GRANT AGREEMENT – Attachment 1

MHCRC TechSmart Initiative for Student Success
Gresham-Barlow School District - Grant Project Plan
K-3 Technology Integration Project

I. PROJECT PURPOSE

About Gresham-Barlow School District

Gresham-Barlow School District (GBSD) is a medium-sized school district on the east side of Multnomah County that serves almost 12,000 students K-12. GBSD is made up of ten elementary schools, one K-8, four middle schools, three high schools, and five charter schools. The diversity of students in GBSD has grown considerably over the last decade. Currently 53 home languages are spoken by students across the district. Following English, Spanish represents the second largest language group with over 2,000 Spanish speaking students in the district. Nearly 50% of students and families in GBSD are impacted by poverty.

Work in Gresham-Barlow School District is driven by a commitment to five district-wide strategic themes:

- *Teaching and Learning, Growth and Achievement for all* - Engage every student in meaningful learning through high-quality instruction and relevant content
- *Equitable Outcomes* - Eliminate the achievement and opportunity gaps throughout the district through an increased focus on equitable outcomes
- *College and Career Readiness* - Improve and increase high school pathways to college and career options
- *Early Learning* - Align practices and resources to support all students reading at grade level by the end of 3rd grade
- *Community Partnerships* - Enhance support for students and schools through parent, business and community partnerships

As part of the focus on teaching and learning, GBSD has been strategically focusing on developing systems and practices to increase the effectiveness and impact of instruction. As part of that work, a district-wide common literacy framework was developed to guide teachers in both the content and high-leverage instructional practices for K-12 literacy. This framework defines the common expectations for all teachers of literacy throughout the district. It aligns with the Oregon Literacy Framework and includes both content and instructional components. The components of the framework are research-based and include high-leverage, effective instructional practices. *See Exhibit 1-Literacy Framework.*

Along with the framework, a new K-5 core literacy program, *Journeys,* was purchased for implementation beginning in Fall 2015. *Journeys,* by Houghton Mifflin Harcourt, is well aligned with the Common Core State Standards in both rigor and content. *Journeys* was chosen by a teacher selection committee after reviewing all potential materials with multiple rigorous evaluation tools. *Journeys* provides resources to effectively support teachers in implementation of the district-wide literacy framework. Differentiated professional development was provided around *Journeys* multiple times throughout the 2015-2016 school year to create a strong foundation of understanding for teachers.

Professional development systems are also being redesigned to increase the effectiveness and impact of instruction. Research has proven that teacher collaboration through Professional Learning Teams (PLTs) is one of the most effective means of professional learning. In order to provide that high-leverage

professional development opportunity for teachers, the collective bargaining agreement was renegotiated to include designated time for grade level teams to meet twice per month in PLTs. During this time, teams work to deeply understand the standards being taught, to design instruction, to create assessments, and to analyze student performance data. The elementary teachers have been focusing specifically on literacy during PLT time during the 2015-16 school year.

Multiple efforts are taking place throughout the district to focus on the strategic theme of equitable outcomes for all students. GBSD, like many other districts, struggles with a persistent achievement gap among groups of students. Students of color, students impacted by poverty, English Language Learners, and students with special needs consistently score lower on proficiency assessments than the student body as a whole. Large-scale, overarching efforts are underway such as the development of the Superintendent's Equity Advisory Committee to support the development of a district equity policy, a prioritization of professional learning funds targeted toward equitable outcomes for all students, and the creation of a district cohort working towards the Equity Certification offered through the University of Portland. Also the district has targeted instructional supports such as the funding of a Sheltered Instruction Coach, training for teachers in Constructing Meaning and other sheltered instruction practices, and increased expectations and accountability to addressing the needs of all students.

GBSD recently developed a long-range technology plan to support the district's mission and vision. The technology plan identifies technology infrastructure and support requirements to guide the technology use to focus on improving student learning and preparing students for college and careers. The plan creates a roadmap for sustainable technology maintenance across the district.

Project Focus

GBSD has chosen to focus **K-3 Technology Integration Project** on developing high quality, effective instruction to strengthen K-3 literacy for several reasons:

1. <u>Student Performance on Reading Assessments</u>
   GBSD has been suffering from falling 3rd grade reading scores on the Oregon State Assessment over the last several years. The percentage of students meeting or exceeding the standard of proficiency has dropped more than 25 points from 2010 to 2014. The decline to a level where only 57.6% of GBSD 3rd graders are passing the achievement test indicates a need for significant modifications to current practices.

   In addition to reading assessment performance scores declining, a persistent achievement gap exists for multiple sub-groups across the district. Students of color, economically disadvantaged students, students with disabilities and English language learners consistently underperform compared to the district as a whole.

GBSD 3rd Grade Reading % Meets/Exceeds on Oregon Assessment of Knowledge and Skills (OAKS)

	2013-14 OAKS	2012-13 OAKS	2011-12 OAKS	2010-11 OAKS
District All	57.6	59.4	60.5	83.2
District Hispanic	32.4	43.6	37.5	73.9
District Economically Disadvantaged	48.5	49.6	50.2	78
District English Language Learners	22.8	29.5	26.6	64.2
Students with Disabilities	27.8	27.9	27.9	57.3
State	66.2	66.4	70.1	83.4

2. Incoming Kindergarten Readiness Skills
   The new Oregon Kindergarten Assessment data has shown that many kindergarteners are arriving at school lacking the identified reading readiness skills. The lack of those readiness skills creates a situation where students are actually behind starting on the first day of kindergarten. Very strategic and targeted instructional measures must be taken to try to catch students up quickly so that their proficiency gap doesn't increase over time. This information adds additional urgency to the work to help students build their early literacy skills.

