

2018

# Palmetto Digital Literacy Program

## Evaluation Report



**SC EDUCATION  
OVERSIGHT COMMITTEE**

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## Executive Summary

Over the past decade the General Assembly passed two pieces of legislation – The Education and Economic Development Act (EEDA), 2005 and the Profile of the South Carolina Graduate, 2016 – that focus on similar desired outcomes: students leaving high school with a South Carolina diploma *prepared* to take the desired next step into the military, college, or the workforce. This preparation includes (1) building knowledge in critical areas like science, technology, math, engineering, the arts, and social studies; (2) growing world class skills like creativity, innovation, team-building, collaboration, and communication skills; and (3) developing work and life skills like self-direction, perseverance, interpersonal skills and global perspective.

In pursuit of these desired outcomes, the General Assembly designated and appropriated funds for a second year in a pilot program, the Palmetto Digital Literacy Program – an initiative of Learning.com. In 2016-17 the General Assembly appropriated \$1.3 million in non-recurring Education Improvement Act (EIA) revenues for the initiative. Districts and schools in the Abbeville equity lawsuit or districts and schools with a poverty index of 80 percent or greater were eligible to participate. (Provisos 1A.52. and 1A.75. of the 2016-17 General Appropriation Act) Again, in 2017-2018, the General Assembly designated and appropriated \$1.3 million in non-recurring EIA revenues to continue the pilot program, the Palmetto Digital Literacy Program through provisos 1A.50. and 1A.69. of the 2017-18 General Appropriation Act.

This report examines the second-year implementation of this pilot project approximately eighteen months after the first implementation step. The report outlines findings by the evaluator through observation, interviews, and software data collection and includes recommendations based on the findings.

The pursuit and successful attainment of the outcomes stated in both the EEDA and the Profile of the South Carolina Graduate will take time. Commitment to the goals must be demonstrated through continued support at the same time interim data are examined for formative effectiveness. This Final report recommends the Palmetto Digital Literacy Program continue in 2018-19 with additions and modifications pursuant to the recommendations. The results should continue to be evaluated for progress and effectiveness. Trends in progress should be examined within the context of the district's overall technology plan and its

implementation. In addition, critical elements of instructional technology within districts and classrooms must be examined and evaluated.

# Palmetto Digital Literacy Program Final Evaluation Report

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## Introduction

For a second, consecutive year, the General Assembly funded a pilot program, the Palmetto Digital Literacy Program – an initiative of Learning.com, in the 2017-18 state budget for districts and schools in the Abbeville equity lawsuit or districts and schools with a poverty index of 80 percent or greater. The General Assembly designated and appropriated \$1.3 million in non-recurring Education Improvement Act (EIA) revenues to continue the pilot program, the Palmetto Digital Literacy Program through provisos 1A.50. and 1A.69. of the 2017-18 General Appropriation Act.

Provisos 1A.50. and 1A.69. of the 2017-18 General Appropriation Act are stated below and describe the legislative intent.

**1A.50.** (SDE-EIA: Surplus) For Fiscal Year 2017-18, EIA cash funds from the prior fiscal year and EIA funds not otherwise appropriated or authorized must be carried forward and expended on the following items in the order listed:

1. Computer Science Task Force - \$400,000;
2. EOC-Partnerships - \$6,281,500;
3. Industry Certification - \$3,000,000;
4. SDE-School Districts Capital Improvement Plan - \$55,828,859;
5. SDE-Technical Assistance - \$1,308,500; and
6. SDE-K-12 Funding Gap - \$450,000.

The Department of Education shall disburse the funds for the K-12 Funding Gap proportionately to school districts that, in the current fiscal year, are cumulatively appropriated and allocated at least eight percent less state funds than the school district was appropriated and allocated in Fiscal Year 2016-17. For purposes of this proviso, state funds includes Education Improvement Act funds. Further, the amounts appropriated and allocated in Part IA and Sections 1 and 1A of this Part IB, shall be considered for purposes of determining whether a school district received less state funds.

**1A.69.** (SDE-EIA: Digital Learning) Of the funds appropriated to the Education Oversight Committee for Partnerships for Innovation, \$1,300,000 must be authorized for schools or school districts that have poverty indices of eighty percent or greater based on the poverty index utilized the prior fiscal year that was student eligibility for the free or reduced price lunch program and Medicaid, or are a trial or plaintiff district in the Abbeville equity lawsuit. In these districts, the EOC will pilot a program that provides school districts with digital learning tools, digital resources, the curriculum foundry, technical support, and professional development.

The purpose of this report is to provide an evaluation of the Palmetto Digital Literacy Program to this point in its second-year implementation. As stated in Proviso 1A.69., the intent of the

General Assembly is to improve digital literacy of students and provide technical support and professional development to teachers. These skills, understandings and applications are essential elements of developing a college and career ready student who also fulfills the **Profile of the South Carolina Graduate** as adopted by the General Assembly in Act 195 of 2016 (H.4936, R.206).

The Palmetto Digital Literacy Program is an initiative of Learning.com, an American-based company, providing software and technology tools to students, schools and districts all over the world. According to their website, *“Learning.com provides an intuitive, flexible, and personalized digital education experience – built for educators by educators. We make it easy to engage students while offering a comprehensive and reliable educational platform that supports districts by empowering teachers, track results and get a return on their educational investment.”*

This report contains the findings of the examination of the product within the context and landscape of South Carolina school districts named in the Abbeville equity lawsuit or having poverty indices of eighty percent or greater based on the poverty index utilized the prior fiscal year, which includes student eligibility for the free or reduced-price lunch program and Medicaid. The report consists of three main parts: (1) the process of implementation; (2) the findings, and (3) the recommendations. The evaluation and the subsequent report include information gathered from the vendor, the evaluator’s personal observations, interviews with the districts, and the evaluator’s professional experiences.

