Lewisville ISD Facilities Advisory Committee 2016-17

Thursday, October 20, 2016 William T. Bolin Administrative Center Board Room 5:30 PM – 9:00 PM Snack Supper begins at 5:30 PM; Meeting Content begins at 6:00 PM Facilitator Michelle Hughes, TM Strategy & Design Group

Lewisville ISD Mission. . .

Students, staff and community design and implement a learning organization that provides engaging, innovative experiences every day

Lewisville ISD Superintendent...

Dr. Kevin Rogers

Your Task Cycle for Tonight. . .

 Purpose of LISD Facilities Advisory Committee 2016: Collaborative development of a bond referendum recommendation for presentation to the Lewisville ISD Board of Trustees and ultimately to the Lewisville ISD community in May 2017

Outcomes for tonight. . .

- Aligned work group; cohesive owners of the Facilities Advisory Committee 2016-17 work
- Process Review (Ground Rules; Decision-making Model)
- Review of Facilities Plan and Introduction to Priority Codes
- Learning & Teaching Review
- The Lewisville ISD Safety & Security Needs
- Existing Facilities Projects
- The LISD Technology Plan
- Overview of subsequent meetings (see bottom of task cycle)

Housekeeping...

- All presented materials & information will be distributed to you as handouts and on the Lewisville ISD website Facilities Advisory Committee 2016-17 Bond Tab.
- Because of time constraints, no breaks have been scheduled, so please take plumbing or motion breaks as needed. Restrooms and exits are right out the doors behind you.
- Ask any questions. Unanswered questions or frequently asked questions and answers will be posted on the Lewisville ISD website Facilities Advisory Committee Tab.
- A committee roster will be distributed. If your information is incorrect, write the correct information on a post-it and leave it on your table. Your attendance at every meeting will help yield optimum results for this committee and this community.

LISD Facilities Advisory Committee Ground Rules...

- One conversation at a time; no side-bar talk
- Honor the time contract
- Stay on topic and on task
- Share ideas freely; no "duck shooting"
- Listen to understand; respect and honor others' input
- Think holistically; sublimate personal agendas; consider the whole District.
- Be kind
- Be honest
- Be relentless in pursuing consensus
- HAVE FUN!

Let's Review. . .

- Facilities Assessment
- Shared Understanding of Priority Codes

Jason Hughes, Executive Director of Facilities Planning Randy Fite, Director of Construction

Facilities Assessment Review & Priority Codes

Jason Hughes, Executive Director of Facility Services and Construction

Randy Fite, AIA, Director of Construction

October 20, 2016

LEWISVILLE INDEPENDENT SCHOOL DISTRICT

Engaging and meaningful student learning based on:

High Quality Curriculum

Relevant Resources

Facilities that provide:

Safety & Security Inspiration Collaboration Innovation



Students are engaged in school through:

Clubs Organizations Fine Arts Athletics CTE

Education is the shared responsibility of the community

Discussion Items



LISD Facilities Context

- During the mid to late 1990's, the District experienced enormous growth at times averaging 2,000 students per year
- District is moving from a fast-growth district into a sustainability period that includes maintenance and stewardship of existing facilities
- Rapid growth and resulting construction in mid to late 1990's created a bubble of facilities all reaching 20 years of age at about the same time



Facilities Assessment Review & Priority Codes | 10.20.16

Facilities Assessment

Facilities Assessment Review & Priority Codes | 10.20.16

Facilities Assessment Study

- Board charged us with the task of performing the Facilities Assessment with LISD personnel. Previous studies were performed using outside consultants
- Provides a method to identify and manage building system needs within a large District of over 80 facilities
- Every facility and major building system and component was inspected and evaluated by LISD Facility Services personnel
 - HVAC, Roofing, Electrical, Flooring, etc.
- Provides a comprehensive look at the age and condition of each building and major building components
- Document to be updated annually going forward
 - In keeping with its purpose as an ongoing tool for use in facilities

planning, the next revision planned this Spring



Evaluation Criteria

- Facility systems and components individually evaluated and scored using three factors:
 - <u>Percent Life Remaining</u> The amount of service life expressed as a ratio of the item's remaining useful life compared to its expected life cycle
 - Work Order History Formula derived score comparing five years of historical maintenance costs for a system to the average cost to maintain that system in similar buildings across the district
 - <u>Visual Examination</u> A score given based on a physical examination of each system/component relative to its expected life-cycle performed by LISD expert technicians