2014-2015	English Letter Names	English Letter Sounds
North Gresham ES	13.8	3.6
Kelly Creek ES	14.9	4.3
District	14.7	4.9
State	17.7	6.6

*Statewide Kindergarten Assessment Data Report, ODE

3. K-12 Technology Steering Committee Recommendation
   During the 2014-2015 school year, the K-12 Technology Steering Committee identified the All Hands Raised indicator of Reading Proficiently by 3rd grade as the most crucial priority for technology supports under the district's long range technology plan.

K-3 Technology Integration Project

The **K-3 Technology Integration Project** aims to leverage the power of technology in the hands of both teachers and students as a teaching and learning tool through a technology rich, blended learning pilot in two elementary schools. The district intends to use the pilot schools' efforts to identify high quality and effective literacy instruction and to develop a clear, well-vetted plan for implementation that can be scaled to

all elementary schools over time. The TechSmart funds provide GBSD a unique opportunity and resources to create such a plan.

For **K-3 Technology Integration Project**, blended learning is defined as a learning environment in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path and/or pace.

Project Outcomes

1. Technology will be routinely and effectively utilized to support curricular literacy goals in pilot school K-3 classrooms.
    a. Transformed practices: Through embedded supports and continuous learning opportunities, new and refined skills, techniques, strategies and routines will be observable in k-3 pilot classrooms as measured by walkthrough observations, surveys, and interviews.
    b. Transformed resources: GBSD will provide teachers in pilot classrooms with technology-rich literacy instructional materials and resources that allow teachers and instructional leaders to better respond to data and meet individual student needs as measured by walkthrough observations, surveys and interviews.

2. By 2020, 80% of 3rd grade students in pilot classrooms will demonstrate grade level proficiency in reading as measured by the reading portion of the Smarter Balanced Assessment in English Language Arts.

3. Between 2017-2020, 3rd grade students within the subgroups of Hispanic, ELL, and Economically Disadvantaged students, and students with disabilities at the pilot schools will demonstrate more growth in proficiency rates than their peers at similar schools in the district as measured by the reading portion of the Smarter Balanced Assessment in English Language Arts.

4. Between 2017-2020, 3rd grade students at the pilot schools will more demonstrate more growth in proficiency rates than their peers at similar schools in the district as measured by the reading portion of the English Language Proficiency Assessment.

5. By spring of 2020, GBSD will have a Digital Learning Toolbox of on-demand professional learning resource for educators in the district. The resources will include videos, screencasts, podcasts, digital PLT opportunities and other relevant digital resources.

Specific Pilot Schools

North Gresham Grade School and Kelly Creek Elementary were chosen as the two pilot schools after considering multiple factors. Each of the district's 11 elementary schools were scored on compatibility and alignment with the criteria below as part of the decision making process.

- Student Demographics
- Student Achievement in Reading
- Leadership Capacity
- Building Culture (Beliefs, perceptions, relationships and attitudes of staff members)
- Other Additional Supports Already In Place

North Gresham Grade School has 555 students enrolled K-5. It is a school-wide Title One school with 68% of the students living in poverty. 30% of the students in the building are Hispanic and 30% of the

students in the building are English Language Learners. The school includes 14 classrooms for the k-3 grades.

Kelly Creek Elementary has 538 students enrolled K-5 with 61% of the students living in poverty. 24% of the students are Hispanic and 24% of students in the building are English Language Learners. The school includes 12 classrooms for the k-3 grades.

Once identified, a group of **teachers, educational assistants, parents, and administrators** from the two pilot schools gathered to help develop the vision and implementation plan for the **K-3 Technology Integration Project** at their schools. They provided specific input on key questions and guidance on issues (see Section III, Project Partners and Beneficiaries - description of the Pilot Schools Technology Integration Visioning Committee).

Role of the Instructional Technology Coach (ITC)

Successfully transforming instruction requires a culture shift. Providing support for educators is crucial in moving to a digital learning culture. Any educator, whether novice or seasoned, requires time, support, and reflection to successfully integrate technology as a tool for high-impact instruction. Providing an on-site Instructional Technology Coach (ITC) is a research proven way to provide ongoing, sustained, timely, and embedded professional development and support for educators.

During the first two years of the project (SY16-17 and SY17-18) North Gresham and Kelly Creek will each have one full-time Instructional Technology Coach (ITC) to support the K-3 programs at the school. During the third year and fourth project years, the ITC support will decrease to one, who will share coaching duties between the two schools. The district also has District Instructional Coaches assigned to certain schools that focus on literacy pedagogy and content. These coaches will collaborate with the ITCs to ensure pilot school teachers have high level coaching support for technology rich literacy instruction.

GBSD anticipates certain teachers at both schools will become peer leaders who take on some of the role and responsibilities of the ITCs over time. In addition, the District Instructional Coaches, who support the 4th and 5th grades at the schools, will be learning side-by- side in the schools to build GBSD capacity to support all teachers.

GBSD staff had the opportunity to attend a meeting with the Earl Boyles Elementary School instructional technology coach (David Douglas School District TechSmart grant) where he identified key skills needed for ITCs. Based on these, GBSD will look for the following in hiring the ITCs: K-5 classroom teaching experience, demonstrated skills in highly effective instructional practices, a strong understanding of Common Core State Standards and good track record of being able to work well with a wide variety of people. In addition, the person will need to have a love for technology and be flexible, innovative and patient.

The ITCs will provide multiple methods of coaching to the educators at the schools:

- *Cognitive Coaching* that invites educators to reshape their thinking about instructional strategies and learning.
- *Instructional Coaching* that directly provides trainings, in-classroom modeling and co-teaching, and supports the collaborative planning process of Professional Learning Teams (PLT).
- *Peer Coaching* between educators that is organized and facilitated by the Instructional Technology Coach.
- *Leadership Coaching* that supports the building administrators and teacher leaders in their work to support successful instructional implementation.

