

Technology Plan  
Erlanger-Elsmere School District  
Erlanger, Kentucky



<http://www.erlangerkyschools.us>

Creation Date: March 8, 2018  
Plan Start Date: July 1, 2018  
Plan Expiration Date: June 30, 2020

# Acknowledgments

## **District Technology Staff**

Laura Deters, Chief Information Officer  
Jonathan Jones, Network Administrator  
Stephanie Trenkamp, Technician

## **Teachers/Library Media Specialists**

Jessica Bauer (Arnett Elementary)  
Laura Albrinck (Lloyd High School)  
Tiffany Gildea (Miles Elementary)  
Kaylee Flynn (Tichenor Middle School)  
Lauren Thomas (Tichenor Middle School)  
Lyndsay Nottingham (Howell Elementary School)

## **Administrators**

Angie Gabbard (Lindeman Elementary School)

## **Parent Representative**

Jon Divita

## Table of Contents

<b>EXECUTIVE SUMMARY.....</b>	<b>1</b>
<b>PLANNING PROCESS AND METHODOLOGY .....</b>	<b>3</b>
<b>CURRENT TECHNOLOGY AND RESOURCES .....</b>	<b>3</b>
I. Technologies already in place.....	3
II. Condition of Current Technologies (The School Technology Report Card) .....	3
III. Accessibility of Technologies for Learners .....	5
<b>CURRICULUM AND INSTRUCTIONAL INTEGRATION GOALS .....</b>	<b>8</b>
<b>STUDENT TECHNOLOGY LITERACY GOALS.....</b>	<b>13</b>
<b>STAFF TRAINING/PROFESSIONAL DEVELOPMENT GOALS.....</b>	<b>16</b>
<b>TECHNOLOGY (NETWORK AND HARDWARE) GOALS .....</b>	<b>20</b>
<b>2018-2019 BUDGET SUMMARY.....</b>	<b>30</b>
<b>2019-2020 BUDGET SUMMARY.....</b>	<b>32</b>
<b>ATTACHMENTS/APPENDICES .....</b>	<b>35</b>

## Executive Summary

This 2018-2020 Erlanger-Elsmere Technology Plan describes how technology will be used in the Erlanger-Elsmere School District to improve learning for all students.

The plan works with a starting premise **that technology is a MEANS to an END (that end being the educational development of students) and not solely an END in and of itself**. As such, resources will be allocated to technologies which ultimately will help students to learn in ALL subject areas. At the same time, however, this plan also recognizes that general technology literacy is important for all citizens living and working in the modern world, and for that reason **this plan also addresses ways to ensure technology literacy skills for Erlanger-Elsmere students**.

With these guiding principles in mind, this plan articulates goals in each of the following four areas:

### 1. Curriculum and Instructional Integration Goals

- a. Goal 1: Technology will be utilized to assist the district in the formative evaluation of student abilities.
- b. Goal 2: Technology will be utilized for the delivery of specialized and rigorous academic courses, including distance learning technologies.

### 2. Student Technology Literacy Goals

- a. Goal 1: Students will acquire technology and information literacy skills as adopted by the Kentucky Board of Education in the Program of Studies for Kentucky schools grades Primary-12.
- b. Goal 2: Students will become technology literate by the end of the 8<sup>th</sup> grade.

### 3. Staff Training/Professional Development Goals

- a. Goal 1: The district will provide staff with the training and/or professional development to effectively utilize the technology that is currently in place in order to improve student learning.
- b. Goal 2: The district will provide training in how to integrate new strategies and emerging technologies into classrooms.

### 4. Technology (Hardware) Goals

- a. Goal 1: District staff will maintain and upgrade an educational network which will allow teachers and students to fully utilize the district's technology resources.
- b. Goal 2: District staff will replace aging instructional hardware with current hardware which will allow for more advanced instructional applications.
- c. Goal 3: District staff will provide faculty and staff members with new technology needed to help students achieve in a safe environment.

A number of strategies and initiatives are contained in the four areas and nine goals stated above, and the majority of this plan (Sections Four through Seven) describe those strategies and initiatives in detail. Immediately following those descriptions is a Budget Summary which lays out the cost of each initiative/strategy and from which funding source(s) each will be paid.

Prior to that, though, immediately following this section is "Planning Process and Methodology," which describes how this plan was written. This is followed by the third section of the plan, "Current Technology and Resources," which describes the current state of technology in the district, which is necessary information in order to place the rest of the plan in context.

Hopefully this document will provide interested parties insight in to how the district's technology plan for 2018-2020 will unfold.

This document will be placed online at the district website (<http://www.erlanger.kyschools.us/technology>) and will serve as notification to parents and community of the technology that is being applied in their child's education so that the parents are able to reinforce at home the instruction their child receives at school.

## Planning Process and Methodology

Prior to the writing of this plan, the District Technology Committee met on April 18, 2018 to review and evaluate the success of the previous (2016-2018) district technology plan, to articulate a vision and goals, and to discuss possible projects/expenditures for the 2018-2020 technology plan and to prioritize those projects. This plan will also be shared with the administrative staff, including principals, at our next administrative meeting scheduled for June 7, 2018.

Once those priorities were established, the first draft of the Technology Plan was written by Chief Information Officer Laura Deters based on the decisions made during that April 18 meeting. That initial draft was shared with the technology committee members only. Any changes suggested by interested parties were discussed by the district technology committee for possible inclusion in this final technology plan.

The technology plan is evaluated continually by the technology staff and any necessary changes are discussed and made during District Technology Meetings. The plan will receive a mid-plan revision early in the second semester of the 2019-2020 school year.

Past technology plans have been implemented by the entire technology staff. The Chief Information Officer typically is the point person in regards to receiving bids and making purchases. The CIO and district-level staff typically install any new technologies, with assistance from the district maintenance department. Occasionally outside vendors are also involved in installation of new technologies.

