

Paul Elementary School  
Minidoka County School District

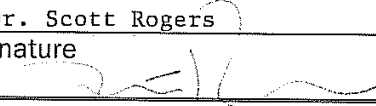
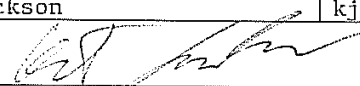
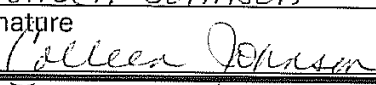
Idaho Technology Pilot Proposal

2013

## Idaho Technology Pilot Project Grant Application Assurance Sheet

Project Title: Learning in the 21st century at Paul Elementary Amount of Request: \$ 375,889.66  
 District Name: Minidoka County Joint School District District Number: #331  
 School Name: Paul Elementary School Number: 105  
 Project Duration: two years

**By signing below, I certify that we have submitted an Internet Acceptable Use Policy to the State Department of Education, and have attached to the submitted documents as reference. I also certify that we have submitted a Technology Plan that meets the minimum requirements, and have attached to the submitted documents as reference.**

Superintendent Name (print) Dr. Scott Rogers	E-mail srogers@minidokaschools.org	Telephone 208 436-4727
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District Technology Coordinator Name (print) Kent Jackson	E-mail kjackson@minidokaschools.org	Telephone 208 436-4727
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Signature 		

## Abstract

This is an exciting time in education. The traditional classroom experience is being replaced by student-centered learning that promotes collaboration, creativity, and critical thinking. At Paul Elementary School, we are beginning to not only imagine this new learning environment, but to make this process a reality. We are in the early stages of redesigning our instruction and assessments to meet Idaho Core Standards. Technology already plays a critical role in transforming our classrooms to Next Generation Learning environments.

The teachers and students of Paul Elementary School feel extremely fortunate to have begun the journey toward 21<sup>st</sup> century learning and whole-school deployment over the past year. We have seen first-hand the significant change in engagement, collaboration and new attitudes towards learning that has permeated our school since our comprehensive technology program was launched.

Paul Elementary School proposes grant funding to continue the use of one-to-one digital devices (iPads) for full-school deployment K-5. In addition, it will fund ongoing professional development to instruct educators in the incorporation of technology, student-centered instructional pedagogy, and technology training.

This project is focused on a programmatic shift from rote memorization techniques and teaching approaches of the past, to problem-solving skills within a Next Generation Learning environment. Specific goals of this project are to improve differentiated instruction, increase student engagement and to develop a culture of higher-level thinking skills and technological fluency among our educators. We have found that when students are excited about learning they take ownership and pride in their educational growth. This shift dramatically alters not only the school climate, but outside constituencies such as parents and the community at large.

Based on the progress we have already seen, we anticipate improved student performance on upcoming tests as we move to Idaho Core Standards and begin to assess these critical 21<sup>st</sup> century skills. Student achievement will be improved through the incorporation of problem-solving and project-based learning. The paradigm shift to project-based learning will encourage students to apply higher level thinking skills to real-world scenarios. Facilitated by this technology, our program will address student achievement in attendance, attitude, retention, participation, and test scores.

Our school has been recognized throughout the state for our successful whole-school approach to technology; and has been visited by countless community members, legislators and stakeholders looking for ways to incorporate comprehensive technology for Idaho students. As such, we believe this project will become a scalable, sustainable and replicable model for schools across Idaho, as they too will be implementing Idaho Core Standards and searching for 21<sup>st</sup> century tools to meet the ever-increasing challenges of our educational environment.

## Educational Needs and Goals

The continuation of our whole-school technology program will address our most critical educational needs and goals, which are clearly linked to the specific demographic and socio-economic challenges faced by our student population. Our overall objective is to provide our students with the learning and critical-thinking skills they need at an elementary school level. They should build upon these skills in a systematic way, as they enter higher learning institutions and move toward becoming successful in a global digital economy.