The primary job responsibilities for the ITCs are:

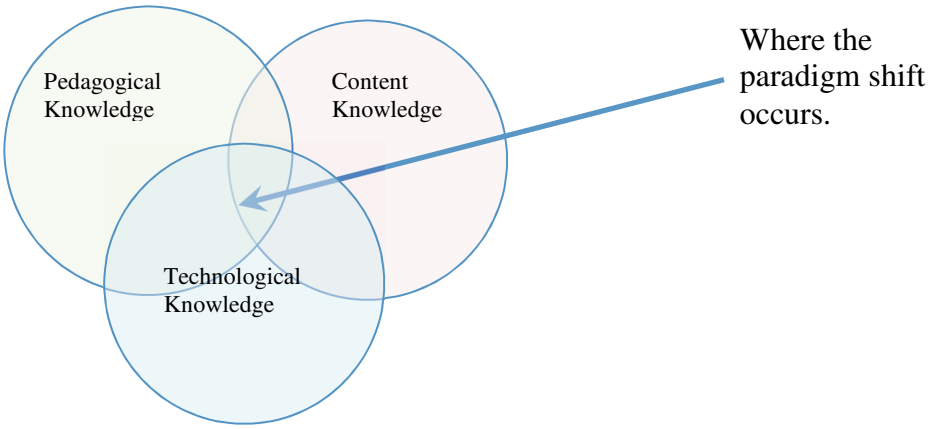
- Develop and lead professional development (PD), implementing the coaching models outlined above.

- Work with District Instructional Coach and Director of Teaching and Learning to the integrate technology instruction with literacy strategies and framework.
- Facilitate and support collaboration within both horizontal (one grade level) and vertical (k-3rd grade) PLTs to affect continuity and articulation of the instructional program.
- Facilitate and support cross-school opportunities that bring together educators from both pilot schools.
- Provide one-on-one coaching in classrooms that include the full coaching cycle of pre-conference, modeling, co-teaching, observation, and post-conferencing.
- Provide peer observation/coaching and lesson-study opportunities for the educators within and across schools.
- Actively participate on the school's leadership team.
- Work collaborative with the principal on implementation and PD.
- Collaborate regularly with the instructional coaches who serve Kelly Creek and North Gresham to ensure that a consistent message and support is being provided.
- Create assets for a Digital Learning Toolbox (see details below).
- Work with district leadership on developing the scaling plan.

The ITC will play a key role in developing the GBSD **Digital Learning Toolbox** as part of the long-term scaling plan. The ITC will be responsible for creating professional learning tools and resources (the Digital Learning Toolbox) over the four years. The ITC will also curate assets provided by teachers and others for inclusion in the Toolbox. Through careful documentation of the instructional transformation, technology integration process and professional learning activities, the Digital Learning Toolbox will provide digital tools and resources to support educators in implementing a long-term scaling plan.

The trainings, PD and coaching around specific instructional strategies and resources will be captured and used to create a variety of teaching resources such as videos, screencasts, and podcasts. Those "on demand" professional learning resources will be housed in a Digital Learning Toolbox within iTunesU, a free application for curriculum development. The resources will be accessible immediately by the educators in the pilot schools, and eventually by the educators in all 11 schools. This work will also be supported by the Director of Teaching and Learning, the Classroom Technology Specialist, and the District Instructional Coaches.

The ITCs will provide leadership for educators by planning, collaborating, mentoring and facilitating change to improve instruction. The ITCs will collaborate closely with the District Instructional Coaches and the Director of Teaching and Learning to provided braided support in all three crucial components of an effective instructional program: Pedagogical Knowledge, Content Knowledge, and Technological Knowledge.



The Pedagogical Knowledge

Relying heavily on the research analysis of Robert Marzano and John Hattie, GBSD has identified highly effective, research proven instructional strategies that are to be implemented in classrooms district wide. An instructional model referred to by the acronym ACTIVE was created based on that research and has been an instructional focus in the district for several years *(Exhibit 2 - ACTIVE model).*

Activate Prior Knowledge
Capture Learning in Measurable Ways
Transferable Knowledge and Skills
Inquiry and Critical Thinking
Verify Understanding and Modify Teaching as Necessary
Engage Learners Actively and Productively

Each letter of the acronym encapsulates a complex instructional strategy that can be implemented in a wide variety of ways. For example, research has proven that activating a student's prior knowledge about a topic or skill promotes higher levels of learning. Many different activities can achieve that goal, however they range in effectiveness. Through the work with the ITC, pilot school educators will have ongoing opportunities to develop and refine the activities they use to address these six major instructional strategies.

*Journeys (*the new literacy program adopted for K-5) aligns well with the tenants of ACTIVE instruction. It provides many digital-only, research-based resources for both teachers and students. The teachers and students will be able to greatly expand instructional opportunities through consistent access to devices and tools, such as interactive smart boards, in the classroom.

In addition to the ACTIVE instructional model, the **K-3 Technology Integration Project** focuses on strengthening the quality of the differentiated instruction being offered for students in the K-3 classrooms of the two pilot schools. Differentiating instruction to meet the needs of each unique learner is always challenging, but it is exceptionally challenging as funding issues have driven up class sizes. Creating high quality blended learning opportunities for students will increase the ability of teachers to meet the needs of each student in the classroom.

As part of that work, a district-wide common literacy framework was developed to guide teachers in both the content and high-leverage instructional practices for K-12 literacy. This framework defines the common expectations for all teachers of literacy throughout the district. It aligns with the Oregon Literacy Framework and includes both content and instructional components. The components of the framework are research-based and include high-leverage, effective instructional practices.

Technology is also a significant support for the implementation of GBSD K-12 Core Literacy Framework (*See Exhibit 1-Literacy Framework)*. One particularly important area is the "Gradual Release of Instruction" model of instruction and instructional technology can greatly enhance a teacher's ability to provide both differentiated instruction and opportunities for independent practice.

Supporting teachers in the pedagogical knowledge is a primary focus of the District Instructional Coaches and the Director of Teaching and Learning.

