Long Range Plan for Technology 2014-18

CISD

Long Range Plan for Technology (LRPT)

Goals, Objectives, and Strategies

(Short link to view this document: http://tiny.cc/LRPT)

LRPT is no longer required for E-Rate funding. However, we will continue to use and update this document for reference, continuity, and consistency across the district. This is a live document and is continuously changing.

Special thanks to our committee members consisting of Learners, Parents, Educators, Admin Staff, Business & Community Members:

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Current realities

- 1:World (K-12)
- Continue wireless projection (tech for multiple devices)
- Genius bar in each school (Elementary/Middle missing this)
- Courses requiring new technology in endorsement areas
- 4th-12th 1:World
- Research through databases
- PBL. UbD, Learning Framework, Flipped Classroom
- Active participation in social media
- Focus on using technology to communicate, create, collaborate, and connect
- Information Fluency - learners analyze, evaluate, and curate information
- Limited parent education
- Future Ready Outcomes are a focus for learning (not losing knowledge of facts, just using them in context)
- Device Support - for repair and help made up of learners, educators, and staff

Future aspirations

- Humans - eye to eye and face to face is still important - building relationships is key
- Courses requiring new technology in new endorsement areas are provided
- 1:world district wide (every learner and educator)
- Parent Education - parents can come learn and share
- Highly Interactive Virtual Classrooms
- Device Support - for repair and help - in every school made up of learners, educators, and staff
- Organized system for troubleshooting etc (led by Learners helping lower grade levels)
- Accommodating learners who don't have technology access at home
- Predictive analytics in education
- Ease of database access (consolidated systems)
- K-12 coding curriculum
- MakerSpace considerations
- Entrepreneurship /INCubator considerations
- Safety, reliability, resilience
- Paperless or at least, less paper

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Gaps

- Highly interactive virtual classroom
- Solution for wireless display to projector
- Teaching face-to-face communication skills, embedded in curriculum
- K-12 Coding Curriculum embedded in content areas
- Current Genius Bars not fully operational - spotty support for student devices
- Device Support - for repair and help - in every school made up of learners, educators, and staff
- Organized system for troubleshooting etc.(led by Learners helping lower grade levels)
- Accommodating learners who don't have technology access at home
- Authentic learning
- Global awareness

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GOAL 1: Expand digital programs and services to meet the needs of all learners in order to be contributing citizens in a 1:world society (a device for every learner and educator PK12) districtwide.

OBJECTIVE 1.1: Develop and implement an aligned K12 Digital Citizenship program.

LRPT category: **Teaching and Learning**

Code	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
1.1.1	Post published strategies in learning management system.	Summer 2017	CISD Administrators, DLCs, Librarians and Educators	Digital Citizenship strategies are published in learning management system
1.1.2	Annually evaluate the effectiveness of strategies implemented and work with stakeholders to enhance opportunities.	Every Spring	CISD Administrators, DLCs. Librarians and Educators	Proficiency documents developed and published for staff reference
1.1.3	Update privacy/protection processes that are district-wide for classroom management programs.	Every Spring	CISD Technology Dept.	Security system in place and ongoing data collection
1.1.4	Identify classroom management systems that are compatible with the devices used on each campus.	Every Fall	CISD Technology Dept.	Successful implementation of classroom management system.

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OBJECTIVE 1.2: Expand the Career and Technology courses within CISD to provide additional opportunities to the entire learner population.

