| Title: | Improvement and Marketing of the Food and Agricultural Education Information System (FAEIS) |
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**Program Code:** MQ.2  **Program Name:** SERD-Admin. Discretionary & Reim.-

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{NO DATA ENTERED}

**Non-Technical Summary**

There is a need to collect and organize institutional agriculture information concerning higher education. FAEIS is a comprehensive web-based survey and database of student and faculty data from 1862, 1890, 1994, and non Land-Grant institutions. The purpose of FAEIS is to gather, compile, and distribute student enrollment, graduation figures, job placement data, and faculty salary information related to the food, agricultural, life, human, veterinary, and natural resource sciences. FAEIS centralizes this information into a single database, and it is the primary United States registry for these subject areas. The data and related analyses are critical to administrators of these of higher education programs. This project will advance the work done during the previous six years of FAEIS development at Virginia Tech by improving and marketing the program so that it has more participants, more users, and provides more value.

**Accomplishments**

**Major goals of the project**

The purpose of FAEIS is to gather, compile, and distribute a broad range of higher education information related to the food, agricultural, life, human, veterinary, and natural resource sciences. FAEIS provides student enrollment, graduation, and job placement information, as well as faculty salary information. FAEIS centralizes these data into a single database. Availability of these data and related analyses is critical to administrators of higher education programs as they plan and deliver educational programs. 1. Market FAEIS - enhance and improve the FAEIS website; develop and distribute marketing materials; participate in conferences and workshops; provide FAEIS data to users; and identify institutions not currently participating in FAEIS, provide them with information, and invite them to participate. 2. Enhance databases in FAEIS - Enhance the Board on Human Sciences benchmarking database and provide reporting means to institutions; enhance the international education database and provide reporting means to institutions; and enhance the regional teaching workshops website. 3. Survey and assess the value of FAEIS - conduct annual survey of FAEIS users regarding its value, conduct a comprehensive assessment of FAEIS to determine progress during the three-year grant cycle and plan for the future; and meet with the FAEIS peer panel annually.

**What was accomplished under these goals?**

In 2013, the FAEIS project celebrated its 30th anniversary. Other key highlights include a resolution in support of FAEIS adopted by the APLU-Academic Program Section and the APLU-Board on Agriculture; a USDA-NIFA external program review, where the panel's closing remarks deemed FAEIS "unique, reliable and important;" and broad-based use of FAEIS by faculty, administrators, and government officials, including the USDA Undersecretary of Agriculture (Dr. K. Woteki). In 2013

alone, the FAEIS public website received 86,793 page hits from 12,594 unique visitors who generated 8,517 reports. For specific objectives and sub-objectives, results are described below:

## 1. MARKET FAEIS

ENHANCE & IMPROVE THE FAEIS WEBSITE: To enhance data quality, in 2010 the FAEIS team added two faculty from the Virginia Tech (VT) Statistics Department as co-PIs and developed a data quality assurance protocol to verify accuracy of existing 2004-2010 data. Specifically, verifying data over these seven years, for all majors for each of the 76 Land-Grant institutions by degree level, gender and ethnicity, involved verifying 230,000 data points. New data is now entered using our data protocol system.

In 2012-2013, the FAEIS public website (http://faeis.usda.gov) was redesigned to increase usability and ease of access to the most important pages within FAEIS. Features added include a new Data Center (http://faeis.ahnrit.vt.edu/reportspubs.shtml) with links to dynamic reports including Data Dictionaries and MS/Excel files with pivot tables for FAEIS enrollment data).

MARKETING MATERIALS:  Multiple brochures, handouts and two large banners have been developed and distributed to over 2000 users. One banner is used at conferences to quickly inform readers of the purpose and goals of FAEIS; the other is prominently displayed at USDA-NIFA headquarters.

CONFERENCES/WORKSHOPS: FAEIS team members made presentations to our funding sponsor, USDA-NIFA, and participated in annual conferences of our partnering organizations: Association of Public & Land-Grant Universities (APLU), Non-land-grant Agriculture and Renewable Resources Universities (NARRU, formerly AASCARR), National Association of University Forest Resources Programs (NAUFRP), Hispanic-Serving Agricultural Colleges and Universities (HACU), First Americans Land-Grant Consortium (FALCON), Board on Human Sciences (BOHS) and team conducted workshops on FAEIS at the North American Colleges and Teachers of Agriculture (NACTA) conferences.