Evaluation Criteria

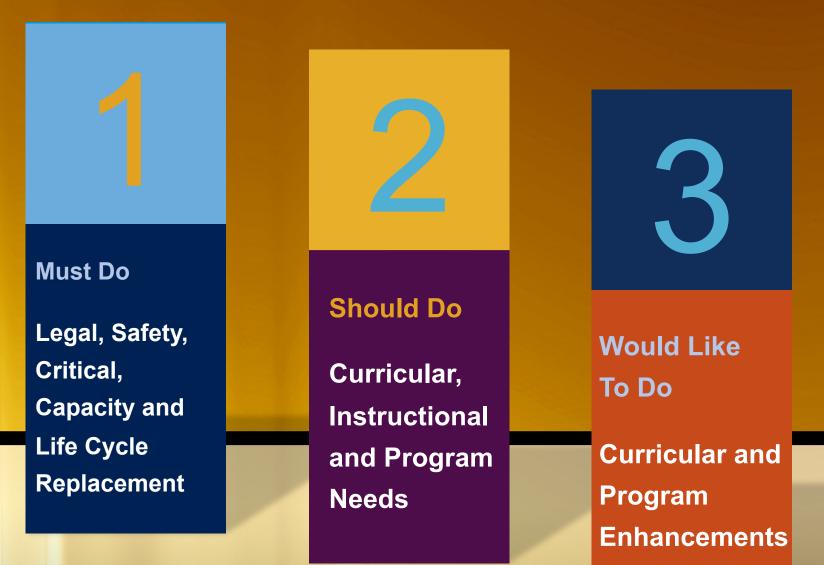
- Averaging the evaluation scores from:
 - Percent Life Remaining
 - Work Order History
 - Visual Examination
- = the Total Assessment Score
 - More accurate picture of the system/component condition
- Because the score is a percentage of life remaining we can project the data over the life of the facility providing a long range replacement plan



Priority Codes

Facilities Assessment Review & Priority Codes | 10.20.16

Priority Codes



Facilities Assessment Review & Priority Codes | 10.20.16

Facilities Assessment Review & Priority Codes | 10.20.16

Score to Priority Codes

- Assessment scores were used to forecast the need for construction projects in the five year planning window
- Scores identify the systems reaching the end of their respective life-cycles
- The scores combined with the professional judgement of Facility Services personnel lead to the priority assignments
- The type of system also establishes the priority
 - Fire sprinkler vs. wall coverings





The Assessment Document provides objective data for planning future facilities needs and associated timelines

 The scores in the Facilities Assessment document are a significant factor that when combined with professional judgement determines the priority code assignment based on the definitions



Let's Review. . .

Learning & Teaching

Lori Rapp, Assistant Superintendent of Learning & Teaching

Learning & Teaching Connecting the Dots

Lori Rapp, Assistant Superintendent Learning and Teaching

October 20, 2016

LEWISVILLE INDEPENDENT SCHOOL DISTRICT

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REAL INNOVATION. LIMITLESS OPPORTUNITY. LEWISVILLE INDEPENDENT SCHOOL DISTRICT Students are engaged in school through:

Clubs Organizations Fine Arts Athletics CTE

Education is the shared responsibility of the community



Students are benefiting from research, resources and new discoveries that continuously improve our ability to meet the needs of students

These are exciting times for learning!



Workforce demands and changes impact the type of learning environment students need.

Industrial age workforce vs. Information/Digital age workforce





Teacher Support & Retention

Supporting teachers with professional learning and resources is critical for preparing students for a changing workforce.

Over 1,258 professional learning sessions offered for teachers during summer 2016

LISD teacher turnover rate 11.7%

State teacher turnover rate 16.6%





Today's students:

- face higher expectations in both school and the workforce
- will graduate into a world where the demands of our professional, personal and public lives grow more complicated every year.





Lillie Jackson Early Childhood Center Pre-kindergarten

Class of 2029!



Learning and Teaching| October 20, 2016

Any Questions, Comments or Feedback?...

A Look At Safety & Security in LISD. . . Matt Garrett, Director of Safety & Security

LISD Safety & Security Needs

Matthew Garrett, Director of Safety & Security

October 20, 2016

LEWISVILLE INDEPENDENT SCHOOL DISTRICT

How is 'need' determined?

- All-hazards emergency planning
- Public safety partnerships
- Safety & security audits



All-Hazards Emergency Planning

- Addresses a range of hazards
- Identify common protocols, systems and tools



LISD Safety & Security Needs | 10.20.16

Public Safety Partnerships

- Active partners with planning and incident response
- Invested in ensuring school safety