Paul Elementary School, located in rural Minidoka County, has an enrollment of 465 students in grades K-5. The school serves an agricultural community of 5,000 people who are mainly employed by dairies, farmers, and agricultural based businesses. Of our student population, 70% qualify as low-income. Our demographics are varied with 41% Hispanic and 58% Caucasian. Thirty-eight percent have been classified as LEP (Limited English Proficient) at some point during their years at our school. In addition, data indicates that our student population is highly transient; 20% of our students have attended multiples schools during the school year, affecting both performance and stability.

Additionally, our data clearly indicates that 50% of students entering kindergarten do not speak English or have very limited ability to communicate in English. Kindergarten fall IRI scores are at 37% proficient, well below the state average of 56%. Unfortunately, the trend continues into 1<sup>st</sup> grade where only 56% of students are proficient by the Spring IRI test compared to the state average of 73%. By the third grade, students make promising gains in reading, but the slow start is directly linked to exposure to vocabulary and language acquisition. Technology has the ability to significantly alter this trend by allowing differentiated instruction, increased vocabulary exposure, and explicit, repeated skill practice. (See appendix A).

We have been pleased with student performance on ISAT. Our students have consistently scored in the 90 percent range in reading and math. However, we have been unable during the last four years to move our students to the next level of achievement. Although we have fully implemented RTI (Response To Intervention) and other intervention programs, we are still unable to rise above this plateau. Over the past several years, our Hispanic students have shown considerable growth, but remain below state averages in math and language.

We believe that this pilot project will continue to improve and enhance the educational and cultural shift that we have seen thus far, helping us to achieve the desired growth in these areas. (See Appendix B). Although current teaching methods and building-wide programs have narrowed the achievement gap for all students, our data (detailed above) shows a plateau in achievement that we believe can be addressed and overcome through this project and our pedagogical shift. Our teachers recognize the potential to create exciting, relevant, collaborative, and engaging learning environments

through the incorporation of this one-to-one technology, and believe this will specifically benefit the challenges and needs faced by our school, based on demographics, economics and language barriers.

Minidoka County School District (MCSD) has demonstrated a strong commitment to instructional technology as demonstrated through the adopted technology plan (attached). While seeking solutions to instructional technology demands, our district was pleased to participate in a pilot program at Paul Elementary that provided the foundation and infrastructure for this project proposal. Support for this project was overwhelmingly positive from district personnel and community stakeholders.

Evidence of our long-term commitment to provide cutting-edge opportunities to our students is seen through the completion of in-district technology grants to individual classrooms, district-wide professional development (including a tech-trek and blended learning training), as well as project completion to increase bandwidth to all schools. MCSD received the ISEE Phase II Grant and will be presenting sessions on current technology practices at the upcoming Idaho Instructional Innovation Conference.

Teachers at Paul Elementary have been extremely proactive leaders in helping MCSD research and incorporate instructional technology. Through their participation in last year's pilot program, teachers demonstrated their buy-in through 100% attendance at professional development opportunities and 95% attendance at un-paid, voluntary weekly technology trainings.

Our teachers understand and have a strong commitment to the value of technology in education. After having technology in their classrooms for just five months, 90% of teachers saw an increase of student engagement. Ninety-three percent said that the use of technology enhanced learning in their classroom. When asked how important professional development was to their implementation, 83% of teachers said it was very important. Our staff is ready, eager, and excited to leverage the investment that has already been made and to continue the implementation of one-to-one device technology in their classroom. (See Appendix C).

Not only are teachers and staff members supportive of this project, our parents also fully support the implementation of technology into the curriculum as a means of equipping their children with the next-generation skills. In a Spring 2013 survey, 98% of Paul families surveyed responded with overwhelming support for the use of technology and project-based learning in our classrooms. Since the deployment launched, we have had 100% participation by students and their families.

The funding received through this project will allow us to continue to redesign our learning environment to a problem-based system where students actively apply 21<sup>st</sup> century skills. This paradigm shift can be replicated in other schools as we continue to share our project with educators in the state through on-site visits, training sessions and collaboration.

## Scope and Sequence

Planning: Throughout the deployment process of our whole-school technology program, Paul Elementary was able to create planning systems and processes to successfully integrate a new technology-centric learning culture throughout our school.

