Date: Monday, June 6, 2016 edited/DP

Mountain Home Public Schools

2016 Mountain Home Public School District Technology Plan

Future Ready Learning

Reimagining the Role of Technology in Education

District Technology Team

This plan was prepared using the technology team input, student, staff and teacher input. Input for this plan was gathered through face to face meetings as well as surveys and our prior district technology plan. The 2016 National Education Technology Plan from the U.S. Department of Education located at http://tech.ed.gov was used as a guide.

MISSION

The mission of the Mountain home Public School District Technology planning committee is to develop a common goal for technology to best serve our students.

ACTION STEPS

Our action steps are: 1) Process Management; 2) Data; 3) Inspiration; 4) Assessment; 5) Learning; 6) Communication

GOALS

Our goals are:

2.1) Professional Development

Provide technology professional development that is relevant and timely

2.2) Curriculum

Strive for excellence by engaging students in curriculum that is technology rich

2.3) Infrastructure

Ensure access to a robust, flexible and comprehensive infrastructure

2.4) Student Devices

Devise and implement a plan to put more technology devices in the hands of students.

RATIONALE: Technology planning is a process that takes both time and resources to understand what is appropriate for both the students and the staff in the district. This technology plan is a documented strategy to follow now and into the future and is intended to serve as a guide for use and purchase of technology. To ensure the right solutions for the software and equipment this plan is intended to be a living document that will be reviewed and modified as the need arises. It is intended to have flexibility and allow for modification and enhancement.

BACKGROUND: The technology planning committee met several times to create a mission statement and action steps for our plan. We then worked on needs assessment, action plans and goals. After our goals were created we divided into subcommittees to work on each of the four goals. The committee included curriculum integration, professional development, equitable use, infrastructure, administration technology needs, hardware, software, facilities, instructional requirements, staff development, budgeting, funding and evaluations as guides in our planning.

Goal 2.1

MHPS Teachers and Staff will provide technology professional development that is relevant and timely.

Chair of Sub-Committee: Leah Cotter

Members of Sub-Committee: Chris Francis, Jennifer Seaman, Kyle McCarn, Leigh Anne Gigliotti, Amber Wescoat, Jeri Thomas

Task(s) **What will be done?**	**Responsibilities** **Who will do it?**	**Timeline** **By when? (Mo./Yr.)**	**Resources** **A. Resources available** **B. Resources needed**	**Potential Barriers** **A. What individuals or organizations might resist?** **B. How?**	**Communication Plan** **A. Who is involved?** **B. What methods?** **C. How often?**
Provide an Instructional Technology Specialist	Dr. Long Dr. Gigliotti MHPS Board of Education	Anticipated July 2016	A. TBD B. Approve FTE/Job Posting	A. Funding B. Schedules, Time, Logistics	A. IT Specialist B. Variety of forms for communication C. Frequent and direct
Provide technology PD for educators with professional learning experiences powered by technology to increase digital literacy and enable educators to create compelling learning activities that improve learning and teaching, assessment and instructional practice	Instructional Technology Specialist Building Administrators District Curriculum Committee Lead Teachers	July 2016: ongoing	A. District and federal funds B. Time, devices and willing participants	A. Reluctant tech users, teachers who have lost interest in tech due to setbacks in past B. Schedules, Time, Logistics	A. All teachers B. Digital lessons (video recorded), after school PD, Lunch and learns, 1-on-1 with IT specialist by appointment, in vertical teams, dept. Meetings, C. Continuous

Develop a teaching force skilled in online and blended learning instruction.		July 2016: ongoing	A. AR Distance Learning Consortium fee - $2,500 per year B. B. Lab space with appropriate devices for blended online learning. C. Appropriate Curriculum	A. Teachers reluctant to trust technology as a tool B. Integration of existing curriculum into digital environment.	A. All Teachers B. Department, Curriculum, and Vertical Alignment Meetings and Digital comm. C. Continuous

Evidence of Success (How will you know that you are making progress? What are your benchmarks?): Observations/Walk Throughs; PD hours dedicated to technology to increase instructional technology skills; and PD logs of the teachers
Evaluation Process (How will you determine that your goal has been reached? What are your measures?): Student Survey; Staff Survey; Focus Group Survey

Goal 2.2

MHPS Teachers and Staff will strive for excellence by engaging students in curriculum that is technology rich.