## Current Technology and Resources

### I. Technologies already in place

For a detailed listing of technologies already in place, please see **Appendix A, the 2016-17 Technology Readiness Report**.

### II. Condition of Current Technologies (The School Technology Report Card)

#### Grading Scale

**A: Cutting Edge**—In addition to having no glaring weakness in this area, this school is actually implementing innovative ideas regarding this aspect of technology.

**B: Proficient**—The school has no glaring weakness regarding this aspect of technology.

**C: Average**—Though there may be areas that need to be addressed, the school is currently on par with similar public schools throughout the state of Kentucky.

**D: Below Average**—The school is functioning in regards to this aspect of technology, but is currently below par with other schools in the state, and instruction is suffering slightly due to this weakness.

**F: Failing**—The school is failing in this element of technology. Instruction in the school is suffering significantly due to this problem.

School	Network Infrastructure	Hardware	Software	Professional Development	Support
Arnett	C	C	A-	D+	B-
Howell	B	C	A-	D+	B-
Lindeman	C	C	A-	D+	B+
Miles	C	C	A-	D+	B-
Tichenor	B-	C	B+	D+	B+
Lloyd	B-	C	B+	D+	B+
Bartlett	B	C	B+	D+	B+

**Report Card Comments:**

**NETWORK INFRASTRUCTURE:** This past year, we completed a re-wire of two buildings, Howell Elementary and Tichenor Middle School. The other 3 elementary schools are in great need of re-wiring, which hopefully will occur in the next few years. I would press this issue more, however, with the current state of K-12 education and funding, it may not be possible to finish the re-wiring that needs to happen. We still need to upgrade all our AP's, in addition to replacing switches and upgrading to a VOIP phone system. All schools have a 1 GB connection to the district hub at the Board of Education, and the 250 MB per second Internet connection provided by the Kentucky Department of Education provides more than 100 KB per second per student, which is the current recommendation for adequate Internet service for K-12 schools.

**Recommendations for future years:** When this plan ends on June 30 of 2020, the networking equipment in most schools will be almost to the point of being obsolete. If re-wires have not occurred, that will be the most pressing matter of the next plan.

**HARDWARE:** The grades in this column mostly reflect the age of the computer labs in the buildings and whether or not there is adequate peripheral technology (interactive flat panels, additional mobile devices, etc.). For the last ten years the district has placed computer lab replacement as a priority, with each elementary school allocated two computer labs and the middle and high school each allocated four, while Bartlett Educational Center is allotted one. Those labs are replaced every six years. The chart immediately following this report card shows the current age of computers in the district as of March, 2018. It also shows the school year in which the computer labs are due for replacement. Note that beginning with the prior two year plan, schools had the option of replacing fixed labs with mobile instructional devices instead, and many schools did so.

In addition, peripheral technology in the district (projectors, SMART boards, etc.) is beginning to age, and there is currently no plan to replace this equipment on any schedule. The "intelligent" classrooms in Lindeman Elementary, for example, were all installed eleven years ago and are now considered old technology. The wave is now to purchase Interactive boards instead of projectors and screens. Many of the Smartboards at Miles have had to have replacement parts just this year. While this is a building expense, a concerted plan needs to be developed in order to bring all the schools into the 21<sup>st</sup> century and beyond.

**Recommendations for future years:** The district should continue practice of replacing staff workstations every six years. Most schools in the past 2-3 years have chosen NOT to replace their fixed computer labs, opting instead to purchase carts of Chrome Books. With the large number of mobile devices that have been purchased, it is time to revisit the computer lab schedule and actually how many labs we want to

maintain. Also, their needs to be a plan to replace smartboards and projectors with interactive boards.

**SOFTWARE:** The district has a number of software applications used for administrative and/or instructional purposes, including Compass Odyssey, Fast ForWord, MAP formative testing, Accelerated Reader and Math, Follett Library software, MUNIS, and Infinite Campus. Most of these software applications are “cloud based,” meaning that they are hosted on an enterprise server somewhere offsite. Microsoft software is provided via the Microsoft Enrollment for Education Solutions licensing. The elementary schools have an “A” (“innovative”) score due to their use of the Footsteps2Brilliance website, an online enrichment site for preschoolers which is available to all citizens of the Erlanger-Elsmere School District, including those not enrolled in the district.

**Recommendations for future years:** The district should continue to provide most of its software via the cloud.

**PROFESSIONAL DEVELOPMENT:** Professional Development continues to be the weak link for the district. Within the technology department, it is very difficult for us to find the time needed to adequately train staff when they receive new technologies in the classroom. While we have a dedicated staff, we have two new hires; a new CIO and a new technician. The learning curve is huge this year. We do have an extremely dedicated staff; one of our technicians became Google Certified on his own time and has been a huge help with the addition of all the Chrome Books and the switch to GMail.

**Recommendations for future years:** 1) School and district professional development plans need to consider the need for staff technology training, a need that has been revealed in numerous state and district surveys, most prominently in the state’s Teaching, Empowering, Leading, & Learning Survey. 2) The district needs to utilize the Instructional Coaches at each individual school to help with professional development and training for staff.

**SUPPORT:** I have given higher scores for this part than my predecessor. We are fully staffed with a full time CIO, an extremely knowledgeable Network Administrator, and two very skilled technicians. Our response time to work orders is very quick. The differences in score between buildings reflects whether or not a technology department staff member has an “office” on the building campus. The buildings with a “B-”score have an onsite staff member. Though that staff member may not always be in his or her office, by having an office in the building, that school can rest assured that the support person will most likely spend at least some part of each day in that building.

