

Technology Plan Cover Sheet
2016-2018 (July 1, 2015 – June 30, 2018)

Organization Information

District/Agency/School (legal name): Northeast Metro Intermediate

District Number: 916

Technology Plan Status

The District/Agency/School has an approved 2013-15 technology plan:

Yes No

2016-2018 Technology Plan Date of Creation: June 14, 2015

Identified Official with Authority

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2016-18 Technology Plan Template

Instructions: Add your responses by typing into the document below.

Technology Needs Assessment. Describe the processes(s) used to determine the technology needs for the LEA for 2016-2018 and briefly summarize the needs that have been determined. Make sure to include any technology needs that will be supported through E-rate discounts, such as telephone, telecommunications access, Internet, and other E-rate eligible services:

Technology and Technology Integration in Northeast Metro 916

Technology has dramatically shifted how, when, and what we learn. In a world awash in a constant flow of information, it becomes crucial to equip students to think critically, communicate clearly, collaborate effectively, and create freely and strategically. In Northeast Metro 916, the goal of technology and technology integration is to support teachers in this work by facilitating training on district-supported platforms and devices, providing coaching and guidance in designing deep learning experiences aligned with the ISTE Standards for Students, and fostering digital leadership and a culture of innovation throughout Northeast Metro 916.

Technology integration professional development in Northeast Metro 916 is primarily provided through the Teaching and Learning Department, with additional skills-based training provided in coordination with Information Services. Two technology integration positions within Teaching and Learning -- one specialist and one coordinator -- are responsible for assessing technology professional development needs, designing and delivering professional learning opportunities, and providing and fostering digital leadership.

Northeast Metro 916's approach to technology professional development is primarily grounded in the ISTE Standards for Students, with connections to supporting technology integration research, best practices, standards, and frameworks, including Puentedura's SAMR model, Koehler and Mishra's TPACK model, and Partnership for 21st Century Learning.

District Context

A number of emerging district initiatives and strategic directions, including a major implementation of standards-based instruction and assessment, will significantly impact our district's professional development landscape. As our needs, capacities, and priorities change, our professional development plan will need to change accordingly.

Expanded instructional coaching capacity: In 2014-15, Northeast Metro 916 implemented a site-based instructional coaching program, with a dedicated coach at each site for one day a week. Based on a mid-year survey of staff across programs, staff who had a coaching experience rated their coach as "effective" or "very effective" in providing support in a variety of areas, including accessing curriculum resources, implementing evidence-based instruction practice, using data to inform instruction, integrating technology into instruction, and fostering a culture of equity. Based on the program's success, its scope will be expanded to support full-time coaching positions at most sites. This expanded capacity will allow additional opportunities for coaches to support staff with integrating technology into instruction.

Shift to standards-based instruction and assessment: As an intermediate school district serving a wide variety of special education populations, many with severe behavioral, cognitive, and mental health challenges, Northeast Metro 916 has great expertise in providing highly-specialized, low-incidence educational services. An identified growth opportunity for the district is to increase teachers' understanding of standards-based instruction and assessment and improve their practice. The district's emphasis on standards-based instruction and assessment will include unpacking standards, elements of backward design, lesson planning, and formative and summative assessment strategies. The shift to a standards-based approach offer many opportunities for addressing technology integration and aligning instruction with ISTE standards.

Focus on data-driven decisions: The district's renewed commitment to establishing and supporting professional learning communities (PLCs) at each site creates a vibrant structure for and solid expectation of using data to inform instruction. Teachers work through an inquiry cycle in a PLC leverage data to "know their impact," increasing their understanding of how instructional decisions affect student learning outcomes. In 2015-16, Northeast Metro 916 will implement the BrightBytes Clarity platform to make rich data available to PLCs and other stakeholders about district technology systems and classroom instructional practices.

