Indiana received a major boost in its efforts to recruit more teachers into the science, technology, engineering and math (STEM) fields with the Indiana General Assembly’s approval of $9.7 million in funding from the state’s new STEM Teacher Recruitment Fund. The grant program encourages the recruitment and retention of teachers in STEM fields. More than 115,000 new STEM jobs are projected for Indiana by 2018, with 40 percent requiring postsecondary education leading to an associate’s degree, and 60% requiring a four-year degree.

The objectives of the STEM Teacher Recruitment Fund are to:

- Encourage the growth of existing organizations that recruit science, technology, engineering, and mathematics teachers.
- Support the establishment of programs that increase the pool of high-quality science, technology, engineering, and mathematics teachers in Indiana.
- Identify recruiting organizations and programs that:
  - Produce high student achievement and highly effective teachers.
  - Match science, technology, engineering, and mathematics teachers with school corporations that are encountering shortages of qualified teachers.
  - Place new science, technology, engineering, and math teachers in schools located in underserved areas.

“Our employers tell us that tomorrow’s workers will need more STEM skills, and Indiana’s goal is to identify and encourage quality teachers to broaden our students’ learning experiences. Continuing to recruit top educators and expand our students’ options will not only enhance the outstanding work of our teachers, but also help our students as they make decisions about future career opportunities.”

~ Governor Mike Pence

“There is no doubt that students with a STEM background will be in high demand in the coming years. In order to meet the demand of tomorrow, it is vital that we work today to increase the number of STEM educators throughout Indiana.”

~ Superintendent of Public Instruction Glenda Ritz
GRANTS AWARDED

<table>
<thead>
<tr>
<th>Grant Recipient</th>
<th>Date Awarded</th>
<th>Amount Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conexus</td>
<td>March 2014</td>
<td>$397,112</td>
</tr>
<tr>
<td>Hamilton Southeastern School Corporation Foundation</td>
<td>April 2014</td>
<td>$190,000</td>
</tr>
<tr>
<td>Independent College of Indiana</td>
<td>April 2014</td>
<td>$1,545,000</td>
</tr>
<tr>
<td>Indiana After School Network</td>
<td>March 2014</td>
<td>$315,000</td>
</tr>
<tr>
<td>Indiana Association of Career &amp; Technical Education Directors</td>
<td>May 2014</td>
<td>$293,819</td>
</tr>
<tr>
<td>Purdue Univ. Research Foundation: Agricultural Science</td>
<td>April 2014</td>
<td>$175,000</td>
</tr>
<tr>
<td>Teach For America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Southern Indiana Foundation</td>
<td>March 2014</td>
<td>$843,571</td>
</tr>
<tr>
<td>Woodrow Wilson Indiana Teaching Fellowship Program</td>
<td>April 2014</td>
<td>$3,753,842</td>
</tr>
</tbody>
</table>

POTENTIAL IMPACT OF THE STEM TEACHER RECRUITMENT FUND

![Graph showing the potential impact of the STEM teacher recruitment fund](image-url)
STEM TEACHER RECRUITMENT GRANTS STATUS UPDATE

**Conexus**

**OVERVIEW:** Hire Technology is a two-year STEM-based advanced manufacturing and logistics curriculum for high school students that is designed to address industry needs. One goal of this grant is to grow the number of Hire Technology certified educators to 134.

**PROGRESS:** Conexus anticipates surpassing its target of 134 certified educators. Through July, an additional 39 teachers were trained in the Hire Technology program, and another 50 are expected to be trained by the end of June 2015. Added to the 55 educators that have already been trained, the number of Hire Technology certified educators appears it will reach 144. The educators that complete Hire Technology Training Pre-Work in accordance with Ivy Tech’s standards are also automatically certified as Ivy Tech faculty. This will allow students that are eligible to earn dual credit.

In order to meet the goal to better equip newly recruited teachers with best practice information, curriculum documentation, and industry resources, Conexus designed a handbook, *Hire Technology Teacher Handbook: First Edition*, published in June 2014. Conexus also partnered with Marian University to offer two Hire Technology training classes. Each class will be a semester long and worth three hours of college credit. There is an expected enrollment of 50 pre-service teachers in the program.

