

1. Pages 2-7 of Initial Response - It would be helpful to capture the benefits of 1:1 (e.g., expanding digital access, student familiarity with their device for assessments, preparation for use of digital technology and resources post-high school) and the disadvantages of not pursuing 1:1 in a one or two page document or slide for sharing in public session.

Examples of Benefits and Limitations	
Benefits	Limitations
No more need to sign up to use technology (no longer a “shared resource” with limited access)	Teachers will need training in Netsupport or similar software to help monitor student use of technology during classroom.
Student organization: students can organize digital documents. (Perhaps a reduced need for large binders?) Access to google calendar where team assignments, reminders are posted	Access points and/or bandwidth may need to be enhanced with increased wireless access.
Moves us closer to a paperless classroom through the use of Google Classroom.	
All students will have electronic access to instructional materials (making it easier for students to access make-up work: reducing the need for parents to pick up missed work)	

2. Page 2 of Initial Response (review of research on 1:1) – Please provide links to or copies of what you consider to be the most important articles on 1:1 learning in elementary and secondary schools.
 - **Link to documents:** <https://drive.google.com/drive/folders/0B-Fn8R1LfRD-WnhZSDRDY3IPM2c?usp=sharing>
3. Pages 2-5 of Initial Response – The responses on Bring Your Own Device (BYOD) in the Initial Response are greatly appreciated. Please expand on (1) are WMS students currently using their own devices and, if so, which kinds of devices and for what purposes (to the extent online usage is tracked); (2) the experiences reported by the faculty with in-class use of those devices; and (3) what the plan is with respect to the use of students’ own devices if 1:1 is implemented.
 - **Staff report a minimal amount of students bring in their own device. The majority of lessons integrating 1:1 access to technology are facilitated through the Chromebooks that are available currently in the school.**
 - **We have not finalized the conversation with the school regarding the use of personal devices once the 1:1 program is begun.**

4. Page 5 of Initial Response (review of other districts on 1:1) – Please share how other districts have implemented 1:1 (i.e., grade level by grade level or all middle school grades together) and financed their 1:1 programs. Also, please describe any tangible evidence of success experienced and any lessons learned by these districts since they implemented 1:1 that you are aware of.
- Students are working multiple mediums, accessing new and additional resources.
 - We contacted several other districts and to obtain the information you requested. The following are summaries of the responses we received:
 - Area District 3 - They have 1:1 iPads at the High School. They began this effort in the 2011-2012 school year by providing iPads to the freshman class and staff. The program continued 2012-2015 with each incoming freshman class.
 - Area District 4 Area District 1 - They deployed 1:1 in grades 6-8 this past September. They charge \$27.85 per student for insurance and handle all claims for the students. They do maintain over 100 spares for student use, when necessary. Their expectations are increased engagement, authentic personalized learning, collaboration and communication, 21st century learning and digital citizenship.
 - Area District 2 - They deployed 3,700 iPads and 4,500 Chromebooks to 15 schools at the beginning of the year (2015-2016 school year) Utilized 1,000 devices during summer school. There were minimal (5) digital safety issues district-wide during the school year. This program was preceded by extensive professional development, administrative involvement and support, and the publication of a reference document articulating expected practices. They have also garnered some assessment information demonstrating skills mastered by using a specific application which indicate a high level of effectiveness of the technology.
 - - They have 750 Chromebooks in 1:1 use. They maintain 20 loaners in the Library to be checked. They treat them just like a textbook - you are expected to have it with you and if you don't you can borrow one if it is available. Their assessment of the success experienced is anecdotal but is adamantly positive in the effect this has had on motivation, access and collaboration.
 - Area District 5 - They have 1:1 Chromebooks in grades 3 through 8 with funding in the 2016-2017 budget to complete 1:1 at the high school. The philosophy supporting this program is that 1:1 facilitates access to digital educational resources, availability beyond the school day, individualized learning, creativity and innovation, personal and technology literacy skills, and college and career readiness. The intention is to provide students with another tool for learning to encourage them to engage in problem-based

learning and help them to recognize that teaching and learning can occur anytime, anyplace.

- They retain a 15% surplus of devices - 10% in the schools and 5% with IT to replenish the schools when devices are out of commission for repair.