The Content Knowledge

Common Core State Standards (CCSS) for English Language Arts is specific content knowledge focus of the project. The CCSS include very specific content and skill expectations for each specific grade level in Reading, Writing, Language, and Speaking and Listening. Proficiency with those standards is measured by the Smarter Balance Assessment beginning in 3rd grade. Those specific standards will drive teaching via the research-based instructional strategies and technology tools. Supporting teachers in the content knowledge is a primary focus of the District Instructional Coaches and the Director of Teaching and Learning.

The Technological Knowledge

The technological knowledge project component will be the role of the ITCs. Their work will focus on two strands of technological knowledge. The priority of these two strands is developing educator knowledge and skill in utilizing both the hardware and software components of instructional technology for effective literacy teaching and learning. They will introduce the teachers to the many apps and web resources available to support effective instruction of content, as well as how to manage the use of the devices and other technology by students in the classroom. The ITCs will be heavily involved in providing the training necessary to build capacity and confidence in the use of technology among the educators in the pilot schools.

The secondary strand of the technological knowledge is around the specific technology skills of students. District standards for student technology skills by grade level were adopted in Spring 2015. The standards are intended to provide teachers with an understanding of the scope and sequence of skill development for student use of technology as a learning tool. The standards address both how to use particular technological tools and resources, but also how to utilize technology to engage in learning across the content and subject areas. The ITCs will support educators in determining how to best integrate the learning of these technology skills within the content of the English Language Arts Common Core State Standards.

Professional Development (PD)

The pilot schools will dedicate a majority of structured professional development (PD) over the 4 years of the project on the overlapping components of content, pedagogy and technology. GBSD and the school's leadership will give priority to developing educator capacity around teaching the rigorous content of the Common Core literacy standards via research-proven instructional strategies that integrate technology as a powerful learning tool. The audience for this PD is classroom teachers in grades 1-3, English Language Development teachers who serve English Language Learners, Special Education teachers who serve students with disabilities, and paraprofessionals who work with k-3 students throughout the school.

One particularly strong aspect of PD that the pilot schools will leverage is the district's recent shift to Professional Learning Teams (PLT) as the primary method of providing learning opportunities for teachers. Research has proven that teacher collaboration (through PLTs) is one of the most effective means of professional development. GBSD and the teachers union renegotiated the collective bargaining agreement to include designated meeting time twice monthly for grade level PLTs. Classroom teachers and specialists, such as English Language Development and Special Education teachers, are involved in the PLTs.

The teams work collaboratively to deeply understand the standards, to design instruction, to create assessments, and to analyze student performance data. In the PLT process, teams focus on four essential questions: 1. What do we expect our students to learn? 2. How will we know they are learning? 3. How will we respond when they don't learn? 4. How will we respond if they already know it? During this time, teachers utilized the research meta-analysis of John Hattie and Robert Marzono to inform their instructional decisions. The elementary teachers have been focused specifically on literacy during PLT time during the 2015-16 school year and will continue this focus through SY 17-18 in the pilot schools. The ITCs and District Instructional Coaches will provide direct support during PLT time.

Specific PD in Year One

Pilot school principals are expected to provide crucial instructional leadership for the success of the **K-3 Technology Integration Project.** With that in mind, particular attention will be paid to ensuring that they have the professional learning opportunities they each need to confidently lead this work. Their initial professional learning will be in the Spring and Summer of 2016. The principals will:

- Participate in a professional learning team (PLT) with the Director of Teaching and Learning, the Director of Technology Services, the District Instructional Coaches, and the ITC. This

PLT will meet for a minimum of 8 hours between April and August and focus on shifting the instructional paradigm to maximize the power of instructional technology.
- Receive technical training on the instructional tools and classroom devices PRIOR to the arrival of their teachers in the Fall so that they are ready to jump in immediately as a knowledgeable support. The Classroom Technology Specialist and the ITC will conduct this and ongoing technical training.

The pilot school teachers will receive ongoing PD via a variety of structures:

- May 2016- teachers will participate in a 3 hour overview training focused on shifting the instructional paradigm to maximize the power of instructional technology. During this time they will also receive information about the instructional tools and classroom devices.
- August 2016- 3 hours of the teacher inservice time prior to the first day of school will be devoted to training teachers on instructional tools and classroom devices. The Classroom Technology Specialist and the ITC will collaborate on this training. This session will also include training around how to best develop procedures and routines for managing devices in the classroom.
- September 2016-May 2017- The district provides five non-student contact curriculum and instruction inservice days scheduled throughout the school year. On each of those days, at least 2 hours will be devoted to professional development relevant to this project.
- Late start Wednesdays twice a month dedicated to teacher collaboration through the PLT structure. During PLT sessions the teachers focus on the curriculum design, instruction, assessment, and analysis of student data in literacy. This work will tie directly to desired outcomes of this project and will be supported by both the ITCs and the District Instructional Coaches. This PLT time is designed to support grade level PD learning communities. These grade level communities develop confidence over time and begin to take on leadership and problem-solving together.
- Additional inservice opportunities provided through strategic use of staff meeting time throughout the year.
- Master schedules are in place in the pilot schools that promote collaboration during the school day with common prep periods for grade level teams.
- The ITC will facilitate digital PLTs between the grade alike teachers of both pilot schools. This will create a collaborative environment for idea sharing and problem solving.
- Teachers will be provided with the opportunity to make site visits to schools that are effectively integrating instructional technology.

II. PUBLIC BENEFIT

Closing the Opportunity and Achievement Gap

A key purpose of focusing on increasing the quality of the literacy instructional program being offered in K-5 classrooms is the need to address the current achievement gap. As mentioned previously, student achievement in reading has been on the decline in GBSD for the last several years. Particularly, students of color, English Language Learners, students with disabilities and students living in poverty persistently underperform their peers in literacy proficiency assessments. This indicates that the instructional program being offered does not meet their learning needs.