Three years ago, Paul Elementary created a long-term plan to begin implementation of technology into the classroom as a means of integrating 21<sup>st</sup> century learning skills to support Next Generation Learning. To begin this process, we purchased a limited number of iPads within a few classrooms. As teachers became aware of the dramatic changes to student engagement through the devices, we began proactive efforts to increase the amount of technology in our classrooms. Through the initial pilot program, substantial improvements were made to the infrastructure, network and connectivity systems. As a result of these efforts, our school is in a unique position to leverage existing structures and devices in order expand our technology program and create a model that is scalable to schools and districts throughout Idaho.

Involvement: In addition to the infrastructure, technology leadership within our school has already been established. Our building level technology specialist has been trained to manage devices and apps on a large scale. In each grade level, there is a lead technology teacher who guides the team in implementation of apps. Additionally, we have conducted ongoing professional development sessions, detailing the process of technology integration in the classroom. The app review committee meets quarterly to decide on the most effective and current applications and other resources suited for classroom use.

Preparation: From the beginning of our initial pilot project, our philosophy was that each teacher and staff member was in this journey together. Because it was a whole-school deployment, everyone was involved, and every teacher had the opportunity to become familiar and confident with the technology. Throughout each phase of the deployment, our teachers were armed with the skills and tools they needed to develop seamless integration within their own classrooms – and the ability to pass those tools and techniques along to their students.

Because of the strategic planning that was created throughout the deployment process; we were able to anticipate potential hesitancies and barricades to buy-in, and to ensure that each teacher felt empowered and supported. We believe that our approach to holistic technology integration is a successful model that can be replicated throughout Idaho schools.

Implementation: Paul Elementary has already completed the initial implementation of the comprehensive technology. We have already configured all infrastructure and hardware, as well as assigning an individual device to each student and instructional staff member. Wireless, networks and server support were implemented during the 2012-2013 school year as well. We have conducted comprehensive training and professional development as part of the overall deployment.

Because of the deployment that has already occurred, our school is uniquely positioned to expand and move toward the next level of technology integration. Our teachers have become extremely comfortable and enthused with the current framework, and are prepared to move forward within this environment to achieve fuller integration. We look forward to becoming a model of technology integration for other schools throughout the state as Idaho continues to focus on Next Generation Learning.

Leveraging on the existing infrastructure and one-to-one system already in place, our implementation timeline will focus on continued professional development. We will provide teachers with extensive knowledge to fully utilize the potential of the devices, based on applications, digital curriculum and current research. The end goal of our professional development program will be to redefine the classroom. At this stage of our deployment, we anticipate that common classroom tasks and computer technology will exist, not as ends, but as support for student-centered learning.

Due to the comprehensive nature of our proposed program, and the paradigm shift that we are working to create, we believe that the program will have a direct impact on the community at large. By creating educational structures and systems that prepare students to learn and excel within today's digital world, these 'digital natives' will be capable of moving seamlessly from the educational setting to becoming successful contributors within the workforce and community.

Evaluation: As the technology program expands, we will establish specific and measureable goals to determine the ability for our program to be replicated in other schools. Our research will focus on both qualitative and quantitative measurements. Qualitative measurements will include gauging the effectiveness of professional development in shifting classroom teachers use of technology in their lessons from skill centered teaching to application of skills through problem-solving projects. We will also continue to survey all stakeholders including students, teachers and parents regarding increased learning, outcomes, and familiarity and accessibility to technology. In addition, we will collect and analyze feedback from visitors to our school, to determine overall perceptions and increased knowledge and understanding of the potential of whole-school technology. This activity will provide essential insight regarding the willingness and commitment of other schools and districts to replicate our model. Timelines for collection of data will include quarterly reports, bimonthly team meetings, and technology reviews.

Quantitative content-specific benchmarks will target increases in math fluency, spelling and high-frequency word accuracy, grade level proficiency in digital citizenship courses and classroom content-based projects with the development of new rubrics to evaluate these projects. Data will include a comparison from the previous year to the next two years with pre-assessments, mid-year and end of year data. Additionally, we will work closely with the SDE on the development of additional measures, criteria and benchmarks.