5. Pages 5-6 of Initial Response – Are there any other major lessons learned from the implementation of the 1:1 program at WIS (beyond the value of classroom management tools and availability of spares noted at the top of page 6), and how will that influence the proposed implementation at WMS?
 - Need to have classroom management tool installed on devices.
 - Importance of digital citizenship lesson at the start

6. Page 6 of Initial Response (review of professional development in the middle of the page on 1:1) – For aid of reference, please provide a chart showing the timing of professional development and curriculum review/writing relevant to 1:1 at WMS.

Direct Access to Digital Devices Implementation and Development Plan				
Year	WIS	WMS	HES	WHS
2015-16	Development Phase			
2016-17	Implementation Phase	Development Phase		
2017-18		Implementation Phase	Development Phase	
2018-19			Implementation Phase	Development Phase
2019-20				Implementation Phase
Note: Development Phase Consists of Both Curriculum and Professional Development Work				

7. Page 6 of Initial Response (timing of implementation of 1:1 at bottom of page) – Please explain the rationale for the shift in approach from initial implementation in

6th grade in FY18 to implementation during the first trimester of FY18 for all three grades at WMS.

- This will be a front and center topic as we outline the district's gauging progress plan. It would not be a fair assumption to have expectations of short term increases. We are preparing our students to succeed in higher education and work world that demands proficiency in digital skills.

8. Page 7 of Initial Response (measuring impact) – This requires further discussion at the 1/17 meeting. Is there measurable educational impact versus anecdotal reports from the experience at WIS? How will the value added of 1:1 be assessed (recognizing that there are 3 items mentioned on page 7 for further discussion) and documented at WMS?

- As discussed at the January 17th meeting it would take several year for noticeable changes in student achievement to be realized following the initial implementation of 1:1. However examples of measurement strategies along the way to promote continuous improvement include the following:
 - Focus groups and/or surveys with stakeholders
 - Learning.com assessment for students
 - Tri-State Consultancy
 - Administration observation of instruction
 - Curriculum Maps

9. Page 7 of Initial Response (top of page) – On reviewing how the implementation will work at the different grade levels, what is the plan for developing guidelines and possibly modifying relevant BOE policy on acceptable use?

- This is included in the timeline to be reviewed this Spring as needed.

10. Is it anticipated that each student would be assigned a Chromebook for the duration of middle school or that the units would stay at the same grade levels year after year?

- Yes

11. How many Chromebooks are currently at WMS? 253

- How many carts? 9
- How many are slated to go to HES and how many to WHS?
 - 2 to HES
 - 7 to WHS
- Do HES and WHS currently have Chromebooks?
 - None at HES
 - 150 at WHS
- When we went 1:1 at WIS, how many Chromebooks pre-existed the 1:1 initiative in WIS? 150
 - How many carts? 6
- Were the WIS units re-deployed into other schools (if so, where)?

- No they are part of the deployment at the WIS and 1 was taken out of service due to end of life.
12. Page 1 of Initial Response (breakdown of technology requests) - the \$210,705 figure for 1:1 at WMS looks like it covers only the cost of the Chromebooks. On page 2 of the Initial Response, the first paragraph of the answer states that “the Chromebook,...can be provided to students for under \$350 (including the device and license)...” What is the “all in” number per Chromebook? Does each unit need a license or does the district have a license that is averaged out to up to \$150 per unit? If students bring their own device (if, e.g., the district specifies the type of device they should purchase), would a license still be required for that device?
 - The per unit cost which was presented in the revised technology lease and included as a replacement page 194 in the budget book shows a cost of \$230. This includes the license and the hardware.
 13. Page 194 – Why does the number of Chromebooks proposed to be purchased far exceed the total enrollment at WMS? Is the number of units essentially providing insurance against breakage and loss or will that separately be covered by insurance/warranty?
 - We have ensured an adequate number of devices to be used as quick replacements and immediate need devices for students whose devices are not available for various reasons. This process has proven to be very beneficial as part of the WIS programs.
 14. Page 10 of Initial Response – The refresh cycle for Chromebooks is listed at 5 years. Is that time period expected to stay the same if the students are allowed to take their Chromebooks home (what is the experience in other districts. Have potential third party sources of funding for the 1:1 initiative been explored?
 - There is no current evidence to show that the refresh cycle of the Chromebooks would need to change. No, third party sources have not been looked at, see question 17.
 15. Are there costs beyond the purchase price of the Chromebooks that would be involved with a purchase versus a lease, such as for insurance (district or family), increased repair/replacement costs or disposal of units at end of useful life?
 - There are no insurance costs. There is always the need for repair and replacement costs for technology that are instructional tools. There is no cost for the disposal of these units at this time.
 16. Have families been surveyed to ascertain how many would be willing to purchase a Chromebook for their WMS student if the district provided the specifications (noting that the district would have to cover the cost for those who do not or could not purchase one)?
 - We have not considered families purchasing these devices because the digital devices will become an education specification. This is supported

by Connecticut General Statutes 10-228. If we require the use of Chromebooks in school, the district must pay for them.