**Hamilton Southeastern School Foundation**

**OVERVIEW:** The Hamilton Southeastern School Corporation will train teachers to be licensed or certified to teach STEM Advanced Placement and International Baccalaureate courses and STEM dual credit courses in partnership with three of the state’s major research universities (Purdue University, Indiana University, and Ball State University).

**PROGRESS:** Hamilton Southeastern School Corporation plans to open a College and Career Academy at both of the district’s two high schools. The Academies are expected to open in the 2015-16 school year, and will each serve approximately 800 students. There will be opportunities for students to earn college credit through AP courses, IB courses, and dual credit courses. Teacher training and curriculum for these programs is ongoing and 69 district educators have already gone through training to teach STEM-related content. A College and Career Pathways document was created to help students choose classes in their pathway of interest and at least one STEM-related course is available within five of six pathways.
Independent Colleges of Indiana

OVERVIEW: The “STEM Teach” program has a goal of increasing the number of highly qualified STEM teachers within Indiana through a coordinated effort from the Independent Colleges of Indiana (ICI).

PROGRESS: The ICI worked on finding courses to offer in-service teachers at member institutions from the time of the grant award until courses began in the fall. As of September 2014, sixteen ICI member institutions are slated to participate in the STEM Teach program by offering courses and/or workshops during the Fall 2014, Spring 2015, Summer 2015 and Fall 2015 semesters. There are a total of 24 workshops and 28 courses scheduled to be offered. Of the 28 courses being offered, sixteen will be undergraduate courses with the intent of attracting teachers interested in adding a STEM content area to their teaching credential or who wish to improve their STEM content knowledge and teaching skills. The other 12 courses will be graduate-level and designed to meet the needs of secondary teachers to teach STEM dual credit courses at the high school level.

ICI is predicting the program having a greater impact than projected and at a lower cost-per-teacher.

Indiana After School Network

OVERVIEW: The goal of the “Ignite! Scholar” program is to recruit undergraduate STEM majors who are not yet enrolled in teacher education programs and pre-service teacher education students who are not yet in STEM fields to participate in STEM instructional activities for students during out-of-school time.

PROGRESS: There are currently 31 participating undergraduate students at Marian University and Indiana University – South Bend. All 31 undergraduate students and 10 mentor teachers were trained in the NASA Ignite! curriculum. The 31 participating students were then also training in STEM content, classroom management and pedagogy. They were then placed in summer programs in South Bend, Indianapolis and Bloomington where they led 140 – 160 hours of STEM activities. For the participants...
that wish to pursue a teacher education program, they will be asked to commit to seek employment in underserved schools or schools that have a shortage of STEM teachers in Indiana.

**Indiana Association of Career & Technical Education Directors**

**OVERVIEW:** IACTED has partnered with Ball State University, Indiana State University, and IUPUI to recruit and train teachers for STEM career and technical education courses. Participants will complete the Workplace Specialist I CTE teacher training program and Workplace Specialist II licensure requirements.

**PROGRESS:** Currently, 125 new Workplace Specialist I teachers are enrolled in the program, which is up from 92 teachers (36%) that were part of the program in 2013. Each of the 125 teachers has a mentor who has successfully completed the training program and currently teaches in an Indiana school.

**Purdue University Research Foundation: Agricultural Science**

**OVERVIEW:** Purdue University partnered with Vincennes University, Ivy Tech-Columbus, and Ivy Tech-Ft. Wayne to increase the number of agricultural science teachers. Together, they recruit students completing agricultural science associate degrees to transfer to baccalaureate degree agricultural science teacher licensure programs. This 2 + 2 model will be supplemented with a distance-based introductory agricultural science education course to be offered to associate degree students.

**PROGRESS:** The “Creating a Pipeline for Agricultural Education Teachers in Indiana” project has accomplished several of its goals in creating a foundation for students to successfully become agricultural science teachers. A project leadership team has been established that consists of three co-principals from Purdue and one representative from each of Vincennes University, Ivy Tech – Columbus and Ivy Tech – Fort Wayne. The leadership team developed a comprehensive recruitment and retention plan and welcomed the project’s first students into the program this fall. They are expected to commit to at least three years of service as agricultural science teachers.

