



# Digital Learning Environment Plan

## Frequently Asked Questions

### **Where can I access the complete Digital Learning Environment Plan / Proposal, as approved by the Board of Education on February 27, 2017?**

The complete Digital Learning Environment (DLE) Plan for Community Consolidated School District 181, approved by the Board of Education on February 27, 2017, is posted on the District website: [www.d181.org](http://www.d181.org) > Learning > Digital Learning Environment. It can also be found on BoardDocs with the February 27, 2017 meeting (Agenda Item 8A). Related resources and supporting documents, such as our six Belief Statements for Digital Learning, are also posted on both sites.

### **How does the Digital Learning Environment work connect to the District's Strategic Plan?**

The first goal in our District 181 Strategic Plan is to "Provide a high quality curriculum that enables all students to achieve their full academic potential and develop 21st century skills." Further, Strategy 1a-7 states that we are to "Integrate the Digital Learning Environment beliefs, needs, resource deployment and replacement cycle, as well as digital learning environment professional development needs into curriculum and instruction related strategies outlined in 1a-5 and 1a-6." The DLE Plan represents efforts to move closer to achieving our goal and specifically, Strategy 1a-7.

### **Why did the administration engage in Digital Learning Environment planning?**

The following concerns are some of the key issues that had been consistently outlined in the District's digital learning work:

- Lack of strategic vision
- Inconsistent access to devices
- Inequities between schools and grade levels
- Lack of a complete replacement cycle for all devices

These ongoing issues had resulted in significant challenges when we attempted to coordinate staff professional development, resource purchases, long-term budgeting, lesson planning, opportunities for teachers to provide differentiation and just-in-time learning for all students, and parent engagement related to technology. These challenges in turn created confusion in our system as well as a financial burden for our Parent-Teacher Organizations, as they had provided substantial contributions to support our technology needs and had long been seeking clear direction from the District. The D181 Foundation additionally had provided considerable donations to assist in our digital learning work over the years.

### **What is achieved with approval of the Digital Learning Environment Plan?**

- We have a strategic and comprehensive vision for digital learning that can be clearly stated to parents and the community.
- All students in grades 3-8 will have access to a personally deployed device at the same time starting in the 2017-18 school year. No group of students will wait for a phased-in deployment plan.
- No matter the building, students will have the same digital learning opportunities.
- All devices will be on a District-maintained replacement cycle.
- We have a multi-year plan for device purchasing to aid in budget decisions, curriculum renewal, and resource adoptions.
- We can better plan for and more consistently provide staff professional development.
- The D181 Foundation and the PTOs will no longer be asked to purchase instructional devices.

### **What is the plan for the deployment of devices by school and grade level?**

- Students in Grades K-2 will have a shared environment with a student:device ratio of approximately 3:1. The number of devices will be based on enrollment; schools with a higher number of K-2 students will receive more devices. The device in Grades K-2 will be an iPad. In the first year of implementation (2017-18), the iPad will not be more than two years old and would have been purchased by either the District or previously purchased by the school's PTO. In subsequent years, the device may be up to three years old but still confirmed to be in good working condition.
- Students in Grades 3-5 will be in a 1:1 environment, with Grade 3 as the year when students will begin to take the device home. The device in Grades 3-5 will be an iPad with a wired keyboard. In the first year of implementation (2017-18), the device will be new or less than two years old. In subsequent years, the device will be purchased new at 3rd grade and move with the student for the next two school years. After a student completes 5th grade, the device will either be moved to the K-2 shared environment or sold at the conclusion of the lease.
- Students in Grades 6-7 will be in a 1:1 environment. The device in Grades 6-7 will be a Chromebook. In the first year of

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implementation, the device will be new or less than two years old. In subsequent years, the device will be purchased new at 6th grade and move with the student for the next two school years.

- Students in Grade 8 will be in a 1:1 environment. For just the 2017-18 school year, 8th graders will use three year-old MacBook Air laptops, which we anticipate will still be in very good condition for the purpose of instruction. Beginning with the 2018-19 school year, all middle school students will use Chromebooks.

#### **After a student completes 8th grade, will the student's parents have the option to purchase the Chromebook?**

It is anticipated that after a student completes 8th grade, the student's parents would have the option to purchase the Chromebook for a small fee. It may be possible that the device can be kept without the need to charge a fee.