District technology committee structure and decision-making: Beginning in spring 2015, technology integration and Information Services staff began efforts to establish a more coordinated district technology committee structure for better communication and inclusive, transparent decision-making. Site-level technology committees will discuss technology needs, instructional bright spots, and proposed or current initiatives, providing supporting evidence for each area. Site committee documentation and recommendations flow into a district-level technology committee comprised of site representatives, technology integration staff, and the Information Services supervisor. The district committee reviews and collates site committee reports and engages in pattern recognition to identify areas of common need requiring coordinated professional development, opportunities for scaling up promising ideas, or competing initiatives that could be reconciled. District committee recommendations are forwarded to Cabinet for action. A coordinated site- and district-level committee structure creates opportunities for greater staff engagement in technology decisions; for generating usable, relevant data about technology needs and practices in the district; for better, data-informed decisions about technology purchasing and implementation; and for increased trust and staff buy-in through a more transparent decision-making process.

Focus on core technology tools: Northeast Metro 916 has adopted a suite of core technology tools and systems to support teaching and learning and professional productivity: Office 365 for productivity and teacher collaboration, Google Apps for Education for student collaboration and creation, Schoology learning management system for digital curriculum delivery, SMART boards and software for interactive presentation of classroom content, Lenovo Thinkpad laptops for intermediate and secondary classrooms, and iPads for younger students and other special education populations. Focusing professional development efforts on a small number of supported core tools will help build knowledge across the district, increase staff trust, ensure consistency, and identify instructional bright spots.

Focus on modern and secure operational technology tools: Northeast Metro 916 will continue its relationships with existing telecommunication providers however during this technology planning cycle, one of our fiber transport leases will expire allowing us to go out for an RFP for

new service. In addition, we will be planning and breaking ground on a new site which will require us to provide transport service back to our head end. Several key operational hardware components are at their end of life including our core network switch and wireless access controllers. These pieces of equipment are essential to support the educational needs of our students. The RFP process will also be used for their replacement. Lastly, because of the age of several of our buildings, to support the educational needs of our students, re-cabling will be needed to provide more stable connections to end user devices. In many of our locations, the network cabling is not at the current industry standard.

Goals and Strategies. List the specific goals and strategies for 2016-2015 that address how your LEA will use technology to deliver education and assist with school administration:

Professional Development Goals

Northeast Metro 916’s technology integration professional development priorities are informed by the Teamworks International FrameWork model, which describes three types or levels of organizational work: Standard Work (standard practice, expected of all teachers), Implementation Work (deploying tested initiatives district-wide or program-wide with a plan for sustainability), and Learning Work (pilot projects, innovative explorations, or emerging technology that will be assessed for effectiveness and sustainability). Different levels of organizational work carry different learning needs, requiring a differentiated approach to professional development. Accordingly, our district technology professional development plan is organized around three broad goal areas aligning with the three levels of organizational work:

Type of Organizational Work (FrameWork)	Technology Goal Area
Standard	Technology Operations and Skills
Implementation	Digital-Age Teaching and Learning
Learning	Leadership and Innovation

The three goals are as follows:

Technology operations concepts and skills

Goal: Increased levels of usage and skills by instructional staff across the district on district-supported platforms and tools.

Digital-age teaching and learning

Goal: Increased opportunities for students to demonstrate 21st century competencies based on ISTE Standards for Students as appropriate by program.

Leadership and innovation

Goal: Create authentic opportunities for teachers to engage in leadership and innovative instructional practices, including project-based learning and building professional learning networks (PLNs).

Operational Goals

Northeast Metro 916's 2016-2018 operational goals include those to support instructional technology, provide stable and secure technology services and allow for scale and adoption of emerging technologies. The Information Services department consists of a 5 member team who supports all infrastructure and operational related activities and co -supports instructional technology with the Instructional technology team.

Context: Lack of consistent leadership in the Information services department over the last several years has led to a lack of streamlined efforts and the adoption of non-enterprise solutions. During the 2014-2015 school year, much work was done to significantly upgrade the technology infrastructure including: A new SAN (Storage Area Network), New UPS (Uninterruptible Power Supplies) devices in the primary and secondary data closet, Wireless reconfiguration, Active Directly reorganization, Email server upgrade, computer replacement lifecycle plan and disaster recovery plan. The 2016-2018 operational goals exist to continue this work and provide an opportunity to further support the instructional technology and teaching and Learning goals outlined in this document.

