Empower every student in Michigan to excel at next generation assessments, to leverage technology for learning, and to achieve lifetime success in a global economy.
EXECUTIVE SUMMARY

The Technology Readiness Infrastructure Grant (TRIG) continued to prepare Michigan schools for online assessment and learning by implementing the following three goals:

1. Provide opportunities to increase capacity to deliver personalized learning in districts and classrooms
2. Create sustainable collaborations which increase the ability of districts to leverage actionable data, maintain reliable technology, and support learning
3. Increase the capacity of local districts to provide ubiquitous access for “Any Time, Any Place, Any Way, Any Pace” learning

TRIG represented 1,469,254 students, 100% of ISDs (56), 97% of LEAs (532), and 59% of PSAs (75).

Additionally, TRIG expanded its online presence through social media and by offering professional development information and M-STEP Tech support on its website, 22itrig.org. TRIG also designed additional activities, which aligned to the original six activities, to better serve the ISDs, LEAs, and PSAs:

- Implemented in 2014-2015: Data Services Collaborative
- Scheduled to begin in the 2015-2016 academic year: Targeted Site Transformation (TST) to transform schools to 1-to-1 learning and Strategic Readiness Support (SRS) to provide customized assistance to ensure schools are ready for online assessment and learning.

In 2014-2015, the districts participating in TRIG received $15,093,231 and $8,039,595 through direct funds. These districts also realized $53,782,759 in value-added and indirect savings, totaling $76,915,585.
TRIG OPERATIONS OFFICE

The TRIG Operations Office supports all TRIG activities and collaborates with the Michigan Department of Education (MDE), Michigan Association of Intermediate School Administrators (MAISA), Michigan Association of School Administrators (MASA), and Michigan Institute for Educational Leadership (MIEM) to advance TRIG goals. TRIG Operations Office personnel publish weekly updates, organize workshops, present at conferences, facilitate informational meetings, update the website, provide outreach to Michigan educational agencies, archive TRIG files, create evaluation templates, convene Steering Committee and Project Manager meetings, and provide budget support.

TRIG OPERATIONS PERSONNEL

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Tim Hall</td>
<td>Project Director (2014-2015)</td>
</tr>
<tr>
<td>Jan Vogel</td>
<td>Project Coordinator</td>
</tr>
<tr>
<td>Deb Kopkau</td>
<td>Conference/Communications Coordinator</td>
</tr>
<tr>
<td>Summer Franck</td>
<td>Communication Assistant/Device Training Coordinator</td>
</tr>
<tr>
<td>Kristin Margelot</td>
<td>Project Assistant</td>
</tr>
<tr>
<td>Pete Everson</td>
<td>Consortium Facilitator</td>
</tr>
</tbody>
</table>

STATEWIDE INDIRECT AND VALUE-ADDED COST SAVINGS TO THE PARTICIPATING DISTRICTS

- **$2,978,278** as a result of E-Rate, and districts were able to expand their bandwidth megabytes per student by 72%
- **$5,505,385** by Data Integration planning, vendor development activities, training, and data hubs
- **$464,940** savings in planning through MTRAx
- **$4,395,000** savings for the equivalent of a three-credit course for 6755 teachers taking the T3 Classroom Readiness course in addition to direct payments totaling **$1,039,674**
- **$34,448,446** savings through Device Purchasing discounts and professional development, as well as **$6,999,921** in direct incentive payments
- **$5,869,380** savings for downloading 48,790 digital textbooks developed by Assessment and Curriculum and for 7188 webinar viewings
- **$121,330** savings resulting from TRIG Operations communication, support, and outreach

**$23,132,826** in savings directly to participating districts
TRIG CONSORTIA

The five consortia advocate for TRIG, lead local and regional implementation of all TRIG activities through effective communication networks, organize the membership to increase participation, and collaborate with other agencies. Representatives of the following five consortia are members of the TRIG Steering Committee:

- Greater Michigan Education Consortium (GMEC)
- Intra-Michigan Consortium (iMC)
- Kent ISD Consortium (Kent ISD)
- Southwest Michigan Consortium (SWC)
- Rural Northern Michigan Consortium (RNMC)

TRIG 2.0 STEERING COMMITTEE

The Steering Committee advises the TRIG Operations Office and monitors the activities.