**Recommendation for future years:** The district should continue to provide a CIO, network administrator, and two technicians. This should provide adequate coverage of technical issues. However, with the addition of so many mobile devices, and the move to a fully networked camera system, the day is quickly approaching when we will need another technician. When we decide to go with a VOIP phone system, we will have to take a hard look at the addition of a staff person.

### III. Accessibility of Technologies for Learners

As was mentioned in the “HARDWARE” section above, all schools in the district have fixed computer labs that are replaced on a regular schedule. After that, the accessibility of technology within the district varies slightly per building. Tichenor Middle School has the most technology building wide, with three mobile carts of Chromebooks per grade for a total of 285 managed devices. Lloyd High School has gone 1:1 in their English Department with



6 carts of Chrome Books. Miles Elementary School is currently 1:1 in grades 4 and 5, and there is additional mobile devices in all grades below that. And all of the remaining schools have at least one mobile lab for teachers to use in their classrooms. Also, we just received our final KETS Offer of Assistance. We may replace one more lab, most likely Arnett Mobile lab, this year.

### Age of Current Computer Labs

School Year Purchased	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Age	7	6	5	4	3	2	1	<1
Warranty Expires	Expired	Expired	15-16	16-17	17-18	19-20	20-21	21-22
Due for Retirement	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
Arnett Fixed Lab		X						
Arnett Mobile Lab	X							
Bartlett Lab								X
Howell Mini Lab <sup>6</sup>							X	
Howell Fixed Lab (HP Chromebooks) <sup>1</sup>						X		
Lindeman Lab 1		X						
Lindeman Lab 2	X							
Miles Fixed Lab 1							X	
Miles Fixed Lab 2 <sup>5</sup>					X			
<del>Tichenor Lab 301</del> Tichenor Library Lab								X
Tichenor Lab 302		X						
Tichenor Tech Lab (Dell Chromebooks) <sup>2</sup>					X			
<del>Tichenor Library Lab</del> Tichenor Lab 301 (Dell Chromebooks) <sup>3</sup>					X			
Lloyd Lab 17/19							X	
Lloyd Lab 35/HP Stream 11 carts <sup>4</sup>					X			
Lloyd Lab 29					X			
Lloyd Library Lab		X						

## Color Code:

- Red: Past due for replacement. These computers SHOULD have been replaced in prior school years, but funding did not allow.
- Yellow: Due for replacement during the period covered by this technology plan.
- Green: Not due for replacement during the period covered by this technology plan.

<sup>1</sup> In lieu of replacing this lab, Howell chose to purchase 60 HP Chromebooks's.

<sup>2</sup> In lieu of replacing this lab, Tichenor chose to purchase Chromebooks.

<sup>3</sup> In lieu of replacing this lab, Tichenor chose to purchase Chromebooks.

<sup>4</sup> In lieu of replacing this lab, Lloyd chose to purchase 75 HP Stream 11's.

<sup>5</sup>In lieu of replacing this lab, Miles purchased 5 8-inch Dell Venues per teacher.

FYI: Arnett FFW, Howell FFW lab are considered a third lab and are not on the list for replacement.

<sup>6</sup>In lieu of replacing this mobile cart, the computers in the Fast ForWord lab were replaced, and remaining funds were used for an additional cart of Chromebooks.

## Curriculum and Instructional Integration Goals

### Goal 1

Technology will be utilized to assist the district in formative evaluation of student abilities. These formative evaluations will be accomplished through software packages that are integrated into instruction in the regular classroom.

### Action Plan: Projects/Activities

Project/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
The Measured Assessment of Progress (MAP) adaptive test will be given to students two to three times a year (middle testing window is optional per school)	1) The MAP test allows teachers to identify exactly what skills students lack so that teachers can address those needs. 2) The program also links to the Compass Odyssey intervention software (See Goal 2 below for more).	Completion of Fall, Winter, and Spring MAP testing. Results available to administrators and teachers.	Begin Date: July 1, 2018  End Date: June 30, 2020	Superintendent / Assistant Superintendent	Local General Funds
Other formative and/or tracking technologies (STAR, Accelerated Reader, Accelerated Math) will be used to track student progress in specific skills	These other formative software packages, which differ from schools to school and are purchased at the school level, either a) provide assessment of skills not evaluated by MAP, or b) provide	Logged evidence of use in the software program(s)	Begin Date: July 1, 2018  End Date: June 30, 2020	School Principals	School Site-based Funds

	additional evaluation of skills as a reliability-check for MAP.				
--	---	--	--	--	--

**Goal 2**

Technology will be utilized for the delivery of specialized and rigorous academic courses, including distance learning technologies.

**Action Plan: Strategies/Activities**

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Edgenuity intervention software will be used during the regular school day.	Intervention software will allow teachers to provide a Response To Intervention (RTI) model to assist students with skill areas where students struggle. Furthermore, the Compass system ties directly into MAP scores (see above) automatically.	1) Statement of use in teacher lesson plans. 2) Logged evidence of use in the software program.	Begin Date: July 1, 2018  End Date: June 30, 2020	Building Principals	Local General Funds
Edgenuity intervention software will be made available for student use outside of the district via an external web address	RTI model can include distance learning technologies to assist students outside of the regular school day. Students can access	Logged evidence of use outside of school day in software program logs.	Begin Date: July 1, 2018  End Date: June 30, 2020	Chief Information Officer	Local General Funds

	the program anywhere they have an Internet connection of sufficient speed.				
Fast ForWord Reading intervention software and Reading Assistant software will be used for struggling readers.	Fast ForWord and Reading Assistant software allow struggling readers to improve reading ability and improve reading test scores.	1) Statement of use in teacher lesson plans. 2) Logged evidence of use in the software program.	Begin Date: July 1, 2018  End Date: June 30, 2020	Building Principals	Local General Funds
Students and teachers will utilize the Kentucky Virtual Library (KVL) for online research.	While web search engines (like Google or Bing) can provide a broad index of the Internet, much of the information is suspect or is inappropriate for school age viewers. The KVL provides safe and appropriate research for students. In addition, since it can be used from outside of the district, it qualifies as a distance learning technology.	Statement of use in teacher lesson plans.	Begin Date: July 1, 2018  End Date: June 30, 2020	Classroom Teachers	Local General Funds
Selected students at Lloyd High	Students who have not succeeded in a	Total number and percentage of	Begin Date: July 1, 2018	Lloyd High School principal; Bartlett	Local General Funds

