# WYOMING EDUCATION TRUST FUND GRANT 2016

Report to the LSO

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## **Wyoming Education Trust Fund**

**REPORT TO THE LSO** October 1, 2016

## **Trust Fund Grant History**

The statutory authorization for this program and the application requirements are contained in Wyoming Statutes 21-22-101 through 21-22-107. In 1991, the 51<sup>st</sup> Wyoming Legislature established a trust to be held in perpetuity titled the Wyoming Education Trust Fund. Interest earned from the corpus of the trust is to be distributed to districts as innovative program grants to fund programs providing innovation in or improvement to public education.

The Trust Fund legislation was amended in 1997, 2001, 2005, and 2008. Most of the amendments are related to the maintenance of the trust itself. The 1997 amendment pertained to the distribution of funds to the University of Wyoming and community colleges. The 2008 amendments adjusted the funding mechanism to narrow the purpose of the grant to provide innovative grants to districts only along with an annual participation in a conference on innovative education.

Currently the trust balance is \$10,000,000.00. By statute, the Governor is required to recommend an additional \$10,000,000.00 appropriation to the fund until the balance reaches \$50,000,000.00. In the history of the trust, no additional funds have been appropriated.

The law allows for grants to be approved in the following categories: curriculum development, operational initiatives, administrator and staff development improvement programs, acquisition of technology equipment, applied science and technology programs, and technical preparation programs. Priority is given to those programs which supplement, not supplant, existing courses and curriculum, are easily transferred and duplicated by other districts, provide matching funds from non-state sources and demonstrate the ability of the recipient district to continue the programs after innovative fund monies are exhausted.

## **2016** Activities

Grants reviewers were determined in February of 2016 and included members of the Wyoming Department of Education, University of Wyoming staff, and one member of the Wyoming State Legislature. Fifteen grant applications were received by the department by the deadline of May 27, with one grant being pulled from consideration for being received after the posted deadline. All grant reviews were completed by three grant reviewers with each scoring sheets returned to

the program manager by June 27, 2016. Grant scores were compiled and awardees determined on June 30, 2016. The grant reviewers determined that a total of five (5) grants were to be awarded for the 2016-2017 award year totaling \$187,923.00. Attachment A, 2016-2017 Award Overview, lists all grant requests, indicates which districts were awarded funds, and gives an overview of each project with award amounts detailed.

In July of 2016 all awarded districts received a grant award letter, detailing the responsibilities of both the department and the district as the awardee. As per the terms of the grant award letter, all awarded districts are required to submit invoices to the Department of Education to receive reimbursement for funds spent. In order to receive reimbursement, the district will be required to submit: an official district invoice, all receipts showing the date of purchase, and packing slips or company invoices showing a zero balance. All purchases must be made within the contract date as outlined on the grant award letter. For this grant award year, all awarded districts will receive a grant manual detailing the duties of the recipient districts and highlighting the necessity of submitting reimbursement requests within contract timelines.

At the end of the 2016-2017 grant award year, all districts will be required to complete and send a grant evaluation to the Wyoming Department of Education for reporting of the use and effectiveness of grant funds. Grant recipients from the 2015-2016 award year reported on their project results by submitting a grant evaluation to the department by June 1, 2016. The compilation of these evaluations is included in Attachment B, 2015-2016 Award Summary. This document lists all 2015-2016 district awardees and details each project funded. All outcomes of 2015-2016 projects were positive, with all districts indicating their interest to apply for the grant in the future.

The final activity for the 2016 year will be to thank grant reviewers for their time and service and determine whether they are interested in serving again.

## 2015 Activities

Grant reviewers for the 2015-2016 grant award year were determined in March of 2015 and included members of the Wyoming Department of Education, employees of the University of Wyoming, and retired Wyoming educators. A total of 20 grant applications were received, with six applications being pulled from consideration due to violation of grant application guidelines and requirements. Fourteen grants were reviewed by volunteer readers with official scoring sheets returned to the program manager by June 15, 2015. Grant scores were compiled by the program manager and awardees determined by June 26, 2015. The grant reviewers determined that a total of (8) grants were to be awarded totaling \$313,833.40. These grants were awarded to eight school districts located throughout Wyoming including: Albany County School District #1, Big Horn County School Districts #1, #2, and #4, Lincoln County School District #2, Natrona County School District #1, Platte County School District #1, and Weston County School District #7. Attachment B, 2015-2016 Award Summary, details all grants awarded for the 2015-2016 year and gives an overview and evaluation of each project funded.