17. Page 185 – Please provide a flow chart of the personnel in the technology department and their responsibilities, showing the change from the current structure to the proposed reorganization.

- As discussed during the January 17th budget workshop.

Learning Commons & Technology Support				
	Library Media **		Library & Technology	Technology Skills & Makerspace
HES	LMS	Para	LCTS	CT & Markerspace
WIS	LMS	Para	LCTS	CT & Markerspace
WMS	LMS	Para	LCTS	
WHS	LMS	Para	LCTS	
FTE Total	9			

**Paraprofessionals play an important role in library operations and continuity.

LMS – Library Media Specialist

LCTS – Learning Commons Technology Specialist

CT – Computer Teacher

18. Page 7 of Initial Response (phasing out of general computer labs) –Is there a projected timeline? How would this be factored into technology support staffing over time?

- The elimination of the computer labs are not on a specific time frame. We are no longer repairing and replacing the computer labs that are impacted by 1:1. Keeping in mind these are only the general use computer labs. These labs will be taken out of service in the future and represent a cost avoidance in the budget.

19. Page 7 of Initial Response (sufficiency of staffing) - With the change in the implementation plan to all three grades at WMS in FY18, please explain how all three grades will be supported, taking into account that the three-year projection on page 196 states that staffing will remain the same as the current FY until FY20 when 1 FTE technician will be added due to the additional expansion of 1:1

(this was understood when the proposed implementation was over time instead of all grades in FY18).

- The request for staffing in FY20 is not related to the request for 1:1 program at WMS. In either the current or the past request all devices would have been implemented in FY19. The impact in FY20 will be the various devices needed to support the high school and the new implementation of a new town wide telephone system.

20. Page 1 of Initial Response (breakdown of technology requests) - New Software is listed at \$21,750 and pages 36-37 of the Initial Response include a description of that software. TalentED, which is one of the new items, is listed on page 191 at a cost of \$15,000. Elsewhere in the budget book, personnel shifts are recommended, in part, to deal with the demands of the evaluation process. Please explain further the benefits of this online tool over the processes currently in place and change in personnel to address some of the administrative demands.

- TalentED is a web-based tool that will allow us to more efficiently administer our own homegrown educator evaluation program by eliminating paper forms. All evaluation forms will be automated and housed in this electronic system, thus allowing teachers and administrators immediate access to documents from home or at work. There are analytics associated with TalentED that will be useful in interpreting our evaluation data. The district's Professional Growth Committee consisting of teachers and administrators have indicated that this tool will save time in their respective roles.
- <https://www.peopleadmin.com/k-12-perform/>

21. Page 184 of budget book and page 34 of Initial Response - One of the rationales in the current budget for increasing support in the tech area was to deal with student data privacy requirements. Please elaborate on the statement on page 34 of the Initial Response "The extent of these efforts is still an unknown". Are there issues regarding the best way to comply, how this law is being regulated by the State, having sufficient resources to comply or something else?

- This is a budget issue from last year. We are currently in the implementation phase. This phase consists of us contacting each vendor and negotiating new terms for their privacy agreements relative to this new law. We have not completed this process yet, therefore the efforts impact are unknown.
- We have also not yet progressed far enough in this process to know if there will be resistance among any segment of vendors for whom compliance with the laws of one state may not be cost effective. In this case we will have to pursue alternative sources of similar programs. We do not have adequate experience to make any projection of what the extent of this might be.

22. What is the status of review undertaken by the committee looking at learning management systems? Last April, there was discussion about looking at vendors

that would also work for an upgraded website. Has there been any further discussion on that topic?

- The committee has not yet begun actively working on this. The intent was for it to begin this month. Staff have been selected to be on the committee, and basic parameters for selecting LMS have been created. Next steps will begin shortly.