## Sustainability and Scalability

Our proposed technology program has been designed to be scalable and sustainable throughout the state of Idaho. Because the infrastructure is already established, and the wireless has been proven reliable and dependable in managing hundreds of individual devices, we are confident that this is a model that can be replicated in any school, in any geographic location throughout the state.

Sustainability: Because the deployment phase of our pilot program has already occurred, Paul Elementary has the ability to refocus our efforts and resources on professional development, system maintenance and software utilization. As other schools are able to deploy this model, once the upfront cost have been expended for hardware, wireless systems, servers and devices, each school will have the ability to create a comprehensive paradigm shift from teacher-centered instruction to student-centered learning.

In addition to the cost saving over time on the infrastructure, one key benefit to the proposed technology program is the offset of hard-costs within the school environment. For example, during our initial deployment period, Paul Elementary saw significant savings in paper costs, copy machine expenditure and maintenance, consumables (workbooks, etc.) and supplies. Not only has this provided us with hard cost savings, it also reduces the impact of paper waste on the environment.

The project is sustainable since the school will own all hardware and the ongoing costs of the network connectivity will continue to be funded by the district. As indicated in the District Technology Plan, MCSD is fully committed to funding, supporting, and implementing technology in all schools that support 21<sup>st</sup> century learning. As such, the district is currently investigating options to expand the model created at Paul Elementary.

Scalability The proposed technology plan is also scalable. As more schools throughout the state or an individual district deploy the hardware and infrastructure to manage one-to-one devices, there are functions such as servers and administration that can become centralized and managed at the district level. Over time, this will decrease the financial outlay for schools to implement and expand the program.

Our whole-school technology program has shown administrators and community leaders from around the state of Idaho first-hand that this approach is successful and scalable. For many years, those in the education arena have lauded technology and its importance to the future of education. We know what technology can do, but the reality of integrated technology in the classroom hasn't been tangible or visible – until now. The visitors to our school in the past six months have all had a similar reaction: seeing is believing. Those who see our technology in action and witness the obvious student engagement are energized, excited and articulate that they are ready to put this vision into reality.



## Budget Narrative

The Minidoka County School District is requesting \$375,889.66 (\$409 per student per year for two years) from the State Department of Education as part of the Idaho Technology Pilot Project grant. This money will be combined with a previously committed \$305,894.83 of matching funds in order to successfully complete a school-wide, one-to-one mobile device deployment and implementation costing a total of \$681,784.49. The generous matching contribution makes the opportunity for this grant funding very fiscally beneficial.

With the award of this grant, combined with the committed matching funds, Paul Elementary will own 480 iPads (one for every student and teacher), 50 iMacs, 25 MacBook Pros and other miscellaneous Apple equipment and software to compliment these devices. The deployment includes all networking infrastructure and components, audiovisual equipment, software to support the system, and professional installation services. The program also includes 80 hours of professional development for teachers and administration, help desk/support program for two years, and a full suite of classroom management software. By awarding Minidoka this grant request, the State Department of Education will enable the implementation of one of the most robust whole-school technology systems in Idaho complete with hardware, software, and services costing a total of \$681,784.49 for only \$375,886.66 in State funding.

In order for this implementation to remain successful, the Minidoka County School District will need to expend \$187,944.83 in September of 2013 and 2014 to cover lease payments for equipment and software. These two payments make up the grant request of \$375,889.66. The additional costs for the full deployment and implementation have been secured through private matching funds: approximately \$293,288 in matching contributions by or before September 2013 and the remaining approximately \$12,667 in matching contributions by or before September 2014.

Please see the attached cost summary for further details.

