Phase III PDL: Expansion to Elementary Grades and Continuation for Middle and High Grades

Phase III of the District's Personalized Digital Learning (PDL) initiative would expand to elementary grades 3-5 in Fall 2015 as the final phase of the 1:1 device deployment for grades 3 through 12. Middle and high school PDL would continue into years two and three, respectively, with some changes to processes.

RECOMMENDATION

Expand 1:1 to Grades 3, 4, and 5

Continue the original plan to expand the District's 1:1 PDL initiative to grades 3, 4 and 5 for the 2015-16 school year with a device (TBD) for each student, with a value not to exceed \$600 per unit including all peripherals. We still believe this is the most instructionally sound decision to continue our District's move to place 21st Century learning tools in the hands of all elementary students in grades 3-5. Elementary devices would not go home with students.

2015-16 Cost: approximately \$6 million, refreshed every four years

OPTION 2: 1:1 for Grades 4 and 5

This would provide 1:1 PDL devices to only Grades 4 and 5 for the upcoming school year, but would allow future consideration to expand to Grade 3. We think there are instructional advantages to doing whole grade 1:1. Devices would not go home with students.

2015-16 Cost: approximately \$4 million, refreshed every four years

OPTION 3: 1:1 for Grade 5 only

This would provide 1:1 PDL devices to only Grade 5 for the upcoming school year, but would allow future consideration to expand to Grades 3 and 4. Again, we think there are instructional advantages to doing whole grade 1:1, even if for only one grade. Devices would not go home with students.

2015-16 Cost: approximately \$2 million, refreshed every four years.

FINANCIAL IMPACT

The Capital Fund (from the Penny Sales Tax) has earmarked \$9.1 million per year for the last five years for technology, including funds for PDL devices and infrastructure for middle and high schools. The plan to continue that commitment into the future was previously approved as part of the long-range Capital Projects funding plan.

ELEMENTARY DEVICE SELECTION

In order to expedite the device selection process, District staff asked for feedback from all teachers (389) in grades 3-5 asking their preference between the Apple iPad and Dell Venue tablet. They also had the option of suggesting an "Other" device. Of the 355 surveys completed Feb. 4-5 (91% return rate), 59% of teachers stated a preference for the Apple iPad; 26% preferred a Venue; 15% suggested another device. Based on those results and our experiences in classrooms to date, *our current preference would be the iPad as the device for elementary schools*.

DIGITAL CONTENT

Digital Content possibilities for Grades 3, 4, and 5

The District staff has collected the list of most likely digital content providers, shown in the chart below. It is important to note that both the iPad and Windows-compatible devices (such as the Dell Venue) will run all of the identified programs except Compass Odyssey as noted. As part of the district's ongoing effort to select digital content, an extensive list of providers has been shortlisted for further review by school leadership teams. This review will take place in early April. Most content providers under consideration have transitioned to supporting multiple platforms. Compass Odyssey will be replaced by a similar solution in the event that their iPad-accessible content is not ready by early Summer 2015.

List of Possible Providers for Elementary Schools			
Provider	Content Area	iPad Compatibility	Windows (Venue) Compatibility
Triumph Learning Waggle *	Math and ELA	Yes	Yes
Compass Odyssey*	Reading, ELA, and Math	Not at present time	Yes
Classworks *	Math, Reading, ELA, and Science	Yes	Yes
Lexia Learning	Reading	Yes	Yes
Achieve 3000 *	Reading and Writing	Yes	Yes
No Red Ink	Grammar and Writing	Yes	Yes
ALEKS	Math	Yes	Yes
ST Math	Math	Yes	Yes
Dream Box Learning	Math	Yes	Yes
Discovery Ed Science Techbook	Science	Yes	Yes
Imagine Learning	Language and Literacy	Yes	Yes

^{*} MAP test compatible as NWEA partner

FINANCIAL IMPACT

Digital content must be paid from the District's General Fund. There is a 2015-16 General Fund Budget package totaling \$1.7 million for PDL Phase III. This completes the three-year rollout for digital content across grades 3-12. Digital content for grades 6-12 is already included in the District's base budget developed for PDL over the past two years.