#### **What specific devices will be purchased?**

We have budgeted and planned for the iPad Air 2 and Lenovo Yoga 11e Chromebook. Technical specifications for both devices are posted on the Digital Learning Environment webpage.

#### **What if a student needs to have their device repaired or replaced, or a new student moves into the District? Will there be enough devices for them?**

When purchasing new devices moving forward, we intend to have a device inventory of approximately 5% above the anticipated 1:1 requirement so that: (1) students do not have an extended wait time if their device needs to be repaired or replaced, (2) we can account for the potential of new students beginning after the start of the school year, and (3) we have sufficient devices for staff. This +5% is included in the device budget. Please see the Deployment Plan (posted on BoardDocs and the DLE webpage) for a chart showing how devices will move through our system over four years (2017-18, 2018-19, 2019-20, 2020-21).

#### **How is the purchase of devices being funded? Will there be a technology fee, and if so, when is it being implemented?**

All new devices purchased for distribution at the beginning of the 2017-18 school year will be on a three-year lease. The short-term and long-term funding solutions will be a combination of funding sources as follows:

- For the 2017-18 school year, the cost of the lease will be subsidized by the resale of older District-purchased and PTO-purchased iPad and MacBook Air devices. (Please see the following related documents posted to BoardDocs and the DLE webpage: Device Inventory and Remarketing, Diamond Assets Apple Trade-In Program, and District 181 Equipment Value Estimates.)
- For the 2018-19 school year and beyond, some funds will be allocated from the District budget and we will implement a new technology fee. The annual K-2 recommended fee is \$25 per year and the recommended fee for Grades 3-8 is \$75 per year. The administration has had extensive discussions with PTO representatives regarding the implementation of this fee. There was widespread consensus that the District should implement the fee as proposed. In fact, the PTO leaders were in agreement that this fee was warranted as families will see the benefit of the fee almost immediately. The fee amounts will be brought forward for Board approval during the 2017-18 school year in time for 2018-19 registration.

Please see the Deployment Plan (posted on BoardDocs and the DLE webpage) for an overview of the device purchases as they relate to long-term costs. Please note that device numbers are based on Kasarda "B" enrollment figures.

#### **Are there other cost considerations, beyond devices and staffing?**

We are proactively identifying potential and confirmed additional expenses related to the implementation of this DLE plan. This ranges from software to support our curriculum (i.e. applications) to equipment. Depending on the purchase, the cost is being included in either the Department of Learning and/or Technology Department budget. Below are some examples of items that have been allocated in the 2017-18 budget.

- Home Filtering: We plan to replace our current web filtering system with a new system that also allows for at-home filtering. We anticipate there could be an increase of up to \$10,000 for this additional service.
- Carts for iPads: We have a total of 58 carts that can store 30 iPads. We anticipate needing approximately 73 carts of this size (\$22,500 for 15 carts at \$1,500 per cart).
- Cables for iPad Charging: \$15,000
- Casper Licenses (Mac Management Tool) and Airwatch Licenses (iPad Management Tool): We anticipate a decrease in the current licenses for Casper if we sell existing Mac computers, which will result in an \$8,000 cost savings. However, we anticipate an increase of approximately \$14,000 in the cost of Airwatch Licenses.

#### **Is D181 going to need to invest additional dollars in its infrastructure at this time?**

D181 has a very robust infrastructure to support implementation of the DLE plan. This includes but is not limited to WiFi

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access points, internet bandwidth, layer 3 routing, and distribution switching. This work has been ongoing and comprehensive, therefore we do not anticipate an additional investment is needed at this time.

**Will a carrying bag be provided with the middle school devices?**

For 2017-18, we plan to purchase a device carrying bag for all middle schoolers which would hold either the Chromebook or MacBook Air (for 8th graders in 2017-18). It is important to note that hard-shell cases cannot be used on the Chromebooks we are planning to purchase due to the device converting into a tablet when folded. In lieu of a case, the carrying bag may help reduce the amount of damage the devices may otherwise experience in being transported between classes and from home-school in a 1:1 environment.