## Budget Spreadsheet



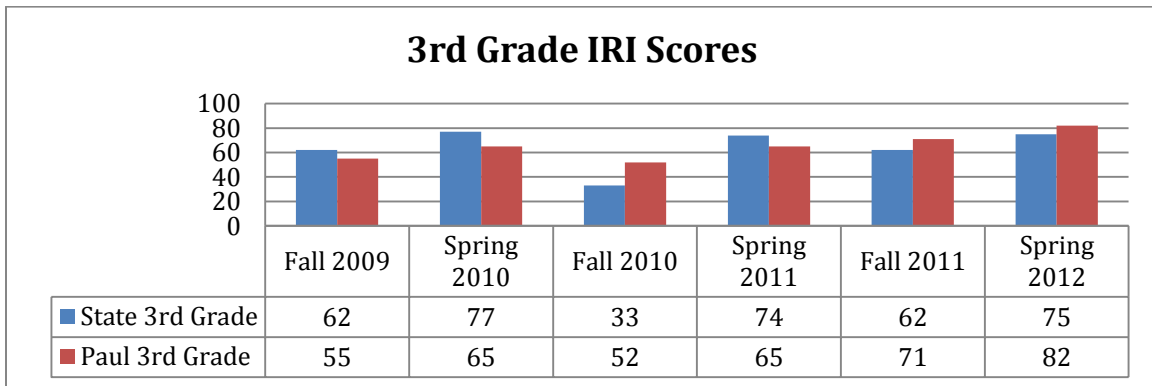
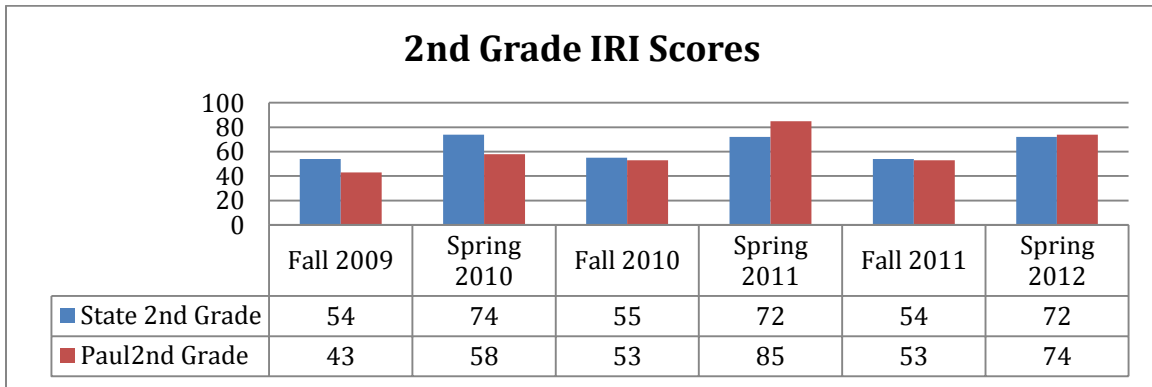
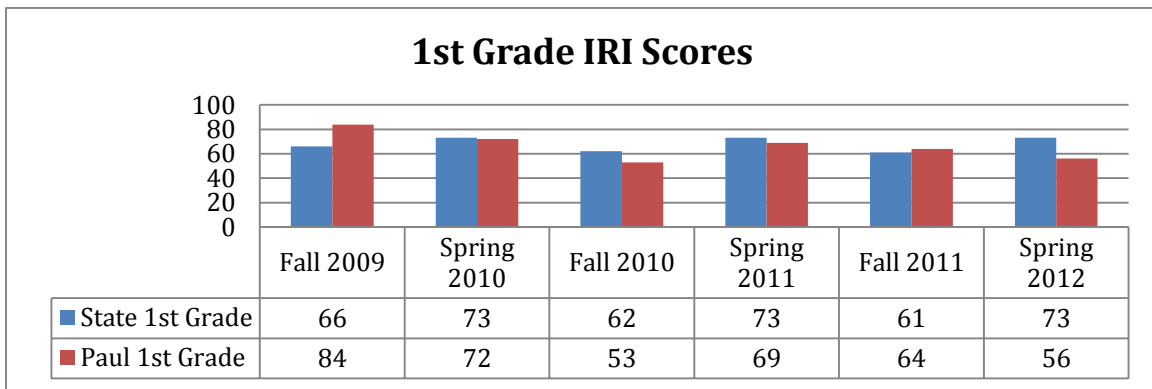
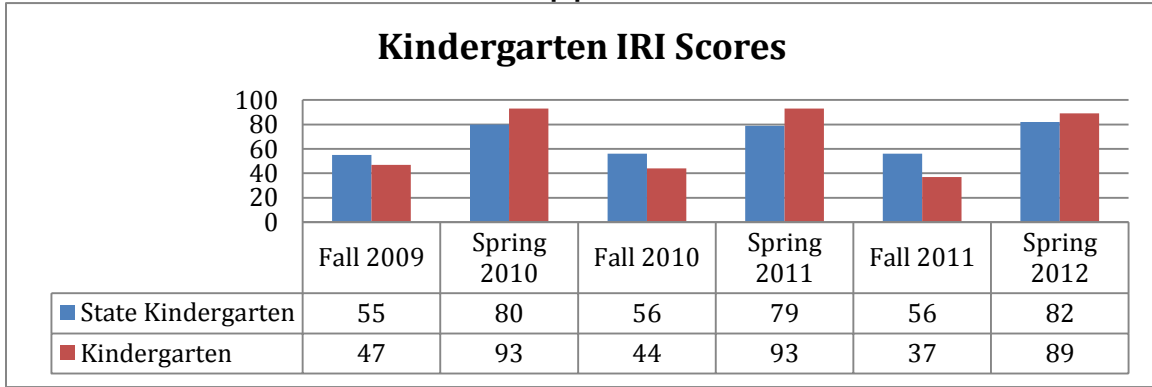
### iSchool Cost Summary, Including Matching Funds Cost Category Summary