Chair of Sub-Committee: Devona Pendergrass

Members of Sub-Committee: Russell Dewey, Justine Roper, Jennifer Drewry, Chris Cudworth, Ben Strider, Kim Fowler

Task(s) **What Will Be Done?**	**Responsibilities** **Who Will Do It?**	**Timeline** **By When?** **(Month/Year)**	**Resources** **A. Resources Available** **B. Resources Needed**	**Potential Barriers** **A. What individuals or organizations might resist?** **B. How?**	**Communication Plan** **A. Who is involved?** **B. What methods?** **C. How often?**
All teachers will use technology based learning	All teachers and staff	August, 2016 to May, 2017	A. Devices B. Profession Development Platform and on Devices	A. Technology resistant staff B. Fear/lack of knowledge and skills	A. Teachers B. On-going formal and informal professional development C. Time to reflect
Use real world technology not limited to social media	Teachers and students	August, 2016 to May, 2017	A. School and personal devices B. Professional development and training on appropriate use of social media	A. Staff and Parents B. lack of skills	A. teachers, students, staff B. formal and informal teacher to teacher training C. Once
Teach students the appropriate research methods to use via technology	Collaboration between teachers and librarians	August, 2016 To May 2017	A. Trained Librarians, state department databases, multidisciplinary collaboration B. Devices and trained teachers	A. Those who believe the internet is the appropriate search tool. B. the internet is simple, but teaching research skills takes time and planning	A. Teachers, students, librarian B. collaborative training with teachers. C. as needed formal and in-formal

Enhance and expand the use of technology in both the classroom and administrative functions	Teachers and Staff	August, 2016 to May, 2017	A. Peer training B. Devices and software for both teaching and administration	A. Teachers B. Reluctant to learn new skills and new teaching methods using technology	A. Teachers B. On-going Professional Development and peer training C. As needed
Digital learning resources to connect parents with the curriculum	Parent Center PIE (partners in Education) Library staff and volunteers	Open House Parent Teacher Conferences and Registration	A. Library Computer Labs B. Training on student devices and platforms	A. Trying to get parents into the buildings for training B. Lack of skills	A. Parents, teachers and staff B. Web page, YouTube videos train students on their devices to train parents C. 4 times a year

Evidence of Success (How will you know that you are making progress? What are your benchmarks?

Parent, teacher and student surveys, rubrics and evaluations, direct observations, standardized test scores (e.g. ACT Aspire) TESS Evidence

Evaluation Process (How will you determine that your goal has been reached? What are your measures?

The Mountain Home Public School District Technology Plan Curriculum sub-committee will meet at the beginning of the school year, at the end of the first semester and then at the end of the school year to evaluate our evidence of success listed above. If our benchmarks have been met that will be used as our measures of success.

Goal 2.3

MHPS Teachers and staff will ensure access to a robust, flexible and comprehensive infrastructure.

Chair of Sub-Committee: Keith Alman

Members of Sub-Committee: Chris Francis, Wes Oldham, Russell Dewey, Kyle McCarn, Leah Cotter

Task(s) **What Will Be Done?**	**Responsibilities** **Who Will Do It?**	**Timeline** **By When?** **(Month/Year)**	**Resources** **A. Resources Available** **B. Resources Needed**	**Potential Barriers** **A. What individuals or organizations might resist?** **B. How?**	**Communication Plan** **A. Who is involved?** **B. What methods?** **C. How often?**
Provide technology supplies such as bulbs	Technology Federal Programs Building	Ongoing currently, to be phased out	Adequate funding in all applicable budgets, work with Federal funds: more centralized purchasing to eliminate elements procured without knowledge of tech department	Aging equipment such as projectors and document cameras can be replaced with alternative technologies (Professional development required)	Communicate with buildings about use of classroom supply budgets; principals and business managers aware of fund remaining; regular updates to teachers
Update and upgrade teacher computers	Technology Department	See Appendix E and F	Adequate funding in technology budget for hardware and software	Transition from desktop to laptop form factor may require professional development and changes in classroom ecosystem: inventory controls must be maintained	establish firm rotation schedule; more centralized purchasing to eliminate elements procured without knowledge of tech department
Add additional printing capabilities in the buildings to decrease classroom printers	Business Office Technology	Annual budget/copier lease cycle	Off-lease copiers or centrally-managed printers	Minimize unnecessary printing	Educate all stakeholders in efficient use of existing equipment
Improve district bandwidth	State-supplied	immediate	e-rate funding	delays in delivery of service	direct communication to administrators and teachers