23. Page 184 – Can the Learning Management System be used to develop virtual portfolios for each student to track that student’s progress in demonstrating understanding of key curricular concepts? At the November 2016 workshop, a student digital portfolio was mentioned as not yet being a parameter for this system-has any further discussion occurred on that parameter? Also discussed at the November 2016 workshop, what is the expectation for eventually enabling this system to be an online professional learning community for the faculty?

- These are items that are still under discussion as we evaluate various LMS programs.

24. Page 190 – What is the plan for training and support on the Learning Management System to ensure that staff uses it regularly? How will usage be monitored?

- This will be developed after the Learning Management System is selected.

25. Page 186 of budget book and page 35 of Initial Response – Can you quantify the amount of overtime that has been required this school year? Is the answer in the Initial Response mainly that overtime is now consolidated for greater transparency or is there a dollar increase due to demand as well? Is it possible to stagger work schedules and avoid overtime by having certain tech personnel start work later?

- The funds added to the budget is an expense for the districts covering of the IT after hours needs of the town and emergency services per the AFSCME contract. There is no net impact to the budget because there is a corresponding revenue item.
- Through January 18th, technology overtime has totaled \$3,820. This amount is primarily due to technicians covering BOE meetings as well as troubleshooting many technical issues that occurred at the beginning of the school year at WHS. The overtime budget proposed for next year is \$820 less than what has been spent through just 7 months. The primary reason for the increase budget to budget is the district is required contractually to provide an on call stipend to technicians. This expense is also billed back, which is shown in the revenue section of technology. But the expenditure is shown separately from revenue for accounting purposes. There is no net increase to the budget in technology overtime.

26. Pages 186 and 189 of the budget book and page 35 of Initial Response – Can you provide any more detail on how VMmare Management and Maintenance was previously handled?

- It appears that this was purchased in the past through either end of year and not budgeted for. The license was allowed to lapse in January 2015 and was not renewed. With the new staffing in IT this was discovered and we are now correcting the budget.
27. Page 186, Line 4302 – Does the repair line adequately cover what you anticipate to be the inventory “hotspots”?
- We believe this covers anticipated repairs. This money is being used for repair only, not replacement.
28. Page 193 – Would be helpful to note on this page that the SmartBoard refresh cycle involves the purchase of the Epson projectors. What is the timeframe for replacing the remaining SmartBoards with the projectors? What is the refresh cycle on the projectors?
- In the discussions with Board of Education and Board of Finance in the Fall of 2015 it was determined we would create a refresh cycle that would put the classrooms on a continuous refresh cycle for the remainder of the devices in the district. The budgeted amount replaces approximately 25 classrooms per year.
 - We have 165 SMART Boards currently in service and will continue to replace them through this funding.
29. Page 194 – The answer to what is included in the New Staff Technology was provided on page 38 of the Initial Response but should be included on this page of the budget book. On page 38, it states that \$20,000 of the \$35,000 is for the purchase of new computers for new staff. As final staffing is not completed for several months, what estimate is this based on?
- This is an estimate based on previous year’s purchases for new staff brought into the district for various purposes. This included both certified and noncertified staff as well as devices that are used for staff that are replacing current staff.
30. Is there philanthropy funding still being used to cover current needs in the learning commons and/or the maker spaces?
- Yes, we are still working with WEF. There are no new requests for MakerSpaces and Learning Commons in this budget.
31. At the November 2016 budget workshop, there was mention of net support being expanded to schools beyond WIS. Is this reflected in the software portion of the budget and, if so, which devices is it intended to cover?
- Yes, this has been included in the budget.
32. Page 194 – From the January 17 budget workshop discussion, please provide further information on the ratio of total Chromebooks to enrollment and number of classrooms at WMS.
- The updated page 194 reflects a request for Chromebooks using the following plan.

- 1 Chromebook for each student based on current enrollment projects.
- 3 Chromebooks in each classroom/instructional space to ensure availability for students that do not have devices.

33. Please discuss the impact of asking families whether they would like to purchase a Chromebook for their student to use throughout WMS if the district provided the specifications (noting that the district would have to cover the cost for those who do not or could not purchase one and the issue would still remain of having extra Chromebooks on hand if a student forgot to bring the device to school or it broke)? [Note: this question has been reworded from what appears in the original Consolidated Second Round of BOE Questions.]

- For discussions with our legal counsel. Connecticut General Statutes 10-228 indicate that if we require the use of Chromebooks in school the district must pay for them.
- <http://law.justia.com/codes/connecticut/2012/title-10/chapter-170/section-10-228>