The demographics of the GBSD student population has significantly shifted over the last decade. Currently, 40% of students are non-white and 12% of students qualify for special education. In K-3rd grades, 88% of these young students are economically disadvantaged.

Effective professional development (PD) and relevant instructional tools are crucial in closing the learning opportunity gap for chronically underserved populations of students. The K-5 Literacy Steering Committee used culturally and linguistically relevant criteria for evaluation in the literacy adoption. Members of the committee included specialists in Special Education, English Language Development and Sheltered Instruction. They evaluated all potential resources with a lens on how well they support learning for underserved students.

Journeys (the newly adopted core literacy program) has particularly strong potential for improvement. The steering committee evaluated literacy programs closely for the strength of instruction around targeted, foundational skills as well as intervention supports crucial not only for the success of all students, but particularly English Language Learners and students with disabilities. *Journeys* contains many resources that support English Language Learners, students receiving special education services and other students who need additional scaffolding and support, but most of these resources require digital tools in order to maximize the benefit for students. Some examples of the resources provided digitally are:

- English Language Development Stations
- Picture Card Blank
- ELL Teaching Guide
- ELL Vocabulary and Concept Posters
- ELL Building Background Videos
- GrammarSnap Videos
- Audio Hub (Where books read aloud to the children)
- Digital Retelling Cards
- Vocabulary in Context Cards
- Interactive Whiteboard lessons
- Decodable Readers
- Reading Intervention Toolkit resources

As part of the ongoing project evaluation, the K-3 Technology Integration Project will identify effective strategies and practices that leverage technology to provide personalized instructions that will inform instruction across the district. These will be documented in the digital learning toolbox.

III. PROJECT PARTNERS AND BENEFICIARIES

This project builds upon previous work done by multiple stakeholder groups. The effective use of technology as an instructional tool is a crucial aspect of bringing the vision and goals of these groups to fruition.

- <u>K-12 Technology Steering Committee</u>
  During the 2014-2015 school year, the K-12 Technology Steering Committee made of up **teachers, administrators and parents,** created a district-wide technology plan, adopted technology standards, and determined district technology priorities. The Committee also identified the All Hands Raised indicator of Reading Proficiently by 3rd grade as the most crucial priority for the implementation of the technology plan.
- <u>K-5 Literacy Steering Committee</u>
  During the 2014-2015 school year, a committee of **28 teachers** representing K-5 classrooms, English Language Development and Special Education evaluated and selected literacy curriculum resources. After thorough review and evaluation, the Committee selected the digital-print hybrid program called

Journeys. Among other things, the Committee believed the hybrid nature of this program would support a transition to more prevalent and consistent use of technology as a learning tool.

- Pilot Schools Technology Integration Visioning Committee
  A group of **teachers, educational assistants, parents, and administrators** from the two pilot schools helped develop the vision for the technology integration projects at their schools. They gave specific input on the following questions:
    - How do you think we can maximize the impact on student learning, particularly in literacy with the TechSmart resources?
    - What are challenges we should proactively consider as we head into this project?
    - What ideas do you have for involving families and the community in this project?
    - What other ideas, insights, or questions do you have?

  The Committee will continue to be a vital resource for planning work throughout the project. They will assist with the development and evaluation of the blended learning environment and help guide the district's work of scaling successful practices to other schools in the district.

  In particular, the Committee will be involved in designing activities for family and community education about their classroom's use of technology for instruction and learning. Committee members posed several viable ideas during the initial work session that will be fine-tuned and implemented during project implementation. These include hosting Family Technology Nights, where students lead technology activities and share projects, and Technology Training Nights for parents where parents have the opportunity to develop their own technology skills. These specific ideas have been built into the project implementation plan.

- Equity Committees
  GBSD is committed to equity and has several groups dedicated to "actively promoting a shared vision for equity and high expectations for the success of all students." These groups approach equity issues from a variety of angles, but closing the opportunity and achievement gap is front and center. The instructional outcomes of this project directly align with many of the desired outcomes of the groups. The groups include different combinations of stakeholders including **teachers, parents, students, and administrators,** depending on the nature of the group's work. Several staff members from the two pilot schools participate in one or more of these committees, as well as the Director of Teaching and Learning and one of the school principals. The work of these groups will directly impact the project by the guidance and direction they provide for the pilot schools on a variety of topics from district equity policies to instructional strategies research proven to impact the achievement gap.

IV. IMPLEMENTATION PLAN

See Professional Development in the Project Purpose Section and Exhibit 3 Implementation Plan for specific timelines and details on the activities listed below.

Continuous Improvement Process

Initiate (May-August)

- Install all necessary infrastructure and hardware.
- Provide introductory training for educators and administrators
    - Introduction to the resources and tools
    - Training on using and managing technology in the classroom

    - Training on the pedagogical aspects of blended learning
    - Conduct site visits to programs that can model blended learning practices

Implement

- Pilot schools begin using the technology and programs for instruction
- School-based Instructional Coach (ITC) and Classroom Technology Specialist: The ITC will focus on instructional technology knowledge and will collaborate closely with the District Instructional Coaches around the support of Content and Pedagogical knowledge for teachers. The Classroom Technology Specialist will provide on-site technical support.
- Professional development sessions related to the integration of technology to implement research-based instructional strategies that support school improvement goals.
- Collaboration within both horizontal and vertical Professional Learning Teams (PLTs) to affect continuity and articulation of the instructional program.
- Cross-school collaboration opportunities that bring together educators from pilot schools
- One-on-one coaching in classrooms that include the full coaching cycle of pre-conference, modeling, co-teaching, observation, and post-conferencing.
- Peer observation/coaching and lesson-study opportunities for the educators within and across both buildings.
- Ongoing evaluation of effectiveness
- Parent and family engagement activities

Refine

- Conduct comprehensive evaluation
    - Reading achievement
    - Effectiveness of Professional Learning
    - The quantity and quality of integration of technology as a learning tool
    - Effectiveness of tools and resources
    - Impact on the achievement gap
- Refine instructional practices and professional learning opportunities based on the data collected
- Continue to engage parents and families

V. EVALUATION PLAN

See Exhibit 4 Logic Model and Exhibit 3 Implementation Plan for specific timelines and details

This project will impact approximately 720 K-3 students and 24 classroom teachers. The evaluation process will include measures of both the changes in instructional practices and the impact on student learning. There will be multiple measurement tools used:

To measure the effective and routine use of instructional technology, the ITCs, Director of Teaching and Learning, the pilot school principals, and the MHCRC evaluator Pacific Research and Evaluation will be collecting data via classroom observations, interviews and surveys, focused on specific criteria to measure implementation in the classroom. The interviews and surveys will be done once a year and the observations will occur regularly throughout all four years of the project.