Number of Students	460	<b>Total iSchool Cost</b>	<b>681,784</b>
Leased Equipment and Software:		Committed Matching Contributions	305,895
Equipment & Software	545,034	<b>Total Funds Requested from State</b>	<b>375,890</b>
Financing Expenses	18,800	Total Cost per Student	1,482
<b>Total Lease payments</b>	<u>563,834</u>	Total Match per Student	665
iSchool Services and Software:		<b>Total Funds Requested per Student</b>	<b>817</b>
Design, Install, Configuration Services	57,000		
Teacher and Admin. Professional Development	11,450		
Help-Desk/Support/Repair & Replacement Program	38,000		
iSchool Connect Software	11,500		
<b>Total iSchool Services &amp; Software</b>	<u>117,950</u>		
<b>Total iSchool Costs</b>	<b>681,784</b>		

### Two-Year Detail Summary

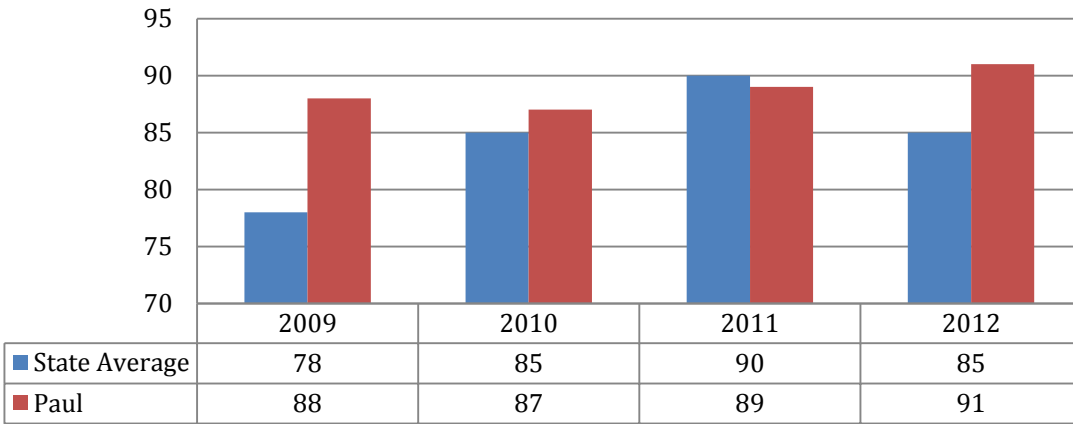
COST CATEGORIES	Year 1		Year 2		Total Program	
	Per Student	Total Annual	Per Student	Total Annual	Per Student	Total 2 Years
<b>Equipment &amp; Software Lease Payments</b>	817	375,890	409	187,945	1,226	563,834
<b>iSchool Services &amp; Software</b>						
Design, Install, Configuration, & MDM	124	57,000	-	-	124	57,000
Teacher and Admin. Professional Development	25	11,450	-	-	25	11,450
Help-Desk/Support/Repair & Replacement Program	55	25,333	28	12,667	83	38,000
iSchool Connect Software	25	11,500	-	-	25	11,500
<b>Total iSchool Service and Software Costs</b>	<u>229</u>	<u>105,283</u>	<u>28</u>	<u>12,667</u>	<u>256</u>	<u>117,950</u>
<b>TOTAL PROGRAM COSTS</b>	1,046	481,173	436	200,611	1,482	681,784
Matching Contributions Already Committed	637	293,228	28	12,667	665	305,895
<b>FUNDS REQUESTED</b>	409	187,945	409	187,945	817	375,890
<b>Average Funds Requested per Student Per Year</b>	409					