LISD Safety & Security Needs | 10.20.16



Safety & Security Audits

- Intruder assessments
- Identify trends and campus needs



Proposed Project List

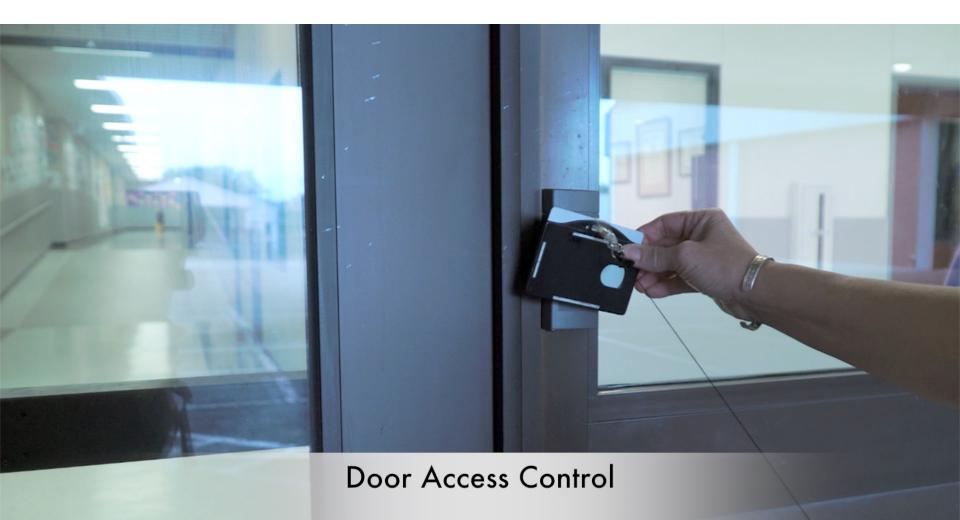
Deter, Deny, Notify and Expedite
4.1- Life Cycle Safety & Security Items
4.2- Expansion of District Wide Security Cameras
4.3- Re-Design Campus Entrances and Install Ballistic
Protection
4.4- Communication and Network Access Completion

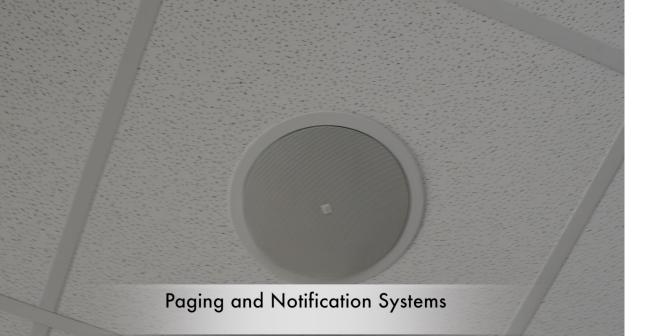


Project 4.1 – Life Cycle Safety and Security Items

- Upgrade access control system
- Upgrade phone, paging and notification systems
- Upgrade energy efficient exterior lighting
- Estimated Cost: \$11,103,901







Phones Use For Communication and Emergency



Project 4.2 - Expansion of District-Wide Security Cameras

- Install approximately 1,200 interior
 - and 650 exterior cameras
- Acquire storage and network
 - infrastructure
- Replace 982 older model cameras
- Estimated Cost: \$3,300,000







Project 4.3 – Redesign Campus Entrances and Ballistic Protection

- Builds upon previous projects
- Ensure classroom doors are not in
 - the security vestibule
- Redesign office layout to prevent
 unauthorized access
- Estimated Cost: \$13,737,998









Project 4.4 – Communication and Network Access Completion

- Six facilities
 - VoIP phones
 - Networked lighting control
 - Security camera access/storage
 - Networked access control
- Estimated Cost: \$693,000



Current example timeline for medical emergencies



Example of timeline improved with bond projects



Current example timeline of an intruder



Example of timeline improved with bond projects





Our goal is simple; at the end of the day, **everyone** safely arrives home.

What Questions or Feedback Do You Have For Mr. Garrett?...

What Projects Support Our Existing Facilities?

Jason Hughes Randy Fite

Existing Facilities Needs

Jason Hughes, Executive Director of Facility Services & Construction

Randy Fite, AIA, Director of Construction

October 20, 2016

LEWISVILLE INDEPENDENT SCHOOL DISTRICT

Engaging and meaningful student learning based on:

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Clubs Organizations Fine Arts Athletics CTE

Education is the shared responsibility of the community

- Many building systems and components share a life-cycle of approximately 20 years, including:
 - HVAC
 - Roofing
- HVAC and overhead systems replacement requires that the building be emptied
 - Perfect opportunity to renovate many items while the building is unoccupied and empty of contents

LISD

Allows for limited disruption to the campus

Scope of work includes renovation or replacement of:

- Critical life safety systems
 - Fire alarm, fire sprinkler, emergency generator
- Major building components
 - HVAC, roof, ductwork, electrical, ceilings, lights, walk-in cooler /freezer, doors and hardware
- Safety and Security
 - Secure entrance, security cameras
- Technology
 - Infrastructure, classroom equipment, Intercom/ bell system, stage sound
- Finishes
 - Flooring, paint, restrooms, walls, casework

Existing Facilities Needs | 10.20.16



20 Year Renovations Elementary Schools (Priority 1) \$134,378,937

- Polser Elementary School
- Creekside Elementary School
- Central Elementary School
- Timbercreek Elementary School
- Degan Elementary School
- Parkway Elementary School
- Prairie Trail Elementary School
- Valley Ridge Elementary School

