



School LEA: 6602042

School Name: GREENWOOD JUNIOR HIGH SCHOOL

Submitter Information

Submitter Name: AARON GAMBLE
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Date of application: 5/26/2016

District Information

District LEA: 6602000
District Name: GREENWOOD SCHOOL DISTRICT
Superintendent Name: JOHN CIESLA
Superintendent Email: john.ciesla@greenwoodk12.com

General Questions

Special Conditions: Need Improvement School
School Rating: A
Is this a brand new LEA? No
Is this an ALE School? No

Vision and Mission



It has long been the position of the Greenwood School District to provide "Excellence in Education." This has become a broad statement for the district and is intended to reflect a commitment to success in the variety of academic and extracurricular pursuits of Greenwood students. As a school that will house 7th and 8th grades beginning in the fall of 2016, the mission of Greenwood Junior High will be to prepare students for their futures. This statement is also very broad in scope, and justifiably so. Students in the middle grades are faced with many life challenges, and are just beginning to make decisions about secondary and post-secondary education and the work force.

It is the hope at Greenwood Junior High for students to be exposed to a wide array of rigorous curricula and potential future pathways. Despite a history of success in traditional achievements, Greenwood Junior High is lacking in quality offerings for STEM (science, technology, engineering, and mathematics) education. It is incumbent upon the leadership of GJHS to act to remedy this void. The future is filled with complex problems in the areas of science and technology. Along with the traditional course offerings, students must become competent problem solvers and committed learners.

As a direct result of becoming a School of Innovation, students will have some traditional barriers broken to pave the way for life-changing opportunities. By granting waivers from the mandates of career education, physical education, and fine arts; students will have the freedom and flexibility to pursue rich course offerings from Project Lead the Way (PLTW). PLTW is one of the leading providers of STEM education in the country, and is well represented in Arkansas. This would allow interested students to pursue classes that will expose them to engineering and biomedical sciences, and thus giving a tremendous opportunity for growth in a student's worldview and future employment plans.



Goals and Performance Targets

Rationale for Innovation

The need for a school of innovation status is rooted in the intense desire to offer high quality STEM education to junior high students. Having taken multiple visits to other campuses to seek out innovative ideas, the leaders of Greenwood Junior High and the district have been very impressed with the product and results put forth by Project Lead the Way (PLTW) in the areas of middle level STEM courses (known in PLTW as Gateway courses). While initially coming with a large expense, the financial sustainability over time is very manageable. The professional development that comes with being a PLTW teacher is intense and widely regarded as being among the best PD available.

To date, each student and teacher interviewed by Greenwood leadership has been excited when sharing experiences and feelings about PLTW. Students enjoy the style of learning and the environment. Teachers love that students are learning real skills that can translate to future success in high school, college, and the workplace.

When asked about the impact of PLTW on students with special needs, one PLTW teacher said that those students historically had just as much success as general education students. She attributed the success to the hands-on style of learning that helps them solidify concepts that might be otherwise too abstract. She went on to say that PLTW classes helped special education students feel more confident and capable than perhaps they had felt in the past. In other words, it helped build a resolve in those students that will last beyond just those classes.

Another desired outcome from the School of Innovation will be the strengthening of math and science learning in Greenwood Junior High. While students are already offered rigorous classes and high expectations, demanding classes such as those offered by PLTW will serve to add value to the curriculum with the arrival of Common Core and Next Gen Science Standards.

At the heart of the rationale, the all-encompassing goal of the implementation of PLTW through a School of Innovation is to transform students. A study out of Indiana said that student participation in PLTW was "significantly related to persistence into the second year of college." It isn't simply enough to enroll. Students must develop a tenacity to persevere. A Texas State University study found that even PLTW students who don't enroll in college earn an average of 13.6% higher wages than other students. This marketable skill set could potentially have a lasting impact on students' lives and quality of living.

In a survey of all 8th grade students at GJH, 86% said they would like to take a STEM class if the mandates of career development and PE were removed. When asked what their preferred learning style was, 51% said working with their hands to build something. PLTW would be an ideal fit for these students. While there are ample opportunities at Greenwood High School for the Advanced Placement students to find enrichment, this will be a perfect opportunity to expose non-AP students to areas they may not have thought within their grasp.

