

## IOWA EETT GRANT CONSORTIUM SUB RECIPIENTS

\$1,262,953.75 In Federal Title II, Part D grants for Iowa were awarded to 11 consortiums:

AEA1 Consortium	\$68,000.36
CEDAR RUN Consortium *	\$306,464.87
NW Consortium *	\$143,066.49
AEA 9 consortium	\$69,105.05
AEA 11 consortium	\$121,160.15
Green Hills AEA Consortium	\$74,011.01
Great Prairie AEA Consortium	\$116,982.55
UEN Council Bluffs	\$37,029.67
UEN Davenport	\$91,965.11
UEN Des Moines	\$168,599.73
UEN SIOUX CITY	\$66,568.52

\*Cedar Run Consortium consists of (AEA 267, AEA 10, Cedar Rapids, Iowa City and Waterloo)

\*NW Consortium consists of (Prairie Lakes AEA 8 and NW AEA)

In the following table, the consortia cover several curriculum areas and grade levels. Eight of the consortia included mathematics in their plans, four of them included science, three of them included reading, two included technology literacy, one included social science, and one included writing.

<b>Consortium</b>	<b>Curriculum Areas</b>	<b>Grade Levels</b>
AEA1 Consortium	Mathematics	Grades 6-12
AEA9 Consortium	Mathematics	Grades 6-12
Cedar Run Consortium	Mathematics, Reading, Science	Grades 9-12
Council Bluffs Consortium	Mathematics, Reading, Science, Social Sciences	Grades 1-12
Davenport Consortium	Mathematics	Grades 3-5
Des Moines Consortium	Technology Literacy, Writing	Grades 6-8
Great Prairie Consortium	Reading	Grade 8
Green Hills AEA Consortium	Mathematics, Reading, Technology Literacy	Grades 6-12
Heartland AEA Consortium	Mathematics, Science	Grades 8-12
North West Consortium	Science	Grades 3-5
Sioux City Consortium	Mathematics	Grades 3-4

### AEA 1 Consortium:

The goals of Integrating Technology in Middle School and High School Mathematics are two-fold:

(1) Increase the student achievement of middle school mathematics students, especially in the Low-SES and IEP sub groups. Increase middle school mathematics teachers' understanding of the ICC concepts, skills and characteristics of effective instruction, so that they are able to apply this learning to their classrooms.

(2) Increase the student achievement of high school students in Dubuque CSD in Algebra I and II and Geometry by using Cognitive Tutor curriculum. Increase high school teacher's understanding of the ICC concepts, skills and characteristics of effective instruction so that they are able to apply this learning to their classrooms.

**Middle School:** Every Student Counts is an initiative that trains middle school mathematics teachers in content and pedagogy. The content is the ICC middle school mathematics concepts and skills. The pedagogy is the ICC skills and characteristics of effective instruction. The initiative includes four workshop days during the year with content focused on Number and Operations and Algebra, year 1; Geometry, year 2; Data Analysis and Probability, year 3. Technology is infused in the work with graphing calculators, mathematics software and technology tools to make formative assessment more efficient. The time in between workshops is for teachers to apply what they have learned and meet with colleagues to share and reflect on learning.

**High School:** Dubuque CSD is training high school teachers to use the Cognitive Tutor curriculum for Algebra I and II and Geometry. Cognitive Tutor is a strong researched based curriculum with strong alignment to the ICC. Teachers are trained in how to use the software with students 2 days per week and how to manage cooperative learning classroom time the other 3 days per week. Teachers attend summer workshops and during the school year have additional follow-up days, as set up by the district. The District has seen an improvement in students passing Algebra I and II and Geometry with Cognitive Tutor. Dubuque also believes the strategies that teachers learn with Cognitive Tutor will carry over to other mathematics classes taught by these teachers.

#### **Benefits to Students:**

**Middle School:** Middle School students that have teachers in ESC will benefit by having teachers that are applying knowledge of best practices and research-based content and strategies. Students will also learn appropriate use of technology for mathematics and be engaged in meaningful problem solving to understand mathematics. Through the lens of technology, students will be able to go deeper in their understanding of

mathematical concepts, see real-world connections to their learning and understand the efficiency that technology allows for teaching and learning.

**High School:** High School students that are using the Cognitive Tutor curriculum will be engaged in one-on-one learning 2 days per week in the computer lab with software that teaches, gives them practice time and gives them "just-in-time" help when needed. The other three days per week they are engaged in problem solving with their peers in the classroom. These students will be engaged in their mathematics learning, see technology as an important tool to learning and learn to value their peers, and not just the teacher, as sources of information.