**Will the K-5 iPads have a keyboard?**

The plan includes wired keyboards (not wireless/Bluetooth) to be included with each iPad. The Deployment Plan shows the plan budget, which incorporates the cost of keyboards. We will work closely with teachers regarding the needed use of keyboards at the elementary level and may reduce the cost of implementing this plan by reducing the number of keyboards. It is possible that purchasing classroom sets of keyboards will suffice, but the current budget accounts for the purchase of one wired keyboard per iPad.

**Will this Digital Learning Environment plan impact our students' ability to complete standardized assessments?**

The District has been using both iPads and Chromebooks in various instructional settings for several years. We have enough experience with both to know their strengths and limitations. Additionally, both PARCC and MAP have confirmed that their assessments will perform properly on either device per their official Technology Requirements (posted on BoardDocs and the DLE webpage). As has always been the case, if an assessment is not compatible with the devices we have, we will administer the test with paper/pencil based on State guidance, an option necessary for many Illinois school districts.

**How are apps currently purchased for student devices?**

Currently, the purchase of apps is done at the building level through building budgets, with apps chosen by teachers from among those apps approved by the App Review Committee. For 2017-18, we will collaborate with building administrators to budget for these purchases at the school and/or District level.

**What is going to be the role of PTOs moving forward as related to technology purchases?**

The administration does not believe the PTOs should be relied upon to provide essential curriculum tools for learning. In our conversations with PTO leaders, they have agreed with this point, that like textbooks, devices used as a primary tool for instruction and engagement should be provided by the District and coordinated at the District level. We also want to support the PTOs in being able to use their hard-earned funds for a variety of other projects and resources in the schools. With this plan, Grades 3-8 will be 1:1 and at the K-2 level, we will not want more devices than the shared ratio we have established. Therefore, PTOs will not be asked for additional devices and we will not accept additional devices. Instead, technology purchases will be limited to different, above-and-beyond technology tools that can be used to enhance learning in the classroom or through extra-curricular activities. This may include but might not be limited to whole-class presentation tools, software for enhancing information or providing additional skills acquisition opportunities for students, and other technology solutions that are not a part of the DLE plan. Any technology purchase recommendations from school PTOs will be required to go through an approval process at the school level and may involve the Department of Learning and Technology Department as needed.

**What kinds of communication / learning opportunities can parents expect with regard to this implementation?**

In the early fall, we anticipate creating a series of opportunities for parents to learn more about this work and how they can most effectively be engaged in digital learning alongside their students. This could involve a school-based meeting, possibly connected to an existing school event (i.e. Curriculum Night). We are currently envisioning a video series to complement that information, with short (five minutes or less) segments that could include these topics, among others:

1. The Plan and Purpose (i.e. why we're doing this, the District-level plan)
2. Helping at Home (i.e. how to help with homework, apps, resources, tools)
3. Device Protection (i.e. care and repair protocols)
4. Security and Data Protection (i.e. filtering content)
5. Digital Citizenship (i.e. appropriate online behavior)
6. Digital Skills (i.e. working with you child to strengthen his/her technology readiness with age-appropriate resources)

Similarly, we need to ensure consistent messages and training are provided to students on these topics. Because we already

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have select schools and grade levels in a 1:1 environment, we have systems and forms in place for this work. The Department of Learning, Technology Department, and Communications Department will work together on these components and will involve additional staff (i.e. CIACC) and parents (i.e. PTO Presidents) as needed.

**Are there standards in Illinois for technology? Is the District planning to create a “technology skills map” for students?**

Illinois has adopted the International Society for Technology in Education (ISTE) Standards, which emphasize the skills and qualities students need to engage and thrive in a connected, digital world. Examples include “creative communicator,” “computational thinker,” and “innovative designer.” Additionally, we have D181 Information Literacy Standards, which are based on guidelines from state and national educational and technology organizations and are aligned with the Common Core State Standards. The research and media skills outlined in these standards are designed to be integrated across the District curriculum.

Beyond these standards, we previously identified the need for a technology skills map, a resource that would outline the specific tasks a student should be able to complete by grade level. For example, we know that keyboarding is a topic of concern for some staff and parents, as students need to be increasingly confident in their word processing for research, assignments, and testing. We do not currently have a set time in the school day at select grade levels to teach keyboarding skills. Rather, like many of the technology-based skills our students possess, it is learned organically as part of ongoing schoolwork and on personal time. The challenge is that we simply do not have time in the school day to focus specifically on such tasks as doing so would require a reduction in time spent on other subjects.

