



## MASTER PLAN

# Digital Learning Curriculum Integration

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## Purpose

The Digital Learning Curriculum Integration Master Plan identifies and describes the independent characteristics and pedagogical strategies attributed to levels of technology integration; entry, adoption, adaptation, infusion, and transformation. This Master Plan provides a framework to monitor the district-wide implementation of the professional development and resources linked to the defined desired outcomes, and measures fidelity of implementation in reaching those outcomes.

### The Plan:

- Clarifies five characteristics of meaningful learning environments within each of the five adoption areas
- Establishes clear expectations of pedagogical strategies required for a specific level of technology integration
- Provides guidance for self-assessment
- Helps visualize what the desired outcomes will look like when they are reached
- Identifies elements and actions for teachers, learners, and administrators
- Supports the systematic integration of technology in the classroom
- Provides a basis for professional learning and development

Empowering all learners to achieve their highest potential through customized learning, creativity, collaboration, and the infusion of digital tools and resources has been shown to have a causal effect on student achievement. The infusion and integration of technology constitutes a map, or plan, to guide new teachers and to refresh the practices of veterans and ultimately increase student achievement.

## Needs Assessment

The Broward School District utilized the Technology Integration Matrix (TIM) to assess and establish current levels of technology integration in the classroom. The TIM incorporates five interdependent characteristics of meaningful learning environments: active, constructive, goal directed (reflective), authentic, and collaborative. The TIM associates five levels of technology integration (i.e., entry, adoption, adaptation, infusion, and transformation) with each of the five characteristics of meaningful learning environments. Together, the five levels of technology integration and the five characteristics of meaningful learning environments create a matrix of 25 cells. Based on data collected from 1,000 classroom teachers in grades k-12, on the five levels of technology integration, 93% of teachers measured at the Entry Level of Classroom Technology integration. Only 2% of the teachers surveyed reported at the adoption level and 4% at the adaptation level. The District vision is for all teachers to achieve the Adaptation Level or higher on the Classroom Technology Integration Matrix.

## 1.0 TEACHER/INDIVIDUAL

**1.1 DESIRED OUTCOME:** Teacher provides opportunities for students to actively engage in the use of technology as a tool rather than passively receiving information from the technology.

LEVEL 5: Transformation	LEVEL 4: Infusion	LEVEL 3: Adaptation	LEVEL 2: Adoption	LEVEL 1: Entry
<p>Serves as a guide, mentor, and model in the use of technology.</p> <p>Encourages and supports the active engagement of students with technology resources.</p> <p>Facilitates lessons in which students are engaged in higher order learning activities that may not have been possible without the use of technology tools.</p> <p>Helps students locate appropriate resources to support student choice.</p> <p>Allows for different kinds of self-directed learning activities supported by various technologies, including robust access to online resources for all.</p>	<p>Guides, informs, and contextualizes student choices of technology tools</p> <p>Is flexible and open to student ideas.</p> <p>Structures lessons so that student use of technology is self-directed.</p> <p>Makes sure multiple technology tools are available in quantities sufficient to meet the needs of all students.</p>	<p>Chooses which technology tools to use and when to use them.</p> <p>Provides students the conceptual and procedural knowledge of the technology tools to guide themselves through activities.</p> <p>Acts as a facilitator toward learning, allowing for greater student engagement with technology tools.</p> <p>Makes technology tools available to students on a regular basis.</p>	<p>Controls the type of technology and how it is used.</p> <p>Paces the students through a project, making sure that they each complete each step in the same sequence with the same tool.</p> <p>Strongly regulates activities.</p> <p>Provides somewhat limited and regulated access to the technology resources.</p>	<p>Is the only one actively using technology. This may include using presentation software to support delivery of a lecture.</p> <p>Has the students complete "drill and practice" activities on computers to practice basic skills, such as typing.</p> <p>Arranges the classroom for direct instruction and individual seat work.</p> <p>Provides very limited and regulated access to the technology resources.</p>

**1.2 DESIRED OUTCOME:** Teacher provides opportunities for students to use technology tools to collaborate with others rather than always working individually.