## Process of Implementation of the Palmetto Digital Literacy Project

Pursuant to the Proviso 1A.69. of the 2017-18 General Appropriation Act and the Palmetto Digital Literacy Project, in the summer of 2017, an invitation to participate in the project was sent to the following districts:

### 33 Abbeville Lawsuit Districts

Abbeville	Clarendon 3	Laurens 56
Allendale	Dillon 3	Lee
Bamberg 1	Dillon 4	Lexington 4
Bamberg 2	Florence 1	Marion
Barnwell 19 (Blackwell-Hilda)	Florence 2	Marlboro
Barnwell 29 (Williston)	Florence 3	McCormick
Barnwell 45	Florence 4	Orangeburg 3
Berkeley	Florence 5	Orangeburg 5
Chesterfield	Hampton 1	Saluda
Clarendon 1	Hampton 2	Williamsburg
Clarendon 2	Jasper	
	Laurens 55	

### 13 Other Districts with 80% or Higher Poverty

Anderson 3  
Calhoun  
Cherokee  
Chester  
Colleton  
Darlington  
Dorchester 4  
Fairfield  
Greenwood 51  
Lexington 3  
Richland 1  
Sumter  
Union

Of the forty-six districts invited to participate, 37 districts chose to participate and, at the time of this report writing, have implemented the use of the software at various stages: signed agreements, software set-up and interface, training, and implementation. Nine districts either were non-responsive after multiple contacts or chose not to participate.

According to records at Learning.com, there have been 800,393 content launches as of the end of December 2017. This is an increase of 440,553 over the end of the school year 2016-2017. Learning.com also indicates there have been 24,503 individual student accounts created, an 8,262 increase over the school year 2016-2017. Teacher accounts have been created by 3,506 teachers in the 209 individual schools using Learning.com.

The following chart reflects information by district regarding implementation over the past two school years:

Districts Offered Participation in Digital Literacy Project		
<i>33 Abbeville Lawsuit Districts</i>		
<b>Abbeville</b>	Enrolled	Both Years
<b>Allendale</b>	Enrolled	Both Years
<b>Bamberg 1</b>	Did Not Participate	Not Participating
<b>Bamberg 2</b>	Enrolled	Both Years
<b>Barnwell 19 (Blackwell-Hilda)</b>	Enrolled	Both Years
<b>Barnwell 29 (Williston)</b>	Enrolled	Both Years
<b>Barnwell 45</b>	Enrolled	Both Years
<b>Berkeley</b>	Did Not Participate	Not Participating
<b>Chesterfield</b>	Enrolled	Both Years
<b>Clarendon 1</b>	Enrolled	Both Years
<b>Clarendon 2</b>	Enrolled	2nd Year
<b>Clarendon 3</b>	Enrolled	Both Years
<b>Dillon 3</b>	Enrolled	Both Years
<b>Dillon 4</b>	Enrolled	Both Years
<b>Florence 1</b>	Enrolled	Both Years
<b>Florence 2</b>	Enrolled	Both Years
<b>Florence 3</b>	Enrolled	Both Years
<b>Florence 4</b>	Did Not Participate	First Year Only
<b>Florence 5</b>	Did Not Participate	Not Participating

Districts Offered Participation in Digital Literacy Project		
<i>33 Abbeville Lawsuit Districts</i>		
<b>Hampton 1</b>	Enrolled	Both Years
<b>Hampton 2</b>	Enrolled	Both Years
<b>Jasper</b>	Enrolled	Both Years
<b>Laurens 55</b>	Enrolled	Both Years
<b>Laurens 56</b>	Did Not Participate	Not Participating
<b>Lee</b>	Enrolled	Both Years
<b>Lexington 4</b>	Did Not Participate	Not Participating
<b>Marion</b>	Enrolled	Both Years
<b>Marlboro</b>	Enrolled	Year 2
<b>McCormick</b>	Enrolled	Both Years
<b>Orangeburg 3</b>	Enrolled	Both Years
<b>Orangeburg 5</b>	Enrolled	Year 2
<b>Saluda</b>	Did Not Participate	Not Participating
<b>Williamsburg</b>	Enrolled	Both Years
<i>Districts with 80% Poverty or Higher</i>		
<b>Anderson 3</b>	Enrolled	Both Years
<b>Calhoun</b>	Enrolled	Both Years
<b>Cherokee</b>	Enrolled	Both Years
<b>Chester</b>	Enrolled	Both Years
<b>Colleton</b>	Enrolled	Year 2
<b>Darlington</b>	Enrolled	Both Years
<b>Dorchester 4</b>	Enrolled	Both Years
<b>Fairfield</b>	Enrolled	Both Years
<b>Greenwood 51</b>	Enrolled	Both Years; have stopped using
<b>Lexington 3</b>	Did Not Participate	Not Participating
<b>Richland 1</b>	Did Not Participate	Not Participating
<b>Sumter</b>	Did Not Participate	Not Participating
<b>Union</b>	Enrolled	Both Years

The staff of Learning.com is responsible for the enrollment process (signing documents of agreement to share data and interface software programs) as well as the training. In conversations with over three-fourths of the districts that have held trainings, the feedback indicates that the training was meaningful, well organized, and relevant. Learning.com conducts exit surveys in all its trainings and, these too, indicate that the training activities are judged to be valued by those participating.

The following findings are based on site visits to 15 of the districts in the implementation stage; conversations with the Learning.com trainer; records provided by Learning.com, and

surveys sent to all districts offered the opportunity to participate in the Palmetto Digital Learning Project.

## Findings

1. As documented in the 2017 report, there is a continuing demonstrated and articulated need for instructional materials in the areas of *keyboarding, digital literacy and internet safety, inquiry learning through technology integration and coding* exists in schools among students K-8. Districts reported that the number one current need is keyboarding application based on the on-line state testing in implementation. Students without keyboarding skills are clearly disadvantaged when responding to test questions on the state summative assessments that require required written response.

Most districts (over 90%) reported using a variety of resources to teach digital literacy and internet safety, and the great majority indicate the modules on these two topics in Learning.com are student friendly and engaging. Teachers, lab managers and principals indicated the ease of use, the student engagement and the reporting are strengths of the Learning.com software. In lab observations, the students provided the observer with positive feedback about the program. These topics are primarily used in computer lab periods and/or media related arts periods. While several (3-5) districts strongly encouraged parents to let students log-in at home and work on Learning.com, most districts do not, and the frequent reason response was the lack of internet access in homes in the district.