Greater Michigan Education Consortium (Genesee ISD)
- Luke Wittum
- Tammy Evans

Rural Northern Michigan Consortium (Copper Country ISD)
- Timothy Davis
- Michael Richardson

Intra-Michigan Consortium (Wexford-Missaukee ISD)
- Lisa Lockman
- Thomas Johnson

Southwest Michigan Consortium (Kalamazoo RESA)
- Brian Schupbach
- Holly Norman

Kent ISD Consortium
- Glen Finkel
- Phillip Carolan

Non-voting Members
- Linda Forward, Director, Office of Education Improvement and Innovation, MDE
- Michelle Johnston, Evaluation Consultant
- David Judd, Director, Office of Systems Integration, MDE
- Karen Mlcek, Evaluation Consultant
- Rhonda Provoast, General Education Learning Network (GELN) Representative
- Michelle Ribant, Assistant Director of Office of Education Improvement and Innovation & State Director of 21st Century Learning, MDE
- David E. Schulte, MAISA Representative
- Amanda Stoel, Department Technician, Office of Education Improvement and Innovation, MDE
TRIG 2.0 PROJECT MANAGERS

The TRIG Activities are interrelated and support district, school, teacher, and student access to resources, data, and learning for online assessment and teaching. Each activity, which focuses on either access, data, or learning, has a project manager, an activity advisory committee, and a specific list of deliverables.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Focus</th>
<th>Project Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide Education</td>
<td>Access — Access to devices,</td>
<td>David Childs</td>
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<tr>
<td>Network (MISEN)</td>
<td>bandwidth, and content for</td>
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<tr>
<td>E-Rate</td>
<td>“Any Time, Any Place, Any Way, Any Pace” learning</td>
<td>Josh Hayes and William Thompson</td>
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<tr>
<td>Device Purchasing</td>
<td>Data — Resources for schools</td>
<td>Donald Dailey</td>
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<td>Data Integration</td>
<td>to assess their readiness for</td>
<td>Kevin Bullard</td>
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<tr>
<td>Data Services</td>
<td>online assessment and learning, and access to data hubs that provide actionable data for teachers</td>
<td>Matthew Linder</td>
</tr>
<tr>
<td>Collaborative MTRAx</td>
<td>Learning — Training teachers</td>
<td>Danielle Letter and Melissa White</td>
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<tr>
<td></td>
<td>to effectively use technology to improve student learning</td>
<td>David Johnson</td>
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<tr>
<td>Classroom Readiness</td>
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<td></td>
</tr>
<tr>
<td>Assessment and Curriculum</td>
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</table>
TRIG ACTIVITIES AND TRIG 2.0 ACCOMPLISHMENTS

ACCESS

Statewide Education Network (MISEN) created a non-profit entity with a board of directors to handle the long-term operations of the future Statewide Educational Network (SEN) and had the following key accomplishments: 1) developed a web-based tool to gather critical infrastructure information of existing networks; 2) established a database of K12 networks; and 3) completed the design to connect the ISDs in a core network backbone supporting the Data Integration hubs. When the SEN is complete, it will facilitate the collaborative purchasing of bandwidth with the E-Rate Activity and provide cost-efficient means for data and resource sharing.

E-Rate goals are to make the E-Rate filing process easier and reduce the cost of bandwidth per student. To accomplish its goals in 2014-2015, the E-Rate Activity participated in consortia workshops, created a bid development tool, and developed Request for Proposals (RFPs) for telecommunication and Internet services, VOIP, and web hosting. As a result of this activity, there were: 1) a 16.8% reduction in megabytes per student (MBPS) costs; and 2) a 72% one-year increase in bandwidth MBPS. The savings coupled with the increased bandwidth ensure that more schools have enough Internet bandwidth for online assessments.