- Forest Vista Elementary School
- Homestead Elementary School
- Bridlewood Elementary School
- Wellington Elementary School
- Southridge Elementary School
- Bluebonnet Elementary School

20 Year Renovations High Schools (Priority 1) \$74,622,033

- Marcus High School limited renovation
- The Colony High School limited renovation
- Flower Mound High School Phase 1
- Hebron High School Phase 1



- Items identified in the Facilities Assessment
 Document as needing replacement within the next five years
- Roofing Replacements (Priority 1) \$2,770,921
 - Ethridge Elementary School
 - Heritage Elementary school
 - Facility Services
- Electrical Renovations (Priority 1) \$3,401,679
 - Lakeview Middle School
 - Lamar Middle School
 - Stewarts Creek Elementary School



- Playground Replacement (Priority 1) \$1,336,882
 - Valley Ridge Elementary School
 - Forest Vista Elementary School
 - Bridlewood Elementary School
 - Homestead Elementary School
 - Wellington Elementary School
 - McAuliffe Elementary School (Pre-K only)



- Flooring Replacements (Priority 1) \$2,505,031
 - Lakeview Middle School
 - Indian Creek Elementary School
 - Hebron Valley Elementary School
 - Castle Hills Elementary school
 - Liberty Elementary School
 - Lamar Middle School
 - Vickery Elementary School
 - Rockbrook Elementary School
 - Coyote Ridge Elementary School
 - Shadow Ridge Middle School
 - LHS Killough High School



Restroom Renovations (Priority 2) \$6,510,363

- Stewarts Creek Elementary School
- Ethridge Elementary School
- Lakeview Middle School
- Hebron Valley Elementary School
- Flower Mound Elementary School (Staff Only)
- Heritage Elementary School
- Morningside Elementary School
- Donald Elementary School
- Garden Ridge Elementary School

- Corridor Wall Finishes (Priority 2) \$1,362,511
 - Lakeview Middle School
 - Flower Mound Elementary School
 - Indian Creek Elementary School



Additions to Existing Facilities

- 10 Classroom Addition Bluebonnet Elementary School (Priority 2) \$4,314,012
- 10 Classroom Addition LHS Harmon (Priority 2) \$5,078,455
- The Colony High School Entry Reconfiguration (Priority 2) \$2,734,295
- LISD Outdoor Learning Area (LISDOLA)
 - Option A (Priority 1) \$3,782,776
 - Building with 4 classrooms, restrooms, new paving, bus drop, portable renovations
 - Building to serve as a storm shelter for the site
 - Option B (Priority 2) \$9,321,157
 - Building with 10 classrooms, meeting room, restrooms, offices, clinic, science store, new paving, and bus stop
 - Building to serve as a storm shelter for the site

Renovations to Existing Facilities

- Distribution Center Renovation (Priority 1) \$349,883
- College Street Elementary School (Priority 1) \$3,268,714
- Campus Support Center (Priority 1) \$623,186
- Dale Jackson Career Center (Priority 1) \$4,965,752
- Renovations needed for possible Academies (Priority 1) \$6,487,549



Summary

Existing Facilities Projects	Priority 1	Priority 2	Priority 3
Elementary Schools - 20 year Renovations	\$134,378,937	\$0	\$0
High Schools - 20 year Renovations	\$74,622,033	\$0	\$0
Life Cycle Building Component Replacements - Priority 1	\$10,014,513	\$0	\$0
Life Cycle Building Component Replacements - Priority 2	\$0	\$7,872,874	\$0
Classroom Additions to Existing Schools	\$0	\$9,392,467	\$0
The Colony High School Entry Reconfiguration	\$0	\$2,734,295	\$0
LISDOLA Option A	\$3,782,776	\$0	\$0
LISDOLA Option B	\$0	\$9,321,157	\$0
Renovation of existing facilities	\$9,207,535	\$0	\$0
Academy Renovations	\$6,487,549	\$0	\$0
Total	\$238,493,343	\$29,320,793	\$0



Final Thoughts

- The needs discussed tonight represent projects identified using the Facilities Assessment Study Report – an objective tool to identify the condition of LISD buildings and to assist in prioritizing the needs
- Priorities are assigned based on the objective scores in the assessment document combined with professional judgment about how the needs fit into the definitions provided
- The list presented will be provided on the FAC webpage with hyperlinks to additional information



Existing Facilities Needs | 10.20.16

What Questions, Comments or Feedback Do You Have For Mr. Hughes and Mr. Fite?