## Appendix A

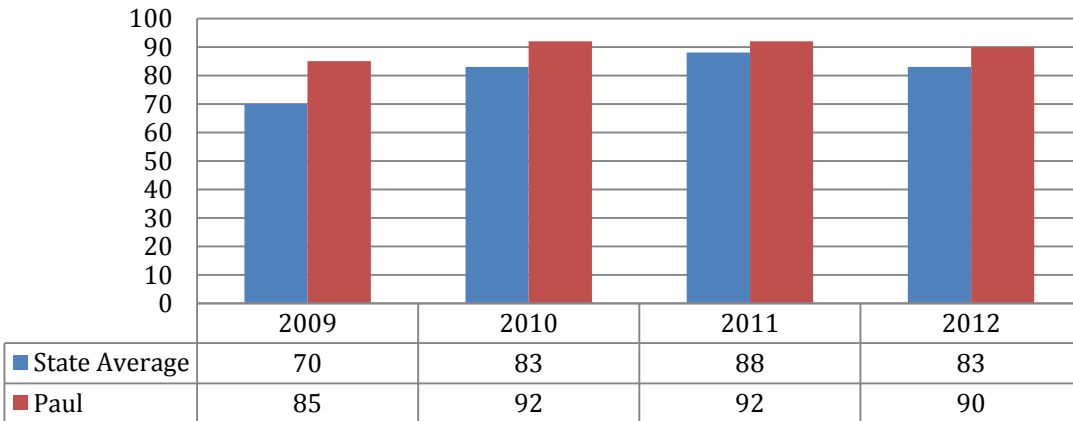


## Appendix B

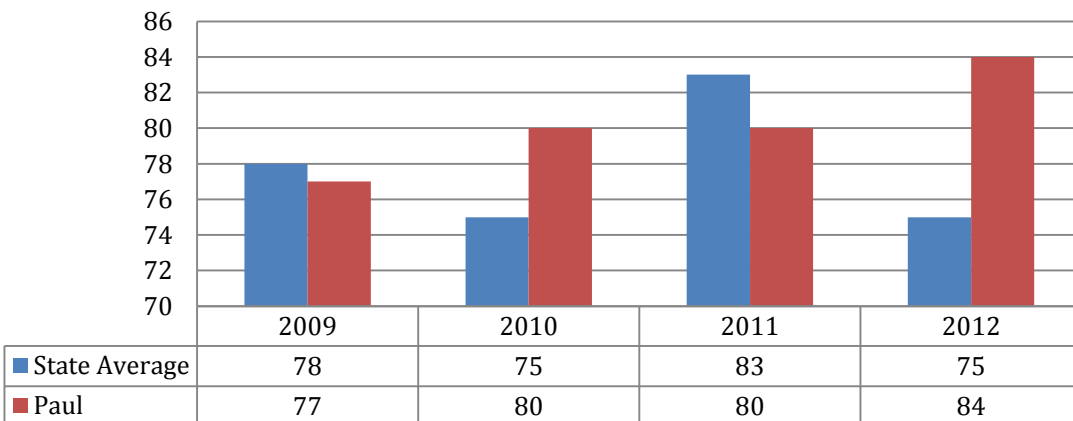
### Reading ISAT



### Math ISAT



### Language Arts ISAT



## Appendix C Staff Technology Perceptions Spring 2013