Device Purchasing developed, issued, and administered statewide bids for personal learning devices and desktop computers to support online testing and learning. Its ongoing goal is to aggregate the statewide demand for these devices to reduce purchase prices. 43 ISDs and 374 LEAs/PSAs purchased 127,319 mobile devices and 19,596 desktops. Districts purchasing devices through this activity realized cost savings of $41,488,367 in vendor discounts, incentive funds, and value-added professional development.

DATA

Data Integration will reduce data entry redundancies and improve reporting capacity for ISDs, LEAs, and PSAs through its newly created five regional data hubs which will have synchronized and consistent processes. This activity is piloting student information systems (SIS) and Ed-Fi Dashboards in school districts. Additionally, it is partnering with Michigan educational agencies, including MDE, Center for Educational Performance and Information (CEPI), MASA, MAISA, and Michigan Association of Secondary School Principals (MASSP) to align the hubs to their work. The Data Integration Activity was recognized by the Michael and Susan Dell Foundation which awarded the activity $74,000 for a study and $133,385 for the Ed-Fi Core.

Data Services Collaborative has 41 ongoing projects throughout Michigan that assist individual schools and school consortia to prepare for online assessments. Thirty-nine collaboratives served 8000 teachers. Because the focus of the Data Services Collaborative Activity is a return on investment (ROI), it decreased the costs of maintaining servers, electricity, staffing, professional development, and devices, particularly computers in labs.
MTRAx continued to be a powerful tool for assessing technology readiness and technology planning and completed three major accomplishments: 1) redesigning of the MTRAx application; 2) developing and deploying a new K12 planning process which integrates technology and school/district improvement planning processes; and 3) creating instructional measures to gauge the readiness status of all Michigan students for online assessments. An independent evaluator examined the MTRAx non-linear implementation process and found it appropriate for achieving the MTRAx goals.

LEARNING

Classroom Readiness designed and offered an online course (T3) for teachers in 284 schools. The activity is also moving forward with MDE and its advisory committee to revise the project and develop learning pathways which will provide “Any Time, Any Place, Any Way, Any Pace” self-paced professional learning opportunities to support technology integration and instructional practice. During the 2014-2015 academic year, 2881 educators completed the T3 course and 3874 educators are in progress for completing. When the participating educators responded to a self-assessment, 47% of the educators reported that they felt proficient in technology readiness and able to change their instructional practice.

Assessment and Curriculum offered six webinars to 4049 educators in 2013-2014. This year, 7188 teachers participated in those webinars. Additionally, this activity changed its focus from offering webinars to developing digital textbooks with 35 Michigan teachers as the text authors. The texts were for 4th, 5th, and 6th grade Social Studies and high school Economics. Michigan LEAs downloaded 48,790 digital textbooks.

COMMUNICATION

In addition to communicating with its stakeholders through the TRIG Operations Office and consortia, TRIG organized the Communication Advisory Committee which has representation from the 56 ISDs and the Operations Office to strengthen its communication capacity. TRIG 2.0 communication strategies included:

1. Creating an infographic which reports statewide, ISD, and LEA/PSA progress
2. Expanding the 22itrig.org website to assist with online testing
   – Improving Weekly Updates with an expanded contact list
   – Implementing statewide information on M-STEP testing
3. Engaging in social media
4. Using video media to explain the activities
5. Participating at professional conferences
6. Customizing talking points for superintendents, business managers, technology directors, teachers, principals, and curriculum directors
7. Developing one page and PowerPoint presentations focusing on the activities