School and all students at the Bartlett Educational Center will utilize the Edmentum program for credit recovery.	traditional school environment—and who would most likely have otherwise dropped out--can utilize the online Edmentum program to gain high school credits	students who complete the Edmentum program; Percentage of those students who graduate	End Date: June 30, 2020	Educational Center principal	
The district will use Follett Library software to serve as a database of library materials and to provide e-books for students.	Destiny provides educator-reviewed digital content and allows students and teachers to find, share, and use both digital and print resources by combining all schools' information into a single database.	Logs of student and faculty use of the Follett system as a library card catalog and as an e-book repository.	Begin Date: July 1, 2018 End Date: June 30, 2020	Library / Media Specialists	Local Funds
Footsteps2Brilliance will be utilized by primary and Pre-K teachers as an intervention for students who need development of pre-school readiness skills.	Footsteps2Brilliance "is the breakthrough early learning solution that helps all children become proficient readers by 3 <sup>rd</sup> grade" (from the Footsteps2Brilliance website).	Logs of student use of F2B.	Begin Date: July 1, 2018 End Date: June 30, 2020	Building Principals	Local Funds

**Notes Regarding Curriculum and Instructional Integration Goals:**

1. **Alignment with Kentucky Core Academic Standards:** The two goals stated above describe technology strategies/activities that will be implemented in the regular classroom. The instruction in those classes, including the use of technology, has been aligned at the school and district level with the Kentucky Core Academic Standards.
2. **Evaluation Process:** The indicators in the table above describe what data will be used to evaluate the strategies/activities described above, and the "Person(s) Responsible" column describes the person who is responsible for evaluating this element.
3. **Accountability for Evaluation:** Indicators for each strategy/activity are described above. The following briefly describes how those indicators are used:
  - a. **MAP:** District Assistant Superintendent and Curriculum Coordinator works with building principals to create a timeline for completion of MAP testing and ensures that testing is complete using reports generated from NWEA website.
  - b. **Other Formative Technologies/Kentucky Virtual Library/Edmodo:** The District Technology Integration Survey (see Appendix 3: District Technology Integration Survey) is administered each spring, and results are compiled by the Chief Information Officer and shared with building principals, who then work to ensure that the tools are effectively used.
  - c. **Edgenuity:** Building principals have the ability and the responsibility for monitoring usage of Compass Odyssey. If usage is not optimal, principals work with teachers individually to correct the issue.
  - d. **Fast ForWord:** Building Fast ForWord coordinators run reports of usage regularly and adjust instruction as needed

## Student Technology Literacy Goals

Link to the Kentucky Academic Standards:

<http://education.ky.gov/curriculum/standards/kyacadstand/Pages/default.aspx>

### Goal 1

Students will acquire technology and information literacy skills as adopted by the Kentucky Board of Education in the Program of Studies for Kentucky Schools Grades Primary-12

#### Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Teachers grades K-12 will embed technology instruction into their subject area classes	Embedded instruction will help students see technology not as a separate part of education but as an integral part of all academic fields.	Teacher Lesson Plans; Technology Integration Survey; evidence from District Rounds.	Begin Date: July 1, 2018 End Date: June 30, 2020	Building Principals	No Direct Cost to District
Each school in the district will continue with an active Student Technology Leadership Program	STLP is a project-based learning program that empowers students in all grade levels to use technology to learn and achieve.	Documented meetings of school STLP.	Begin Date: July 1, 2018 End Date: June 30, 2020	Building Principals	No Direct Cost to District

### Goal 2

Students will become technology literate by the end of the 8<sup>th</sup> grade.

#### Action Plan: Strategies/Activities



Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Students in middle school will successfully complete a Technology Competency Curriculum.	A specific curriculum tied to 21 <sup>st</sup> Century technology learning skills will fill in the gaps missed by the embedded technology instruction in regular education classes, ensuring that students enter high school with the skills necessary to utilize technology for learning.	Passing grade for course in student middle school schedule	Begin Date: July 1, 2018 End Date: June 30, 2020	Middle School principal	No Direct Cost to District
Middle school students will complete a careers exploratory curriculum (including technology careers) prior to the end of their 8 <sup>th</sup> grade year.	1) Students will discover areas of interest in the field of technology. 2) Students with an interest in technology will be more likely to use that technology in other projects.	Completion of curriculum by 8 <sup>th</sup> grade students.	Begin Date: July 1, 2018 End Date: June 30, 2020	Middle School Principal	No Direct Cost to District

**Notes Regarding Technology Literacy Goals:**

The chart above describes four different strategies/activities used in the district in the area of Technology Literacy. Those four strategies can basically be broken down into two overarching ideas: 1) Embedding technology instruction into every course, and 2) ensuring that students are technology literate by the end of the 8<sup>th</sup> grade.

1. **Embedding Technology Instruction into Every Course:** This goal is meant to ensure that students receive work with technology in every course, and that technology instruction isn't simply left to the 8<sup>th</sup> grade teachers. School Curriculum Coaches, in conjunction with building principals and the district Chief Information Officer, work to help teachers find appropriate places to use technology to enhance

instruction, and work to include technology not just for itself, but to include 21<sup>st</sup> Century Skills of critical thinking, communication, collaboration, and creativity.