TIMELINE AND RESOURCES FOR DEPLOYMENT

1. High Schools' re-deployment of Venues – During the first two weeks of school in Fall 2015.

District staff is currently finalizing a major commitment from Dell to replace all current Venues with new (and improved) devices due to the high number of hardware issues with our original inventory. Dell will take back our entire current inventory at the end of the current school year. Dell will also provide manpower resources needed to re-distribute new Venue tablets to approximately 12,000 students at no additional cost to the District. The devices would be asset tagged and imaged by Dell prior to redistribution in the Fall. We have sufficient staff to assist with the re-distribution over a staggered schedule with middle and elementary schools. Re-deployment should take no more than one day per high school.

Middle Schools' re-deployment of iPads – Immediately following the high school redeployment in weeks three and four of school in Fall 2015

District staff has received a commitment from Apple representatives to provide sufficient manpower from Apple to re-distribute iPads to approximately 10,000 students at no additional cost to the District. We have sufficient staff to assist with the re-distribution over a staggered schedule with high and elementary schools. Re-deployment should take no more than one day per middle school.

3. Elementary Schools' deployment of devices TBD – Beginning on or around October 1, 2015

The deployment schedule would be delayed until completion of the high school and middle school redistributions, freeing up District staff to deploy elementary devices at a rate of one school per day (at a minimum) in order to finish in one calendar month. We have a commitment from Apple to provide manpower resources for the deployment if the iPad is the chosen device. If another device is selected, we will work with that vendor to secure a similar commitment for deployment. As with the other two levels, the District staff is sufficient to handle the staggered deployment – particularly with the commitment of support from the most likely vendors.

FINANCIAL IMPACT

None

STAFFING IMPACT

None since Apple and Dell have agreed to provide manpower assistance with deployment.

OTHER DEPLOYMENT ISSUES AND SOLUTIONS

iPad Under 13 accounts

Last year there was much frustration related to getting parents to give permission for needed iTunes accounts for students under the age of 13 through Apple's process. There have been changes at Apple's level that should ensure a smoother rollout procedure, including "under 13" accounts. In addition, new permission forms will be part of the District's online registration forms that parents can access in Spring 2015. Should iPads be selected for elementary students, there will be the need for those parents to also sign U13 forms. As an extra option beyond online registration, Apple has pledged on-site manpower to assist with the deployment process that could include setting up iTunes accounts with parents.

Device roll-overs to grades 6 and 9

Devices returned from this year's students in grade 8 at middle school will have to be collected, wiped clean of all data, and prepared to distribute to students in grades 6. That work will be done during the summer months and should not create workload demands beyond the District's ability to cover. It is also planned to make sure that all current fifth graders in our system are enrolled with iTunes accounts prior to the end of the current school year in order to accelerate their transition to grade 6 in the Fall. The transition from grade 12 students' devices to incoming ninth graders will be taken care of with the new Venue distribution at the beginning of the school year.

FINANCIAL IMPACT

None

STAFFING IMPACT

None

WIRELESS UPGRADES

Elementary building Wi-Fi

Work is ready to begin immediately on installation of wireless access points in all elementary schools in preparation for the 1:1 rollout in Fall 2015. That work will be completed before the scheduled distribution of elementary grades devices. The work will be done through a pre-arranged combination of in-house technology staff and an outside contractor as was used with the middle and high school upgrades.

FINANCIAL IMPACT

No additional funding is required since this is included with the infrastructure upgrades approved previously as part of the long-range Capital Projects Plan for technology.

STAFFING IMPACT

The District already has an in-house low-voltage wiring team in Technology, and they coordinate work with CMI, an outside contractor that was awarded an eRate-eligible contract for various structured cabling work.