Both of these initiatives should lead to increased student achievement and real learning for students. These initiatives should also positively impact the post secondary success of these students.

### Cedar Run Consortium:

The goals of Cedar Run Consortium's EETT initiatives are:

1. Build knowledge of Iowa Core Curriculum and 21st Century Skills specifically Technology Literacy Standards.
2. Create a collaborative community of learners and leveraging online resources.
3. Mentor peers and colleagues in integrating technologies in their classrooms and applying new teaching practices.
4. Play a leadership role in technology integration efforts within the school and/or the district.

We are proposing two initiatives for educators in Cedar Run Consortium. The initiatives are continuations and expansions of projects previously funded with E2T2 funds. Both focus on providing teachers the knowledge and skills to effectively integrate technology into their teaching. The proposed initiatives are;

1. 21<sup>st</sup> Century Learning Institute - Host and collaborate professional development activities with LEA participants to develop technology integration strategies in math, science and literacy within AEA 10, AEA 267.and the Iowa City Community schools
1. Integration of interactive whiteboards and student response systems in high school math classrooms in Cedar Rapids and middle school reading classrooms in Waterloo..

### Benefits to students:

1. Improved performance on standardized and district-developed measures of math, science and literacy.
2. Access to technology tools to improve academic achievement in math, science and literacy.
3. Reduction in performance gap between student subgroups (e.g. FRPM/Non-FRPM, Ethnicity, Gender and IEP).

### Benefit to teachers:

1. Professional development on integration of technology tools that can improve academic achievement in math, science and literacy.
2. Collaboration with peers to develop and implement new technology integration strategies.
3. Mentorship and PD opportunities in their own buildings and district.

### AEA 9 Consortium:

The goals of the AEA 9 E2T2 *Mathematics Project — 2009-2012* are to increase critical thinking and problem-solving skills and the technological abilities of all middle and high school mathematics students and to improve the quality and delivery of mathematics instruction by all middle and high school mathematics teachers through the use of technology. These goals will be met by expanding student access to Cognitive Tutor mathematics curricula, continued collection and monitoring of student achievement and teacher implementation data, and a Mathematics Academy focused on creating units of instruction for 6<sup>th</sup> and 7<sup>th</sup> grade mathematics teachers.

The E2T2 Mathematics Project — 2009-2012 will use two strategies to meet its Action Plan goals:

Strategy 1: The AEA 9 E2T2 Consortium will purchase additional Cognitive Tutor curricula site and annual licenses according to school districts' CSIP needs.

Strategy 2: AEA mathematics consultants and the LEA Carnegie Learning Certified Implementation Specialist (CIS) will design and deliver professional development for mathematics teachers using 1) the Essential Characteristics, Content and Skills of the Iowa Core Mathematics Curriculum; 2) modeling Characteristics of Effective Instruction and scientifically research-based strategies that engage students in mathematical reasoning and real-world problem-solving; and 3) prepare teachers to use technology to deliver and monitor classroom instruction.

#### **Benefits to Students:**

- Students in AEA 9 will perform on average 25% better on assessments of complex problem-solving and mathematical reasoning when compared to control groups from May 2009.
- Students will be technologically literate by the end of 8th grade.
- Students will be better prepared for advanced secondary mathematics and science courses and post-secondary employment opportunities (focus on 21<sup>st</sup> Century Skills).
- The mathematics achievement gap for student subgroups, especially IEP students, will continue to narrow.

## **Council Bluffs Consortium:**

Goals of the EETT Initiative:

- a. To support instruction in the core areas and at the secondary level
- b. To help teachers make their thinking and the thinking of students more explicit (think alouds (all content areas), reciprocal teaching (all content areas), multiple representations (NCTM as well as all content areas), communication strands (NCTM), and reasoning
- c. To increase student achievement through the sub-goals (a) and (b) in all core areas (math, science, language arts, and social studies)

Description of the EETT Initiative:

Providing staff members in these core areas with LCD projectors and document presentation devices such as Elmo's (document cameras). These projection and presentation technologies will allow teachers to better present instruction and will also allow students to better present their thinking and solutions to problems, projects, inquiries, and assignments.

We will make use of our district's curriculum coaches to provide professional development sessions in not only the use of these technologies but also the most effective methods for making learning and thinking explicit.

The equipment combined with the professional development will increase student learning and, in turn, increase achievement scores.