**Teach For America**

**OVERVIEW:** Recent college graduates are being recruited to teach STEM subjects in Indianapolis and northwest Indiana low-income schools. Participants commit to at least two year teaching assignments in Indiana schools with high at-risk student populations. Teach For America’s participants receive training through Marian University and the University of Phoenix.
**PROGRESS:** Teach For America developed a total of 121 first- and second-year STEM teachers during the 2013-2014 school year, up from 60 in 2012-2013. Teach For America teachers set year-end goals for student achievement based on testing and the results demonstrate that they are performing within the top 25th percentile of educators statewide. The average year-end results for all K-12 STEM teachers participating in the program was 87% benchmark achievement in 2013-2014, up from 78.9% the previous year. This achievement rate takes into account locally-adopted assessments such as Acuity and NWEA, in addition to ISTEP and ECA’s.

Teach For America member institutions are also offering new STEM programs, including Project Lead the Way, Intro to Engineering, First Robotics and MathCOUNTS.

**University of Southern Indiana Foundation**

**OVERVIEW:** The “Teaching Eagles Program” is aimed at recruiting undergraduate STEM majors to enter a teacher training program and undergraduate education majors to focus on STEM content. Program participants—Teaching Eagles—are also engaged in co-curricular service learning opportunities.

**PROGRESS:** Several efforts were made over the spring and summer to recruit students that resulted in 61 students participating in the Teaching Eagles program. The breakdown of participants by grade level and content expertise is as follows: Twenty-Six Elementary Mathematics, six Elementary Science, seventeen Secondary Mathematics, and 12 Secondary Science. In order to help retain students in the program, each Teaching Eagle has a mentor and the project director has made personal connections with each participant.

**The Woodrow Wilson National Fellowship Foundation**

**OVERVIEW:** The Woodrow Wilson National Fellowship Foundation recruits and places teachers in a high-need public school for at least three years. Individuals that wish to become fellows undergo a rigorous selection process and then take a one-year master’s degree program at one of five Indiana universities (Ball State University, Indiana University – Purdue University Indianapolis, Purdue University, University of Indianapolis, or Valparaiso University). Fellows admitted into the program generally have a STEM degree and can be recent graduates or career changers.

**PROGRESS:** Eight Teaching Fellows are currently funded through the grant and up to 64 more individuals can participate in the program for the class of 2015 through grant funding. The placement for the most recent group of participants will not take place until the 2015 school year.
Co-Chairs
Governor Mike Pence
Superintendent of Public Instruction Glenda Ritz

Members
Representing Business & Community:
- Sergio Aguilera, retired Mexican Consul to Indianapolis
- Dr. Vince Bertram, CEO, Project Lead The Way
- Dennis Bland, president, Center for Leadership Development, Inc.,
- Bruce Breeden, director of business development, Telamon Corporation
- Kevin Brinegar, president, Indiana Chamber of Commerce
- Amos Brown III, host/managing editor, Afternoons w/Amos, WTLC-AM
- Steve Dwyer, president & CEO, Conexus Indiana
- Jim Edwards, member, Indiana Works Council
- Al Hubbard, president, E & A Industries, and member, Indiana Comm. for Higher Education
- Robert Hurst, mayor, Princeton, Indiana
- Patrick Kiely, president & CEO, Indiana Manufacturers Association
- William Stanzyczekwicz, president and CEO, Indiana Youth Institute
- Glenn Tebbe, executive director, Indiana Catholic Conference

Representing Education:
- Steve Baker, principal, Bluffton High School
- Linda Day, second vice president, Indiana State School Boards Association
- Daniel Elsener, president of Marian University and member of the State Board of Education
- Dr. Stacey Hughes, research director, Indiana Education Employment Relations Board
- Dr. Victor Lechtenberg, vice president for academic affairs and provost, Purdue University
- Teresa Lubbers, commissioner, Indiana Commission for Higher Education
- Dr. Michael McRobbie, president, Indiana University
- Teresa Meredith, president, Indiana State Teachers Association
- Patrick O'Rourke, president, Hammond Federation of Teachers
- Dr. Wendy Robinson, superintendent, Fort Wayne Community Schools
- Danny Shields, 5th and 6th grade teacher, Unionville Elementary School
- Marvin Ward, former business manager, Brownsburg Community Schools

Representing the Indiana General Assembly (appointed by legislative leadership):
- Rep. Robert Behning, chair, House Education Committee
- Sen. Dennis Kruse, chair, Senate Education Committee
- Rep. Vernon Smith, ranking minority member, House Education Committee
- Sen. Earline Rogers, ranking minority member, Senate Education Committee