LRPT category: **Teaching and Learning**

	Strategies:	Timeline	Person(s) Responsible	Measurable Evidence
1.2.1	Administer a 6th-12th survey for students and parents to identify career education interest.	Every Fall	Director of CTE	Survey will be completed with at least a 30% response rate and data analyzed and categorized into interest areas.
1.2.2	CTE Advisory Committee will establish a comprehensive 6th -12th growth plan for CTE programs based on House Bill 5 and the endorsement areas.	Every Spring	Director of CTE, Educators	Plan is developed to increase the number of courses and map out career pathways. Plan is updated each year.
1.2.3	Design a curriculum curation plan and professional learning plan to meet the needs of the new modified or changed CTE courses.	Every Spring	Director of CTE	Curriculum curation plan is developed. Professional development plan is completed.
1.2.4	Evaluate CTE program effectiveness annually based on college/workforce readiness standards to align with the endorsement areas.	Every Summer	Director of CTE	Program evaluation is completed. Courses and curriculum are adjusted to close gaps in the program.
1.2.5	Create a comprehensive marketing and communication plan to reach all stakeholders impacted by changes.	Every Summer	Director of CTE, PR Department	Marketing plan is developed. Messages are sent to students and parents about course options.
1.2.6	Gather retention and program participation data on CTE alumni.	Every Fall	CTE Director and high school counselors	Post high school, college and career data is compared with CTE program participation.

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1.2.7	Create new or adjust current curriculum in HS computer science or computer programming courses.	2016-2018	Director of CTE	New courses are created or curriculum is updated.

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GOAL 2: Prepare our CISD educators to become designers and consumers of learning experiences in a 1:world society (a device for every learner and educator PK12) districtwide.

OBJECTIVE 2.1: Increase CISD educators' level of technology design expertise through a differentiated professional learning program.

LRPT category: **Educator Preparation and Development**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
2.1.1	Train all new new staff in Instructional Technology Integration.	Ongoing	Exemplar Educators and Digital Learning Coaches	Attendance at training sessions recorded in Eduphoria Workshop.
2.1.2	Provide follow-up Instructional Technology Integration for all existing staff and administrators.	Ongoing	Digital Learning Coaches	Attendance recorded in Eduphoria Workshop. Agendas of training sessions.
2.1.3	Continue differentiated professional learning model (including paraprofessionals) to include coaching, face-to-face, and virtual learning.	Ongoing	Digital Learning Coaches	Digital Learning Coaches website, webinar recordings, schoology courses, and educator reflections.
2.1.4	Create a choice summer learning experience dedicated to the integration of technology at all levels.	Annually	Director of Professional Learning Digital Learning Coaches	Recorded attendance and educator reflections.
2.1.5	Define and record exemplar examples of learning experiences created by learners, educators, and community.	Ongoing	Director of Instructional Technology	Exemplar experiences and videos.
2.1.6	Annually assess and evaluate the professional learning model.	Bi-Annual	Campus Administrators Central Administrators Digital Learning Coaches	Evaluation will be conducted and presented in a Board Report. Clarity Results

OBJECTIVE 2.2: Implement a learning management system, K-12th.

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LRPT category: **Educator Preparation and Development**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
2.2.1	Deliver professional learning to new staff utilizing the campus learning management system (Schoology and Echo)	Ongoing	Exemplar Educators Digital Learning Coaches Schoology Professional Trainers	Eduphoria attendance records Learning agendas. *Standards in the District are ECHO (at New Tech), and Schoology.
2.2.2	Provide ongoing professional learning to all CISD educators about designing and vetting digital content for educators on campus LMS	Ongoing	Elementary and Secondary Educators Digital Learning Coaches Schoology Professional Trainers	Eduphoria attendance records Learning agendas.
2.2.3	Provide professional learning for district administrators and campus principals on designing professional learning using Schoology.	Summer 2017	Director of Instructional Technology Digital Learning Coaches	Training is created and offered to CISD Administration and campus principals.
2.2.4	Design and organize learning experiences in Schoology (LMS system) for learners and educators.	Ongoing	Elementary and Secondary Educators Digital Learning Coaches Curriculum Directors Principals	Courses are created and designed in Schoology. *Please note ECHO is also a platform used at New Tech for designing and organizing learning.
2.2.5	Implement courses with learners utilizing Schoology.	Ongoing	Elementary and Secondary Educators Digital Learning Coaches	Learner accounts are created in campus LMS (Schoology) and designed learning experiences are being delivered through learning management system.
2.2.6	Provide training for CISD parents on how to use the system to gain insight on their child's learning.	Ongoing	Director of Instructional Technology	Courses are utilized by learners, staff and parents.