What Is The Technology Plan in LISD? Bryon Kolbeck, Executive Director of Technical and Information Services

Technology Planning

Bryon Kolbeck, Executive Director of Technical & Information Systems

Lori Rapp, Assistant Superintendent of Learning and Teaching

Michele Jacobsen, Director of Digital Learning

LEWISVILLE INDEPENDENT SCHOOL DISTRICT

Presentation Takeaways

Provide information to help guide questions & deepen committee's understanding:

- Technology plays a vital role in:
 - student learning
 - $\circ~$ operations within the district
 - safety and security (as shared by Matthew Garrett)
- Significant infrastructure
 - $\circ~$ Needed to support how and why technology is used
- There are processes in place for evaluation and review of technology

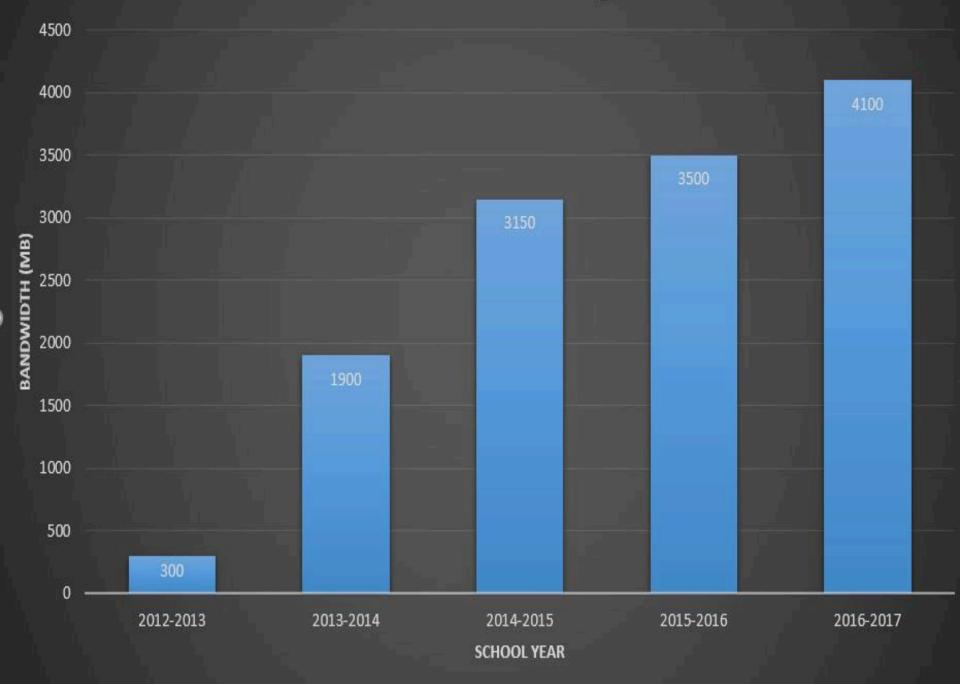


"We need to prepare students for their future, not our past" lan Jukes



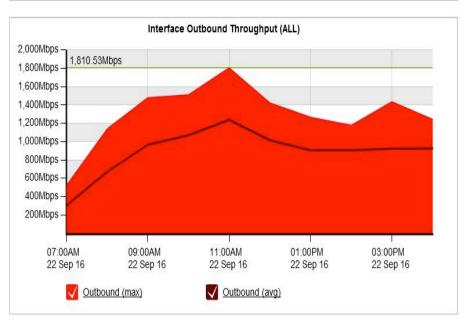


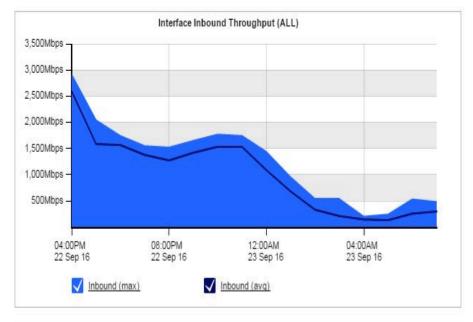
LISD Bandwidth Usage

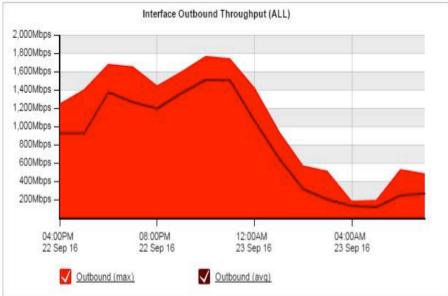


Internet Usage During the School Day

Interface Inbound Throughput (ALL) 4,500Mbps 4.016.84Mbps 4,000Mbps 3,500Mbps 3,000Mbps 2,500Mbps 2,000Mbps 1,500Mbps -1.000Mbps 500Mbps 07:00AM 09:00AM 11:00AM 01:00PM 03:00PM 22 Sep 16 Inbound (max) Inbound (avg)