However, while over 95% of the districts reported using the keyboarding modules, districts also expressed the need is related to “state mandated testing online.” Only three districts articulated keyboarding as a stepping stone to other technology skills or need in the workforce. This lack of understanding and application to real world scenarios

demonstrates the need for state level visioning and articulation of the technology skills continuum to districts, teachers, families and students.

The Inquiry Learning units continue not to be used by the majority of districts at the time of the on-site visits or conversations. When asked why the Inquiry Learning units are not being taught, the most frequent response was a desire by the district not “to add more things” to the teachers to do. However, in the districts in which the Inquiry modules are used, district leaders stated instructional technology integration is a focus. Rather than seeing the Inquiry modules as another thing to do, the Inquiry modules are integrated parts of teaching and learning, creating more relevant and engaging lessons for students. This systemic approach coupled with extensive professional development advances the student experience far beyond the traditional textbook. Teachers implementing the Inquiry modules stated planning time and ongoing professional development as critical aspects to full employment of the modules. District leaders stated the need for state level guidance along with blue prints for computer science standards as well as instructional technology integration.

Coding is the topic least taught in K-8, based on observations and conversations. More Coding lessons have been launched since year one implementation, but this occurred on a systemic or routine basis in less than 30% of the districts. In one district, the Coding module was used during the Hour of Coding activities.

In schools with only computer labs and few classroom computers (for use as centers or stations), time is the first barrier in exploring and/or practicing any or all the modules. And

“even if we had a 1:1 distribution model, our teachers need lots of training first,” as one district instructional leader shared.

Along with the qualitative data, the quantitative data correlates this finding. Forty-six districts were offered the opportunity to implement the Palmetto Digital Learning Project and 37 accepted affirming their need for this type of resource. This need does not exist in isolation, but rather is an integral part of learning, if we are really preparing students in South Carolina to meet the Profile of the Graduate and be college and career ready. The need for digital learning resources is as critical as we once considered the textbook and its adoption process.

Of the 37 school districts that participated in the program, 11 districts had administered the pre- and post-assessment 5<sup>th</sup> grade results as of March 2, 2018 and are presented below. The EOC communicated in writing to all eligible districts that “districts participating in the Palmetto Digital Literacy Program in school year 2017-18 are required to conduct pre-assessment results at the conclusion of the first semester.” Due to the demands of summative assessments and spring formative assessment testing on school bandwidth and on instructional time, the EOC and Learning.com agreed to and advised districts to conduct post-assessment results by the end of February. The EOC and Learning.com hope that districts will administer the post-assessment results for grade 3 by the end of the school year.

21st Century Skills Assessment			
5th Grade Pre- & Post-Assessment Proficiency Results			
	17/18 Pre	Growth	17/18 Post
<b>District A</b>	18.8%	1.4%	20.3%
Communication and Collaboration	21.1%	7.0%	28.1%
Creativity and Innovation	23.6%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	19.6%	5.0%	24.6%
Digital Citizenship	19.1%	5.0%	24.1%
Research and Information Fluency	18.1%	0.5%	18.6%
Technology Operations and Concepts	11.6%	7.5%	19.1%
<b>District B</b>	23.1%	15.5%	38.6%
Communication and Collaboration	26.5%	23.1%	49.6%
Creativity and Innovation	23.1%	6.0%	29.1%
Critical Thinking, Problem Solving and Decision Making	25.6%	12.8%	38.5%
Digital Citizenship	20.5%	11.1%	31.6%
Research and Information Fluency	20.5%	21.4%	41.9%
Technology Operations and Concepts	22.2%	18.8%	41.0%
<b>District C</b>	18.5%	3.7%	22.2%
Communication and Collaboration	22.2%	No Growth Measured	
Creativity and Innovation	11.1%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	22.2%	No Growth Measured	
Digital Citizenship	11.1%	22.2%	33.3%
Research and Information Fluency	22.2%	22.2%	44.4%
Technology Operations and Concepts	22.2%	No Growth Measured	
<b>District D</b>	18.7%	0.1%	18.8%
Communication and Collaboration	19.8%	13.8%	33.6%
Creativity and Innovation	19.0%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	19.0%	No Growth Measured	
Digital Citizenship	19.8%	No Growth Measured	
Research and Information Fluency	20.7%	6.0%	26.7%
Technology Operations and Concepts	13.8%	3.4%	17.2%
<b>District E</b>	19.5%	5.3%	24.8%
Communication and Collaboration	21.3%	24.5%	45.7%
Creativity and Innovation	22.3%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	20.2%	1.1%	21.3%

<b>5th Grade Pre- &amp; Post-Assessment Proficiency Results</b>			
	<b>17/18 Pre</b>	<b>Growth</b>	<b>17/18 Post</b>
Digital Citizenship	18.1%	2.1%	20.2%
Research and Information Fluency	17.0%	4.3%	21.3%
Technology Operations and Concepts	18.1%	9.6%	27.7%
<b>District F</b>	22.5%	5.0%	27.5%
Communication and Collaboration	23.7%	14.5%	38.2%
Creativity and Innovation	21.7%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	23.0%	5.3%	28.3%
Digital Citizenship	23.0%	No Growth Measured	
Research and Information Fluency	22.4%	9.2%	31.6%
Technology Operations and Concepts	21.1%	4.6%	25.7%
<b>District G</b>	18.1%	No Growth Measured	
Communication and Collaboration	25.0%	12.5%	37.5%
Creativity and Innovation	25.0%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	16.7%	No Growth Measured	
Digital Citizenship	8.3%	8.3%	16.7%
Research and Information Fluency	25.0%	No Growth Measured	
Technology Operations and Concepts	8.3%	No Growth Measured	
<b>District H</b>	24.3%	2.9%	27.1%
Communication and Collaboration	42.9%	No Growth Measured	
Creativity and Innovation	28.6%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	17.1%	2.9%	20.0%
Digital Citizenship	20.0%	No Growth Measured	
Research and Information Fluency	17.1%	25.7%	42.9%
Technology Operations and Concepts	20.0%	5.7%	25.7%
<b>District I</b>			
Communication and Collaboration	32.90%	10.70%	43.60%
Creativity and Innovation	27.00%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	27.00%	0.40%	27.40%
Digital Citizenship	25.00%	6.60%	31.60%
Research and Information Fluency	27.60%	9.20%	36.80%
Technology Operations and Concepts	23.00%	9.50%	32.50%
<b>District J</b>			
Communication and Collaboration	29.70%	12.30%	42.0%