2.2.7	Create and implement a feedback and evaluation system for improvement.	Every Spring	Director of Instructional Technology	Evaluation system is developed and feedback is obtained from student, staff, and parents.
2.2.8	Create a comprehensive marketing and communication plan to reach all stakeholders.	Every Spring	Director of Instructional Technology PR Department	Marketing messages are sent to all stakeholders.

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GOAL 3: Provide adequate staffing support (technical and instructional) for every campus, K12, to support the district in their 1:World initiative.

OBJECTIVE 3.1: Create a staffing model with adequate support for campuses.

LRPT category: **Leadership, Administration and Support**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
3.1.1	Define what "adequate" equates to in a K-12 setting (for ex: 1 technician to every 750 devices, 1 integration specialist to every 1000 learners).	January 2015 <u>January 2017</u>	District Administrative Leadership Committee <u>Human Resources</u>	CISD established staffing model.
3.1.2	Present staffing model to stakeholders for approval.	February 2015 <u>February 2017</u>	District Administrative Leadership Committee <u>Human Resources</u>	Staffing model presentation.
3.1.3	Budget for, hire and train additional approved support staff (technical and instructional).	April 2015 <u>March 2017</u>	District Administrative Leadership Committee <u>ELT-Board Approval</u>	Additional support staff added.
3.1.4	<u>Create/implement a replacement cycle/timeline for replacing professional staff computer and/or laptop needed to function in their job</u>	<u>Ongoing</u>	Technology Department	Staff is equipped with current technology device(s).

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OBJECTIVE 3.2: Streamline and standardize our system of technical support.

LRPT category: **Leadership, Administration and Support**

	Strategies	**Timeline**	**Person(s) Responsible**	**Measurable Evidence**
3.2.1	Explore different delivery methods of support (virtual, learner supported, etc..) that meet the needs of the district.	<u>Ongoing</u>	Technology Department	List of recommended methods of support.
3.2.2	Pilot and evaluate the different methods of support.	<u>Ongoing</u>	Technology Department	Survey about various pilots.
3.2.3	Implement the recommended method of support.	August 2016 - June 2017	Technology Department	Support method is implemented. Data is captured and analyzed

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GOAL 4: Improve community awareness of the role of technology in the Learning Framework and differing campus initiatives.

OBJECTIVE 4.1: Clearly articulate/communicate the district's vision to prepare our learners for the future.

LRPT category: **Leadership, Administration and Support**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
4.1.1	Explain the district's Future Ready Vision and each campus' supporting initiative (with supporting exemplars) and promote on the district's website.	Ongoing	District and Campus Leadership	Information for each campus is accurately represented (initiative and exemplars) on the CISD website.
4.1.2	Market and conduct forums, showcases, open houses, etc... to improve the community awareness of the role of technology within the district.	Ongoing	District and Campus Leadership	Schedule of forums, showcase, open houses

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GOAL 5: Maintain a secure, highly available, redundant, and scalable infrastructure.

OBJECTIVE 5.1: Ensure critical data is replicated to a remote location.

LRPT category: **Infrastructure for Technology**

	Strategies	Timeline	Person(s) Responsible	**Measurable Evidence**
5.1.1	Install current generator at secondary datacenter	2017-2018	Director of Technical Services	Relocation of existing generator
5.1.2	Implement a solution to achieve an active-active datacenter to keep resources and applications available	2017-2018	Director of Technical Services	Implementation of the active-active datacenter

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OBJECTIVE 5.2: Optimize and expand the network (wireless and Internet bandwidth) to support 1:World society districtwide.