Overall achievement in reading proficiency will be measured using assessments currently used in the district:

- Smarter Balanced Assessment in grade 3 (once in Spring)
- DIBELS Screener completed three times per year in grades K-3 (Fall, Winter, Spring)

- Common District Assessments created from *Journeys* assessment resources given three times per year in grades K-3 to measure proficiency on identified literacy standards. (Fall, Winter, Spring)

To measure the impact of this project on closing the achievement gap, the growth rate for students in underserved subgroups on the assessments listed above will be compared with the growth rate of students in those same subgroups at schools in the district with similar demographics and learning contexts. Additionally, the growth rates on the reading portion of the ELPA (English Language Proficiency Assessment) will be compared between the pilot schools and their similar counterpart schools for English Language Learners as well.

VI. TECHNICAL DESIGN

As part of the work to develop the district's Long Range Technology Plan, an in-depth inventory and technological needs assessment was completed in each building, including the two pilot schools. This helped determine the infrastructure and hardware needs.

Devices and classroom management:

Based on grade-level appropriate device options, the plan is to provide iPad devices for Kindergarten students and Chromebook devices for students in grades 1-3. These devices are compatible with *Journeys* and provide a balance between ease of use (by age/grade) and a full function device with keyboards for grades 1-3.

The technical design provides a 1:2 device to student ratio for iPads in Kindergarten and a 1:1 device to student ratio for Chromebooks in grades 1-3. Pedagogically, it is not necessary for kindergarteners to each have simultaneous access to independent use of a device in the same manner that benefits the students in grades 1-3. The 1:1 device ratio in grades 1-3 supports the desired outcome of students routinely and effectively utilize technology for learning. An important component of true integration is removing barriers to timely and relevant access to tools. 1:1 also supports teachers in their ability to authentically differentiate learning opportunities to meet individual student needs. English Language Learners and students with disabilities will travel with their "homeroom" devices when needed to engage with specialists in classrooms.

The two pilot school classrooms (26 K-3 classrooms, plus four ELL and four Special Education classrooms) will be setup for digital instruction. Each classroom will be updated with smart/interactive projection technology and whiteboard (with Smart Board Notebook software) to allow student and teacher interaction. Classrooms will also receive digital sound projection, teacher voice amplification technology, Apple TV for wireless projection and content streaming, and appropriate laptop computers for instructional staff that are designed to integrate with the aforementioned instructional technologies. The Classroom Technology Specialist will manage the on-site classroom technology implementation initially and provide ongoing technical support in schools.

The Classroom Technology Specialist will also directly support the student mobile devices and the instructional technology provided for classrooms and will work directly with teachers, the ITCs and school staff to train in the use of all equipment. He/she will be available for in-classroom support of projects for teachers, specialists and the ITC, and to promote the proper use and maintenance of devices by students. This staff member will be assigned specifically to the schools in this project.

The Classroom Technology Specialist will be on a rotation schedule between the two schools with latitude to address issues at either school for the first two years. Occasionally he/she may shift to other district projects. In years 3 and 4, his/her time will shift part-time to other schools but will spend at least half-time continuing to support at the pilot schools.

The Service Desk Coordinator will conduct procurement and receiving duties, and coordinate deployment of all classroom technology and devices to the buildings. This staff member is also responsible for initial training and support of the Classroom Technology Specialist.

GBSD Technology Services (Network Systems Technician) will enroll devices in the mobile device management system which provisions and tracks the devices, helps protect them from misuse or threats, and easily deploys applications and configurations to support instruction.
Equipment purchased and distributed as part of the project will be specifically tagged and tracked to the building level and periodically inventoried.

Network and Bandwidth Upgrades:

GBSD has been strategically upgrading the wired network infrastructure across the district for the last four years. As part of the K3 Technology Integration Project, GBSD will upgrade the wireless networks, expand bandwidth and add network switching equipment for each pilot school.

Wireless access points will be placed in all common spaces and in each pilot school K-3 classroom, including the four ELL and Special Education classrooms, to increase bandwidth and accessibility (connection access) in order to accommodate the mobile and wireless devices.
The wireless and classroom technology upgrades will ensure that each classroom will have a smooth and consistent network experience with adequate bandwidth to support the number of devices. The upgrade plans include the purchase, configuration, and installation of Aruba enterprise level wireless access points and HP switching equipment. These devices will be installed based on the district's standards for device operation and management. These devices will support bandwidth tuning for performance, enterprise controller management, network security, and are consistent with the overall district network standards and current management platforms.

The district will also upgrade its internal building wiring to ensure the wired and wireless networks are supported by 1+ Gb certified copper and 10Gb fiber infrastructure.