LEVEL 5	LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
<p>Seeks partnerships outside of the setting to allow students to access experts and peers in other locations.</p> <p>Encourages students to extend the use of collaborative technology tools in higher order learning activities that may not have been possible without the use of technology tools.</p> <p>Connects tech tools in this setting to text, voice, and video chat applications and network access has sufficient bandwidth to support the use of these technologies for all students simultaneously.</p>	<p>Encourages students to use technology tools collaboratively.</p> <p>Arranges setting so that technology tools that allow for collaboration are permanently located in the setting and are available in sufficient quantities to meet the needs of all students.</p>	<p>Provides opportunities for students to use technology to work with others.</p> <p>Selects and provides technology tools for students to use in collaborative ways, and encourages students to begin exploring the use of these tools.</p> <p>Arranges desks and workstations so that multiple students can access technology tools simultaneously.</p>	<p>Directs students in the conventional use of technology tools for working with others.</p> <p>Arranges the setting to allow for the possibility of group work, and at least some collaborative technology tools are available.</p>	<p>Directs students to work alone on tasks involving technology.</p> <p>Arranges the setting for direct instruction and individual seat work.</p>

**1.3 DESIRED OUTCOME:** Teacher provides opportunities for students to use technology tools to connect new information to their prior knowledge.

LEVEL 5	LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
<p>Facilitates higher order learning opportunities in which students regularly engage in activities that may have been impossible to achieve without the use of technology tools.</p> <p>Encourages students to explore the use of technology tools in unconventional ways and to use the full capacity of multiple tools in order to build knowledge.</p> <p>Creates a setting that includes robust access to a wide variety of technology tools, robust access to online resources and communities, and the ability to publish new content online.</p>	<p>Consistently allows students to select technology tools to use in building an understanding of a concept.</p> <p>Provides a context in which technology tools are seamlessly integrated into a lesson.</p> <p>Is supportive of student autonomy in choosing the tools and when they can best be used to accomplish the desired outcomes.</p> <p>Creates a setting that includes a variety of technology tools and access to rich online resources that are available in sufficient quantities to meet the needs of all students.</p>	<p>Has designed a lesson in which students' use of technology tools is integral to building an understanding of a concept.</p> <p>Gives the students access to technology tools and guides them to appropriate resources.</p> <p>Makes sure that technology tools that facilitate the construction of meaning are available to students for conventional uses.</p>	<p>Provides some opportunities for students to use technology in conventional ways to build knowledge and experience.</p> <p>Allows students to construct meaning about the relationships between prior knowledge and new learning, but the teacher is making the choices regarding technology use.</p> <p>Makes technology tools that allow for building knowledge available to students for conventional uses on a limited basis.</p>	<p>Uses technology to deliver information to students.</p> <p>Arranges the classroom so that all students can view the teacher's presentation.</p>

**1.4 DESIRED OUTCOME:** Teacher provides opportunities for students to use technology tools to link learning activities to the world beyond the instructional setting rather than working on decontextualized assignments.

LEVEL 5	LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
<p>Encourages innovative use of technology tools in higher order learning activities that support connections to the lives of the students and the world beyond the instructional setting.</p> <p>Provides access to technology tools and online resources that allow for student engagement with the local or global communities. A variety of technology tools are available with robust access for all students simultaneously to information outside of the school and primary source materials.</p>	<p>Encourages students to use technology tools to make connections to the world outside of the instructional setting and to their lives and interests.</p> <p>Provides a learning context in which students regularly use technology tools and have the freedom to choose the tools that, for each student, best match the task.</p> <p>Provides a variety of technology tools and access to rich online resources, including information outside of the school and primary source materials that are available in sufficient quantities to meet the needs of all students.</p>	<p>Creates instruction that purposefully integrates technology tools.</p> <p>Provides access to information on community and world issues.</p> <p>Directs the choice of technology tools but students use the tools on their own, and may begin to explore other capabilities of the tools.</p> <p>Occasionally gives students access to information about community and world events and primary source materials.</p>	<p>Directs students in the conventional use of technology tools for learning activities that are sometimes related to the students or issues beyond the instructional setting.</p> <p>Rarely gives students access to information about community and world events and primary source materials.</p>	<p>Assigns work based on a predetermined curriculum unrelated to the students or issues beyond the instructional setting.</p> <p>Gives students access to resources available via technology in the instructional setting include primarily textbook supplementary material and reference books or websites, such as encyclopedias.</p>

**1.5 DESIRED OUTCOME:** Teacher provides opportunities for students to use technology tools to set goals, plan activities, monitor progress, and evaluate results rather than simply completing assignments without reflection.