LRPT category: **Infrastructure for Technology**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
5.2.1	Ongoing configuration of software for network optimization.	2014-2018	Director of Technical Services	Monitor the current demand through appropriate metrics.
5.2.2	Monitor network utilization and capacity planning through use of monitoring tools	2014-2018	Director of Technical Services	Reports showing network utilization.
5.2.3	Acquire hardware and additional Internet bandwidth as needed.	2014-2018	CTO	Mobile devices can connect at the same time with adequate speed.
5.2.4	Instructional technology requirements vs. Infrastructure Capacity.	2015-2018	CTO	Improved instructional technology and greater capacity with infrastructure as evident by helpdesk data.

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LRPT category: **Infrastructure for Technology**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
5.3.1	Explore options for access on buses.	May 2015-2017	CTO Asst. Supt. for Business and Support	Solutions are vetted.
5.3.2	Acquire hardware if needed.	June 2017-2018	CTO Director of Technical Services	Solution is implemented and configured.
5.3.3	Verify adequate access to resources.	August 2017-2018	CTO Asst. Supt for Business and Support	Transportation used by CISD have wireless capability.

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GOAL 6: Data and documents that are fully integrated and accessible to provide functional reporting.

OBJECTIVE 6.1: Implement a document management system with storage, search and retrieval capabilities that reduces hard copy records, improves digital workflow and provides digital record management.

LRPT category: **Infrastructure for Technology**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
6.1.1	Research document management systems.	2017-2018	CTO Asst. Supt for Business and Support Asst. Supt for Administration	Solutions are vetted.
6.1.2	Acquire hardware and software.	2017-2018	CTO	Solution is implemented and configured.
6.1.3	Provide training for use of system and scanning of documents.	2017-2018	CTO Asst. Supt. for Business and Support Asst. Supt. for Administration	10% reduction in paper each year. 25% less filing cabinets. More accurate and efficient open records; faster response time.

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OBJECTIVE 6.2: Consolidate siloed data into a single solution.

LRPT category: **Infrastructure for Technology**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
6.2.1	Identify data to consolidate.	May 2017	CTO Asst. Supt. for Business and Support Asst. Supt. for Administration Asst. Supt. for Curriculum & Instruction	All data is identified.
6.2.2	Research systems.	May 2017	CTO Asst. Supt. for Business and Support Asst. Supt. for Administration Asst. Supt. for Curriculum & Instruction	Solutions are vetted.
6.2.3	Migrate data.	August 2017	Director of Technical Services	All data is consolidated into a central location.
6.2.4	Provide data processing training for the end users.	August 2017	CTO Asst. Supt. for Business and Support Asst. Supt. for Administration Asst. Supt. for Curriculum and Instruction	Survey of staff indicates they can find needed data.

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OBJECTIVE 6.3: Implement a robust financial management system that provides seamless data collection and reporting with full technical support from the provider.

LRPT category: **Infrastructure for Technology**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
6.3.1	Migrate data	May 2016-2017	Director of Technical Services	All data is migrated and verified.
6.3.2	Provide training for end users.	May 2016-2017	CFO Asst. Supt. for Business and Support Asst. Supt. for Administration	Staff understand how to use the new financial system.

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GOAL 7: Utilize effective and comprehensive communication systems for all stakeholders.

OBJECTIVE 7.1: Provide parents, students and schools realtime transportation data by fully integrating with Dallas County Schools. For example, a badge system for all CISD students.

LRPT category: **Infrastructure for Technology**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
7.1.1	Discuss with Dallas County Schools options for a comprehensive communication system.	May 2015-2018	CTO Asst. Supt. for Business and Support Asst. Supt. for Administration	Solutions are vetted.
7.1.2	Integrate solution to provide real-time data into website/mobile application.	August 2016-2018	CTO Asst. Supt. for Administration	Implemented solutions provide data.

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OBJECTIVE 7.2: Provide telecommunication services required to maintain effective communication and to support emergency services.