REPAIRS

Dell Venues — Repairs for breakage and for warranty work are currently all being done by Dell, either through the certified technician they provide on-site at no cost to the District or through their repair facility. Additionally, Dell has placed service technicians at our high schools during second semester to provide on-site assistance. This year was hopefully unique in that the overwhelming share of the repairs were due to either faulty chargers, keyboards, ports or daughter boards — which Dell has replaced as warranty items. That led to back-orders for parts that should not be a problem moving forward. Dell has agreed to replace all Venues with new models and all required supporting manpower in time for the opening of school in August. This will be done at no cost to the District. We are continuing conversations about repairs for next year, but based on current information we recommend that most if not all repairs continue to be completed by Dell.

iPads – Repairs for breakage are currently being done by local vendors with the average time lost for repairs at 10 days. We chose to "self-insure" against breakage due to the high cost of total Apple Care at the time we purchased the middle school iPads. Glass breakage repairs run from \$100 to \$125 each. We are in conversations with Apple about warranty and repairs for breakage with any new iPads we purchase, as Apple representatives have shared that they are in the process of restructuring their warranty package for large enterprise customers such as Horry County Schools. We have been advised by Apple that they are not aware of districts with in-house iPad repair operations, and we do not recommend doing so. We are concerned about the large number of potential iPad repairs that will need to be done during the Summer months, assuming many students have delayed glass replacement during the school year. We will solicit additional repair vendors to handle the workload.

Loaners – We initially purchased an inventory of around 10% of the devices to be used as "loaners" while insured devices were being repaired. Our practice has been to provide loaners to those students with purchased insurance first, and to others as available (with parent agreement for responsibility). We do not feel that we should carry an inventory for loaning larger than the current level. We may be able to have a different solution depending on our warranty and repair agreements with Apple and Dell for the coming year.

Summer Repairs – We are making plans for an anticipated upswing in device breakage repairs in Summer 2015. Since users were responsible for breakage repair costs (either through insurance fee or personal responsibility), we think many students may have gone through the year with a minor cracked screen that will need repair over the summer. This will not be an issue with the Dell Venues since they will be replaced, but middle school iPads would be impacted. In preparation for the volume, the District technology department is seeking additional vendors for repairs from across the state and region.

MOVING FORWARD: We are also in conversations with Apple and Dell vendors regarding the cost of having full warranty and breakage repair included in the cost of purchase of any new devices. Feedback from Apple is that in-house repair shops are not the norm. We have one Dell-provided technician on-site for repairs, and we have some Dell-provided repair technicians in the high schools this semester. This will be an ongoing discussion with Dell over the next month, and is a critical piece of our insurance fee as we prepare to move into next year.

FINANCIAL IMPACT

This is currently being covered by the District's optional insurance/breakage fee, but changes to the fee or changes in how we move forward with complete care options with either Dell or Apple will have an impact that cannot be determined at the present time. We will have enough information to make a recommendation within the next month, but the basic idea has always been to make repair for breakage as close to self-supporting as possible.

STAFFING IMPACT

None presently. There is virtually no repair on iPads except for glass breakage repair, and all of that is outsourced as we believe this is the most cost-effective approach. All Dell repairs are currently being done by Dell, and we would prefer to continue that arrangement with a combination of warranty and complete care agreements. Glass breakage repairs for Dell Venues could be handled differently due to the lessor availability of local vendors. That could lead us to consider a Dell-certified repair person added to the Technology staff, but it is too early in conversations with Dell to make that decision.

