

1:1 Implementation Rubric

One of the most effective ways to determine how well school technology programs are meeting the needs of students, teachers, staff, and the community is through self-reflection and discussion by the school leadership team. While teacher and student surveys certainly provide a realistic assessment of the daily impact of programs and services on the teaching and learning process, an objective comparison of an individual program with state and national standards and recommendations offers an opportunity for self-assessment.

The 1:1 Implementation Rubric that follows is based on Technology Standards & Performance Indicators for Students (ISTE NETS-S), the NC IMPACT Guidelines, Texas Star Chart, and NC Learning Technology Initiatives (NCLTI) Planning Framework. This rubric provides a global perspective of school media and technology programs at both the building and system levels.

Directions: As a leadership team, use this rubric to reflect on your 1:1 initiative. Go through the rubric and decide where your school falls in each category. Your school must match all bullets to be awarded points for that category. For example, if your school only matches 1 of the 2 bullets in the Advanced Category, then you should grade yourself as Developing, since you matched the 2 bullets there. Use the score chart provided on the next page to total and summarize your 1:1 Implementation Classification for each implementation area.

If any questions come up when completing the rubric, please feel free to contact Jeni Corn, jocorn@ncsu.edu.

The rubric comparison points are:

- 1-Early (Starting) Technology
 - 2-Developing Technology
 - 3-Advanced (Prepared) Technology
 - 4-Target Computing
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School Name:

Number of School Staff Completing the Rubric:

- ___ administrators
- ___ central office
- ___ teachers
- ___ other

1:1 Implementation Rubric Score Chart

Enter the corresponding value into the chart below using the following rubric comparison points:

1-Early (Starting) Technology 2-Developing Technology 3-Advanced (Prepared) Technology 4-Target Computing

Curriculum & Instruction						Total
CI1 Classroom Use	CI2 Access to Digital Content	CI3 Content Area Connections	CI4 Technology Applications	CI5 Student Mastery of Technology Applications	CI6 Web-Based Lessons	
Infrastructure & Technical Support						
IA1 Students:Computer	IA2 Access/Connectivity	IA3 Classroom Technology	IA4 Technical Support	IA5 LAN/WAN	IA6 Student Access to Distance Learning	
Leadership, Administration & Instructional Support						
LAI1 Leadership & Vision	LAI2 Planning	LAI3 Instructional Support	LAI4 Communication & Collaboration	LAI5 Sustainability	LAI6 Policy	
Professional Development						
PD1 Professional Development Experiences	PD2 Models of Professional Development	PD3 Educator Capability	PD4 Participation in Technology-Driven Professional Development	PD5 Levels of Understanding	PD6 Student Training	

1:1 Implementation Summary:

Implementation Area	Total	Classification*
Curriculum & Instruction		
Infrastructure & Technical Support		
Leadership, Administration & Instructional Support		
Professional Development		

***Classification:** Early (Starting) Technology (6-8 pts.), Developing Technology (9-14 pts.), Advanced Technology (15-20 pts.), Target Computing (21-24 pts.)