LEVEL 5	LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
<p>Creates a rich learning environment in which students regularly engage in higher order planning activities that may have been impossible to achieve without technology.</p> <p>Sets a context in which students are encouraged to use technology tools in unconventional ways that best enable them to monitor their own learning.</p> <p>Provides access to a wide variety of technology tools and robust access to online resources for all students simultaneously.</p>	<p>Creates a learning context in which students regularly use technology tools for planning, monitoring, and evaluating learning activities.</p> <p>Facilitates students' selection of technology tools.</p> <p>Provides access to a variety of technology tools for planning in sufficient quantities to meet the needs of all students.</p>	<p>Selects the technology tools and clearly integrates them into the lesson.</p> <p>Facilitates students independent use of the technology tools to set goals, plan, and monitor progress, and evaluate outcomes. For example, in a given project, the teacher may select a spreadsheet program that students use independently to plan and monitor progress.</p> <p>May provide guidance in breaking down tasks.</p> <p>Provides access to technology tools (such as graphic organizers, calendars, spreadsheet software, and timeline software) for planning, monitoring progress, and evaluating outcomes.</p>	<p>Directs students step by step in the conventional use of technology tools to either plan, monitor, or evaluate an activity. For example, the teacher may lead the class step by step through the creation of a KWL chart using concept mapping software.</p> <p>Provides access to technology tools that allow students to plan, monitor, and evaluate their work.</p>	<p>Uses technology to give students directions and monitor step-by-step completion of tasks.</p> <p>Monitors the students' progress and sets goals for each student.</p> <p>Provides access to skill building websites and applications, including the ability to track student progress across levels.</p>

**Data Collection Plan: TEACHER/INDIVIDUAL**

Level of Measurement	Instrument/Data Type	Frequency	Responsible for Collecting Data
Quality and Fidelity of Implementation	-Completes feedback forms and surveys one per each course that is completed -Analysis of Technology Integration Matrix Observation tool data -Summary of feedback throughout the year -Analysis and comparison of Technology Integration Matrix Observation data to baseline data	1 x Year	District/Site Instructional Facilitator  Technology Specialist  Administrator
Impact on Practice	-Analysis of TIM-O data -Analysis of survey feedback -Analysis and comparison of Technology Integration Matrix Observation data, base-line to end of year	1 x Year	District/Site Instructional Facilitator Technology Specialist  Administrator
Impact on Student Achievement	FSA EOC College and Career Ready	1 x Year	District/Site Instructional Facilitator  Technology Specialist  Administrator

## 2.0 ADMINISTRATOR /SUPERVISOR

**2.1 DESIRED OUTCOME:** Administrator supports the professional learning culture that promotes the integration of digital tools and resources into teaching and learning.

LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
<p>Makes digital learning among top priorities for students, staff and themselves as evidenced by the selection of professional learning activities conducted at their schools that focus on effective instruction practices of integrating technology into teaching and learning.</p> <p>Sets agenda for professional learning by aligning it to classroom, school, and District goals for student and teacher learning.</p>	<p>Accepts importance of digital learning for students, staff and themselves. However, professional learning activities focus more on learning hardware and applications instead of addressing effective instructional practices of integrating technology into teaching and learning.</p> <p>Aligns professional learning to only classroom and school goals for student and teacher learning.</p>	<p>Does not consider digital learning among their top priorities for students, staff and themselves. There is no evidence of professional learning activities to promote integration of digital tools and resources into teaching and learning</p> <p>Does not align professional learning to classroom, school and the District goals for student and teacher learning.</p>	<p>Fails to establish the criteria for effective implementation of digital tools and resources and there is little or no evidence of monitoring implementation</p>
<p>Develops expertise in others by setting high standards for their performance, and use data to give frequent, constructive feedback.</p>	<p>Advocates for professional learning and make their own career-long learning visible to others by developing and participating in professional learning within and beyond the school.</p>	<p>Does not develop expertise in others by setting high standards for their performance and using data to give frequent feedback.</p>	

**2.2 DESIRED OUTCOME:** Administrator monitors the use of digital tools and resources.

LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
<p>Facilitates changes to instructional practices in the implementation of digital tools and resources in the classrooms</p> <p>Analyzes observation data from all classrooms to assess school-wide integration and implement improvement strategies in integration of digital tools and resources</p> <p>Monitors integration of online resources such as BEEP, ILS, and LMS, to make improvements to the learning processes</p> <p>Uses data regarding the integration of digital tools and resources for performance, assessment of growth and refinement of instructional strategies.</p>	<p>Monitors implementation throughout the school by doing walk-through observations in each classroom</p> <p>Compiles observation data from all classrooms to assess school-wide implementation and reflect on implementation of digital tools and resources</p> <p>Examines analytics data for implementation with fidelity</p> <p>Examines the school's data to determine the effectiveness of implementation of digital tools and resources in the classroom.</p>	<p>Establishes the criteria for effective implementation of digital tools and resources</p> <p>Identifies observation data to assess school-wide implementation of digital tools and resources</p> <p>Identifies analytics data from different sources such as BEEP, ILS, and LMS</p> <p>Identifies data on the integration of digital tools and resources in the classroom.</p>	<p>Fails to establish the criteria for effective implementation of digital tools and resources and there is little or no evidence of monitoring implementation.</p>

**2.3 DESIRED OUTCOME:** Administrator effectively communicates the District and school visions for curriculum integration through digital learning.

LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
<p>Communicates the District's and school's vision for technology curriculum integration to stakeholders using more than two methods as evidenced by websites, parent link, webinars, and open house meetings</p> <p>Share school's "best practices" with other schools, the District and other Districts</p>	<p>Communicates the District's and school's visions for technology curriculum integration to stakeholders using at least two methods as evidenced by websites, parent link, webinars, and open house meetings</p> <p>Reports "best practices" and results from the successful implementation of the school's technology initiatives within the school community.</p>	<p>Communicates the District's and school's visions for technology curriculum integration to stakeholders using only one method</p> <p>Acknowledges "best practices" with individual teacher(s).</p>	<p>Shows no evidence of communication of the District's and school's visions for technology curriculum integration to stakeholders</p>

<b>Data Collection Plan: ADMINISTRATORS</b>			
Level of Measurement	Instrument/Data Type	Frequency	Responsible for Collecting Data
Quality and Fidelity of Implementation	-Completes feedback forms and surveys once per each course that is completed -Analysis of Technology Integration Matric Observation tool data -Summary and Analysis of feedback throughout the year - Analysis and comparison of Technology Integration Matric Observation data to baseline data	1 x Year	District Administrator
Impact on Practice	Analysis of TIM-O data -Analysis of survey feedback	1 x Year	District Administrator
Impact on Student Achievement	FSA EOC College and Career Ready	1 x Year	District Administrator

<b>3.2 DESIRED OUTCOME:</b> Instructional Facilitator monitors the use of digital tools and resources			
<b>LEVEL 4</b>	<b>LEVEL 3</b>	<b>LEVEL 2</b>	<b>LEVEL 1</b>
<p>Facilitates changes to instructional practices in the implementation of digital tools and resources in the classrooms.</p> <p>Analyzes observation data from all classrooms to assess school-wide integration and implement improvement strategies in integration of digital tools and resources.</p>	<p>Monitors implementation throughout the school by doing walk-through observations in each classroom.</p> <p>Compiles observation data from all classrooms to assess school-wide implementation and reflect on implementation of digital tools and resources.</p>	<p>Establishes the criteria for effective implementation of digital tools and resources</p> <p>Identifies observation data to assess school-wide implementation of digital tools and resources</p>	<p>Fails to establish the criteria for effective implementation of digital tools and resources and there is little or no evidence of monitoring implementation.</p>
<p>Monitors integration of online resources such as BEEP, ILS, and LMS, to make improvements to the learning processes.</p> <p>Uses data regarding the integration of digital tools and resources for performance, assessment of growth and refinement of instructional strategies.</p>	<p>Examines analytics data for implementation with fidelity.</p> <p>Examines the school's data to determine the effectiveness of implementation of digital tools and resources in the classroom.</p>	<p>Identifies analytics data from different sources such as BEEP, ILS, and LMS</p> <p>Identifies data on the integration of digital tools and resources in the classroom.</p>	

**3.3 DESIRED OUTCOME:** Instructional Facilitator effectively communicates the District and school visions for curriculum integration through digital learning.

LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
<p>Communicates the District's and school's vision for technology curriculum integration to stakeholders using more than two methods as evidenced by websites, parent link, webinars, and open house meetings</p> <p>Share school's "best practices" with other schools, the District and other Districts</p>	<p>Communicates the District's and school's visions for technology curriculum integration to stakeholders using at least two methods as evidenced by websites, parent link, webinars, and open house meetings.</p> <p>Reports "best practices" and results from the successful implementation of the school's technology initiatives within the school community.</p>	<p>Communicates the District's and school's visions for technology curriculum integration to stakeholders using only one method.</p> <p>Acknowledges "best practices" with individual teacher(s).</p>	<p>Shows no evidence of communication of the District's and school's visions for technology curriculum integration to stakeholders</p>

<b>Data Collection Plan: DISTRICT INSTRUCTIONAL FACILITATORS</b>			
<b>Level of Measurement</b>	<b>Instrument/Data Type</b>	<b>Frequency</b>	<b>Responsible for Collecting Data</b>
Quality and Fidelity of Implementation	MLP Data Survey Data	1 x Year	District/Site Based Administrator Technology Specialist
Impact on Practice	Technology Integration Matrix Observation Tool (TIM-O)/TIM assessment data	1 x Year	District/Site Based Administrator
Impact on Student Achievement	FSA/EOC data Technology Integration Matrix Observation tool (TIM-O) data College and Career Ready data	1 x Year	District/Site Based Administrator