2. **Technology Literacy by the end of the 8<sup>th</sup> grade:** State and federal standards call for all students to have a degree of technology literacy by the end of the 8<sup>th</sup> grade. To that effect, Tichenor Middle School employs both a specific technology course (Technology Competency) and a careers course that includes a section focusing on technology careers.
3. **Evaluation Process:** The indicators in the table above describe what data will be used to evaluate the strategies/activities described above, and the "Person(s) Responsible" column describes the person who is responsible for evaluating this element.
4. **Accountability for Evaluation:** Indicators for each strategy/activity are described above. The following briefly describes how those indicators are used:
  - a. **Embedding Instruction into Regular Education Classrooms:** Building administrators oversee teacher integration of technology into the classroom and discuss with staff members during their regularly scheduled evaluations. In addition, both school and district administrators utilize an electronic walkthrough program which captures technology usage and they report those findings to teachers. Staff members who need additional training in the use of technology in the classroom work with school Building Coaches, members of the district technology staff, and with outside trainers in order to improve.
  - b. **STLP Program:** Building principals ensure that a school's STLP program is occurring. The eventual hope is that schools will utilize the regional and state STLP competitions as an incentive for programs to improve.
  - c. **Technology Literacy by the end of the 8<sup>th</sup> grade:** Currently the indicator for whether or not a student is technology literate will be completion of the Technology Competency course. However, since different people may teach that course over time, the standards for the skills necessary to pass the course—and thus, be named technology literate—could be more fluid than the district would desire. As such, the district needs to work to find some more objective way of determining the technology competency of students in that course.

## Staff Training/Professional Development Goals

### Goal 1

The district will provide staff with the training and/or professional development to effectively utilize the technology that is currently in place in order to improve student learning.

### Goal 2

The district will provide training in how to integrate new strategies and emerging technologies into classrooms.

### Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Provide professional development training / re-orientation to all staff who utilize district telecommunication systems (WAN, telephones, mobile phones) via staff meetings and early release meetings	More efficient usage of the telecommunication systems, better time on task for all employees, resulting in more focus on education	Agenda and handouts from trainings	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	No direct cost to district
Provide opportunities for CIO and other technology leaders in the district to attend professional conferences, such as the Infinite Campus Interchange and the Kentucky Society for Technology in Education Conference	Technology leaders will learn about new technologies and new uses for current technologies and will bring that information back to the district to share with other staff members	EILA certificate or other evidence of attendance of trainings	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	District Professional Development Funds, Local General Funds

The Safe Schools Training Program will be used to provide professional development for teachers.	Safe Schools is an online training program which provides teachers with PD on multiple student safety and student rights issues. The program gives teachers information to help provide a safe learning environment.	Evidence of completion of Safe Schools via the website's reporting tool.	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	Local General Funds
District staff will provide yearly "refresher" training on the security of confidential student information and on the sharing of such information with third parties.	Students (and their parents) will have the ability to learn in an environment that protects and respects confidential student information.	Training provided will be logged in the CIO's calendar.	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	No direct cost to district
Administrative and select teachers will complete the KyGoDigital training this summer.	This training will help teacher and administrators be more productive with our new Gmail and GSuite.	Completion of KyGoDigital trainings.	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	No direct cost to district

**Notes Staff Training/Professional Development Goals:**

1. **Current Staff Technology Competency:** The latest Technology Readiness Survey indicates that the vast majority of teachers in the Erlanger-Elsmere School District are competent in technology. However, without a clear method of measuring teacher technology competency, the decision of whether or not a teacher is competent is left to the building principal, and as a result the validity of that data is suspect. Other surveys, including the state's Teaching, Empowering, Leading & Learning survey (Appendix B) suggest a different conclusion. They suggest a staff that is fairly technology competent but that requires additional professional development regarding technology.

2. **Topic and Nature of training to be made available to staff and connection between training and district curriculum goals:**  
The topics and nature of training that staff will receive is difficult to predict over a two year time period as emerging technologies often change the face of instruction. Knowing that the unknown exists, however, one can put that aside and “guess” that the following trainings will occur over the next two years.
  - a. Social Networking as an educational tool.
  - b. Internet Safety. Related to CDIP Goals
  - c. Utilizing Intelligent Classroom Technology to its fullest
  - d. Integrating technology in the elementary/middle/high school classroom
  - e. Appropriate Usage of District Technology
  - f. Teaching in a BYOD Classroom
  - g. Teaching in a 1:1 Classroom
  - h. Using Cloud-based Productivity Tools (Google Apps for Education, Office 365) to Their Fullest
  - i. Protecting Student Data on our Computers and in the Cloud
3. **Methods of Training:**
  - a. Conferences (i.e. Kentucky Society for Technology in Education annual conference)
  - b. On site trainings
  - c. One on one trainings
4. **Connection Between Training to be Offered and the Curriculum Goals of the District.** See the current Comprehensive District Improvement Plan, found at <http://www.erlanger.k12.ky.us/compimp.html> .
5. **Training Opportunities for Technical Staff.** Release time and budgeted funds are included in this plan for the following:
  - a. Attendance at the Kentucky Society for Technology in Education (KySTE) Conference
  - b. Attendance at the Infinite Campus Interchange Conference
  - c. Attendance at Monthly KDE regional technology updates (also known as NKySTE meetings)
  - d. Monthly KDE Technology webcasts
  - e. Other trainings as deemed appropriate
6. **Evaluation Process:** The indicators in the table above describe what data will be used to evaluate the strategies/activities described above, and the “Person(s) Responsible” column describes the person who is responsible for evaluating this element.