Type of Operational Work	Technology Goal Area
Customer Service	<i>Instructional Technology Support</i>
Security	<i>Provide stable and secure technology services</i>
Innovation	<i>Allow for scale and adoption of emerging technologies</i>

The three goals are as follows:

Instructional Technology Support

Goal: Using the ITIL (Information Technology Infrastructure Library) framework, apply industry standard methods and procedures to service requests.

Provide stable and secure technology services

Goal: Maintain and grow current technology products and services to meet industry standard specifications.

Allow for scale and adoption of emerging technologies

Goal: Implement new technologies when possible, that are recognized as being universal and align with existing infrastructure.

Operational Hardware and Services

Device Type	Quantity
Desktops (Windows 7 and Windows 8)	600
Tablets (Windows 8)	680
iPads	565
Chrome Books	33
Servers	29
Wireless Access Points	150
Printers	125

2016-2018 Operational Hardware Goals: The following specific operational hardware and service goals will be addressed during this technology planning cycle: (Includes e-rate supported services)

- Replace existing T1 transport connections with fiber or equivalent.
- Provide 916 technology connections to all district owned and/or leased locations
- Internet access will be provided by our current Internet Service Provider which is TIES.
- All digital and analog phone lines will be maintained using Century Link as the provider.
- Verizon cell phones will continue to be used within the district.
- Replace aging wireless and cabled connections throughout the district.
- Establish a RFP for end of contract fiber connections currently hosted by ZAYO.

Professional Development Plan. Describe the professional development strategies you have in place for 2016-2018 to ensure LEA staff are prepared to use the technology infrastructure, software programs, and online resources provided:

916 Technology Integration intends to implement a targeted professional development plan for each of its three overarching goals, as articulated below:

Technology Operations Concepts and Skills

Goal: Increase levels of usage and skills by instructional staff across the district on district-supported platforms and tools.

In order to increase levels of usage and competency by staff on district-supported platforms and tools, Technology Integration staff will conduct site-based group training sessions on an as-needed based on individual site needs as reflected in requests for help and Essential Skills Survey data. Technology Integration staff will also conduct face-to-face training with individual teachers as needed in order to provide more targeted support and guidance. Additionally, Tech Integration staff have developed online tutorials and self-paced training courses, to which staff will be directed as needed. Finally, Technology Integration and Information Services staff will meet monthly with site-based technology committees made up of representatives from each site in order to address basic skill training and other support needs. These meetings will be an important source of information regarding technology "bright spots" throughout the district and

district technology needs with regard to device, software, support, and training needs, as well as an opportunity to establish a culture of open communication and transparency.

Digital-age Teaching and Learning

Goal: Increased opportunities for students to demonstrate 21st century competencies based on ISTE Standards for Students as appropriate by program.

In order to increase opportunities for 916 students to demonstrate and build standards-based 21st century skills, Tech Integration will implement a multi-tiered professional development effort geared toward building teachers' capacity to design deep learning experiences enhanced by effective use of technology.

As noted above, 916 will be expanding its Instructional Coach program for the 2015-2016 school year so that all but two of the Instructional Coaches will move to full time. Tech Integration staff will work closely with each Instructional Coach in order to build their individual capacity to promote the effective use of instructional technology in 916 classrooms. This work will take the shape of trainings on platforms and digital tools, exposure to current best practices and innovative instructional strategies, and video-based coaching based on Jim Knight's *Focus on Teaching* (2015). These trainings will take place during the monthly Instructional Coach meetings, and Tech Integration staff will collaborate with Instructional Coaches in the sites as needed. As a result of this support, Instructional Coaches will be better equipped to facilitate conversations with teachers about effective instruction and how technology can be utilized to deepen and enhance teaching and learning.