Benefits to Students/Teachers:

- a. See above, student learning will increase through immediate feedback, better conceptual demonstrations and sharing of student work and student thinking
- b. Instruction will improve as well but will also become more efficient as presentations, demonstrations, and sharing of student work will not have to be copied or duplicated
- c. As more and more instructional supports are becoming digital and on-line, teachers will be better able to bring these resources and supports into student view more easily and more quickly. Thus the engagement of students will increase and so with the dialogue and interaction among students, with teachers, and with the instructional media as well

### **Davenport Consortium:**

The proposed project will support the DCS Comprehensive School Improvement Plan in adopting the District Long-Range Goal that "All K-12 students will reach high levels of math achievement." E2T2 funds will infuse technology into a guaranteed and viable approach to math interventions for 3<sup>rd</sup>-5<sup>th</sup> grade students to assure proficiency in math fundamentals through "Do the Math" intervention and whiteboard classroom delivery.

#### **Description of the Proposed Initiative\***

The district is encouraging flexible grouping at the upper elementary level to provide a delivery system for math intervention for students identified by teachers as at-risk of academic failure. The three years of the proposed project will phase in interactive whiteboard technology and teacher software support for the "*Do The Math*" intervention approach across three grade levels, starting with 5<sup>th</sup> grade to assist in transition to the secondary level. Project implementation will include comprehensive professional development in the proposed intervention strategies and the whiteboard technology delivery system.

#### **Benefits to Students:**

Program implementation is meant to impact both teacher effectiveness and student achievement. Teachers will be monitored as they integrate the identified intervention strategies to evaluate effectiveness and refine ongoing professional development needs. Participating students will be assigned based on need for intervention. These interventions are designed to bring students back to grade level proficiency in math fundamentals. This will prepare students for the more rigorous math content of the secondary level. Outcome indicators for the proposed project will include fidelity of implementation by participating teachers, appropriateness of student groupings and assignment, and, ultimately, increased student achievement in math fundamentals to get upper elementary students back on grade level and more successful in the 6<sup>th</sup> grade transition.

## Des Moines Consortium:

### **Goals of the EETT Initiative**

1. Incorporate technology resources, skills, and systems into the classroom to increase achievement in literacy, with emphasis on grade 8.
2. Increase the use of student achievement data to support School Improvement and inform instruction.
3. Provide on-going, high-quality professional development, training, and support to integrate technology into all areas of curriculum, instruction, and assessment.
4. Close the digital divide by providing the diverse student bodies at DMPS middle schools access to technology.

### Description of the EETT Initiative:

E2T2 teachers will use *MyAccess* to increase opportunities for students to write, reduce assessment time, measure student progress, and provide timely remediation. E2T2 teachers will receive ongoing training on collecting, accessing, and analyzing data to gain an accurate view of student progress. Teachers will become more effective in teaching literacy (specifically writing), better at incorporating technology as a tool to increase student achievement, and more proficient at using student data to inform and differentiate instruction through active learning activities. This project will increase student access to educational technology.

### Benefits to Students:

Writing is critical to all subject areas, and studies show students become better writers when they write frequently. A meta-analysis of 26 studies of *writing with computers* found that instructional uses of computers for writing have a positive impact on student writing. *MyAccess* provides students timely and appropriate feedback through the research-validated automated essay scoring system. Students are able to revise essays based on the feedback received and re-submit for a new evaluation of the essay. This project allows (and will encourage) teachers to make on-going evaluations of their own teaching methods. Too often, a major barrier to differentiating instruction and effective re-teaching is the lack of timely student assessment. With the *MyAccess* program, teachers will be able to assess their teaching methods and modulate teaching plans and re-teaching methods based on student learning. Teachers will also respond monthly on their use of the *MyAccess* program and data in their decision-making.

## Great Prairie AEA Consortium:

### **Goals of the EETT Initiative:**

**Student Goal:** To increase the percent of GPAEA eighth grade students proficient in reading comprehension as measured by Iowa Test of Basic Skills

**Technology Goal 1:** To train and support GPAEA teachers to effectively use technology tools including interactive whiteboards, handheld devices, and web-based tools to increase student reading comprehension achievement

**Technology Goal 2:** To use technology to help deliver professional development opportunities and foster communication in the area of research-based strategies to improve adolescent reading. Delivery methods will include use of the ICN (Iowa Communication Network) and/or Video Conferencing Units, Desktop Videoconferencing, and collaborative web-based tools

#### Description of the Proposed Initiative\*

The decision to focus on 8<sup>th</sup> grade reading for the GPAEA E2T2 grant proposal was made based on ITBS/ITED student achievement analysis. Eighth grade reading has the lowest percent proficient for all students when compared to reading, math, and science grades 4, 8 and 11.