In July of 2015, notification letters were sent out to all applicant districts. Those districts awarded with the Wyoming Education Trust Fund received a detailed grant award letter and

contract describing the responsibilities of both the department and the district as the awardee in August of 2015. As detailed in the terms of the grant award contract, all awarded districts were required to submit invoices to the Department of Education to receive reimbursement for funds spent. In order to receive reimbursement, the district was required to submit: an official district invoice, all receipts showing the date of purchase, and packing slips or company invoices showing a zero balance. All purchases must have been made within the contract date as outlined on the grant award letter.

Invoices were received monthly from seven of the eight awarded districts, with reimbursements being processed within two weeks of invoice submission. Four of the awarded districts submitted invoices after the contract end date of June 1, 2016 which required the submission of additional documentation in order for the department to process the late reimbursement requests. Due to the high volume of requests being made after the contract end date, it was determined that further communication is needed in the future to ensure all invoices and reimbursement requests are received and processed within the contract period. For the 2016-2017 grant award year, awarded districts will receive a grant manual detailing the duties of the recipient districts and highlighting the necessity of submitting reimbursement requests within contract timelines.

As described above, 2015-2016 grant recipients were required to report on their project results by submitting a grant evaluation to the department by June 1, 2016. All evaluations were received by this deadline, with a summary of each evaluation submitted being completed by the program manager in July of 2016. The compilation of these evaluation summaries is included in Attachment B, 2015-2016 Award Summary. All outcomes of 2015-2016 Wyoming Education Trust Fund Grant projects were positive, with each district indicating their interest to apply for the grant in the future.

## **Program Managers History**

From 2004 – 2011 Dianne Frazer served as the WDE ex-officio member and program manager of the Wyoming Education Trust Fund Grant. Roy Hoyle served in the same capacity for the 2011-2012 school year. In 2012 Lachelle Brant, then serving as a Distance Education Consultant, took over as program manager and served in that capacity until 2015. In 2015 Alicia Kerns, Digital Learning Consultant, became program manager and can be contacted for any further information regarding the Trust Fund Grant. She can be reached at: (30) 777-3679 or alicia.kerns1@wyo.gov.

## Attachments

Included with this report are the following attachments:

Attachment A-2016-2017 Award Overview Attachment B-2015-2016 Award Summary

## Attachment A: 2016-2017 Award Overview

2016-2017 Award Overview

Official Grant Ranking Sheet

Total Awards: \$187,923.00

#### Class 1

Big Horn County School District #4 \$20,523.00 "Full STEAM Ahead: Preparing Students for 21st Century Careers"

Big Horn County School District #4 has been awarded the Wyoming Education Trust Fund Grant in order to purchase equipment for the district "STEAM" (Science, Technology, Engineering, Art, and Math) classrooms. Identified equipment to be purchased included: robots, Andruinos, and probeware. By purchasing these items for the STEAM classrooms, the district hopes to increase the desire for their students to pursue more math and science courses throughout their high school career. In doing so, they believe that they will be able to encourage more students to go on to enroll in college and vocational schools to continue their math and science education.

## Class 2

Uinta County School District #6\$40,000.00"Customized Learning with the Lyman Teachers Academy"

Unita County School District #6 was awarded the Wyoming Education Trust Fund Grant to plan and implement a blended learning program within their district. The need for this program was described as "moving education from the industrial age to the innovation age". The grant will allow the district to provide digital content and curriculum for Project Based Learning (PBL) programs, train educators to incorporate PBL, and provide supports to both teachers and students as they move towards individualized instructional practices. The hope of this project is to reengage the un-engaged learners at any and all points of the achievement spectrum and connect the "world of school" to the outside world through Project Based Learning.

## Class 3

Carbon County School District #1 \$16,000.00 "Increasing STEM Awareness Through Robotics"

Carbon County School District #1 has been awarded the Wyoming Education Trust Fund Grant for the 2016-2017 year to fund the purchase of two robotics kits and their engineering counterparts. The goal is to "unleash the students' creative imaginations" and enrich their STEM (Science, Technology, Engineering, and Math) activities at the high school level. The district hopes to generate so much interest in robotics and engineering through the use of these robotics kits that they will have the opportunity to create a robotics club where several varying age groups of students can compete with neighboring districts.