Curriculum & Instruction	Early (Starting) Technology	Developing Technology	Advanced (Prepared) Technology	Target Computing
CI1 Classroom Use	<ul style="list-style-type: none"> Teachers occasionally use technology to supplement instruction and present teacher-centered lectures. Students use technology for skill reinforcement. 	<ul style="list-style-type: none"> Teachers use technology to drive instruction, improve productivity, and model technology skills Students use technology to communicate and present information. 	<ul style="list-style-type: none"> Teachers use technology as a collaborative tool in teacher-led and some student-centered learning experiences to facilitate the development of students' higher order thinking skills and to interact with content experts, peers, parents, and community. Students use technology to evaluate information and analyze data to solve problems. 	<ul style="list-style-type: none"> Teachers and students are immersed in a student-centered learning environment where technology is seamlessly integrated into the learning process and used to solve real world problems. Students use technology to develop, assess, and implement solutions to real world problems.
CI2 Access to Digital Content	<ul style="list-style-type: none"> Teachers have occasional access to digital resources for instruction. 	<ul style="list-style-type: none"> Teachers have regular access to digital resources in the classroom. 	<ul style="list-style-type: none"> Teachers have regular access to digital resources in various instructional settings (e.g., school, home, community). 	<ul style="list-style-type: none"> Teachers have on demand access to digital resources anytime/anywhere.
CI3 Content Area Connections	<ul style="list-style-type: none"> Teachers use technology for basic skills practice with little or no connections with content objectives. 	<ul style="list-style-type: none"> Teachers use technology to support content objectives. 	<ul style="list-style-type: none"> Teachers integrate technology in subject areas. 	<ul style="list-style-type: none"> Teachers seamlessly apply technology across all subject areas to provide learning opportunities beyond the classroom.
CI4 Technology Applications	<ul style="list-style-type: none"> Teachers are aware of technology applications for grades K-12. 	<ul style="list-style-type: none"> Teachers have a general understanding of appropriate technology applications for their content areas. 	<ul style="list-style-type: none"> Teachers are knowledgeable of and consistently use appropriate technology applications for their content areas and grade levels. 	<ul style="list-style-type: none"> Teachers seamlessly integrate technology applications in collaborative, cross-curricular units of instruction.
CI5 Student Mastery of Technology Applications	<ul style="list-style-type: none"> Up to 25% of students have mastered technology applications. 	<ul style="list-style-type: none"> Between 26-50% of students have mastered technology applications. 	<ul style="list-style-type: none"> Between 51-85% of students have mastered technology applications. 	<ul style="list-style-type: none"> Between 86-100% of students have mastered technology applications.
CI6 Web-Based Lessons	<ul style="list-style-type: none"> Teachers use a few web-based activities with students 	<ul style="list-style-type: none"> Teachers have customized several web-based lessons, which include online standards-based content, resources, and learning activities that support learning objectives. 	<ul style="list-style-type: none"> Teachers have created many web-based lessons, which include online standards-based content, resources, and learning activities that support learning objectives. 	<ul style="list-style-type: none"> Teachers have created and integrate web-based lessons which include online standards-based content, resources, and learning activities that support learning objectives throughout the curriculum

Infrastructure & Technical Support	Early (Starting) Technology	Developing Technology	Advanced (Prepared) Technology	Target Computing
IA1 Students:Computer	<ul style="list-style-type: none"> Less than two (2) student computers available per classroom. 	<ul style="list-style-type: none"> Two (2) to five (5) connected multimedia student computers available per classroom At least one connected multimedia student lab or mobile cart is available 	<ul style="list-style-type: none"> Six (6) or more connected multimedia student computers available per classroom. 	<ul style="list-style-type: none"> 1 to 1 access to multimedia computer for all students in the classroom when needed. Ability to take computers home.
IA2 Access/Connectivity	<ul style="list-style-type: none"> No access to the Internet in the classroom. 	<ul style="list-style-type: none"> Internet access to at least one computer in the classroom. 	<ul style="list-style-type: none"> Direct Internet access with reasonable response time in the classroom. 	<ul style="list-style-type: none"> Direct Internet connectivity in the classroom with adequate bandwidth to access e-learning technologies and resources for all students. Consistent access at home and school.
IA3 Classroom Technology	<ul style="list-style-type: none"> Teachers have shared access to resources such as, but not limited to, digital cameras, PDAs, MP3 players, probes, interactive white boards, projection systems, scanners, classroom sets of graphing calculators. 	<ul style="list-style-type: none"> Teachers have access to a designated computer and shared use of resources such as, but not limited to, digital cameras, PDAs, MP3 players, probes, interactive white boards, projection systems, scanners, classroom sets of graphing calculators. 	<ul style="list-style-type: none"> Teachers have access to a designated computer and dedicated and assigned use of commonly used technologies such as, but not limited to digital cameras, PDAs, MP3 players, probes, interactive white boards, projection systems, scanners, classroom sets of graphing calculators. 	<ul style="list-style-type: none"> Teachers have ready access to a designated computer and a fully equipped classroom to enhance student instruction. Technologies include those earlier, as well as the use of new and emerging technologies.
IA4 Technical Support	<ul style="list-style-type: none"> When needed, the response time for technical support is greater than twenty-four (24) hours. 	<ul style="list-style-type: none"> When needed, the response time for technical support is less than twenty-four (24) hours. 	<ul style="list-style-type: none"> When needed, the response time for technical support is less than eight (8) hours. 	<ul style="list-style-type: none"> When needed, the response time for technical support is less than four (4) hours.
IA5 LAN/WAN	<ul style="list-style-type: none"> Students and teachers have access to technologies such as print/file sharing and some shared resources outside the classroom 	<ul style="list-style-type: none"> Students and teachers have access to technologies such as print/file sharing, multiple applications, and district servers 	<ul style="list-style-type: none"> Students and teachers have access to technologies such as print/file sharing, multiple applications, and district-wide resources on the campus network 	<ul style="list-style-type: none"> All classrooms are connected to a robust LAN/WAN that allows easy access to multiple district-wide resources for students and teachers, including but not limited to, video streaming and desktop videoconferencing
IA6 Student Access to Distance Learning	<ul style="list-style-type: none"> Students have no or limited access to online learning with rich media such as streaming video, podcasts, applets, animation, etc. 	<ul style="list-style-type: none"> Students have scheduled access to online learning with rich media such as streaming video, podcasts, applets, animation, etc. 	<ul style="list-style-type: none"> Students have anytime access to online learning with rich media such as streaming video, podcasts, applets, animation, etc. 	<ul style="list-style-type: none"> Students have anytime access to online learning with rich media such as streaming video, podcasts, applets, and animation, and sufficient bandwidth storage to customize online instruction