While keeping those challenges in mind and acknowledging the potential benefit of a skills map, it is our intent to make this a key task during the 2017-18 school year.

**What is the plan for staff professional development?**

We recognize that professional development (PD) is essential to successful execution of the DLE plan. Some of that work has already begun because as we have been engaging in extensive curriculum writing and development for all content areas this year, technology is being interwoven and integrated, just as it is in classroom instruction. We are building a solid foundation based on high quality curriculum.

It is also important to note that we have staff members already experienced in a 1:1 environment and/or experienced in the fundamentals of effective technology integration. While we have been referring to this work as an “initiative” at times, the reality is that our teachers and support staff have had exposure to technology. Some of our staff are already prepared for the impact of this District-wide plan due to their experience in D181, or in some cases, their experience in previous school districts.

With the plan now approved, the Department of Learning will engage the leadership of our two staff associations (HCHTA and HESS) and the District’s Staff Development Committee in creating a multi-year PD plan that incorporates a technology focus where appropriate. The Curriculum, Instruction, and Assessment Advisory Council (CIACC) will also be asked to weigh in on this work. We anticipate the May 2017 Institute Day will have a technology component, and the tech learning will continue with staff development sessions that take place prior to the start of the 2017-18 school year. Because this device roll-out is no longer being phased-in (as was being considered in an earlier proposal), the PD plan will be more consistently delivered.

We know that the most effective PD is ongoing and job-embedded whenever possible, so we will incorporate opportunities throughout the coming school year for staff to receive training and collaborate with one another. One way this will be accomplished is through the use of Teachers on Special Assignment (TOSAs). Our 2017-18 staffing plan will include three teachers working with their D181 colleagues to support effective technology integration and lesson planning, among other job-embedded PD activities. We anticipate that our Media Resource Center (MRC) Directors will also be essential in supporting the successful District-wide roll-out of this plan and staff PD.

Another service to enhance our professional development offerings will be opportunities coordinated through the high quality trainers from Apple and Google and their partner organizations.

We plan to hold on increasing in-building Help Desk Technician staffing at this time, as we believe our current staffing levels will be sufficient for 2017-18. However, this is an area we will be monitoring closely. We will need additional technology help this summer due to the scale of our deployment plan to ensure we are ready for the start of next school year.

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### **Which devices will staff be using?**

Staff in K-5 will have both a MacBook Air and iPad. Middle school staff will have a MacBook Air. While the middle school students will be using a Chromebook, the MacBook Air can run the same Google Chrome web browser, therefore they will be using the same essential tools that their students will be using. In order to fulfill their professional responsibilities, the middle school teachers need the more robust tools offered by a MacBook Air. While the MacBook Air is a more costly device, our research and experience shows that the MacBook Air is likely to last longer and provide greater performance. We plan to have the staff MacBook Airs on a four-year replacement cycle, while the student Chromebooks will be on a three-year cycle. The costs for staff devices are included in the plan budget, as shown in the Deployment Plan (posted on BoardDocs and the DLE webpage).

### **Why is the District implementing the Learning Management System Canvas?**

A Learning Management System (LMS) is a software application or web-based technology that is used for the management, organization, and delivery of resources, instruction, and learning processes, which often include assessing and monitoring student progress. Specific tools within the LMS can enable students to work in collaborative groups, communicate with peers and instructors, post completed assignments, receive feedback, work from multiple locations, and more. We have been focused on the Learning Content Management System side of the LMS as well as the Learning Management System itself. The content management side incorporates the support of content development, the opportunity to reuse that content, and the publication of the content. Additionally, we are interested in the functionality of the LMS, which includes but is not limited to the following: course content delivery, curriculum management, skills and competencies management, skill gap analysis, individual development plan, assessing and recording, reporting resource management, and virtual organizations.

Canvas is the system that was approved by the Board of Education at the February 27, 2017 Business meeting. Canvas is reported to be a reliable, customizable, user-friendly LMS. Students, teachers, and professional learning communities can use multiple devices to collaborate on-site or off-site. Its features include automated tasks, varied collaboration and communication tools, collaborative workspaces, assessment and progress monitoring tools, parent co-enrollment, instructional design management, and tools for aligning instruction to Common Core State Standards.

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