Internet Usage After School Day

Increase in number of devices

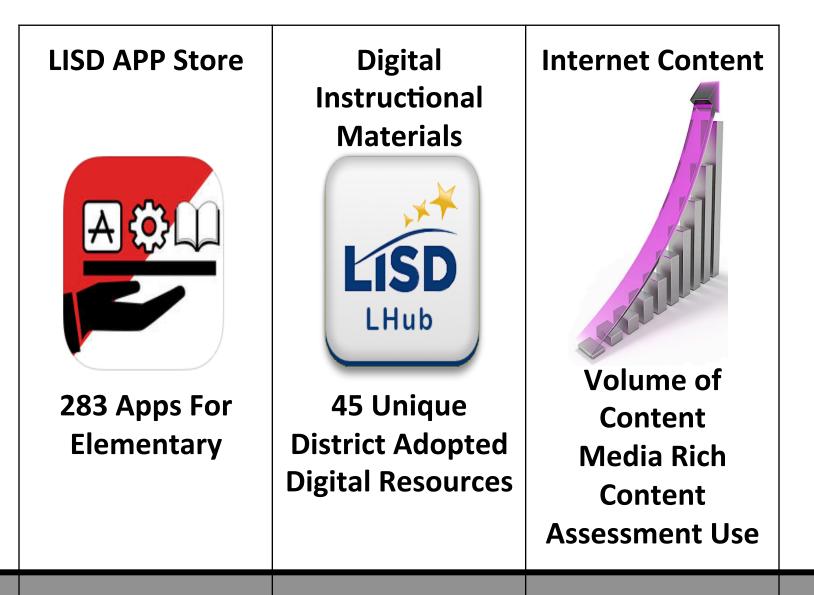
Managing

- 51,266 iOS
- 13,160 MacOS
- 14,650 Windows
- 9,300 Chromebooks





Increase in Digital Content



Student Safety and Privacy

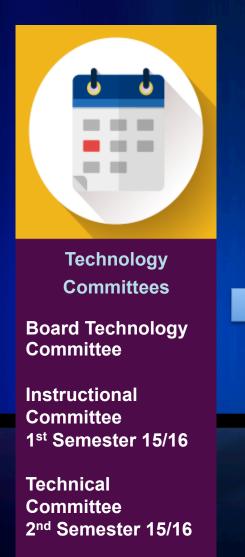
LISD was 1 of 7 School Districts in the U.S. to earn the Trusted Learning Environment Seal



LEADING EDUCATION INNOVATION



Technology Planning Process





Technology Planning

Based upon committee input, developed the Board Approved Technology Plan in the Spring of 2016 Action Teams June 2016 Teacher teams-Defined classroom needs

Instructional Materials-like feedback process

Coordinated instructional and operations needs with infrastructure plan

Technology Plan Provides

Instructional Technology Task Force

Community Technology Experts

Professional Learning

Infrastructure

Instruction/Learning Experiences

Digital Citizenship/ Technological Literacy Technology Resources

Data and Privacy

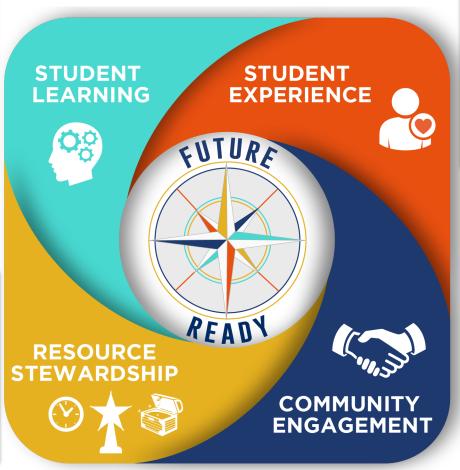
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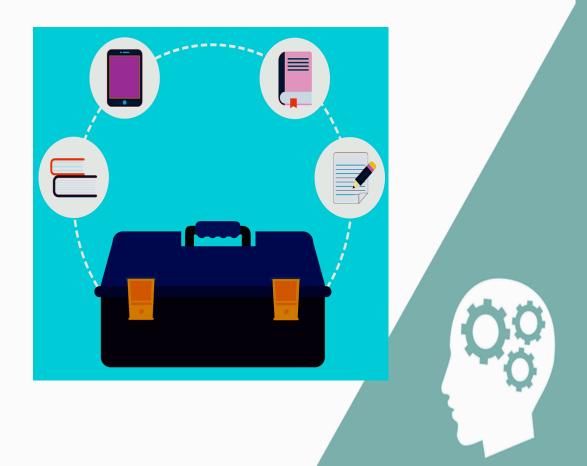
Clubs Organizations Fine Arts Athletics CTE

Education is the shared responsibility of the community

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Student learning – Access to Relevant Resources

- Teacher and Students need access to "tools" for the learning required
 - Literature/Books
 - Manipulatives
 - Hands-On Materials
 - Technology
 - Experts in the field
 - Supplies
 - Software/Programs
 - Assessments



Learning Environments

"Central to this new type of learning engagement is a shift in the learner's role, from a passive consumer of information to an active developer of the knowledge and skills that the learner considers important for his or her future.