## Mid-Year and End of Year Evaluation Plan Template

### Quality and Fidelity of Implementation

Participant	Middle of Year Evaluation	End of Year Evaluation
Teacher/Individual	<ul style="list-style-type: none"> <li>-Completes feedback forms and surveys one per each course that is completed</li> <li>-Analysis of Technology Integration Matrix Observation tool data</li> </ul>	<ul style="list-style-type: none"> <li>-Summary of feedback throughout the year</li> <li>-Analysis and comparison of Technology Integration Matrix Observation data to baseline data</li> </ul>
Administrator/Supervisor	<ul style="list-style-type: none"> <li>-Completes feedback forms and surveys once per each course that is completed</li> <li>-Analysis of Technology Integration Matrix Observation tool data</li> </ul>	<ul style="list-style-type: none"> <li>-Summary and Analysis of feedback throughout the year</li> <li>- Analysis and comparison of Technology Integration Matrix Observation data to baseline data</li> </ul>
District Instructional Facilitator	<ul style="list-style-type: none"> <li>-Completes feedback forms and surveys once per each course that is completed.</li> </ul>	<ul style="list-style-type: none"> <li>-Summary and Analysis of feedback throughout the year</li> <li>- Analysis and comparison of Technology Integration Matrix Observation data to baseline data</li> </ul>

### Impact on Practice

Participant	Middle of Year Evaluation	End of Year Evaluation
Teacher/Individual	<ul style="list-style-type: none"> <li>-Analysis of TIM-O data</li> <li>-Analysis of survey feedback</li> </ul>	<ul style="list-style-type: none"> <li>-Analysis and comparison of Technology Integration Matrix Observation data, base-line to end of year</li> </ul>
Administrator/Supervisor	<ul style="list-style-type: none"> <li>-Analysis of TIM-O data</li> <li>-Analysis of survey feedback</li> </ul>	<ul style="list-style-type: none"> <li>Analysis and comparison of Technology Integration Matrix Observation data, base-line to end of year</li> </ul>
District Instructional Facilitator	<ul style="list-style-type: none"> <li>-Analysis of TIM-O data</li> <li>-Analysis of survey feedback</li> </ul>	<ul style="list-style-type: none"> <li>Analysis and comparison of Technology Integration Matrix Observation data, base-line to end of year</li> </ul>

<b>Impact on Student Achievement</b>		
<b>Participant</b>	<b>Middle of Year Evaluation</b>	<b>End of Year Evaluation</b>
Teacher/Individual	N/A	FSA EOC College and Career Ready
Administrator/Supervisor	N/A	FSA EOC College and Career Ready
District Instructional Facilitator	N/A	FSA EOC College and Career Ready

The desired outcomes for teachers were taken from the Technology Integration Matrix produced by the Florida Center for Instructional Technology, College of Education, University of South Florida.

The Technology Integration Matrix

Level of Technology Integration into the Curriculum

	Entry	Adoption	Adaptation	Infusion	Transformation
Active	Information passively received	Conventional, procedural use of tools	Conventional independent use of tools; some student choice and exploration	Choice of tools and regular, self-directed use	Extensive and unconventional use of tools
Collaborative	Individual student use of tools	Collaborative use of tools in conventional ways	Collaborative use of tools; some student choice and exploration	Choice of tools and regular use for collaboration	Collaboration with peers and outside resources in ways not possible without technology
Constructive	Information delivered to students	Guided, conventional use for building knowledge	Independent use for building knowledge; some student choice and exploration	Choice and regular use for building knowledge	Extensive and unconventional use of technology tools to build knowledge
Authentic	Use unrelated to the world outside of the instructional setting	Guided use in activities with some meaningful context	Independent use in activities connected to students' lives; some student choice and exploration	Choice of tools and regular use in meaningful activities	Innovative use for higher order learning activities in a local or global context
Goal-Directed	Directions given, step-by-step task monitoring	Conventional and procedural use of tools to plan or monitor	Purposeful use of tools to plan and monitor; some student choice and exploration	Flexible and seamless use of tools to plan and monitor	Extensive and higher order use of tools to plan and monitor

Characteristics of the Learning Environment

The Technology Integration Matrix was developed by the Florida Center for Instructional Technology at the University Of South Florida College Of Education and funded with grants from the Florida Department of Education. For more information, visit <http://mytechmatrix.org> <http://fcit.usf.edu/matrix/>