Equipment List:

Equipment	**Est Cost**	**Items Needed**	**Est Cost**
Teachers/Coaches Computers	$994	37	$36,778
Bright-Link Projector with touch screen capability	$1570	34	$53,380
Smartboard Notebook software for projector	$250	34	$8,500
Projector wall mount and wiring	$950	34	$32,300
White board	$240	34	$8,160
Apple TV	$69	34	$2,346
Instruction Cart	$200	34	$6,800
RedCat Audio amplification system	$1100	34	$37,400
Projection Speakers	$110	34	$3,740
iPad for student use (7K classrooms; 15-per class)	$379	105	$39,795
iPads for teacher use	$379	7	$2,653
iPad secure charging station	$1700	7	11,900
Mobile Device Management for each ipad	$16	112	$1,792
Dell Chromebooks for student use) (grades 1-3, 35 per class for 19 classes)	$309	665	$205,485
Chromebook secure charging station	$1700	19	$32,300
Aruba Enterprise Access Points with controller licensing	$950	52	$49,400
Total equipment			$532,729

VII. BUDGET

The budget for the GBSD K-3 Technology Integration Project represents the full cost to implement this project over 4 years. The budget includes grant funds and district match resources.

COST CATEGORY	GRANT FUNDS	MATCH RESOURCES	TOTAL
Personnel	113,529	1,092,163	1,205,692
Education & Training	594,400	0	594,400
Contractual	0	10,560	10,560
Curriculum Asset	0	150,000	150,000
Equipment/Technology	578,427	107,100	685,527
Overhead Costs	82,970	87,709	170,679
Total	$1,369,326	$1,447,532	$2,816,858

Budget Narrative

Personnel

Pilot School Principals

For the duration of the project (4 years) the pilot school principals will spend 30% of their time on instructional leadership, including support for technology integration into the teaching and learning design. Based on an average annual salary of $110,000 plus benefits.
Grant: $0
Match: $363,550

District Instructional Coaches

District Instructional Coaches are assigned to five schools. For this project, each coach will spend 25% of their time for four years to provide pedagogical and content instruction support and integration with ITCs for the two pilot schools. Based on an average annual salary of $72,000 plus benefits.
Grant: $0
Match: $207,420

Deputy Superintendent of Teaching and Learning

For the duration of the project (4 years) the Deputy Superintendent of Teaching and Learning will spend 5% of her time to support implementation through representing learnings on district leadership team and management on overall project and evaluation. Based on an average annual salary of $125,000 plus benefits.
Grant: $0
Match: $34,067

Director of Teaching and Learning

For the duration of the project (4 years) the Director of Teaching and Learning will spend 30% per of her time to support and coaching the ITCs and the District Instructional Coaches; conducting PD for Principals and teachers and work with PRE on evaluation implementation. Based on an average annual salary of $91,000 plus benefits.
Grant: $0
Match: $153,114

Director of Technology Services
For the duration of the project (4 years) the Director of Technology Services will spend 20% of his time year one, two and three, and 5% in year four, to direct all aspects of the technology implementation and provide overall technology project coordination. Based on an average annual salary of $89,000 plus benefits.
Grant: $0
Match: $74,380

Classroom Technology Specialist
The Classroom Technology Specialist is a new fulltime position; however will spend 70% time in the first 2 years dedicated to the pilot schools and years 3-4, 50% dedicated to the project. Based on an average annual salary of $55,000 plus benefits.
Grant: $113,529
Match: 83,835

Technology Service Desk Coordinator
The district Technology Service Desk Coordinator will spend 20% (8 hours per week) in year one and two, 15% (6 hours per week) in year three, and 5% (2 hours per week) in year four. Based on an average annual salary of $58,000 plus benefits.
Grant: $0
Match: $51,702

Application Support Specialist
For the duration of the project (4 years) the district Application Support Specialist will spend an average of 8% of his/her time to support the annual setup, configuration and support of student accounts, teacher accounts, classroom software for Journeys and other software.. Based on an average annual salary of $48,000 plus benefits.
Grant: $0
Match: $21,799

Network and Systems Technician
The Network and Systems Technician will spend an average of 20% of his time over a year, with most of the time in the first four months. This position will support network broadband upgrades, design, installing and monitor wifi, network integration of all classroom instructional technology, setup and manage security profiles on devices, and manage device centralized updates and enrollment . Based on an average annual salary of 52,000 plus benefits.
Grant: $0
Match: $46,781

Facilities/Infrastructure
Facilities Department staff will dedicate significant time initially during this project to support planning and management of power upgrades, installation of classroom and building electrical requirements, and support classroom infrastructure upgrades as necessary.
Grant: $0
Match: $55,515

Education & Training

Instructional Technology Coach (ITC)

The ITC will spend 100% of his/her time to provide initial training, including direct coaching and PD, on the integration of technology and literacy programs. One ITC will be at each of the two pilot schools the first two years. In the third year and fourth year, one ITC will split time between the two schools. Based on an average annual salary of 70,000 plus benefits.

Grant: $590,400

Match: $0

Training Fees

Professional development and training costs for ITCs and principals as necessary; this may include conference/workshop registration fees, local travel, outside trainer fees, etc. Estimating a cost of $1,000 per year.

Grant: $4,000

Match: $0

Contractual

Demonstration Site Visits

Substitute teacher time for two days of release time to allow each K-3 teacher at both pilot schools to visit demonstration sites to gain firsthand experience of effective use of instructional technology. $220 per day substitute cost for a total of 48 days.

Grant: $0

Match: $10,560

Curriculum Asset

K-3 Literacy Curricula Program

Journeys cost for K-3 literacy program for two pilot schools for 4 years; includes digital assets/resources.

Grant: $0

Match: $150,000

Equipment/Technology

Applications and Software

Each K-3 teacher in the pilot schools will be allowed up to $10 per student per year to spend on applications and/or subscriptions to be used on student devices in the classroom for student learning purposes. $10 x 839 devices x 4 years

Grant: $33,560

Match: $0

Wireless Access Points

Wireless access points will be placed in all common spaces and K-3 classrooms at the pilot schools. Based on 26 wireless access points per school, at $950 per unit.

Grant: $49,400

Match: $0

Wireless Access Point Installation

Outside contractor to install wireless access points based on total installation costs of $16,100 per school.