Leadership, Administration & Instructional Support	Early (Starting) Technology	Developing Technology	Advanced (Prepared) Technology	Target Computing
LAI1 Leadership & Vision	<ul style="list-style-type: none"> Leadership has the basic awareness of the potential of technology in education to lead to student achievement. 	<ul style="list-style-type: none"> Leadership develops a shared vision and begins to build buy-in for comprehensive integration of technology leading to increased student achievement. 	<ul style="list-style-type: none"> Leadership communicates and implements a shared vision and obtains buy-in for comprehensive integration of technology leading to increased student achievement Distributive leadership facilitates sustainability of the initiative A student leader is included in the planning team 	<ul style="list-style-type: none"> Leadership promotes a shared vision with policies that encourage continuous innovation with technology leading to increased student achievement Teams of instructional, curriculum, technology, and administrative personnel to work together to goals and strategies for an effective 1:1 initiative.
LAI2 Planning	<ul style="list-style-type: none"> Few technology goals and objectives are incorporated in the school/district improvement plan. 	<ul style="list-style-type: none"> Several technology goals and objectives are incorporated in the school/district improvement plan. 	<ul style="list-style-type: none"> Technology-rich school/district plan sets annual technology benchmarks based on the technology applications standards. 	<ul style="list-style-type: none"> Leadership team has a collaborative, technology-rich school/district improvement plan grounded in research and aligned with district strategic plan focused on student achievement.
LAI3 Instructional Support	<ul style="list-style-type: none"> Teachers have limited opportunity for technology integration and planning or professional development. 	<ul style="list-style-type: none"> Teachers have time for professional development on the integration of technology. 	<ul style="list-style-type: none"> Teacher teams are provided time to create and participate in learning communities to stimulate, nurture, and support the use of technology to maximize teaching and learning. 	<ul style="list-style-type: none"> Educational leaders and teacher teams facilitate and support the use of technologies to enhance instructional methods. On-demand, up-to-date student data is available to administrators and teachers to drive instructional decision-making.
LAI4 Communication & Collaboration	<ul style="list-style-type: none"> School leaders use technology for limited written communication with teachers and parents 	<ul style="list-style-type: none"> Technology is used for communication and collaboration among colleagues, staff, parents, students, and the community. 	<ul style="list-style-type: none"> Current information tools and systems are used for communication, management of schedules and resources, performance assessment, and professional development. Technology is used to engage leaders from the business community. 	<ul style="list-style-type: none"> Variety of media and formats, including telecommunications and the school website used to communicate, interact, and collaborate with all education stakeholders Marketing strategies are used to engage the business community and seek volunteers to assist with promoting the initiative.
LAI5 Sustainability	<ul style="list-style-type: none"> Limited discretionary funds for implementation of technology strategies to meet goals and objectives outlined in the school/district improvement plan 	<ul style="list-style-type: none"> Discretionary funds and other resources are allocated to advance implementation of some technology strategies to meet goals and objectives outlined in the school/district improvement plan. 	<ul style="list-style-type: none"> Discretionary funds and other resources are allocated to advance implementation of most of the technology strategies to meet the goals and objectives outlined in the school/district improvement plan. 	<ul style="list-style-type: none"> Discretionary funds and other resources are allocated to advance implementation of all the technology strategies to meet the goals and objectives outlined in the school/district improvement plan. A team of stakeholders is assembled to create a long-term funding plan for the initiative. These individuals include the district leadership team, local business partners, and outside business individuals).
LAI6 Policy	<ul style="list-style-type: none"> Planning team is in place to develop policies for ensuring student safety and appropriate use of computers 	<ul style="list-style-type: none"> Policies for ensuring student safety and appropriate use of computers are in place 	<ul style="list-style-type: none"> Policies are enforced for ensuring student safety and appropriate use of computers are in place 	<ul style="list-style-type: none"> Policies for ensuring student safety and appropriate use of computers in accord with the Children's Internet Protection Act (CIPA), while still enabling teachers and students access to a wide range of information and communication resources (AUP, plans for parent, teacher, student information, filtering, virus/spyware protection)