Have all technology ready for testing	Principals/ Supervisors	Ongoing	computer labs/ chromebooks /other devices	logistical issues, changes in testing software requirements	Principals share information with stakeholders concerning resources available. Method of Communication: E-mails, Connect 5, newsletters, radio/TV announcements, and Twitter; lab/testing proctors should evaluate labs and report issues to technology department as they arise
Electronic forms and documents	Administrators Technology Department/ Teachers	Development has already begun and will continue	Google Docs / Google Drive / Google Sites / Eschool / Efinance -- Many external companies use paperless systems	will all forms be acceptable and compliant to all offices and needs?	Administrator communication, due diligence in evaluating new vendors
Replace older technology with new ideas such as tech tv's	Technology Federal Programs Building	Immediate and ongoing	vendor input, conference and workshop attendance, needs assessment to determine viability	Provide Professional development for effective use of technology	Department meetings, district in-service, Professional Development sessions such as Tech Tuesday.
Update and replace aging infrastructure	Technology Department	Ongoing See Appendix G	utilize e-rate funding as available	remove older cabling when necessary; all new cabling Cat6; Replace older switches with new tech capable of up to 10Gbps	see appendix for 5-year e-rate plan for replacement and upgrade of wireless infrastructure

Evidence of Success-Direct observation of teaching, more stringent inventory auditing, evaluation of average age of existing equipment in classrooms

Evaluation Process-Feedback from stakeholders through surveys and meetings, network usage metrics, development of evaluation rubrics for each item, evaluation checklists and possible mid-year audit.

Goal 2.4

MHPS Teachers and staff will devise and implement a plan to put more technology devices in the hands of the students.

Chair of SubCommittee: Janet Wood

Members of Sub Committee: Wes Oldham, Maddy Goeke, Joshua Francis, Tammy Goeke, Cheryl Human, Martha Wedgeworth

Task(s) **What Will Be Done?**	**Responsibilities** **Who Will Do It?**	**Timeline** **By When?** **(Month/Year)**	**Resources** **A. Resources Available** **B. Resources Needed**	**Potential Barriers** **A. What individuals or organizations might resist?** **B. How?**	**Communication Plan** **A. Who is involved?** **B. What methods?** **C. How often?**
Technology for all students; move toward 1:1 student technology	District	See attached - Explanation: Appendix A 2016-17: Appendix B 2017-18: Appendix C 2018-19: Appendix D	A. Budget B. More money in the budget	A. Money B. Bandwidth	Who: District Technology Committee Methods: Meetings, surveys, feedback from stakeholders
Rotation to keep classroom equipment updated	District Technology Department	Throughout the year- constant evaluation of and up to date inventory	A. Budget B. Technology Director to keep accurate inventory of teacher, student, and lab devices.	A. Budget B. Bandwidth	Who: Technology Director Methods: Accurate inventory

CTE - must meet state standards	CTE Committee will keep administration and technology informed	Each year	A. Limited Perkins money is available B. District funds	Budget	CTE Committee will submit rotation upgrade/replacement schedule to meet minimum standards. Work with Federal Programs Coordinator for additional Perkins money.
Accessibility for all students and staff - open labs	Building admins will assign personnel.	September - 1 night per week per building from 4:00 - 8:00	Use paras, subs, other classified. Work shifts could be noon-8:00 one day per week.	Staff may not be available	Building admins; communicate which night; monitor use.

Evidence of Success:

- Teacher, staff, parent, and student feedback
- Acquisition timeline has been determined

Determine if goals have been reached:

- Sub-committee will meet and evaluate at the beginning of each semester and at the end of the school year.
- Accurate inventory to determine if 1:1 has been achieved
- Increase in number of mobile devices for student use driven by the curriculum

Appendix A:

The District Technology Committee (DTC) determined that providing more student devices was an integral part of the Technology Plan. The committee also determined that each teacher in grades 2 - 12 would be provided a chromebook if requested. The following Appendixes show the requested breakdown in the district plan moving toward 1:1 implementation.

These requests are in addition to any mobile devices which are purchased in lieu of textbooks/materials, etc. when each subject area is up for their instructional resource adoption year.