<b>5th Grade Pre- &amp; Post-Assessment Proficiency Results</b>			
	<b>17/18 Pre</b>	<b>Growth</b>	<b>17/18 Post</b>
Creativity and Innovation	26.10%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	21.20%	0.50%	21.7%
Digital Citizenship	20.10%	3.80%	23.9%
Research and Information Fluency	24.70%	6.50%	31.2%
Technology Operations and Concepts	20.10%	1.60%	21.7%
<b>District K</b>			
Communication and Collaboration	27.80%	5.0%	32.8%
Creativity and Innovation	23.00%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	22.00%	22.8%	44.8%
Digital Citizenship	18.70%	12.6%	31.3%
Research and Information Fluency	20.60%	15.2%	35.8%
Technology Operations and Concepts	17.70%	16.6%	34.3%

While this report centers on the Palmetto Digital Learning Project and Learning.com, its implementation is not in isolation. Rather the evaluator, heard and observed the infrastructure needs associated with this product's use as well as any software's implementation.

2. There continue to be significant unmet infrastructure needs in the provision of digital learning environments for students. The infrastructure includes the hardware distribution model developed by the district (types of devices and numbers per student as well as teacher access), the backbone of the hardware distribution system (servers, routers, wireless access points, back-up plans and staff to set-up and maintain) and the software (programs, apps and other internet resources) available to the teachers and students. For efficiency and effectiveness, this technology plan should be developed at the district level. School level decisions may be included within the overall technology plan, but left completely to the schools to procure resources, decisions are often made that lack sustainability and big picture vision. For example, in one district, schools decided on and procured devices with allocated and PTA funds. Students in kindergarten now are trying to learn keyboarding on an IPAD without a keyboard attached. In some schools, computer labs are outdated and lack the speed and capacity for software programs used in 2017-2018. While the technical needs of the Learning.com software were verified before implementation began, the type of device, headphones, nor frequency of use (impacts quantity in schools) were sometimes not addressed or districts did not have an overall plan for instructional technology integration

In every district, technology support staff was mentioned as a need to fully implement Learning.com. The lab setting is the place most students are using the software. In many incidences, there is a lab manager in this setting. Because it is not a certified position, the

capabilities and knowledge of curriculum integration varies widely among schools and districts.

3. More extensive planning time and professional development are needed to develop digital learning environments within the schools and districts. In year 2 of its implementation, districts most often asked for more time to implement and articulated the need for more professional development. Learning.com professional development was described as exceptional; the true need is for time to provide the professional development.

Lab managers, teachers and district contact staff reported the need for additional planning time to best use the software for integration in other content lessons. In fact, in most of the schools and districts from which information was collected, the implementation of units or models in the classroom is voluntary. Computer labs focused on the keyboarding learning.

Since the time for each student to interact with the learning software varies within the school and certainly by district, the results may vary per time on task. To provide the optimum time (or at least minimum time), planning within the district should happen during the extra time to meet, coordinate, and change school schedules if needed.

## Summary of Findings

Schools and districts report a strong need for keyboarding software due to the demands placed on students while taking online state assessments. Learning.com meets this need on multiple levels and reporting available. Early pre- and post-assessments indicate it is effective. The remaining 33 districts to post assessments results in March will provide additional information or evidence.

Schools and districts also report the internet safety and digital literacy modules are being used to fulfill the need for this basic teaching requirement in instructional technology integration.

Beyond the implementation of these modules, the use of other modules within this resource is sporadic. In several districts, there exists comprehensive instructional technology plans; these plans extend to curriculum planning at the high schools with backwards design development for coding, computer science, engineering, and other STEM sequences. There also exists in these district technology plans a structured determination for support services in both technology staff areas (infrastructure development and maintenance) and instructional technology staff areas (using technology in teaching and learning as well as the development of technology curriculum).

But evidence and practice of this extensive planning are not widespread among the districts observed or interviewed. Several districts expressed the need for some models, guidance and/or resources to develop and implement robust instructional technology plans and programs for the district. Wide variance in instructional technology integration

plans impacts student learning and achievement. Ultimately, the opportunities for students depend on both this planning and provision.

## Recommendations

1. Continue to offer the Palmetto Digital Learning Project for FY2018-2019, collecting data on student achievement to make informed decisions about the effectiveness of the software on student learning in the areas of keyboarding and digital learning. Districts currently enrolled or offered in the future should have outlined expectations for continued enrollment in the project. This is not a reflection of Learning.com software, but the need for the supports in the implementation of any/all instructional software. These expectations should include:
  - a) An implementation plan submitted before the beginning of school that includes software and program use within the first 20 days of school.
  - b) Pre-assessment and post-assessments provided and embedded in Learning.com.
  - c) A submitted professional development plan including initial and follow-up training for lab managers and teachers. Principals, instructional coaches, or technology coaches should engage in training on report and data analysis aspects of Learning.com
  
2. Given that the examination of this software has revealed the wide variety of hardware distribution models and technology plans, guidance and support from the state should be provided for districts. There are several models of distribution that are effective with different budgets. Priority planning must focus on student learning and teacher preparation. Time for use, ease to maintain and access are other considerations. This planning must be a comprehensive examination and determination of hardware distribution for students (for example, 1:1 that goes home, 3:1 laptops for students

available for teachers to check-out or 4 laptops per classroom to be used in small group/center work, etc.). In addition, the plan must include access to wireless, back up plans, and security.