If you have any questions or need further information about this instrument, please contact Dr. Jeni Corn (jocorn@ncsu.edu).

Professional Development	Early (Starting) Technology	Developing Technology	Advanced (Prepared) Technology	Target Computing
PD1 Professional Development Experiences	<ul style="list-style-type: none"> Teachers have participated in professional development on basic technology literacy skills and district information systems. 	<ul style="list-style-type: none"> Teachers have participated in professional development on integrating technology into content area activities for students as well as to streamline productivity and management tasks 	<ul style="list-style-type: none"> Teachers have participated in professional development on technology integration into the curriculum through the creation of new lessons and activities that promote higher order thinking skills and collaboration with experts, peers, and parents 	<ul style="list-style-type: none"> Teachers collaborate with other professionals in developing new learning environments to empower students to think critically to solve real-world problems and communicate with experts across business, industry and higher education.
PD2 Models of Professional Development	<ul style="list-style-type: none"> Teachers participate in large group professional development sessions to acquire basic technology skills. 	<ul style="list-style-type: none"> Teachers participate in large group professional development sessions focusing on increasing teacher productivity and building capacity to integrate technology effectively into content areas with follow-up that facilitates implementation. 	<ul style="list-style-type: none"> Teachers participate in on-going professional development, including training, observation/assessment, study groups, and mentoring. 	<ul style="list-style-type: none"> Teachers participate in multiple professional development opportunities that support anytime, anywhere learning available through delivery systems including individually guided activities, inquiry/action research, and involvement in a developmental/improvement process.
PD3 Educator Capability	<ul style="list-style-type: none"> Educators are aware of the certification for technology applications. 	<ul style="list-style-type: none"> Most educators meet two (2) to three (3) technology application standards. 	<ul style="list-style-type: none"> Most educators meet four (4) to five (5) of the technology application standards. 	<ul style="list-style-type: none"> Most educators meet all six (6) of the technology application standards.
PD4 Participation in Technology-Driven Professional Development	<ul style="list-style-type: none"> Teachers participate in less than nine (9) hours of technology professional development per year. 	<ul style="list-style-type: none"> Teachers participate in nine (9) to eighteen (18) hours of technology professional development per year. 	<ul style="list-style-type: none"> Teachers participate in nineteen (19) to twenty-nine (29) hours of technology professional development per year. 	<ul style="list-style-type: none"> Teachers participate in thirty (30) or more hours of technology professional development per year.
PD5 Levels of Understanding	<ul style="list-style-type: none"> Teachers understand technology basics and how to use teacher productivity tools. 	<ul style="list-style-type: none"> Teachers adapt technology knowledge and skills for content area instruction. 	<ul style="list-style-type: none"> Teachers use technology as a tool in and across content areas to enhance higher order thinking skills. 	<ul style="list-style-type: none"> Teachers create new, interactive, collaborative, and customized learning environments.
PD6 Student Training	<ul style="list-style-type: none"> Training on school technology policies and software is not provided to students. 	<ul style="list-style-type: none"> Training on school technology policies and software is being planned for students. 	<ul style="list-style-type: none"> Training on school technology policies and software is provided to students once a year. 	<ul style="list-style-type: none"> Training on school technology policies and software is provided to students multiple times a year.

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