It is important to note that the implementation of this program is intended to be a starting point. Measurement of the effects of these goals may not be seen for several years. For example, enrollment numbers in the GHS STEM pathway will likely increase, but it may not be instantaneous. The first year of the program will be mostly establishing a baseline for future comparison.



Goal	Goal Description	
1	To prepare students for STEM education at Greenwood High School and beyond by establishing a strong STEM program for 7th and 8th graders	
2	To improve student performance in the area of science through offering STEM courses to 7th and 8th graders	



Innovations

Innovation	Purpose
<p>The innovation is simply to implement STEM courses through Project Lead the Way in grades 7 and 8. While there is ample opportunity to expand in the future, the initial implementation would involve four semester classes: "Design & Modeling" and "Automation & Robotics" at the 7th Grade level, with "Medical Detectives" and "Science of Technology" for 8th Grade.</p>	<p>Currently there are no true STEM offerings in the secondary curriculum on the campus of Greenwood High School. This implementation will create not only a strong program at Greenwood Junior High but a vision for future learning at the secondary and post-secondary levels. Students will have the opportunity to explore a variety of STEM careers through hands on, project-based learning. This could result in an expansion of Project Lead the Way courses into Greenwood High School or create a desire for students to pursue the STEM fields that currently exist at Greenwood High School through concurrent credit and the Western Arkansas Technical Center (WATC) at the University of Arkansas-Fort Smith.</p> <p>Beyond merely increasing participation in STEM curricula, the implementation of PLTW classes will greatly improve student success in science in general. The students will be exposed to a wide variety of skills and careers for future success. Career options that may have been previously unknown to the students will not only be unveiled but also practiced in the classroom setting with real world tools and technology. This will provide students with many new career choices.</p>



Innovation Plan

Plan Date	Action	Expected Outcome
06/01/2016	Two teachers will be hired or placed as PLTW teachers and set for professional development at the site most convenient for their location and schedule.	The teachers will receive extensive training in the areas they will teach. The training leads directly to teacher licensure in the relevant courses.
08/15/2016	Classes begin with roughly half of each grade participating in PLTW STEM classes.	Students will participate in diverse project-based learning in a rigorous setting. Students will be highly engaged and become more familiar with STEM than ever before. The experience will serve as a marketing tool for the STEM Pathway at Greenwood High School, as well as for a number of potential STEM college and career options.



Requested Waivers

Code section, Rule, or Local Policy	Goal	Rationale
Arkansas Rules Governing Standards for Accreditation 9.03.3.5 (Physical Education); 9.03.3.6 (Fine Arts); 9.03.3.9 (Career and Technical Education)	1	<p>The request to waive these specific Standards allow for flexibility for a 7th or 8th grade student to add two semesters of STEM courses to a schedule without compromising core courses or extracurricular involvement in athletics, band, or choir. The rich diversity in the content of PLTW courses would serve as a fitting substitute for any career and technology learning from which the student would be exempted. The current offering for 7th grade is ICT and for 8th grade it is Career Development. A broad variety of STEM career fields will be highlighted within the scope of the program, and technology will be an integral piece in each course. All of the requested exempted classes will still be available for GJH students to take as electives. They will also be offered to all students who are not taking the STEM classes. For example, an 8th grade student not taking the STEM offerings will take a semester of career development and a semester of physical education.</p> <p>To clarify, Greenwood Junior High is requesting the named courses associated with the cited standards for accreditation be waived for students taking the PLTW STEM courses. The courses will remain mandatory for all other students and optional as electives for students in STEM courses.</p>
ACA 6-16-130 (Visual Arts and Music), ACA 6-16-132 (Physical Education)	1	<p>In order to offer students the flexibility to take STEM courses at the 7th and 8th grade level, Greenwood Junior High seeks a waiver from the Arkansas statutes that explicitly require students to receive instruction in physical education and in fine arts and music. Students will still be afforded the opportunity to take elective courses in physical education and visual art. Furthermore, all students will have the opportunity to be involved in extracurricular athletics including football, volleyball, basketball, and track. Students may also opt to take band and/or choir as an elective in the area of fine arts.</p> <p>The request to waive the statutes is simply to allow the flexibility for a student to participate in STEM courses without having to opt out of a personally valued elective. For clarification, if a student wished to take band and choir, he or she would need the PE requirement waived to have room in the schedule for STEM.</p>