PROVIDE FAEIS DATA TO USERS: The FAEIS public website (http://faeis.usda.gov) is the primary access point for FAEIS resources, which include over 4,000 individual html pages, PDFs, spreadsheets, and images.

The FAEIS Report Builder (http://faeis.ag.vt.edu/faeisrpt.cfm) is the primary source for generating reports from FAEIS data. For the years 2008-2012, 2,932 sessions were recorded with a total of 36,480 reports generate. FAEIS frequently assists users with requests for customized reports, e.g., In 2012, at least 26 end users received expert assistance from FAEIS; with 17 in the first five months of 2013, including the Director of NIFA.

NEW FAEIS INSTITUTIONS: FAEIS' efforts in this area have been particularly successful for Tribal land-grant colleges, and for both non land-grant (NLG) colleges and two-year institutions, that have agricultural programs.  Completions data (e.g., degrees and certificates awarded) for all disciplines at the 32 Tribal 1994 Land-grant institutions has been added to FAEIS Report Builder for the years 2004-2012. Data at this level of completeness and accessibility has never been available until now.  For NLGs, the FAEIS office identified 80 institutions offering degrees in Agricultural Sciences (bachelors or higher). Of these, 44 were already in FAEIS as NARRU(ASSCARR) members; degree data for the additional 36 were added to FAEIS Report Builder for the years 2004-2012; enrollment data was added to FAEIS (2004-2012) for 24 of these 36. Data from FAEIS was used by USDA-NIFA, APLU, and NARRU as the NLGCA competitive grants progressed from concept to reality. Degree data for public two-year institutions granting degrees in Agriculture was also added to FAEIS Report Builder for the years 2004-2012. Results from this data were published in the October, 2013 FAEIS newsletter (http://www.faeis.ahnrit.vt.edu/newsletter/october_13/newsletter_oct13.html )

## 2. ENHANCE DATABASES IN FAEIS.

BOARD ON HUMAN SCIENCES (BOHS) BENCHMARKING DATABASE: The BOHS benchmark survey was developed at the request of the BOHS and Council of Administrators of Family and Consumer Sciences (CAFCS). Fifty institutions with Family and Consumer Sciences programs participated in the benchmarking survey from 2008-2011.

INTERNATIONAL DATABASE: The International Programs Database module was added in 2008 and collects data on students studying abroad, international research and outreach projects, and countries with international programs. One-hundred and forty (140) institutions and more than 250 projects have been added to the International Programs database. Results include acceptance of an article in the NACTA Journal.

REGIONAL TEACHING WORKSHOPS WEBSITE: The USDA Regional Teaching Workshops and Awards Programs website, developed in collaboration with University of Florida, serves as a repository for presentations given at the regional teaching workshops, and highlights national and regional teaching award recipients. The website lists all award recipients from 1992 to 2012, along with their presentations and teaching philosophies, where these have been provided to FAEIS. In addition, past Award Program documents are found on the site.

## 3. SURVEY AND ASSESS THE VALUE OF FAEIS.

ANNUAL SURVEY FAEIS USERS: The second year of our FAEIS Annual Longitudinal survey was conducted in the summer of 2008. Two-hundred and eighty-five (285) FAEIS users participated for a 27% response rate. The survey indicated that the majority of users find FAEIS useful to their needs and satisfied with FAEIS products.  Longitudinal questions from this survey were incorporated into the 2009 triennial survey (see below). Following changes in priority for the FAEIS contract and at the request of our USDA-NIFA contact, Shane Ball, all user surveys were terminated. This fact made it even more important to interact with users at conferences and workshops.