Assistance in budget review and planning should also be offered from the state. Many of the districts observed in this study, have small staff and little capacity to develop creative budgets using multiple funding sources. Related to this project, each district that continues to use Learning.com should either submit the district instructional technology plan or agree to develop and implement with assistance from an external technical assistance team that could be composed of staff from the South Carolina Department of Education, the EOC, technology experts from other school districts or institutions in higher education. During site visits and interviews three districts demonstrated comprehensive planning and continue to serve as models, using state technology funds, general fund dollars, general obligation bonds, QZAB bonds and/or competitive grant funds to implement their comprehensive instructional technology plan. Districts with less than full scale technology plans risk large gaps in student preparation for global opportunities in the workforce.

3. Technology as a tool and as an area of study must be the focus of instructional technology integration for students. Any effective software to teach critical skills included in the Profile of the SC Graduate, is not an add-on, but must be systemic to all aspects of teaching and learning Pre-K - 12. The world of our students and their future is inclusive of technology tools, software, devices. Students with an understanding of multiple areas of technology, from coding to repair to job integration, have a distinct advantage in the job market. Students without this access and understanding are at a disadvantage; the achievement and poverty gap will grow wider. The disparity in technology support devices, such as keyboards and headphones, among the districts significantly impacts the students'

chances for achievement in the modules of Learning.com as well as other software program.

The most robust instructional technology plans in districts include redirection of current funds. This must also be examined at the state level. A review of the current traditional textbook procurement and delivery process may yield more funds for developing a statewide process for the planning, review, and provision of software products.

## Conclusion

In summary, the software product Learning.com certainly provides several needed instructional resources to students and teachers. The effectiveness of its use can be documented in early results. The examination of this product, through observation, conversation, survey, and data revealed and/or reinforced an existing condition amongst our schools and districts. The disparity in opportunity as well as exposure to instructional technology integration is resounding. This gap can be closed only with the help and assistance of state level planning and support. Our state plan for technology in public schools must include the review of infrastructure needs, access, and provision. Teacher training and certification areas, computer and technology learning standards must be determined and implemented by the South Carolina Department of Education with fervor. The process of instructional software selection, provision and availability to *all* students must be examined and developed; while districts with resources and capacity are currently doing this, many other districts do not have these resources or capacity. Models or blue prints (samples for this planning to be shared in a sperate document to the EOC) should be available along with technical assistant provided to these districts so that equitable access and opportunities exist for all students in South Carolina.

One software product's success in facilitating student achievement is truly based on the other parts of the technology plan as noted in the findings and recommendations. This product does appear to offer quality learning experiences should be continued for another year to determine its effectiveness most conclusively. It must be also noted that providing effective software is not a solution to the more complex instructional technology integration picture.

## **Appendix A:**

### Reference Resources

Article on Arkansas efforts; competition for economic development

<https://www.the74million.org/article/how-arkansas-is-teaming-up-with-teachers-facebook-other-tech-titans-to-rethink-computer-science-education/>

Future Ready Schools - Dashboard for creating a plan

<https://dashboard.futurereadyschools.org/framework>

National Conference of State Legislators (technology in schools)

<http://www.ncsl.org/research/education/technology-in-schools-digital-devices-textbook-funds-educators635678003.aspx>

Wisconsin Department of Public Instruction Instructional Media and Technology

<https://dpi.wi.gov/imt/toolset>

**Appendix B:**  
Profile of the South Carolina Graduate

The graphic features a dark blue background with a large yellow scroll in the center. At the top of the scroll, a blue ribbon with a white graduation cap icon is centered. The scroll is divided into three vertical columns. The left column is titled 'WORLD CLASS KNOWLEDGE' and lists 'Rigorous standards in language arts and math for career and college readiness' and 'Multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences'. The middle column is titled 'WORLD CLASS SKILLS' and lists 'Creativity and innovation', 'Critical thinking and problem solving', 'Collaboration and teamwork', 'Communication, information, media and technology', and 'Knowing how to learn'. The right column is titled 'LIFE AND CAREER CHARACTERISTICS' and lists 'Integrity', 'Self-direction', 'Global Perspective', 'Perseverance', 'Work Ethic', and 'Interpersonal Skills'. At the bottom of the scroll, there are logos for 'transformSC' and 'SOUTH CAROLINA COUNCIL ON COMPETITIVENESS'. Below the scroll, there is a copyright notice and a list of adopting organizations.

# PROFILE OF THE SOUTH CAROLINA GRADUATE



## WORLD CLASS KNOWLEDGE

Rigorous standards in language arts and math for career and college readiness

Multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences

## WORLD CLASS SKILLS

Creativity and innovation

Critical thinking and problem solving

Collaboration and teamwork

Communication, information, media and technology

Knowing how to learn

## LIFE AND CAREER CHARACTERISTICS

Integrity

Self-direction

Global Perspective

Perseverance

Work Ethic

Interpersonal Skills

**transformSC**  
The Innovation Mindset for our students

AN INITIATIVE OF SOUTH CAROLINA COUNCIL ON COMPETITIVENESS

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Adopted by: SC Arts in Basic Curriculum Steering Committee, SC Chamber of Commerce, SC Council on Competitiveness, SC Education Oversight Committee, SC State Board of Education, SC Department of Education, TransformSC Schools & Districts

## Appendix C:

### Learning.com February Monthly Report



### Palmetto Digital Literacy Program February Monthly Report

#### Current Registered Districts

As of March 2, 2018, there were 37 school districts (209 individual schools) registered to participate in the Palmetto Digital Literacy Program for the 2017-18 school year. The current list of participating districts includes:

Abbeville	Allendale	Anderson 3	Bamberg 2	Barnwell 19	Barnwell 45	Calhoun
Cherokee	Chester	Chesterfield	Clarendon 1	Clarendon 2	Clarendon 3	Colleton
Darlington	Dillon 3	Dillon 4	Dorchester 4	Fairfield	Florence 1	Florence 2
Florence 3	Greenwood 51	Hampton 1	Hampton 2	Jasper	Laurens 55	Lee
Lexington 4*	Marion	Marlboro	McCormick	Orangeburg 3	Orangeburg 5	Union
Williamsburg*	Williston					

\* - District indicated interest to participate, but have still not submitted registration forms.