## Technology (Network and Hardware) Goals

### Goal 1

**To maintain and upgrade an educational network which will allow teachers and students to fully utilize the district's technology resources**

#### Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Provide connectivity to the Internet via the Kentucky Department of Education network	1) Increased communication between staff/students and outside entities, 2) Increased efficiency of research for staff/students, 3) Availability of outside resources, such as Infinite Campus, MUNIS, Compass Odyssey, and formative assessments	99% uptime for district network	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	Shared service supplied by the Kentucky Department of Education
Continue to provide connectivity to the elementary schools via leased, managed, fiber optic lines.	1) Quicker, more efficient usage of the Wide Area Network, 2) Ability to centralize district housed web-based applications, such as Fast ForWord, and Renaissance Learning applications. This centralization will save money, which will allow for more such applications in the	99% uptime for district network	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	USF 80%, Local General Funds 20%

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
	future.				
Provide local and long distance telephone service	Phone service assists in home/school communication and is necessary for a safe learning environment.	99.9% uptime of local and long distance phone service	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	100% by Local General Funds.
Comply with and enforce all security initiatives involving the network, workstations, and data—including the current WSUS and EPO (anti-virus) initiatives	A secure network and workstations mean less downtime for instruction involving technology, secure data ensures the reliability of the data we use for making data-driven decisions, as well as public confidence in our ability to protect private information, which will make parties more likely to share information with us in the future	1) Percentage of machines with latest patches as reported by WSUS server 2) Percentage of machines with latest McAfee versions, patches and updates as reported by ePO server	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	Shared service supplied by the Kentucky Department of Education
Provide support and next day replacement capability of current network (Basic Maintenance)	Ensure minimum of downtime so that network-based instructional time is not interrupted.	Payment of support renewal	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	KETS Funds
Rewire the Ethernet networks at Arnett Elementary, Miles Elementary, Lindeman Elementary, and Lloyd High School (the	The current Ethernet network described to the left was installed in the 1990's using Cat 5 cable, which allows a maximum of 1 GB per	Building rewiring complete by final timeline date to the right.	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer, Network Manager	USF 85%, Local General Funds 15%



Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
oldest, original part).	second bandwidth. Replacing this cable with Cat 6 will allow for 10 GB per second of bandwidth, which will provide sufficient bandwidth for years. In addition, network closets are currently not in ideal locations and create the danger of overheating network equipment, which would cause network resources to go down for all or part of a building if they failed. Finally, network drop needs have changed over 25 years, and a rewire will allow schools to have network drops where they are needed now.				

**Goal 2**

**To replace aging instructional hardware with current hardware which will allow for more advanced instructional applications.**

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Replace faculty/staff workstations that were	Better efficiency of teachers with faster	100% completion	Begin Date: July 1,	Chief Information	KETS Funds

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
purchased prior to the 2012-2013 school year.	machines; Currently teachers with these older workstations cannot run newer, high demand software on their own machines (Read/Write Gold, Fast ForWord, digital video), making them less likely to use these technologies with students.	by stated End Date	2018 End Date: June 30, 2019	Officer	
Replace faculty/staff workstations that were purchased prior to the 2013-2014 school year.	Better efficiency of teachers with faster machines; Currently teachers with these older workstations cannot run newer, high demand software on their own machines (Read/Write Gold, Fast ForWord, digital video), making them less likely to use these technologies with students.	100% completion by stated End Date	Begin Date: July 1, 2019 End Date: June 30, 2020	Chief Information Officer	KETS Funds
Provide funding to replace one mobile lab at Arnett Elementary School. The funding can be used either to replace the lab OR AS AN ALTERNATIVE the same funding can	Students will be able to run today's demanding applications, especially Fast ForWord which will improve student reading achievement, and Compass Learning, which is remedial software directly connected to students' formative	100% completion by stated End Date	Begin Date: July 1, 2018 End Date: June 30, 2019	Chief Information Officer	KETS Funds

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
<p>be used to provide mobile devices of the school's choice, with the understanding that the fixed lab will not be replaced for another six school years.</p>	<p>testing. In addition, if the second option is chosen, more students will have access to devices that can be used in their classrooms for a more integrated approach.</p>				
<p>Provide funding to replace Computer Lab 2 at Lindeman Elementary. The funding can be used either to replace the lab OR AS AN ALTERNATIVE the same funding can be used to provide mobile devices of the school's choice, with the understanding that the fixed lab will not be replaced for another six school years.</p>	<p>Students will be able to run today's demanding applications, especially Fast ForWord which will improve student reading achievement, and Compass Learning, which is remedial software directly connected to students' formative testing. In addition, if the second option is chosen, more students will have access to devices that can be used in their classrooms for a more integrated approach.</p>	<p>100% completion by stated End Date</p>	<p>Begin Date: July 1, 2018 End Date: June 30, 2019</p>	<p>Chief Information Officer</p>	<p>KETS Funds</p>
<p>Provide funding to replace 30 computers in Arnett Elementary Fixed Lab OR AS AN ALTERNATIVE the same funding can be used to provide</p>	<p>Students will be able to run today's demanding applications, especially Fast ForWord which will improve student reading achievement, and Compass Learning, which is</p>	<p>100% completion by stated End Date</p>	<p>Begin Date: July 1, 2018 End Date: June 30, 2019</p>	<p>Chief Information Officer</p>	<p>KETS Funds</p>

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
mobile devices of the school's choice, with the understanding that the fixed labs will not be replaced for another six school years.	remedial software directly connected to students' formative testing. In addition, the computers can be used for formative and summative assessments, including the End of Course assessments.				
Provide funding to replace computers in Lab 302 at Tichenor Middle School. The funding can be used either to replace the labs OR AS AN ALTERNATIVE the same funding can be used to provide mobile devices of the school's choice, with the understanding that the fixed labs will not be replaced for another six school years.	Students will be able to run today's demanding applications, especially Fast ForWord which will improve student reading achievement, and Compass Learning, which is remedial software directly connected to students' formative testing. In addition, if the second option is chosen, more students will have access to devices that can be used in their classrooms for a more integrated approach.	100% completion by stated End Date	Begin Date: July 1, 2018 End Date: June 30, 2019	Chief Information Officer	KETS Funds
Provide funding to replace computers in Lindeman Elementary School Lab 2. The funding can be used either	Students will be able to run today's demanding applications, especially Fast ForWord which will improve student reading achievement, and Compass	100% completion by stated End Date	Begin Date: July 1, 2018 End Date: June 30, 2019	Chief Information Officer	KETS

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
to replace the labs OR AS AN ALTERNATIVE the same funding can be used to provide mobile devices of the school's choice, with the understanding that the fixed labs will not be replaced for another six school	Learning, which is remedial software directly connected to students' formative testing. In addition, if the second option is chosen, more students will have access to devices that can be used in their classrooms for a more integrated approach.				