The traditional school model is predicated on the idea of students as consumers of knowledge.





Today's students place a higher premium on the experience of creating content and sharing their discoveries, masterpieces, and manuscripts with the world. They also expect to use technology to direct and monitor their own learning experiences." (Evans, 2015)

Texas Essential Knowledge & Skills (TEKS)

What are students expected to do?

Technology Application TEKS 3-5

Critical thinking, problem solving, and decision making. The student researches and evaluates projects using digital tools and resources. The student is expected to:

(A) identify information regarding a problem and explain the steps toward the solution;

(B) collect, analyze, and represent data to solve problems using tools such as word processing, databases, spreadsheets, graphic organizers, charts, multimedia, simulations, models, and programming languages;

(C) evaluate student-created products through self and peer review for relevance to the assignment or task; and

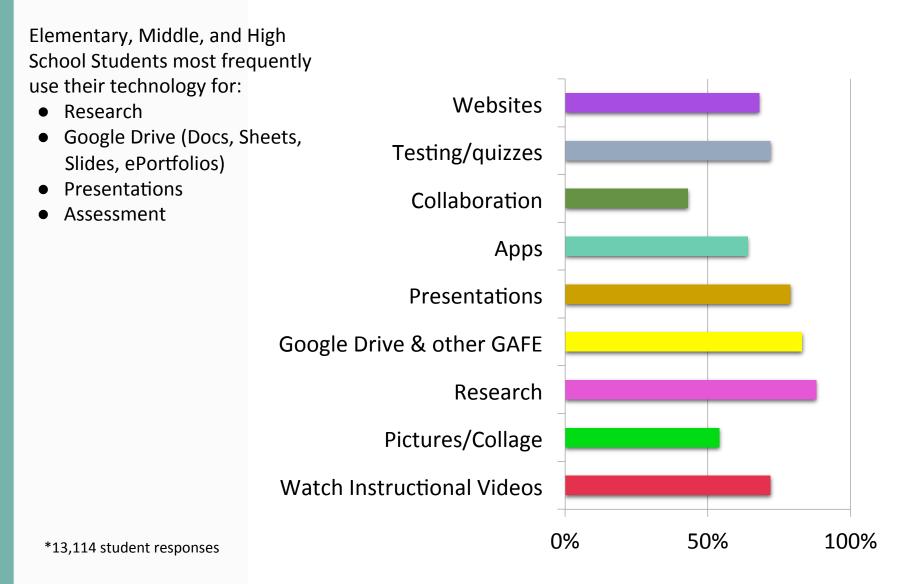
(D) evaluate technology tools applicable for solving problems.

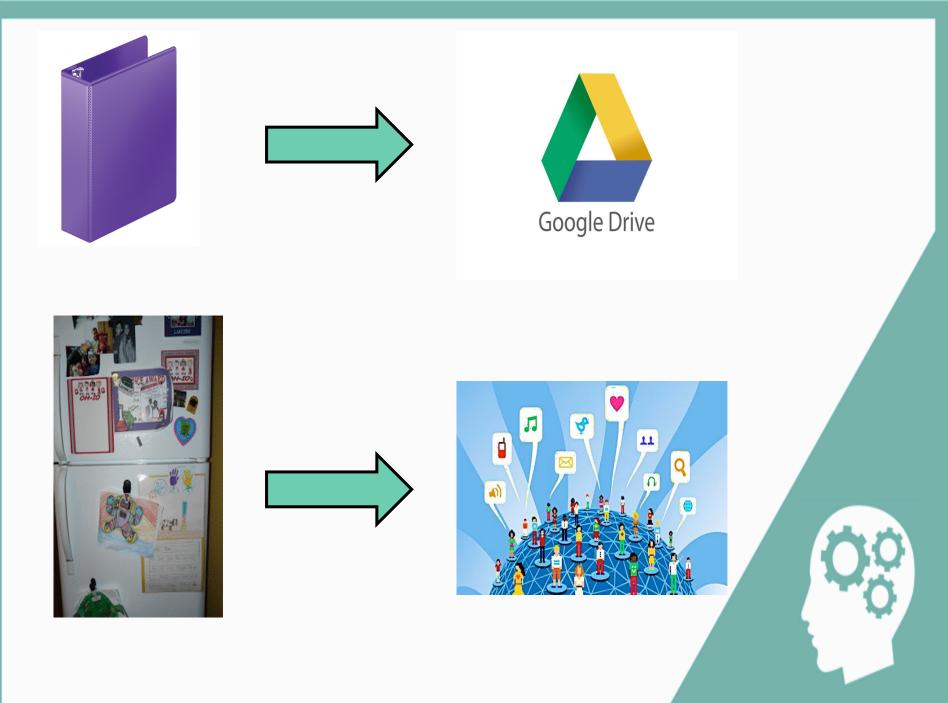


Information Access

Students spend 13,000+ hours in school and are required to learn over 900 content standards in Math, Science, Language Arts, and Social Studies alone.