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Council of Innovation

District:

School:

Minority at School 11.00%

Council Member Name	Representative Group	Minority	Position	Date Elected
Erin Fowler	Student	Y	Member	1/7/2016
Dacie Gamble	Student	N	Member	1/7/2016
Hunter Hesslen	Student	N	Member	1/7/2016
Jordyn Lane	Student	N	Member	1/7/2016
Molly Odell	Student	N	Member	1/7/2016
Tracy Curry	Parent	N	Member	1/6/2016
Kristy Odell	Parent	N	Member	1/6/2016
Todd Hales	Parent/Community Member	N	Member	1/6/2016
Chance Lane	Parent/Community Member	N	Member	1/6/2016
Chandra Brotherton	Teacher	N	Member	1/7/2016
Rachel Fontenot	Teacher	N	Member	1/7/2016
Christy Hesslen	Teacher	N	Member	1/7/2016
Dana Higgins	Teacher	N	Member	1/7/2016
Andrew Maxwell	Teacher	N	Member	1/7/2016
Jodie Davis	Classified Employee	N	Member	1/7/2016
Jana Green	Classified Employee	N	Member	1/7/2016
Aaron Gamble	Principal	N	Chair	1/4/2016
Cody Chatman	Principal	N	Member	1/4/2016



Shared Leadership

Meeting Date	Meeting Purpose	No. of Teachers Present	No. of School Staff Present	No. of Parents Present	No. of Community Members Present	No. of Students Present	Meeting Outcome/Planned Next Steps
1/6/2016	Elect Parent Representation	2	2	2	0	0	Elected Four Parents to Serve
1/10/2016	Discuss Possible Innovation(s)	5	2	2	2	5	Voted to Present Goals to Teachers for Approval
1/11/2016	Hear, Discuss, and Begin Voting Process on Proposal	23	2	0	0	0	Teachers were given general information and watched a video on PLTW's Gateway program. Teachers in all disciplines who served on the SOI Team were in strong support of the initiative. All teachers were given a voice and opportunity for comment before voting. Ballots to be submitted to envelope anonymously for approval.
1/14/2016	Present Accepted Proposal to School Board	17	0	0	8	0	School Board Voted Unanimously to Move Forward with Application Process



Election Results

Number of certified and classified on staff:	60
Number of staff who voted:	57
Number of staff who voted for proposed Plan:	54
Number of staff who voted against the proposed plan:	3
Percentage of staff voting in favor of the proposed Plan of Innovation:	90



Professional Development Scope

Professional Development Plan Part 1

Date	Audience	Purpose of the Session
1/11/2016	Licensed Teachers, Counselor, Classified Staff	In a general faculty meeting session, all staff in attendance were presented with the information for Project Lead the Way. A brief video was shown that gave an overview on PLTW Gateway. The specific courses that Greenwood JH is offering were discussed and what participation could potentially lead to. Staff shared their enthusiasm for the program. At the conclusion of the meeting, ballots were placed in the teacher's lounge for staff approval of the SOI proposal.

Professional Development Plan Part 2

Date	Audience	Purpose of the Session
6/1/2016	2 teachers (to be determined)	Multiple day, intense professional development will occur (course specific) at a partner university during the summer. Teacher licensure in the specific courses will be a result of the PD. The professional development associated with PLTW is reported to be some of the very best available, a fact that has been supported by all teachers and administrators GJH leadership has asked.
6/1/2017	Grade level licensed teachers (the same as before, or possibly additional)	Depending on student interest and support, the program could expand to include more students or more courses. Either of which would require more training for staff.