2881 educators completed the T3 course and 3874 educators are in progress
PROCESS
1. Engaging Michigan educators in the development and implementation of activities
   - Over 100 people participate on activity advisory committees
   - Approximately 200 Michigan educators are in work groups to plan the implementation of the activities and create the deliverables
   - 35 Michigan teachers are digital textbook authors
2. Partnering with Michigan educational agencies and organizations including MDE, MAISA, MASA, MACUL, MASSP, MIEM, GELN, Regional Education Media Centers (REMCs), ISD Tech Directors, Michigan Association for Educational Data Systems (MAEDS) and Michigan Association of Supervision and Curriculum Development (MiASCD)
3. Networking with all 56 ISDs through the five consortia to leverage support for all TRIG activities at the LEAs and PSAs

COST EFFICIENCIES
1. Savings and incentives for purchasing devices through TRIG
2. Increasing megabytes per student (MBPS) by 72% with a 16.8% reduction in costs through the E-Rate Activity
3. Data Integration vendors’ collaborative development of deliverables and financial support of $207,385 from the Michael and Susan Dell Foundation
4. Data Services Collaborative Return on Investment (ROI) estimates $1.94 returns for every $1.00 invested, according to an independent evaluator
5. Districts received the equivalent of $76,915,585 in direct, value-added, and indirect savings from the activities

IMPACT
1. TRIG represented 97% of Michigan students in LEAs and PSAs.
2. 6,755 teachers in 284 schools participated in the T3 course.
3. 146,915 devices were purchased in 2014-2015 compared to 118,065 devices purchased in the previous year.
4. 48,790 digital Social Studies textbooks were downloaded.
5. 7,188 educators viewed Assessment and Curriculum webinars.
6. 8,000 educators participated in the Data Services Collaborative.
7. Percentages of district and building readiness increased from 43% to 64% of the districts and 78% to 83% of the buildings since the 2013-2014 academic year.

VISION FOR THE FUTURE
1. The TRIG infrastructure will be the basis for future statewide educational initiatives.
2. TRIG activities will collaborate to strengthen their effectiveness and sustainability.
3. MISEN will implement its plan for a statewide network through regional collaboration and partnerships.
4. Data Integration will be fully implemented to reduce data entry redundancies and improve instructional decision making.
5. Through E-Rate, all Michigan schools will have the bandwidth for their students to participate in online assessments and learning.
6. MTRAx will be institutionalized as the Michigan schools’ technology planning process.
7. Michigan teachers will effectively use technology to increase student achievement.
## FINAL AMENDED AWARDS — TOTAL $44,977,373

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<tr>
<th>DESCRIPTION</th>
<th>ORIGINAL AWARD</th>
<th>AMENDED AWARD</th>
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<td><strong>District Participation Funds</strong></td>
<td>$15,093,231</td>
<td>$15,093,231</td>
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<tr>
<td>Assessment &amp; Curriculum</td>
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<td><strong>GRAND TOTAL:</strong></td>
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TOTAL EXPENDITURES — $44,976,252

- District Participation Funds $15,093,231
- SEN $10,484,652
- GMEC $486,128
- iMC $204,266
- KENT $277,694
- SWC $164,692
- RURAL $150,968
- Classroom Readiness $3,000,000
- Data Integration $2,054,400
- Data Services Collaborative $2,500,000
- Device Purchasing $7,149,900
- MTRAx $1,264,721
- E-Rate $564,000
- Operations Office $1,281,600
- Assessment & Curriculum $300,000
### INDIRECT, DIRECT, AND VALUE-ADDED SAVINGS — TOTAL $76,915,585

#### 2.0 TRIG COST SAVINGS

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<th>DESCRIPTION</th>
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<td><strong>TOTAL</strong></td>
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<td>$23,132,826</td>
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**TOTAL INDIRECT & DIRECT $76,915,585**

- Indirect Savings / Value-Added Savings $60,782,680
- Direct Savings $23,132,826
- **2.0 TRIG Total Awarded Funds $44,977,373**