COMPREHENSIVE ASSESSMENT OF FAEIS: The three-year FAEIS evaluation of users was completed in 2009. Highlights include (a) the more years of experience a user has using FAEIS, the greater the level of satisfaction with FAEIS; (b) the greatest satisfaction of FAEIS data and its use included the following: enrollment, institutional benchmarking, trend analysis,

salary comparisons; (c) the greatest satisfaction of FAEIS products: CIP code list, e-newsletter, website; (d) the FAEIS report builder—good, but room for improvement; (e) users were most confident in the following FAEIS data: college enrollment, faculty headcount, student/faculty demographics, degrees awarded: least confident: international/student placement (e**) most users believe FAEIS adds-value and is used twice as often as any other similar database;** and (f) most users have not contacted help desk; but of those that have---90% rated it excellent or good.

MEET WITH FAEIS PEER PANEL ANNUALLY: The FAEIS peer panel met annually from 2008 to 2010, providing a forum for the FAEIS team and USDA-NIFA to present information on the project, while receiving feedback from the peer panel, consisting of academic deans who use FAEIS. Results of these meetings are posted on the FAEIS website. Outcomes included priority setting to address the needs of users. This activity has also been terminated due to changes in the FAEIS contract (see ANNUAL SURVEY section above.)

### What opportunities for training and professional development has the project provided?

The FAEIS team provided training workshops on the use of FAEIS at conferences that draw a large number of our users, e.g., the North American Colleges and Teachers of Agriculture (NACTA) annual conference.

### How have the results been disseminated to communities of interest?

Through publications, presentations, workshops and newsletters.

### What do you plan to do during the next reporting period to accomplish the goals?

{Nothing to report}

### Participants

### Actual FTEs for this Reporting Period

| Role | Faculty and Non-Students | Students within Staffing Roles | | | Computed Total by Role |
| --- | --- | --- | --- | --- | --- |
| | | Undergraduate | Graduate | Post-Doctorate | |
| Scientist | 0.4 | 2 | 1 | 0 | 3.4 |
| Professional | 0.9 | 0 | 0 | 0 | 0.9 |
| Technical | 0 | 0 | 0 | 0 | 0 |
| Administrative | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 |
| Computed Total | 1.3 | 2 | 1 | 0 | 4.3 |

### Target Audience

FAEIS offers an accessible resource of educational data for users which include faculty, higher education administrators, government officials, industry professionals, and the general public to strengthen higher education programs. FAEIS can assist users in examining student enrollment trends, degrees awarded, emerging disciplines, student placement, institutional comparisons and faculty salaries.

### Products

| Type | Status | Year Published | NIFA Support Acknowledged |
| --- | --- | --- | --- |
| Other | Published | 2012 | YES |

### Citation

"Trends occurring in the number of baccalaureate degrees awarded in different U.S. regions." FAEIS Newsletter, December 18, 2012. On Web: http://www.faeis.ahnrit.vt.edu/newsletter/index.shtml

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Conference Papers and | Published | 2013 | YES |

**Citation**

Hightower, L., M. Marchant, B. Richardson. "Are American Public Higher Education Institutions Meeting the Needs of Minority Students? Exploring Educational Attainmnet in Land-Grant Institutions Across the United States." Virginia Tech's 2013 Conference Proceedings on Higher Education Pedagogy, Blacksburg, VA. February 6-8, 2013, pages 98-99.

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Conference Papers and | Published | 2013 | YES |

**Citation**

Hightower L., M. Marchant, H. Lu, E. Vance, B. Richardson, E. Smith. "Exploring Educational Attainment of Undergraduate Minority Students in Land-Grant Institutions," North American Colleges and Teachers of Agriculture (NACTA) Annual Conference, Blacksburg, VA. June 25-28, 2013. Abstract printed in NACTA Journal, 57:1(2013):23-24. Retrieved from http://www.nactateachers.org/images/stories/AbstractSupplements/ nacta%20abstracts%20vol%2057%20supplement%201.pdf.

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Other | Published | 2013 | NO |

**Citation**

"Farm Boom Sows Jobs Bounty: Agriculture Students, and Their Schools, Reap Rewards of a Fertile Field." Wall Street Journal, by WSJ reporters: David Kesmodel and Owen Fletcher, Feb. 13, 2013. On web: http://online.wsj.com/news/articles/SB10001424127887324906004578292226320385578 2?mod=wsj_share_email. Optional Comments: FAEIS data was used in this Wall Street Journal newspaper article.