### Goal 3

To provide faculty and staff members with new technology needed to help students achieve *in a safe environment*.

Action Plan: Strategies/Activities

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
Provide mobile phones for administrators, bus drivers, and maintenance workers	1) Ability to provide immediate communication from families, community and staff to administrators, 2) safer school environment with bus drivers having ability to communicate instantly in an emergency, 3) ability to communicate immediately with	Monthly bills paid	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	Data Plans: 100% Local General Funds Voice Plans: 100% Local General Funds

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
	maintenance workers to provide a safer school (in the case of failed heater, potential safety hazard, etc.)				
Provide messaging services (texting) and data plans, as appropriate, for district mobile phones for maintenance workers, athletic director	Email services for maintenance workers alert maintenance workers when district HVAC and refrigeration units go down, ensuring that students can be fed and can learn in a safe environment. Data plan for athletic director allows him to stay in touch with coaches at both home and away events.	Monthly bills paid	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Information Officer	Local General Funds
Provide licensing, support, and hosting fees for Infinite Campus Student Information System	Infinite Campus provides several instructional benefits, only some of which are detailed here. 1) Allows for tracking of attendance so that truant students can be given assistance needed to return to school, 2) Allows teachers, students, administrators, and parents and/or guardians to track student academic progress via Gradebook and Parent Portal, 3) provides communication tools for parents and	Infinite Campus fees paid by due date and service not terminated	Begin Date, July 1, 2018 End Date: June 30, 2020	Chief Finance Officer	Local General Funds

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
	community.				
Use the Infinite Campus Messenger System for School-to-Home Communication	Provides email, text, and telephone communication from school to home, which 1) allows school to effectively communicate with home and 2) provides for a safe school environment in the event of an emergency.	Infinite Campus fees paid by due date and service not terminated	Begin Date, July 1, 2018 End Date: June 30, 2020	Chief Finance Officer	Local General Funds
Provide licensing for select Microsoft software via Microsoft School Agreement	The Microsoft School Agreement allows the district to install select MS products, including Office and Windows among others, on any district-owned machine not carried by an individual student. Each piece of software has its own impact on instruction. Some of the more prominent, though are below  1) Office—a) Access to MS's latest Office suite, b) Single version of Office means fewer compatibility issues. 2) Windows—Classroom use of latest features built into Windows, 3) SCCM—provides for quick hardware and	Licensing fees paid on time	Begin Date: July 1, 2018 End Date: June 30, 2020	Chief Finance Officer, Chief Information Officer	KETS

Strategy/Activity	Instructional Outcome	Indicator	Timeline	Person(s) Responsible	Funding Source
	software deployment, minimizing the amount of time that an instructional device is being serviced.				

**Notes on Technology (Hardware) Goals:**

1. **An Up to date, technology-rich environment:** The “instructional outcome” column in the table above describes, for each technology initiative, how the activities identified will support the district’s vision for an up to date, technology-rich environment.
2. **Technical Standards:** The Kentucky Department of Education’s Office of Knowledge Information Data Systems (KIDS) provides a set of Technology Architectural Standards which states must follow to ensure compatibility of interconnected systems. The Architectural Standards “enable commonality and consistency within and across the Kentucky Education Technology Systems (KETS) functions and locations.”<sup>1</sup>
3. **Evaluation Process:** The indicators in the table above describe what data will be used to evaluate the strategies/activities described above, and the “Person(s) Responsible” column describes the person who is responsible for evaluating this element.



## 2018-2019 Budget Summary

Acquired Technologies and Professional Development	E-Rate	KETS	Other (Specify)	Initial Cost	Recurring Cost	Current Progress
<b>Costs Related to Curriculum and Instructional Integration Goals</b>						
NWEA/Map Testing			LG 27,798		27,798	
Renaissance Learning (STAR, Accelerated Reader, Math)			LG 19,536		19,536	
Edgenuity			LG 25,200		25,200	
Scientific Learning (Fast ForWord, Reading Assistant)			LG 26,456		26,456	
Kentucky Virtual Library			LG 2,059		2,059	
Edmentum/Plato			LG 16,271		16,271	
Follett Library Software			LG 4,250		4,250	
Footsteps2Brilliance			LG 26,340		26,340	
<b>Costs Related to Staff Training/Professional Development Goals</b>						
PD Opportunities for Technical Staff, District and School leaders		2,000	KM 2,000		4,000	
Safe Schools Program			LG 3,180		3,180	
<b>Costs Related to Technology (Network and Hardware) Goals</b>						
Leased, managed fiber optic lines	26,784		LG 4,220		31,004	
Local Telephone Voice Service			LG 32,760		32,760	
Long Distance Telephone Voice Service			LG 712		712	
Basic Maintenance of Network Equipment		3,728	KM 3,728		7,456	