During the 2015-2016 school year 916 will be expanding and bolstering its Professional Learning Community initiative, with a specific goal of building teachers' capacity to collaboratively use data to improve teaching and learning across the district. Tech Integration staff will attend each PLC meeting in order to offer guidance and support with regard to instructional technology and how it specifically relates to the efforts of each PLC. These meetings will be an especially fruitful forum for building teachers' capacity to make connections between their teaching practice and the ISTE standards for instructional technology use, as well as for Tech Integration staff to offer timely, targeted support "on the ground."

Based on the data collected in the Essential Skills survey and in response to district personnel requests for further training on technology, four half-days have been set aside for district-wide technology training. Technology Integration staff will facilitate these trainings, which will focus on Office 365, Google Apps for Education, and Schoology. These trainings will also draw on content presented during additional Standards-Based Instruction training days conducted by Teaching and Learning, in order to bolster the connection between technology and instruction; i.e., the necessity of grounding classroom technology use in sound, research-based instructional strategies. Further, the technology training days will focus on specific ISTE standards, with the specific aim of giving 916 teachers a common language around and clear understanding of authentic collaboration. Technology Integration staff will follow up on these trainings in each site during the PLC meetings and with individual staff as needed.

Finally, Technology Integration staff will build 916 teachers' capacity to locate, share, and evaluate digital resources; conduct asynchronous learning experiences; and communicate and

collaborate using digital tools. This support will take the shape of Schoology user groups based on site and/or content (e.g., "critical thinking), as well as training materials and other resources made available on the 916 Teaching and Learning Intranet page. Technology Integration staff will facilitate conversations within the Schoology groups, continually add to all resource repositories, and make staff of additional external professional development opportunities through TIES and other organizations.

Leadership and Innovation

Goal: Create authentic opportunities for teachers to engage in leadership and innovative instructional practices, including project-based learning and building professional learning networks (PLNs).

In order to foster a culture of innovation and leadership throughout the district, Technology Integration staff will create authentic opportunities for teachers to engage in leadership and innovative instructional practices, including project-based learning and building professional learning networks (PLNs). As with any innovation, it will take time for these ideas to take root and become established practices throughout the district. To start this process, Technology Integration staff will work with small groups of teachers willing to experiment with their instructional practice and approach to informal professional development. Technology Integration staff will establish and facilitate both longer term Schoology user groups and more targeted eight week discussion-based courses focused on project-based learning, especially as exemplified by the Maker Movement, makerspaces, and a general "maker" approach to education. These groups will share resources, successes, areas of need, and best practices on a regular basis in order more effectively implement their project-based learning efforts, and to build a collective identity as educational innovators and change agents in the district. To this end, though much of the support offered by Technology Integration will center on project-based learning, there will also be an intentional effort to build leadership capacity within these cohorts, so as to increase the members' ability to effectively lead change in their sites and begin to change the culture as it relates to technology. In keeping with this goal, Technology Integration staff will provide leadership and change management resources, as well as support and training on building Personal Learning Networks using a variety of platforms and social media, including Schoology, Twitter, and others as individual need dictates.

Technology Integration staff will also facilitate an Innovation Incubation initiative, which will focus on supporting teachers in conducting technology-related action research projects. This initiative will encourage and highlight innovative practices while simultaneously provide an opportunity to gather data on what effective instructional technology use looks like in a district with 916's unique demographics and needs. Technology Integration staff will work with individual teachers to identify potential project topics, provide the necessary technical support, provide coaching and conduct classroom observations, and provide other resources as necessary. Participating teachers will be provided with the opportunity to present their findings to the 916 board, in order to better inform district leadership about district-wide technology efforts and successes.