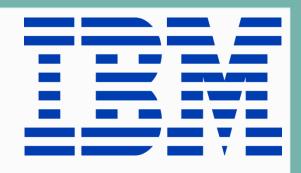






For people without disabilities and specialized learning needs technology makes things easier.

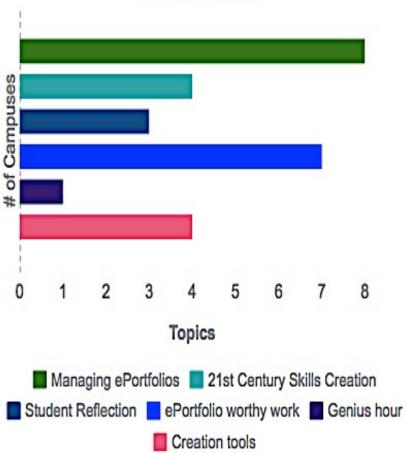
For people with disabilities and specialized learning needs technology makes things possible.



eReaders Captions Video taping Assisted listening Touch screens Speech recognition software Word processors

Professional Learning

ES School



- Campus Administration and staff are seeking out
- Professional learning has evolved
- Not just one time ITFs (Instructional Technology Facilitators) support throughout the year
- Focusing on 21st century skills
- Access to student learning devices is critical

Priority Levels Of Student and Staff Access

<u>Priority 1</u> (Maint. Current <u>Model)</u>

- Instructional Devices for students & staff: \$48,220,718
- Programs/
 Operations:
 \$11,174,150
- Total: \$59,394,868

<u>Priority 2</u> (Current Model + Addressing Needs For Grades PK-3)

- Instructional Devices for students & staff: \$65,984,160
- Programs/
 Operations:
 \$11,174,150

Total:\$77,158,310

Priority 3 (Reduction of Access From Current Model)

- Instructional Devices for students & staff: \$37,775,748
- Programs/
 Operations:
 \$11,174,150
- Total: \$48,949,898

Priority Levels Of Student and Staff Access

<u>Priority 1</u> (Maint. Current Model)

- Total: \$59,394,868
- Maintains Access 4th-12th
- Consistency across campuses w/District provided
- 5 year refresh for student devices
- Similar accessibility to instructional digital materials

<u>Priority 2</u> (Current Model + Addressing Needs For

Grades PK-3)

- Total: \$77,158,310
- Increases classroom access PK-3
- Consistency across campuses w/District provided
- 4 yr refresh for student devices
- Increased accessibility to instructional digital materials
- Provide access to Special Programs

<u>Priority 3</u> (Reduction of Access From Current Model)

- Total: \$48,949,898
- Reduction of access across all levels
- Consistency across campuses w/District provided
- 5 year refresh for student devices
- Decreased accessibility to instructional digital materials

Technology Plan Provides

Instructional Technology Task Force

Community Technology Experts

Professional Learning

Instruction/Learning Experiences

Digital Citizenship/ Technological Literacy Infrastructure

Technology Resources

Data and Privacy



Infrastructure Highway-What Is On The Highway?

- Instructional
- Operational
- Safety & Security



Technology Planning | October 20 2016



Infrastructure-What is the Highway Made Out Of?



Infrastructure Needs

Growth Trends

Determined Equipment Lifecycles

Established replacement for infrastructure

Alignment with the Facilities project list

Manufacturer reviews/roadmaps, secure pricing

Recognition of the dependency and need for redundancy



Infrastructure Project Cost

- Classroom Technology
 - Projectors, Printers, Wireless Projection,
 Classroom Audio Replacements: \$6,482,004
- Data Center, Infrastructure, Security: \$30,739,031
- Campus Sound and Paging: \$2,500,000

• Total Priority 1 Infrastructure Costs: \$39,721,035



Total Project Cost

	Maintain Current Access Model	Maintain Current Access Model + Addressing Access Needs for Grade PK-3	Reduction of Access From Current Model
Project	Priority 1	Priority 2	Priority 3
Student and Staff Access	\$59,394,868	\$77,158,310	\$48,949,898
Infrastructure	\$39,721,035	\$39,721,035	\$39,721,035
Total	\$99,115,903	\$116,897,345	\$88,670,933

*We are committed to retiring the bonds consistent with life of the assets

Considerations

Technology

- impacts all students and staff in LISD
- is so much more than a student mobile learning device
- of the future, cannot be purchased today
- usage, demands continued investment in infrastructure
- access for student learning varies within priorities 1, 2, & 3

"We need to prepare students for their future, not our past" lan Jukes





What Questions, Comments or Feedback Do You Have For Mr. Kolbeck?

Process Check/Likes & Wishes

LIKES:	WISHES:

Next Meeting Thursday, November 17

New/Reconfigured Facilities CTE Fine Arts

Don't Miss It!