Grant: $0

Match: $32,200

Layer one Bandwidth Increases to Buildings
Bandwidth increases will be made through upgrading internal school building wiring to 1+ Gb certified copper and 10Gb fiber and installing new network switching infrastructure. The cost is based on estimates from similar completed district projects.
Grant: $0
Match: $74,900

Classroom Instructional Equipment
Classroom instructional technology for classrooms includes projectors and costs for installation, Smartboard Notebook software bundle, whiteboard, carts, audio amplification, Apple TV, instructional staff laptops. See equipment list in Technical Design Section for more detail.
Based on a bundle cost per classroom of $5,483 (34 classrooms).
Grant: $177,266
Match: $0

Classroom Instructional Equipment Installation
Cost to install and test classroom equipment. ($357 x 34 classrooms)
Grant: $12,138
Match: $0

Classroom Devices
Classroom devices for K-3 students. See equipment list in Technical Design Section for more detail. Includes iPads, Chromebooks, and charging stations.
Grant: $293,925
Match: $0

Laptops for ITCs and Classroom Technology Specialist
Laptops for use in coaching and PD and the development of the digital toolbox.
Grant: $ 2,982
Match: $0

Overhead Costs
Represent the standard district 6.45% indirect cost of administering the grant project by the GBSD business services and other departments.
Grant: $82,970
Match: $87,709

VIII. ORGANIZATIONAL CAPACITY

The Gresham-Barlow School District is in a strong position to implement the **K-3 Technology Integration Project** and integrate instructional technology into K-3 learning environments because of the breadth of our collective in-house experience, and our commitment to improve student learning.

Superintendent Jim Schlachter and the GBSD School Board embrace the need for multiple pathways for students to engage, develop skills and succeed academically. The Superintendent led development of the High School Pathways Fairs to draw in middle school students and their families to learn what high school programs are available, and how they lead students on different college and career paths. He also initiated

development of the Long Range Technology Plan, and strongly encouraged development of student technology standards (rolled out Fall 2015) to ensure students become confident users of technology in educational settings and beyond. Superintendent Schlachter serves on the All-Hands Raised Leadership Council and pushes continually for increased opportunities for historically underserved students to engage in challenging academic experiences.

Teresa Ketelsen, the GBSD Deputy Superintendent of Teaching and Learning, is the recipient of the *Oregon Association of Central Office Administrators* Administrator of the Year award in 2011. She is recognized regionally and state-wide for focus on classroom implement of effective instructional strategies. She is committed to high quality, effective learning opportunities for every student.

Angie Kautz, the Director of Teaching and Learning, had over a decade of experience as an elementary classroom teacher before moving into a curriculum and instruction position. In addition to her leadership around professional learning and effective instructional practices within the district, she also provides curriculum and instruction trainings around the state.

Bill Dewitz, the Director of Technology Services, has been leading the vision and planning of the GBSD Long Range Technology Plan. Although Bill works specifically on the technology side of things, he is collaborates and partners with the Teaching and Learning department to best utilize the technology to support student learning.

The pilot school principals bring a combination of strengths that will be key to the project success. Both Tracy Klinger and Nancy Torbert are strong instructional leaders. They each have comprehensive knowledge and skills regarding high quality instructional practices, which they demonstrate regularly through their leadership at their schools. They are both strongly committed to increase the opportunities for their students to use technology as a learning tool.

The Gresham-Barlow School District is committed to appropriate use of instructional and operational technologies, and recently replaced approximately 80% of teacher and support staff computers, as well as our testing labs across the district. In that process, many computers were repurposed for student use to replace the oldest student devices across the district. In addition, all district schools and its five district office facilities currently have both public and private wireless networks to support the 5,300 computers, tablets, printers and servers we have for staff and student use, and to provide internet connectivity for our patrons while on one of our campuses. The Long Range Technology Plan clarifies the district's current status and prioritizes needs, providing important information for the Superintendent, and the district Bond Planning Committee.

District leaders have done in-depth work over the last several years to establish a vision and plan for district improvement. This focus on district improvement will impact the efforts and strategies that will take place in the pilot schools. Again, much of the work around district improvement is focused on equity and growth mindset. In this work, they have collaborated with a variety of partners:

- Oregon Department of Education
- Chalkboard Project
- Oregon Leadership Network
- All Hands Raised
- Multnomah County Curriculum and Instruction Advisory Committee
- Learning Forward

IX. REPLICABILITY

The **K-3 Technology Integration Project** aims to leverage the power of technology in the hands of both teachers and students as a teaching and learning tool through a technology rich, blended learning pilot in two elementary schools. Gresham-Barlow School District has committed to utilize district resources to also implement technology-rich learning classrooms in the 4th and 5th grades at the two pilot schools.

Although the TechSmart grant project specifically targets reading by 3rd grade, GBSD believes that it is crucial to offer these same opportunities for literacy achievement and closing the achievement gap in the intermediate grades as well. The district is leveraging the TechSmart investment to transform teaching in the two pilot schools holistically to begin to make change district wide.

The district intends to use the pilot schools' efforts to identify high quality and effective literacy instruction that can be scaled to all elementary schools over time.

The purpose behind starting the district's technology integration with just two pilot schools is to allow for the development of a clear and vetted plan for implementation across all 11 elementary schools. The TechSmart funds provide GBSD the opportunity and the needed resources to create such a plan.

GBSD anticipates that through participation by teachers, the District Instructional Coaches and the school-based ITCs in PLTs and other trainings, certain teachers and District Instructional Coachers will become peer leaders who take on some of the role and responsibilities of the ITCs over time. The District Instruction Coaches (supporting 4th and 5th grade) will be learning side-by-side with teachers and ITCs to building their capacity to support all teachers across the district to use technology as a teaching and learning tool.

Additionally, the project includes creating systems and resources that will allow the replication of successes in other buildings. Communication with district-wide committees and other schools will support replicability. The successes and gains of students and programs in these pilot schools will generate interest, enthusiasm and support across schools and community.