to serve a changing profession and industry.

**Delivery Systems -** New Jersey's system of learning about food, agriculture, and natural resource management will be recognized nationally and internationally for its effectiveness and visionary delivery systems.

Continued ...

New Jersey is a leader in technology. New Jersey ranks in the top ten nationally in the agricultural production of crops such as blueberries, spinach, eggplant and cranberries. Biotechnology and animal health research are important to New Jersey as well. Instruction for training and educating our young people for career paths in these fields will be expanded in current programs and in new programs of instruction. Instruction will be updated accordingly to meet these needs.

Currently, the New Jersey Department of Education is adopting a series of career pathways. Every student may select a career pathway and plan their course of study. It is our responsibility to help people of all ages take advantage of those opportunities.

We need to prepare a work force of future agriculturalists. Available funding will be directed to agriculture education programs to keep up with industry needs. Teachers and students must have immediate access to the latest information, such as the state's Core Curriculum Content Standards, through an interactive, on-demand delivery system.

**Model State Association** - New Jersey FFA will be recognized nationally as a model state FFA association. FFA, the local, state and national organization of students enrolled in agricultural education, is in all 50 states and several trust territories.

The New Jersey FFA Association, as a component of the State Department of Agriculture, puts FFA closer to resources that benefit Agricultural Education students/FFA members. Urban programs in Agricultural Biotechnology will benefit student involvement in this premier in-school agricultural youth organization.

Visioning results from this initiative indicated the need for quality programs. Future indicators of progress will include greater numbers of state FFA degrees, applications from all chapters, a national officer elected from New Jersey, national level winners in proficiencies and career development events, and FFA opportunities for students enrolled in private and charter schools.

Agricultural Awareness - Every person in New Jersey will have the opportunity and resources to increase their knowledge and skills concerning food, agriculture, natural resources and the use of production systems for human existence and improved quality of life.

A coordinated system of education in agriculture for all ages, in cooperation with other groups, new and exciting business enterprises, and other educational resources will be available.

Continued ...

Articulation of secondary and post secondary education - There will be a direct linkage between all secondary and post-secondary education programs in agriculture by 2006.

Agricultural Education helps students set and achieve career goals. The need for articulation between secondary and post-secondary education for students in agriculture will increase in the future. Middle school and high school programs will continue to evolve and involve more students. Programs will work directly with two-year and four-year colleges on joint research activities.

**Tomorrow** - Agricultural education will continue to evolve as will the goals outlined in the visioning and strategic planning phases of the initiative. Stakeholders will be called on to continue the implementation of the goals at the local and state levels. Change will occur as a positive force for the future of agricultural education, our students and the industry of agriculture.

Stronger agricultural education curriculums will mean better employees for business and industry in the future. Implementation of these plans will continue to affect tomorrow's agricultural education programs, students and the industry of agriculture.

This initiative will have the most impact, however, through a team effort involving the community, schools, faculty and students. Here's to a bright tomorrow for agricultural education and to a future filled with promise and opportunity.

| Many thanks to all of the county boards of agriculture who administered funding for the grants to local county consortia. The <i>Reinventing Agricultural Education for the Year 2020</i> initiative was stronger for their participation. |
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| Special thanks to the community stakeholders who supported agricultural education in New Jersey and helped develop a plan to improve agricultural education. ◆   |
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