Districts currently choosing not to participate include:

Bamberg 1	Berkeley	Florence 4	Florence 5	Laurens 56	Lexington 3	Richland 1
Saluda	Sumter					

#### Year-to-Date and Monthly Statistics

Student/Teacher Data	Previous YTD (January 2017)	Current YTD (March 2, 2018)
Student Accounts Created	28,361	28,641
Student Content Launches	934,569	1,316,062
Teacher Content Launches	3,488	3,865

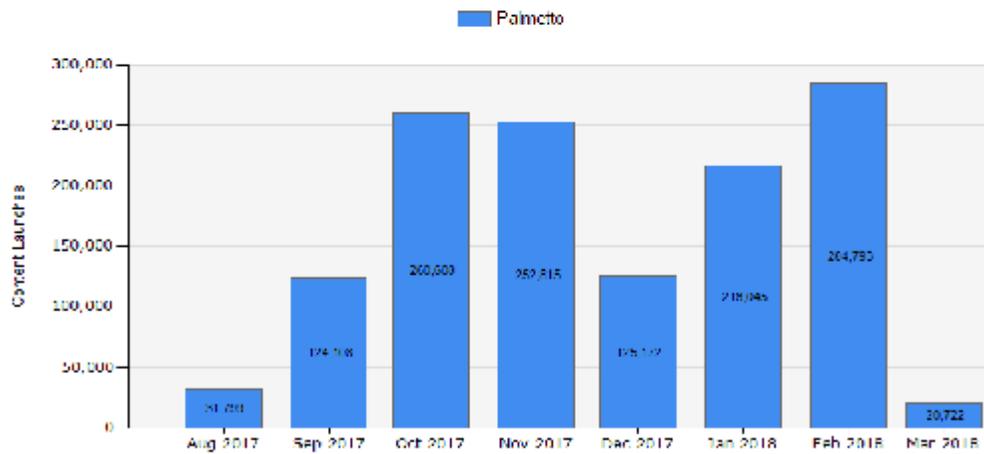
Unique Students per Month, by Consortium



Student Logins per Month, by Consortium



Student Launches per Month, by Consortium



**5th Grade Digital Literacy Pre-Assessment Result (YTD)**

For the 2017-18 school year, all participating districts are required to provide the 5<sup>th</sup> grade digital literacy assessment. Below is the current year to date status of the 5<sup>th</sup> grade pre-assessment for all participating districts

District	Pre-Assessment Data			
	Total Assessed	Avg. Score	# Proficient	% Proficient
Abbeville				
Allendale				
Anderson 3	65	224	7	10.8%
Bamberg 2	1	219	0	0.0%
Barnwell 19				
Barnwell 45	152	236	32	21.1%
Calhoun	81	242	15	18.5%
Cherokee				
Chester	300	230	50	16.7%
Chesterfield	383	222	54	14.1%
Clarendon				
Clarendon 2				
Clarendon 3	48	220	5	10.4%
Colleton	371	219	57	15.4%
Darlington	96	201	5	5.2%
Dillon 3				
Dillon 4	234	205	19	8.1%
Dorchester 4	177	242	45	25.4%
Fairfield	159	245	31	19.5%
Florence 1	1,093	243	240	22.0%
Florence 2				
Florence 3				
Greenwood 51				
Hampton 1				
Hampton 2	24	193	1	4.2%
Jasper	114	195	5	4.4%
Laurens 55	359	230	59	16.4%
Lee	93	214	7	7.5%
Marion	234	183	7	3.0%
Marlboro	138	208	14	10.1%
McCormick	14	196	1	7.1%
Orangeburg 3	79	229	11	13.9%
Orangeburg 5				
Union	257	229	39	15.2%
Williston 29				

**Teacher Digital Literacy Pre-Assessment (YTD)**

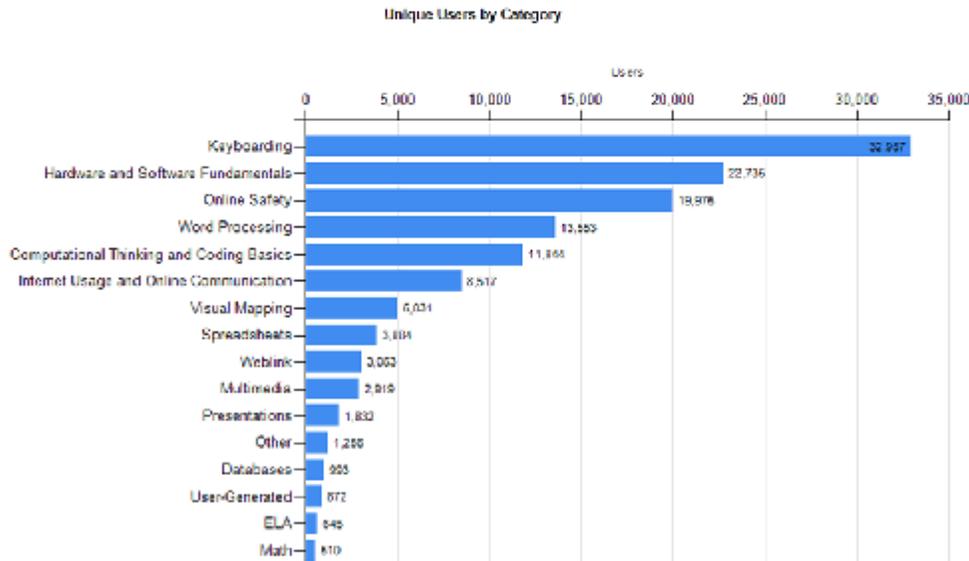
During the 2017-18 school year, districts may choose to utilize the WayFind Teacher Digital Literacy Assessment. WayFind is a teacher assessment that is aligned to the ISTE Standards for Teachers and provides meaningful data to help understand how well teachers grasp 21<sup>st</sup> century teaching skills. District may use the result of the assessment to identify skill gaps and to create Professional Development plans for their teachers.

Below are the districts that have chosen to provide WayFind to their teachers (YTD) and the results.