SCHOOL-LEVEL SUPPORT

School Technology Support

Based on a request from middle and high school principals and from the Finance/Human Resources Board Committee, a new budget package is being developed for building-level technology support positions for each school in the District with PDL 1:1. These will be 1.0 FTE support staff positions with 200-day contracts. We anticipate the cost of this package to be approximately \$1.7 million if all schools get a position. The cost would be cut in half if only middle and secondary schools get positions, with elementary positions an option. These positions would report to the building principal, but would receive training from the District Office staff. These positions would also be available to District staff during periods of need during device deployment and collection. Duties would include:

- Assist with deployment and collection of devices
- Monitor inventory of devices in schools
- Assist with tracking fee collection and record-keeping related to insurance and/or repair costs
- Handle logistics of shipping and receiving devices for warranty or repair work
- Provide appropriate level of technical assistance
- Assist with all technology related communication between school and District and help manage work orders

FINANCIAL IMPACT

One position for all schools elementary, middle and secondary: \$1.7 million in 2015-16;

Approximately \$850,000 if positions are only placed in middle and secondary schools (recommendation) with elementary schools added later.

STAFFING IMPACT

No impact at the District level except coordination on matters related to PDL.

INSURANCE

District staff is currently considering the best option for next year regarding insurance for damage/breakage. Checks with other districts, including Mooresville (NC), Richland 2, Lexington 1, and Rock Hill found that the \$50 fee is the standard with one breakage repair covered as part of the districts' self-insurance. Currently, around two-thirds of HCS students have our \$50 breakage insurance. We have explored the idea of a reduced annual technology fee required of all students – but would need 100% of students paying in order to cover our current breakage repair costs. District staff members are also discussing comprehensive coverage with both Apple and Dell for new devices, and that may be an option providing we can make it cost effective. These are obviously large budget decisions regardless of the direction we ultimately decide to take. We are too early in those discussion stages to make a final recommendation. However, the necessity of school-level support would be reduced if insurance collections and paperwork for our self-insure model were eliminated.

FINANCIAL IMPACT

None anticipated if we continue the self-supporting optional breakage fee. Changes to the fee to make it universal or to reduce it will result in lost revenue that will have to be considered as we develop the plan to handle breakage repairs. It is too early to provide adequate financial information, but we will be able to make a recommendation within the next month.

STAFFING IMPACT

New school support staff would be impacted by the method in which we handle insurance and breakage repairs. The District Technology staff is being re-organized to have one person in charge of inventory tracking, service orders, etc.

SUMMARY

- We recommend expansion of PDL 1:1 to elementary grades 3, 4 and 5 in 2015-16.
- Our current preference would be for the iPad as the device of choice for elementary students after feedback from the school level and consideration of curricular needs associated with PDL.
- The cost of the expansion has been considered in the Capital Fund Projects Long-Range Plan and is considered sufficient to move forward.
- Digital content has been pre-screened, and all content under consideration is well-suited for use with the either device under consideration. A General Fund Budget package has been developed.
- The District is well-prepared for the deployment of devices at all three levels in Fall 2015 utilizing a staggered schedule that does not overlap and utilizes manpower support from both Apple and Dell on site. District staff is sufficient with this assistance.
- Apple has agreed to assist with registration issues that hampered the deployment of iPads at middle schools; similar support would also be provided at elementary schools.
- Dell has announced the total replacement of all Venue tablets in use at the high school level, which should take care of warranty issues experienced this year.
- School infrastructure upgrades are delayed due to the elementary PDL decision, but the
 District Technology staff is staffed and confident the work will be completed before
 deployment in Fall 2015.
- Decisions on repairs for the upcoming year are pending based on possible changes in agreements with Apple and Dell. However, the District Technology staff does not need additional staff for repairs since out-sourcing continues to be the most cost-effective solution.
- As requested, school technology support staff positions have been recommended in a separate General Fund Budget package.
- Decisions on insurance are still in the discussion and fact-gathering stage, but we will be ready to present a recommendation in one month.
- The District Technology staff and Learning Services staff are confident that we are adequately
 prepared to make the 3-12 PDL initiative successful as we complete the third phase of the
 rollout in 2015-16.