The Adoption 6 Year Cycle includes:

- 2016-17: Agriculture Education, Family and Consumer Science, Special Education k-12, and Fine Arts, Art, Music and Theater.
  * Fine Arts, Art, Music and Theater - request 34 chromebooks for 2016-17
- 2017-18: ELA grades k - 12
- 2018-19: Mathematics
- 2020-21: Social Studies
- 2021-22: Science, Keyboarding, CTE, Business Education, Business & Technology Classes

As 1:1 is implemented, all mobile devices and charging stations previously purchased with district funds for classroom instruction may be redistributed until the 1:1 rotation is met in each building.

**** The mobile devices listed in Appendix B, C, D, and E reflect an average of 300 students per grade. The number of teachers listed per grade is based on the current staff numbers. Both of these are subject to be altered depending on the actual number of students per grade and the actual number of teachers per grade.**

Appendix B: Mobile Devices requested from the DTC for 2016-17:

Appendix B: Mobile Devices requested from the DTC for 2016-17:

1. iPads for k-1 teachers (5 per teacher)(Title 1 purchased 3 per kdg teacher and 4 per 1st grade teacher)
2. Chromebooks for 2nd grade (1:2 per teacher; 1 chromebook for every 2 students)
3. Chromebooks for Literacy teachers in grades 3 - 8 (1:2; 1 chromebook for every 2 students)
4. Chromebooks for 9th grade (1:1 - every 9th grader will be issued a chromebook)
5. Chromebooks for grades 10 - 12 (Literacy teachers - buddy system); 30 chromebooks in HS library for student check-out.

Building	**# of Teachers**	**# per teacher**	**# of Students**	**iPads**	**Chromebooks**
Kindergarten	16 SPED(1)	5 2	20 8	80 2	
NWH - 1st grade	13 SPED(1R;1SC)	5 2/3	22 8/10	65 5	
NWH - 2nd grade	13 SPED(1R;1SC)	12 3/3	24 8/10		156 7
HIS - 3rd grade	9 literacy SPED(1R;1SC)	12 3/3	24 8/10		108 6
HIS - 4th grade	4 literacy SPED(1R;1SC)	13 3/3	26 8/10		52 6
HIS - 5th grade	5 literacy SPED(1R)	14 4	28 8		70 4
PMS - 6th grade	4 literacy SPED(1R;1SC)	14 3/3	28 8/10	3	56 3
PMS - 7th grade	4 literacy SPED(1R;1SC)	15 3/3	30 8/10	3	60 3
MHJH-8th grade MHJH-9th grade	5 literacy SPED-(4R;1SC)	15 2/3 1:1	30 8/15		75 12 300 (1:1)
MHHS (10-12) Guy Berry	9 literacy HS library 3 literacy	Buddy system 5/6 ea	5 carts/30 per 50-check out		150 50 16
Totals				155	1133

Appendix C: Mobile Devices requested from the DTC for 2017-18:

1. iPads for Kindergarten (5 per teacher)(Title 1 purchased 3 per teacher in 2016)
2. iPads for 1st grade (1:1; 1 iPad for every student)(Title 1 purchased 4 per teacher in 2016)
3. Chromebooks for 2nd grade teachers (1:2; 1 chromebook for every 2 students - would bring 2nd grade to 1:1)
4. Chromebooks for Math teachers in grades 3 - 6 & 8 (1:2; 1 chromebook for every 2 students)
5. Chromebooks for grade 7 (1:1; 1 chromebook for every student)
6. Chromebooks for all 9th graders

Building	**# of Teachers**	**# per teacher**	**# of Students**	**iPads**	**Chromebooks**
Kindergarten	16 SPEC (1)	5 2	20	80 2	
NWH - 1st grade	13 SPEC(1R;1SC)	5 2/3	22	65 5	
NWH - 2nd grade	14 SPEC(1R;1SC)	12	24		123 (1:1)
HIS - 3rd grade	9 science SPEC(1R;1SC)	12 4/5	24 8/10		108 9
HIS - 4th grade	4 science SPEC(1R;1SC)	13 4/5	26 8/10		52 9
HIS - 5th grade	5 science SPEC(1R)	14 4	28 8		70 4
PMS - 6th grade	4 science SPEC(1R;1SC)	14 4/3	28 8/10	 3	56 4
PMS - 7th grade		1:1		3	236 (1:1)
MHJH-8th grade 9th grade	5 science SPED (4R;1SC)	15 2/3 1:1	30 8/15		75 12 300 (1:1)
MHHS (10-12)	8 science	Buddy	4 carts/30		120 10th (1:1)
HS library			2 carts/30		60
Totals				158	1238

Appendix D: Mobile Devices requested from the DTC for 2018-19:

1. iPads in Kindergarten (1:1; 1 iPad for every student)
2. Chromebooks for 2nd grade teachers (5 per teacher)
3. Chromebooks for grades 3 - 6 (1:1; 1 chromebook for every student)
4. Chromebooks for all 9th graders

Mobile Devices requested from the Technology Committee for 2018-19:

Building	# of Teachers	# per teacher	# of Students	iPads	Chromebooks
Kindergarten	16	1:1	20	80 (1:1)	
NWH - 1st grade	13	1:1		96 (1:1)	
NWH - 2nd grade		1:1			1:1 (17-18)
HIS - 3rd grade		1:1	24		66 (1:1)
HIS - 4th grade		1:1	26		178 (1:1)
HIS - 5th grade		1:1	28		142 (1:1)
PMS - 6th grade		1:1	28		180 (1:1)
PMS - 7th grade					1:1 (17-18)
MHJH-8th grade 9th grade		 1:1			126 (1:1) 300 (1:1)
MHHS (10-12)	(all 10th and 11th will have chromebooks)				
Totals				176	992

Appendix E: Mobile Devices requested from the DTC for 2019-20:

Mobile Devices for 2019-20:

1. High school will be 1: (every student will have a chromebook)
2. Purchase chromebooks for every 9th grader - 300
3. Redistribute the teacher chromebook carts from HS to lower grades
4. Repair/upgrade/replace k-12

Building	Year of 1:1	# of teachers	# per teacher	iPads	Chromebooks
Kindergarten	18-19				
NWH-1st	18-19				
NWH-2nd	17-18				
HIS-3rd	18-19				
HIS-4th	18-19				
HIS-5th	18-19				
PMS-6th	18-19				
PMS-7th	17-18				
MHJH-8th	18-19				
MHJH-9th	16-17				300
MHHS-10	17-18				
MHHS-11	18-19				
MHHS-12	19-20				
Totals					300

Mobile Devices for 2020-21

1. High school will be 1:1 (every student will have a chromebook)
2. Purchase chromebooks for all 9th graders
3. Repeat rotation from 2016-17

Appendix F:

School	Lab	Usage	16-17	17-18	18-19	19-20	20-21
MHHS	Library Blue	special	desktops				desktops
MHHS	Library Gold	special	desktops				desktops
MHHS	Library	General	chromebooks				
MHHS	415	EnglishDept	chromebooks				
MHHS	Baker	CTE?	chromebooks				
MHHS	Science	special		laptops			
MHHS	Science	special		laptops			
MHHS	Smith	CTE					as needed
MHHS	Jones	CTE	as needed				
MHHS	Young	CTE			as needed		
MHHS	Blevins	CTE	chromebooks				
MHHS	Fowler	CTE	chromebooks				
MHHS	Beckham	CTE	chromebooks				
MHJH	Jones	CTE			as needed		
MHJH	Walker	CTE			as needed		
MHJH	Tejcek	CTE	as needed				
MHJH	B8	General		chromebooks			
MHJH	B10	General		chromebooks			
MHJH	C5	General		chromebooks			
MHJH	Library	General		chromebooks			
PMS	Library	General			chromebooks		
PMS	O'Dell	CTE	as needed				
PMS	108	General			chromebooks		
PMS	213	General		chromebooks			
PMS	26	General			chromebooks		
HIS	3rd	General				chromebooks	
HIS	4th	General				chromebooks	
HIS	5th	General				chromebooks	
NWH	C4	General				chromebooks	
NWH	C6	General				Ipads	
Kdg	Lab	General				ipads	

APPENDIX G:

year	desktops	laptops	available desktops for lab use	available laptops for lab use
1	75	75	150	0
2	75	75	150	0
3	50	100	150	0
4	50	100	150	0
5	50	100	75	75
6	50	100	75	75
7	50	100	50	100
8	50	100	50	100

100 oldest according to purchase date will be replaced yearly
teachers will be polled as to preferred form factor
devices will be ordered based on responses and replaced as usual
50 spare devices will be on standby
replaced according to purchase date/asset number/platform availability
also used for emergency replacements

APPENDIX H:

MHPS Wireless infrastructure
Long-term planning
Based on 5-year Erate cycle

	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
MHHS					
MHJH					
PMS					
HIS					
NWH					
KDG					
other					

replace all WAPs
supplement with replaced WAPs
maintain existing WAPs
Evaluate and replace as needed