District	Total Assessed	Avg. Score	# Proficient	% Proficient
Fairfield	22	384	21	95.5
Marlboro	19	375	17	89.5%

**Skill Category Usage (YTD)**

The below graph identifies the skill categories most utilized as measured by student content launches.



**Trainings Delivered or Scheduled**

Date	District	Attendees
7/12	Jasper	Master Technology Teachers
7/26	Dorchester 4	District/School(s) Administration
8/2	Clarendon 2	District/School(s) Administration
8/9	Marlboro	District/School(s) Administration
8/10	Colleton	Computer Lab & Media Specialists
8/11	Chesterfield	Computer Lab Specialists
8/14	Hampton 2	Computer Lab Specialists
8/16	Marlboro	Computer Lab & Media Specialists
8/17	Dorchester 4	Computer Lab Specialists
8/18	Cherokee	Classroom Teachers
8/21	Clarendon 3	Computer Lab Specialists
8/29	Laurens 55	Computer Lab Managers
9/7	Dillon 4	Computer Lab Specialists
9/13	Dorchester 4	Williams Memorial Elementary School
9/18-9/19	McCormick	Computer Lab Specialists
9/20	Marion	Computer Lab Specialists
9/21	McCormick	Computer Lab Specialists
9/22	Lee	Computer Lab Specialists
9/25	Orangeburg 3	District/School(s) Administration, Computer Lab Specialist, Classroom Teachers
9/25-26	Florence 1	Computer Lab & Media Center Specialists
10/6	Clarendon 2	Computer Lab Specialists
10/9	Chester	Classroom Teachers
10/10	Barnwell 45	Computer Lab Specialists, Classroom Teachers
10/11	Dorchester 4	Harleyville Elementary School
10/16	Fairfield	Fairfield Elementary School Staff
10/25	Fairfield	Fairfield Magnet School - Classroom Teachers
11/9	Dillon 3	Latta Elementary - School Administration
12/6	Dillon 3	Latta Elementary - Classroom Teachers
1/19	Colleton County	Computer Lab Specialists
1/24	Florence 3	Webinar for All Staff
1/31	Bamberg 2	New Computer Lab Specialists
2/13	Allendale	Webinar with District Administration
2/15	Laurens County	HS ISS Teacher

## Appendix D:

### Report on 5<sup>th</sup> Grade Pre- and Post Assessments



**Palmetto Digital Literacy Program**  
January 2018 – Report on 5<sup>th</sup> Grade Pre- & Post-Assessments

#### Introduction

A requirement of district participation in the 2017-2018 Palmetto Digital Literacy Program was that all districts deliver a digital literacy pre- and post-assessment to all 5<sup>th</sup> grade students who were receiving digital literacy instruction. The purpose of this requirement was to provide efficacy data to the Education Oversight Committee (EOC), as well as to members of the South Carolina legislature, whom are responsible for funding the program.

During the 2017-2018 school year, Learning.com has worked with the below listed eligible districts to provide access to a comprehensive K-8 digital literacy curriculum that focuses on 11 essential skill areas: Computer Fundamentals, Keyboarding, Digital Citizenship and Online Safety, Web Browsing, Email and Online Communication, Visual Mapping, Word Processing, Spreadsheets, Databases, and Presentations, and Computational Thinking.

Abbeville	Allendale	Anderson 3	Bamberg 2	Barnwell 19	Barnwell 45	Calhoun
Cherokee	Chester	Chesterfield	Clarendon 1	Clarendon 2	Clarendon 3	Colleton
Darlington	Dillon 3	Dillon 4	Dorchester 4	Fairfield	Florence 1	Florence 2
Florence 3	Greenwood 51	Hampton 1	Hampton 2	Jasper	Laurens 55	Lee
Lexington 4	Marion	Marlboro	McCormick	Orangeburg 3	Orangeburg 5	Union
Williamsburg	Williston					

#### Pre- & Post-Assessment Process

All participating districts are to conduct a pre-assessment of all 5<sup>th</sup> grade students receiving digital literacy instruction. This pre-assessment, the Learning.com 21<sup>st</sup> Century Skills Assessment (21CSA), measures students' skills as defined by the 2014 International Society for Technology in Education Standards (ISTE-S Standards). The standards are divided into six strands;

1. Creativity and innovation - Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
2. Communication and collaboration - Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
3. Research and information fluency - Students apply digital tools to gather, evaluate, and use information.
4. Critical thinking, problem solving, and decision making - Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
5. Digital citizenship - Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
6. Technology operations and concepts - Students demonstrate a sound understanding of technology concepts, systems, and operations.

A pre-assessment was delivered to participating districts prior to the end of October 2017. Although a post-assessment is scheduled for Spring 2018 for all participating districts, Learning.com identified three districts who agreed to deliver a post-assessment in mid-December. The purpose of this early post-assessment was to provide preliminary efficacy data to the EOC for evaluation of the program prior to the start of the 2018 legislative session. The three districts agreeing to participate in the December post-assessment were; Dorchester 4, Laurens 55, and Union.

In addition to the 2017-2018 pre- and post-assessment data from the three participating districts, results from the 2016-2017 assessments are also provided, as well as a brief narrative of the results.

Pre- & Post-Assessment Results

21st Century Skills Assessment						
5th Grade Pre- & Post-Assessment Proficiency Results						
	16/17 Pre	Growth	16/17 Post	17/18 Pre	Growth	17/18 Post
Communication and Collaboration	28.40%		Not Assessed	31.90%	10.7%	43.60%
Creativity and Innovation	18.50%		Not Assessed	27.00%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	27.20%		Not Assessed	27.00%	0.4%	27.40%
Digital Citizenship	28.40%		Not Assessed	25.00%	6.6%	31.60%
Research and Information Fluency	21.00%		Not Assessed	27.60%	9.2%	36.80%
Technology Operations and Concepts	21.00%		Not Assessed	23.00%	9.5%	32.50%
Communication and Collaboration	17.50%	8.90%	26.40%	23.70%	12.3%	42.00%
Creativity and Innovation	17.50%	8.30%	25.80%	26.10%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	18.80%	No Growth Measured		21.20%	0.5%	21.70%
Digital Citizenship	22.70%	0.40%	23.10%	20.10%	8.8%	28.90%
Research and Information Fluency	11.80%	7.40%	19.20%	24.70%	6.5%	31.20%
Technology Operations and Concepts	12.70%	No Growth Measured		20.10%	1.6%	21.70%
Communication and Collaboration	31.70%	0.60%	32.30%	27.80%	5.0%	32.80%
Creativity and Innovation	24.00%	2.20%	26.20%	23.00%	No Growth Measured	
Critical Thinking, Problem Solving and Decision Making	29.50%	No Growth Measured		23.00%	22.8%	44.80%
Digital Citizenship	23.00%	No Growth Measured		18.70%	12.6%	31.30%
Research and Information Fluency	14.80%	6.50%	21.30%	20.60%	15.2%	35.80%
Technology Operations and Concepts	17.50%	1.70%	19.20%	17.70%	16.6%	34.30%