Platte County School District #1\$85,916.00"Music and Stage Technology for College and Career Readiness"

Platte County School District #1 has been awarded the Wyoming Education Trust Fund Grant in order to pilot the "Aesthetic and Technical Creativity through Music and Stage Technology Project" and purchase equipment for the Music and Stage Technology courses offered at Wheatland High School. Through this project students will have the opportunity to embrace their artistic side and find an outlet for their creativity as well as allow them to meet one of their Performing Arts graduation requirements without needing to participate in a performing ensemble. Participating students will work one-on-one with music directors, theater directors, and community members of various performing groups to create and collaborate with other students and produce a like-minded vision for a final production.

## Class 4

Sheridan County School District #2\$25,484.00"Improving Literacy Achievements Through the Arts"

Sheridan County School District #2 was awarded the Wyoming Education Trust Fund Grant to create and implement a phased design of art and music opportunities at the elementary and secondary levels to connect students with local theater and build background knowledge on targeted state Language Arts Standards. The hope for this project is to connect students with the historical WYO Theater and create an educational partnership in musical and theatrical productions, expose students to the world of music and art, and grow students' confidence and interest in those fields, thus providing educational literacy opportunities and increasing literacy achievement scores of participating students.

## **Applications Received-No Award**

Albany County School District #1 Big Horn County School District #1 Big Horn County School District #2-Pulled from consideration; continuation grant not allowable Campbell County School District #1 Carbon County School District #2 Crook County School District #1 Fremont County School District #14 Sheridan County School District #1 Teton County School District #1

## Attachment B: 2015-2016 Award Summary

#### Albany County School District #1\$36,825.00

Albany County School District #1 received funding from the Wyoming Education Trust Fund Grant in July of 2015. With these funds the district planned to pilot two new courses through "Project Lead the Way: Introduction to Engineering and Principles of Engineering" to high school students in an effort to incorporate all four components of STEM into the classroom. As of 2016, Laramie High School began offering both freshman and sophomore level "PLTW courses", which expose the students to advanced engineering topics and disciplines so that they can decide if engineering is a field they are interested in pursuing and choosing as a career.

The goal of this project was to increase interest in Engineering courses so that Laramie High School can continue offering PLTW courses, determine a qualified instructor to participate in training to teach the course, purchase additional materials and software, and provide space for the courses to be taught. Data collected throughout the 2015-2016 school year showed that interest and enrollment in these courses increased by 194%. This data shows that the goal has already been met and exceeded. The hope is to continue growing interest in PLTW courses, increase students' overall interest in engineering and encourage pursuing engineering courses in their undergraduate education.

#### **Big Horn County School District #1**

Big Horn County School District #1 received funding to purchase the <u>LEGO mechanism</u> <u>Classroom Pack</u> for 24 students, <u>LEGO Mindstorms Education EV3 Robotics</u> set, design engineer software curriculum, advancing software for the mechanism classroom, EV3 Face-to-Face training for 10 teachers, and provide stipend payments for 6 teachers to begin a LEGO Mindstorm Education program emphasizing robotics, technology, and mathematics. The LEGO curriculum was incorporated into elective courses to increase engagement of students and develop the skills of the 21st century learner including: collaboration, communication, creativity, critical thinking, and problem solving.

The goals of this innovative program were: to increase math and science scores, engage students more deeply into classroom activities, encourage students to learn advanced problem solving skills, and allow students to have a better understanding of the relevance of math and science in their future. Upon completion of the program the district had met many of the identified goals including an improvement in classroom participation and an increase in classroom math and science scores.

#### **Big Horn County School District #2**

#### \$69,380.00

\$13,568.85

Big Horn County School District #2 received funds from the Wyoming Education Trust Fund Grant to continue the one-to-one initiative in their schools. The district used awarded funds to purchase iPad Air devices, covers, and keyboards as well as funding Apple Foundations Trainer Academy for the district technology director and Apple Inc. Education Professional Development activities. The goal of these activities was to align the district curriculum to the International Society for Technology in Education (ISTE) standards in order to meet the technology demands of the Wyoming Content Standards.

In order to prepare the district for the new initiative, a survey was taken by all staff members in order to ascertain which ISTE Standards were being addressed through current curriculum activities. Upon completion of the survey, the results were analyzed and the district determined that there was still a strong need for the district to further address educational technology and continue to work towards developing and implementing new lessons, projects, and assessments that would allow students to meet the demands of the 21st century.

## Big Horn County School District #4

#### \$37,900.00

Big Horn County School District #4 received funds from the Wyoming Education Trust Fund Grant to design and implement a blended learning program titled "Blended Learning in the Math Classroom" and purchase Dell Chromebooks, online textbooks, and carts for charging mobile electronic devices as well as providing professional development opportunities for two Riverside High School educators. The goal of this blended learning program was to provide high school students with learning environments similar to many college courses in order to prepare them for success after high school, accelerate student growth in mathematics, and increase MAP scores.