Evaluation. Explain the evaluation process for your technology plan for 2016-2018, including timeline, roles and responsibilities, and information gathered to assess how the technology plan goals and strategies are being met:

In keeping with the district's focus on data, Technology Integration staff will utilize a data-driven approach to evaluate its efforts. This process will incorporate a number of data sets in order to monitor progress on each of the goals listed above. The timeline will vary based on initiative, but will largely follow scheduled monthly meetings and training sessions. Technology Integration will be primarily responsible for implementing these efforts. See below for further details:

Technology Operations Concepts and Skills:

Assessment Information	Timeline	Roles and Responsibilities
<ul style="list-style-type: none"> • Clarity data • Essential Technology Skills survey data • Platform analytics 	September 2015: Technology Training Day One	Tech Integration: Plan, facilitate technology training days
	October 2015: Administer Clarity survey	Tech Integration, IS: Attend and facilitate site-based tech committee meetings and District Tech Committee meetings
	November 2015: Technology Training Day Two	
	Spring: Administer Essential Tech Skills survey (round two)	Tech Integration: Provide on-site instructional technology training and coaching as needed
	Monthly: Site-based technology committee meeting	Tech Integration: Create and provide online tutorials; maintain TI Intranet page
	Monthly: District Technology Committee Meeting	Tech Integration: Consult available data to assess current efforts and adjust as necessary
	As needed: Site-based training	

Digital Age Teaching and Learning

Assessment Information	Timeline	Roles and Responsibilities
<ul style="list-style-type: none"> • Clarity data • Instructional Coach survey • Schoology group enrollment • Classroom observations and walkthroughs (device use, teacher practice, student skills demonstrated) 	September 2015: Technology Training Day One	Tech Integration: Plan, facilitate technology training days
	October 2015: Administer Clarity survey	Tech Integration: Facilitate technology training and support for Instructional Coaches
	November 2015: Technology Training Day Two	Tech Integration, IS: Attend and facilitate site-based tech committee meetings and

	<p>Monthly: Site-based technology committee meeting</p> <p>Monthly: District Technology Committee Meeting</p> <p>Monthly: Instructional Coach meeting</p> <p>Ongoing: PLC meetings</p> <p>As needed: Site-based training</p>	<p>District Tech Committee meetings</p> <p>Tech Integration: Create, maintain and facilitate Schoology user groups based on site and content</p> <p>Tech Integration: Conduct classroom observations, schedule and conduct individual coaching sessions</p>
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Leadership and Innovation

Assessment Information	Timeline	Roles and Responsibilities
<ul style="list-style-type: none"> • Teacher-generated action research data • Classroom observations and walkthroughs • Coaching conversation documentation • Schoology group/course enrollment, discussion frequency • Clarity data (platform use/frequency of use data) • Frequency of 916 teacher participation in edchats 	<p>Fall 2015: Identify potential PBL participants</p> <p>Ongoing: Facilitate PLN and action research efforts</p>	<p>Tech Integration: Identify potential participants</p> <p>Tech Integration: Create and facilitate Schoology courses/groups</p> <p>Tech Integration: Provide training and resources for PLNs, including social media best practice training</p> <p>Tech Integration: Work with 916 Communications Coordinator to publicize success stories</p>

Optional Links. Provide links to district strategic planning documents, survey instruments, policies, or other resources that were used to provide data and help prepare the technology plan:

District Strategic Plan: <http://www.nemetro.k12.mn.us/Page/2767>

District Overview: <http://www.nemetro.k12.mn.us/Page/2845>

District Mission and Values: <http://www.nemetro.k12.mn.us/Page/2766>

District Policies: <http://www.nemetro.k12.mn.us/Page/235>

Link to Current Technology Plan. Provide the link on the LEA website where the technology plan will be posted and updated throughout the planning period:
<http://www.nemetro.k12.mn.us/Page/2784>

Children's Internet Protection Act (CIPA)

This LEA has an Internet Safety/Acceptable Use Policy in place.

Yes No

If yes, please provide a link to access the policy at the LEA website:

http://www.nemetro.k12.mn.us/cms/lib/MN01001215/Centricity/Domain/29/Board%20Policies/524-TechnologyResponsibleUseSafetyPolicy_05-05-15.pdf

This school district deploys an Internet filter to protect minors from material that is pornographic or otherwise harmful to them.

Yes No

*Submit the cover sheet and template in PDF or Word (not a scan) by e-mail to:
mde.schooltechplan@state.mn.us.*