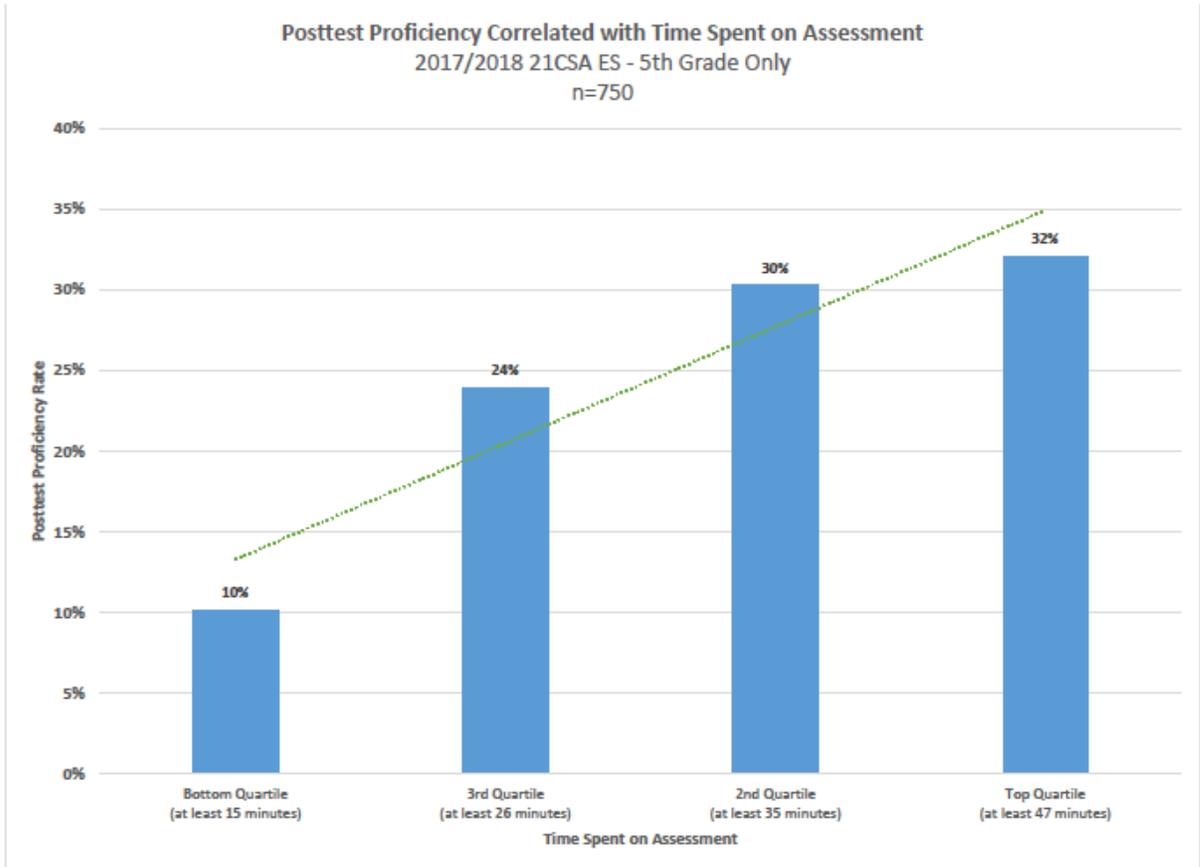
Pre- & Post-Assessment Narrative

As a reminder, the above 2017-2018 5<sup>th</sup> grade pre- and post-assessment scores are based upon approximately 2.5 months of digital literacy instruction. All three districts saw increases in proficiency in 5 of the 6 ISTE strands, with no growth measured in the Creativity and Innovation strand. Although further examination is required; with only 2.5 months of instructional time between the pre- and post-assessment, it is possible that the lessons and instruction related to this specific ISTE strand have not yet been engaged at the level necessary to impact student skills as measured by the 21CSA.

Also, in comparing the 2016-2017 post-assessment results (conducted in the Spring of 2017) to the 2017-2018 post-assessment results (conducted in December of 2017), we can see that with the exception of the ISTE strand previously identified (Creativity and Innovation), the current 5<sup>th</sup> grade students demonstrated a higher digital literacy proficiency than their 2016-2017 peers. One potential reason may be related to the fact that the current 5<sup>th</sup> grade students received digital literacy instruction as 4<sup>th</sup> graders (2016-2017 - first full year of the Palmetto Digital Literacy Program), thus positioning them positively for the current 2017-2018 school year.

# Appendix E:

## Duration



*The SC Education Oversight Committee is an independent, non-partisan group made up of 18 educators, business persons, and elected leaders. Created in 1998, the committee is dedicated to reporting facts, measuring change, and promoting progress within South Carolina’s education system.*

**ADDITIONAL INFORMATION**

If you have questions, please contact the Education Oversight Committee (EOC) staff for additional information. The phone number is 803.734.6148. Also, please visit the EOC website at [www.eoc.sc.gov](http://www.eoc.sc.gov) for additional resources.

The Education Oversight Committee does not discriminate on the basis of race, color, national origin, religion, sex, or handicap in its practices relating to employment or establishment and administration of its programs and initiatives. Inquiries regarding employment, programs and initiatives of the Committee should be directed to the Executive Director 803.734.6148.