Acquired Technologies and Professional Development	E-Rate	KETS	Other (Specify)	Initial Cost	Recurring Cost	Current Progress
Upgrade faculty/staff workstations purchased prior to 2012-13 school year (38 devices)		10,213	KM 10,213	20,427		
Upgrade/Replace Arnett Mobile Lab and Fixed Lab		8,242	KM 8,242	16,485		
Upgrade/Replace Lindeman Lab 1 and 2		8,242	KM 8,242	16,485		
Upgrade/Replace Tichenor Lab 302		5,243	KM 5,243	10,485		
Rewire Ethernet Networks in Arnett Elementary School	40,000		LG 28,753	68,753		
Cellular Phones (voice service only) for administrators, bus drivers, and maintenance (18 lines at \$15 per month)			LG 3,804		3,804	
Cellular Phones (messaging and data services) for administrators, bus drivers, and maintenance			LG 1,150		1,150	
Infinite Campus Yearly Fees			LG 12,327		12,327	
Infinite Campus Messenger Yearly Fees			LG 2,638		2,638	
Microsoft EES Agreement Yearly Fees		7,750	KM 7,750		15,500	
<b>TOTAL</b>	<b>66,784</b>	<b>45,418</b>	<b>282,872</b>	<b>132,635</b>	<b>229,929</b>	
Acquired Technologies and Professional Development	E-Rate	KETS	Other (Specify)	Initial Cost	Recurring Cost	

LG = Local General Funds    KM = KETS Match (BOE approved match of KETS funds from Local General Fund)

**Total Budget for All Funding Sources: \$395,074**

## 2019-2020 Budget Summary

Acquired Technologies and Professional Development	E-Rate	KETS	Other (Specify)	Initial Cost	Recurring Cost	Current Progress
<b>Costs Related to Curriculum and Instructional Integration Goals</b>						
NWEA/Map Testing			LG 27,798		27,798	
Renaissance Learning (STAR, Accelerated Reader, Math)			LG 19,536		19,536	
Edgenuity			LG 25,200		25,200	
Scientific Learning (Fast ForWord, Reading Assistant)			LG 26,456		26,456	
Kentucky Virtual Library			LG 2,059		2,059	
Edmentum/Plato			LG 16,271		16,271	
Follett Library Software			LG 4,250		4,250	
Footsteps2Brilliance			LG 26,340		26,340	
<b>Costs Related to Staff Training/Professional Development Goals</b>						
PD Opportunities for Technical Staff, District and School leaders		2,000	KM 2,000		4,000	
Safe Schools Program			LG 3,180		3,180	
<b>Costs Related to Technology (Network and Hardware) Goals</b>						
Leased, managed fiber optic lines	26,784		LG 4,220		31,004	
Local Telephone Voice Service			LG 32,760		32,760	
Long Distance Telephone Voice Service			LG 712		712	
Basic Maintenance of Network Equipment		3,728	KM 3,728		7,456	
Upgrade faculty/staff workstations purchased prior to 2013-14 school year		10,213	KM 10,213	20,427		

Acquired Technologies and Professional Development	E-Rate	KETS	Other (Specify)	Initial Cost	Recurring Cost	Current Progress
Cellular Phones (voice service only) for administrators, bus drivers, and maintenance (18 lines at \$15 per month)			LG 3,804		3,804	
Cellular Phones (messaging and data services) for administrators, bus drivers, and maintenance			LG 1,150		1,150	
Infinite Campus Yearly Fees			LG 12,327		12,327	
Infinite Campus Messenger Yearly Fees			LG 2,638		2,638	
Microsoft EES Agreement Yearly Fees		7,750	KM 7,750		15,500	
<b>TOTAL</b>	<b>26,784</b>	<b>23,691</b>	<b>232,422</b>	<b>20,427</b>	<b>260,441</b>	
Acquired Technologies and Professional Development	E-Rate	KETS	Other (Specify)	Initial Cost	Recurring Cost	

LG = Local General Funds    KM = KETS Match (BOE approved match of KETS funds from Local General Fund)

**Total Budget for All Funding Sources: \$282,897**

## Budget Summary – Narrative

Most of the pages above describe in detail the strategies and initiatives that the Erlanger-Elsmere Independent School District intends to pursue over the next two school years. The four pages immediately before this page, however, lay out the costs for those previously stated strategies and initiatives, as well as how the district intends to pay for them.

Determining any budget in a public school setting is always difficult, but this past year has shown that nothing is safe and our funding could be cut at any time, as federal and state funding can be altered by legislators or public administrators. In the budget tables above, the gray-colored columns represent the funding sources that this plan intends to utilize for technology projects. None of them is guaranteed, but the expectation is that the funding listed in the tables above will be available for the purchase of the technology listed. It is my hope that the E-Rate Category 2 budget will be extended for another 5 years, which will change the expectations of this plan.

That’s not to say that there aren’t additional, unmet technology needs that the district has during the 2016-18 period. Listed below are technology projects that should be completed during this time frame, but for which no funding is currently expected. However, should additional funding for technology become available during the time covered in this plan, it will be used for these projects.

Acquired Technologies and Professional Development	Initial Cost	Recurring Cost
Upgrade wiring throughout the District	557,000	
Upgrade District Telephone Systems	125,000	
Upgrade/Replace Lloyd Library Lab	18,930	
Replace 1/6 of the projectors in the district during the 2018-19 year with more current technology	31,000	
Replace 1/6 of the projectors in the district during the 2019-20 year with more current technology	31,000	
1:1 Program with Chromebooks at Lloyd H.S.	120,000	30,000
1:1 Program with Chromebooks at Tichenor M.S.	84,000	28,000
<b>Total Immediate Needs Currently Unfunded</b>	<b>847,050</b>	<b>58,000</b>

## **Attachments/Appendices**

Appendix A: Erlanger-Elsmere School District Technology Readiness Report for 2015-16

Appendix B: Erlanger-Elsmere School District Teaching, Empowering, Leading, and Learning Survey for 2015