LRPT category: **Infrastructure for Technology**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
7.2.1	Ensure telecommunication services are available.	2014-2015 2015-2016 2016-2017 2017-2018	CTO Director of Technical Services	Reports indicating minimal downtime for services.
7.2.2	Ensure emergency services communication is available.	2014-2015 2015-2016 2016-2017 2017-2018	Director of Technical Services	Periodic testing logs of 911, elevator, fire, and security POTS lines.
7.2.3	Provide telecommunication services for VOIP phone system.	2014-2015 2015-2016 2016-2017 2017-2018	CTO Director of Technical Services	Reports indicating minimal downtime for services.
7.2.4	Continue to provide telecommunication services for long distance for all campuses.	2014-2015 2015-2016 2016-2017 2017-2018	CTO Director of Technical Services	Reports indicating minimal downtime for services.
7.2.5	Continue to provide cellular services for selected district administrators.	2014-2015 2015-2016 2016-2017 2017-2018	CTO Director of Technical Services	Reports indicating minimal downtime for services.

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GOAL 8: Maintain equitable standards across district

OBJECTIVE 8.1: Create equitable leaner device standards across the district.

LRPT category: **Infrastructure for Technology**

	Strategies	Timeline	Person(s) Responsible	Measurable Evidence
8.1.1	Re-evaluate classroom technology standards.	Ongoing	CTO Director of Technical Services Director of Instructional Technology	Standards are updated and shared.
8.1.2	Implement and maintain replacement cycle.	Ongoing	Director of Technical Services	Inventory logs reflecting implementation and maintenance.
8.1.3	Investigate device needs and define process to create equity across campuses.	Ongoing	Director of Technical Services	Plan data logs reflecting the equity implementation.
8.1.4	Redistribute devices to create equity.	Ongoing	Director of Technical Services	Plan and Inventory logs reflecting the equity implementation.

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LRPT category: **Infrastructure for Technology**

	Strategies	Timeline:	Person(s) Responsible:	Measurable Evidence
8.2.1	Update all security cameras to provide better visibility and coverage.	2016-2018	Director of Technical Services	Cameras in place capturing data.
8.2.2	Implementation of video surveillance system for SPED as needed.	2016-2018	Director of Technical Services	Video surveillance is implemented.
8.2.3	Review firewall logs and ensure access lists are documented	2016-2017	Director of Technical Services	Firewall logs
8.4.4	Investigate security solutions for IPS/IDS, NAC, SIEM, and DDoS prevention	2017-2018	Director of Technical Services	Comparison study of solutions
8.2.5	Implement cyber security training and ongoing testing	2016-2017	CTO Director of Technical Services	Staff trained and report metrics
8.2.6	Evaluate liability insurance for security breach	2017-2018	CTO Director of Technical Services	Comparison of plans
8.2.7	Perform third party security audit	2017-2018	CTO Director of Technical Services	Security audit report

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OBJECTIVE 8.3: Technology upgrade for new and existing buildings

LRPT category: **Infrastructure for Technology**

	Strategies	Timeline:	Person(s) Responsible:	Measurable Evidence
8.3.1	Wireless density upgrade for Wilson and Cottonwood Creek elementary schools	2016-2018	Director of Technical Services	Wireless APs installed in all classrooms
8.3.2	Plan and install the new Middle School West technology infrastructure.	2016-2017	CTO Director of Technical Services	Wireless APs installed in all classrooms MDF, IDF closets and switches Phone system
8.3.3	Plan and Install the new 9th Grade Center technology infrastructure.	2017-2018	CTO Director of Technical Services	As needed: Upgrade Wireless APs in all classrooms MDF, IDF closets and switches Phone system
8.3.4	Plan and install the Data Center upgrades	2016-2018	CTO Director of Technical Services	Fiber resilience at all buildings Infrastructure expansion MDM expansion Hybrid Cloud Phases 1 and 2
8.3.5	Upgrade and install Boardroom audio/video broadcast system	2016-2017	CTO Director of Technical Services PR Department	Analog to digital conversion completed