The effectiveness of the blended learning program was evaluated through the use of student surveys, which were completed at the end of each semester, and data collected from the MAP assessments. The MAP scores indicated that 65% of students at least doubled their expected annual growth rate. In addition to an increase in MAP scores, the district also discovered through the survey results that students found the online learning environment to be much more engaging and productive.

The primary failure of the program that was identified was the inability of the district to integrate Khan Academy into the curriculum due to the fact that the goal setting software in Khan Academy did not fit with the curriculum and students were very resistant to watching videos to complete lessons on the Khan Academy website. The district does plan to attempt to incorporate video lessons into curriculum in the future as students will likely experience this form of delivery after high school.

## Lincoln County School District #2 \$37,516.00

Wyoming Education Trust Fund Grant funds were awarded in July of 2015 to Lincoln County School District #2 to begin a one-to-one iPad initiative at Afton Elementary School. The iPads were used in many subjects including spelling, math, and keyboarding. Upon completion of the project the district saw an increase in students' spelling achievement, large gains in students math growth and achievement, and an exceptional increase in student engagement.

The failure that was identified was the districts hope to bridge the home-to-school communication breakdown issues. Overall, the district was unable to find a program suitable to bridge the communication barrier. The district plans to continue to search for a program that

would allow them to communicate effectively with families to show them the work and progress of their student and will implement the new program during the 2016-2017 school year.

## Natrona County School District #1\$97,670.00

Wyoming Education Trust Fund Grant funds awarded to Natrona County School District #1 in July of 2015 were utilized throughout the 2015-2016 school year to begin the "Ignition" program, a program designed to improve the climate and culture of Natrona County High School in Casper, Wyoming. The NCHS "Ignition" program leaders were able to train staff and student mentors, who were then able to host the jumpstart activities for the incoming 9th grade students, which gave those students knowledge of the support systems available at Natrona County High School. Surveys were sent out to gauge the effectiveness of the program, with 381 parents and 1,089 students completed the survey. Survey results showed both parents and students believed the program to be average in preparing students for success at the high school. This program will continue at Natrona County High School and data will continue to be collected and analyzed to further improve the program.

The second area of focus of the "Ignition" program at NCHS was on improving both the climate and culture of the high school. The activities completed which focused on these areas were: student recognition, staff-student mentor programs, and recruiting for student extracurricular activities. The future outlook for this program is positive, with plans to continue and expand the student recognition program, recognize exceptional staff each month, and continue to share results with all stakeholder groups in order to drive efforts to improve the culture and climate at Natrona County High School.

Program Contact: Shannon Harris shannon\_harris@natronaschools.org (307)253-1511

## Platte County School District #1

\$13,773.55

Platte County School District #1 received Wyoming Education Trust Fund Grant funds in July of 2015 and utilized those funds throughout the 2015-2016 school year to implement the "Music Technology for Comprehensive Musicianship" program in the sixth through twelfth grades in Wheatland, Wyoming. The goal of the project was to purchase new technology for those students enrolled in band to make practice time more engaging and efficient in order to increase overall practice time outside of school hours and increase the number of students meeting all Wyoming Performing Arts standards and benchmarks.

The project "Music Technology for Comprehensive Musicianship" proved to be very effective as the lead educator noticed his students showing more interest in practicing their instruments during personal time outside of school. When given a survey as to how often students practiced outside of class time, there was a dramatic increase the number of students spending two to three hours of time practicing on their own.

The one failure that was identified in the grant review, received by the department on June 1, 2016, was the delay experienced with the district technology department setting up the classroom computers that were needed for students to use <u>SmartMusic</u>. Full use of SmartMusic was not possible until February of 2016, which impacted the goals and overall effectiveness of the program.

## Weston County School District #7 \$7,200.00

Weston County School District #7 used Wyoming Education Trust Fund Grant funds in order to purchase three <u>Phantom 3 Professional Drones</u> for Upton High School. The project goal was for high school students to partner with local businesses to perform flights and gather information for the volunteer businesses. In doing so, the students would be prepared with skills and experience to use when entering the workforce.

The issues that were identified in the grant review and evaluation, received on June 1, 2016, were the difficulty of flying the drones during windy weather and a lack of business owners willing to participate in the program and use the information gathered by the drones. Despite difficulties, students learned that drones have a niche in aerial photography and that drones are best used in project or problem-based courses.