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Other | Published | 2013 | NO |

**Citation**

"More College Students Turning to Agriculture Degrees," The Daily Gazette, by Gazette Reporter: Kelly de la Rocha, February 20, 2013. On web: http://www.dailygazette.com/news/2013/feb/20/more-college-students-turning-agriculture-programs/. Optional Comments: FAEIS data was used in this Daily Gazette newspaper article.

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Websites | Published | 2008 | YES |

**Citation**

RICHARDSON B., M. Marchant, E. Smith, E. Vance. The Food and Agricultural Education Information System (FAEIS) website (http://www.faeis.ahnrit.vt.edu/index.shtml). Optional Comments: The FAEIS team maintains over 4,000 individual html pages, PDFs, spreadsheets, and images on the FAEIS web site. FAEIS data are available from 2004-present.

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Conference Papers and | Published | 2013 | YES |

**Citation**

Richardson, B., M. Marchant. February 2013. "The Food and Agricultural Education and Information System (FAEIS)," invited presentation, Association of Public Land-Grant Universities-Academic Programs Section (APLUAPS)/Non-land-grant Agricultural and Renewable Resources (NARRU) annual meeting, Alexandria, VA. February 29-March 2, 2013.

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Other | Published | 2013 | YES |

**Citation**

"Baccalaureate enrollment for minorities in Natural Resources and Conservation disciplines," FAEIS Newsletter, June 12, 2013. On Web: http://www.faeis.ahnrit.vt.edu/newsletter/index.shtml

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Other | Published | 2013 | YES |

**Citation**

"Forecasting the supply of graduates in the ducational pipeline." FAEIS Newsletter, April 23, 2013.
On Web: http://www.faeis.ahnrit.vt.edu/newsletter/index.shtml

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Other | Published | 2013 | YES |

**Citation**

"Trends in graduate enrollment at public and Land-grant institutions." FAEIS Newsletter, February 8, 2013.
On Web: http://www.faeis.ahnrit.vt.edu/newsletter/index.shtml

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Other | Published | 2012 | YES |

**Citation**

"Minorities are sustaining the growth in undergraduate student enrollment in family and human sciences." FAEIS Newsletter, October 3, 2012. On Web: http://www.faeis.ahnrit.vt.edu/newsletter/index.shtml

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Other | Published | 2012 | YES |

**Citation**

"Trends for minority students enrolled in colleges and departments of agriculture and natural resources at 98 higher education institutions across the United States." FAEIS Newsletter, September 4, 2012. On Web: http://www.faeis.ahnrit.vt.edu/newsletter/index.shtml

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Other | Published | 2012 | YES |

**Citation**

"Trends in Gender for Undergraduates in Programs in Natural Resources and Conservation at Institutions Affiliated with NAUFRP (National Association of University Forest Resources Programs), FAEIS Newsletter, August 12, 2012.  On Web: http://www.faeis.ahnrit.vt.edu/newsletter/index.shtml

| Type | Status | Year Published | NIFA Support Acknowledged |
|---|---|---|---|
| Other | Published | 2012 | YES |

**Citation**

"Trends in Gender of Undergraduates in Agriculture Programs at the Land Grants from 2004-2011." FAEIS Newsletter, July 12, 2012.  On Web: http://www.faeis.ahnrit.vt.edu/newsletter/index.shtml


**Other Products**

**Product Type**

Audio or Video

**Description**

"Agriculture Degrees: The Hot Ticket for Job Growth?" FOX News. January 7, 2013. On web:
http://video.foxnews.com/v/2079770761001/#sp=showclips&amp;v=2079770761001.

Optional Comments: FAEIS data was used in this news video, which features UC Davis.

**Product Type**

Other

**Description**

In 2012-2013, FAEIS Team members made presentations at USDA-NIFA, including the NIFA-Institute of Youth, Family
and Community (IYFC) Open House; and at annual conferences of our partner organizations including the Association of
Public and Land-Grant–Academic Programs Section Universities (APLU-APS); Non-land-grant Agriculture and Renewable
Resources Universities (NARRU, formerly AASCARR); North American Colleges and Teachers of Agriculture (NACTA),
and the 1890 Land-Grant Colleges and Universities Directors' Meeting.

**Changes/Problems**

We experienced major funding cuts, some of which have been restored by NIFA.