The E2T2 funding will make it possible to increase 8<sup>th</sup> grade student reading comprehension achievement through the integration of technology into existing high fidelity implementing Second Chance Reading (SCR) classrooms. A review of GPAEA and district data will be used to determine greatest areas of need and the first round of eligible districts. The technology integration focus will include the use of online dictionaries, wikis, blogs, and Promethean boards, handheld voting devices, laptop access for students, flip videos, Kindles and/or i-pods.

First Cohort (approximately 30) teachers will attend two days of technology/SCR professional development days during the spring of 2010 and five summer days. One day of professional development each semester will also provide time for additional demonstrations, planning and practice of strategies as well as enhance collaboration with other SCR teachers.

During 2010-2011 as second cohort of teachers will begin the integration of technology following the same professional development calendar as the first cohort. Data will determine adjustments to the time frames and professional development design according to the Iowa Professional Development Model.

For the third and final year 2011-2012, no new cohorts are planned. One day of follow-up professional development for continuing participants each semester is our current projection. Participating teachers will bring one video lesson to share with the group

and each teacher will provide one live demonstration for their peers as all trained teachers continue to collaboratively, plan, practice and demonstrate the SCR strategies.

### **Benefits to Students:**

This project will increase student reading comprehension achievement through the integration of technology into existing high fidelity implementing Second Chance Reading (SCR) classrooms. The proposed implementation of technology will also increase student engagement/motivation and help students acquire 21st century skills particularly in the areas of technology and employability.

Below are examples of teacher and student uses of the technology to support reading comprehension:

- Wikis and blogs for students to post summary of books read during independent reading, both in class and the required out of class reading;
- Handheld devices for formative assessment and feedback on weekly vocabulary lists from the teacher's Read Aloud/Think Aloud and independent reading;
- Interactive whiteboard and/or hand-held devices to practice interactive vocabulary assessments to allow the students to determine which vocabulary words need additional study and practice;
- Immediate recording of student responses for the comprehension strategies of "dictated writing", "inductive thinking", and "round table" where students could also record facts heard during the teacher Read Aloud/Think Aloud;
- Flip video cameras to increase student engagement and motivation in reader's theater;
- Use of i-pod(s) for students who may have been absent to watch and participate in a recorded "Read Aloud/Think Aloud story which is at the student's grade level and therefore cannot be independently read by the student;
- Access to on-line definitions of vocabulary words from independent reading;
- Kindles or e-book readers to allow students to increase student engagement and motivation; and
- Student, parent and teacher access to technology resources 24/7 during and outside the school day to enhance student/ parent/teacher communication.

### **Green Hills AEA Consortium:**

The goal of the Green Hills consortium is to increase the percentage of students who are proficient in mathematics and elementary literacy, while closing the achievement gap of students in different sub-groups (e.g., free and reduced, students with IEPs). The intent of the Green Hills Core Cadres is to impact teacher quality and student achievement. The Cadres focus on best practices in mathematics and reading instruction implemented through high quality professional development and technical support. To assist in the attainment of these goals students, teachers and administrators will have access to appropriate and engaging technology resources.

Goals for this include:

- 1) Enhance classroom teachers' ability to teach the conceptually and in alignment of the concepts and skills of the Iowa Core Curriculum.
- 2) Enhance classroom teachers' ability to use formative assessment in the classroom.
- 3) Enhance classroom teachers' ability to manage and use supplemental and intensive instruction to meet the needs of diverse learners.
- 4) Improve teachers and administrators ability to gather and use data to inform instruction and program decisions.
- 5) Enhance classroom teachers' ability to use technology to engage students in meaningful learning

The Green Hills Core Cadre grant will use the professional development and on-site instructional observations to help teachers improve their teaching practice in order to meet the diverse learning needs of their students. Research confirms that improving instruction, through support of instructional coaching and appropriate technologies, can significantly increase the academic achievement and engagement of students.

#### **Benefits to Students:**

Through the continuous improvement of engaging and meaningful instruction and tasks, students will have the opportunity to participate in authentic and relevant work. Teachers will be engaged in professional development activities that will allow them to design meaningful lessons that will support literacy, student inquiry and problem-based tasks. The grant will focus on improved instruction, meaningful tasks, informative assessments and ongoing collaboration. It is the intent of this grant to benefit student learning by improving the skills of the participating teachers. Due to the limited funding of this grant, technology applications for students may go beyond the scope of this grant.

## **Heartland AEA Consortium:**

### **Goals of the EETT Initiative:**

It is important for schools to develop more flexible and creative models of content delivery in order to support the development of autonomous, lifelong learners who are skilled in reflecting on their learning (both formal and informal) and planning for teachers' personal, educational and professional development. This project aims to stimulate change, working towards this vision. Effective content delivery strategies will help teachers fully implement the Iowa Core Curriculum. Modeling, project-based learning, learning supports, quality instructional resources, peer and collaborative learning, and assessment skill development and practice are all areas that are planned.

#### **Goals:**

- (1) Create learning communities for both teachers and students utilizing Web 2.0 tools to encourage participatory involvement, collaboration, interactions among users, and the creation/sharing of resources
- (2) Increase access to the Iowa Core Essential Concepts and Skills for all students
- (3) Increase student and teacher engagement in learning
- (4) Increase relevance and real-world applications in classroom instruction
- (5) Develop 21st Century skills (e.g., critical thinking and reasoning, communication skills, information & visual literacy, scientific reasoning, productivity, and creativity)

### **Description of the EETT Initiative:**

This proposal focuses on supporting effective math & science instruction in grades 8-12 through the use of ongoing professional development opportunities connected to student learning, effective classroom practice, content knowledge, best practices in technology, & access to a variety of low/no cost technology tools. Teachers will engage with technology applications & effective instructional models such as problem-based learning, simulations, and inquiry. As teachers transfer these experiences to teaching & learning in their classrooms & begin to implement Characteristics of Effective Instruction, all students will have increased access to learning and the Essential Concepts & Skills of the Iowa Core Curriculum.

### **Benefits to Students:**

The infusion of technology in classroom instruction can provide increased access to learning math and science content for all students. Technology tools can facilitate opportunities to engage in differentiated instruction, increase engagement/interaction, and access information and experiences that may not be available in the local community or students' homes.

### **NW Consortium:**

The overall goal for this initiative is to raise student achievement in schools to meet AYP, specifically in 3rd through 5th grade science. Enabling goals for this include: A) Enhance classroom teacher's ability to use formative assessment in the classroom. B) Enhance classroom teacher's ability to manage and use differentiated instruction strategies in the classroom thereby focusing on multiple learning needs and styles of students. C) Improve teachers and administrators ability to gather and use data to inform better decision making. D) Introduce technology that helps keep students engaged even in challenging content areas.

The Northwest Consortium E2T2 grant will use online technology from Learning.com using the web-based digitally delivered program "Aha! Science" to help high-need schools that are underperforming in elementary science improve their achievement scores and meet AYP targets. Research confirms that underperforming in science during elementary years sets the tone for continued underperformance in middle and high school. The cumulative nature of fundamental science skills makes early proficiency a vital need for all students.

### **Benefits to Students:**

Students will benefit immediately. Through the formative assessment piece built into Aha! Science and differentiation among students, so that the teacher will dramatically be able to change how they instruct the class. Teachers will quickly and completely be able to know each student's level of mastery for a given topic at a given time. Students will be grouped differently and receive attention or instruction based on a validated point in time using comprehension levels rather than teacher best guesses. All students have the opportunity to respond to every question and become more engaged in the classroom dialogue, even in courses such as science.

### **Sioux City Consortium:**

The overall goal for this initiative is to raise student achievement in SINA schools to meet AYP, specifically in 3rd and 4th grade math. Enabling goals for this include: A) Enhance classroom teacher's ability to use formative assessment in the classroom. B) Enhance classroom teacher's ability to manage and use differentiated instruction strategies in the classroom thereby focusing on multiple learning needs and styles of students. C) Improve teachers and administrators ability to gather and use data to inform better decision making. D) Introduce technology that helps keep students engaged even in challenging content areas.

#### **Description of the EETT Initiative:**

In order to meet the goals highlighted above, the district is proposing the acquisition and use of cutting edge alpha numeric student responder systems, student response software, and classroom projectors. These tools will be tied to another separately funded district initiative to field a new student information and analysis system. Together these items will give the teachers new technology based tools to conduct rapid formative assessments on a frequent basis. These components allow for kids to see how they are doing through visual projection while also keeping them more engaged through interaction with the responder units at various points throughout the lesson. This initiative will also allow for the rapid collection and analysis of data in a classroom, building, or across the district at levels never before possible within the district.

#### **Benefits to Students:**

Students will benefit immediately. Through formative assessment and differentiation the teacher will dramatically change how they instruct the class. Teachers will quickly and completely be able to know each student's level of mastery for a given topic at a given time. Students will be grouped differently and receive attention or instruction based on validated point in time comprehension levels rather than just teacher best guesses. All students have the opportunity to respond to every question and become more engaged in the classroom dialogue, even in courses such as math.