

Statewide Educational Technology Legislative Report

January 2024



Introduction

This comprehensive report is being submitted to both the Senate Committee on Education and the House Committee on Education as mandated by Louisiana Revised Statute 17:3921.2. Its primary objective is to provide a detailed overview of Louisiana's advancements in the realm of educational technology, as well as the current status of technology readiness within the state's public schools and school systems. Furthermore, this report will identify specific standards, goals, and supportive strategies for fostering the growth and expansion of technology-rich learning environments in educational settings.

In recent years, Louisiana has achieved significant progress in enhancing educational opportunities for its students, thereby improving their life prospects. However, several critical challenges still need to be addressed, particularly in technology access and integration in educational contexts. Ensuring every child has access to personalized, student-centric learning experiences is of utmost importance, particularly in digital technologies. This report emphasizes the need for concerted efforts to overcome these challenges, equipping students with the necessary skills and knowledge to thrive in a digitally-driven world. By focusing on these areas, Louisiana aims to improve educational outcomes and ensure its students are well-prepared for the demands of the future workforce and the evolving digital environment.

The Louisiana Department of Education Educational Technology Plan

In May 2022, the Louisiana Department of Education (LDOE) unveiled a comprehensive and revised Educational Technology Plan, marking a significant step forward in the state's commitment to integrating technology into its educational system. This plan serves as a foundational guide and a blueprint for local school systems as they develop their strategic technology plans. A robust framework empowers school leaders to integrate educational technology at the school level. To guarantee students' educational experiences, this framework incorporates technological advancements.

The LDOE has identified five strategic goals essential to successfully integrating educational technology, each designed to support student success and achievement across the state. These goals are:

1. **Preparation of Educators:** Equip teachers and educational leaders with the necessary skills and knowledge to effectively integrate technology into high-quality teaching and learning environments. This preparation involves providing professional development and continuous learning opportunities to ensure educators are proficient in leveraging technology for educational excellence.
2. **Equitable Access:** Create and nurture equitable access to high-quality, inclusive learning environments for parents and learners of all ages. This goal emphasizes the importance of ensuring that every learner, regardless of background or location, has access to the same quality of technology-enhanced education.
3. **High-Impact Systems and Partnerships:** Cultivate high-impact systems, structures, and partnerships that provide access and foster continuous learning. This work includes facilitating broadband Internet access in the homes of every student and educator in Louisiana, recognizing the critical role of connectivity in modern education.
4. **Quality Teaching and Learning Environments:** Provide high-quality teaching and learning environments by ensuring the continued availability of effective digital technology for every student, teacher, educational leader, and classroom in Louisiana. This goal guarantees that technological resources are available, high quality, and effectively used in educational settings.
5. **Technology Fluency Programs:** Implement programs that facilitate technology fluency so that all students are on track to a professional career, college degree, or entering the workforce. This strategic goal recognizes the importance of technology skills in the contemporary job market and higher education, aiming to equip students with the skills necessary for success in these areas.

Key Activities to Support School Systems

In pursuing educational excellence and in line with the 2022 Educational Technology Plan, the LDOE is dedicated to assisting school systems to create and maintain technology-rich learning environments. This commitment reflects a holistic approach to educational technology, addressing various critical aspects essential for modern, dynamic, and effective teaching and learning. LDOE's support is multifaceted, focusing on several key areas:

Instructional Technology Resources

The LDOE recognizes the transformative power of technology in education. It is committed to providing educators and students with a wealth of instructional technology resources to enhance teaching and learning. We carefully curate these resources to align with Louisiana's curriculum standards and design them to enrich the educational experience by incorporating interactive and engaging digital content.

To further its commitment to empowering educators and students with cutting-edge technology tools, the LDOE Academic Content Team has secured K-12 state-wide access to Kami, a versatile digital annotation tool. This initiative, which comes at no cost to Louisiana schools, aligns with the LDOE's mission to ensure that all students have access to high-quality curricula and innovative learning tools.

Kami offers a range of features that empower educators to create and deliver dynamic and interactive lessons. Equipped with annotation tools, teachers can easily annotate documents, presentations, and images, providing students with clear and engaging explanations of complex concepts. Additionally, Kami facilitates student collaboration by enabling students to annotate and share documents simultaneously, fostering a collaborative learning environment.

The LDOE's dedication to providing instructional technology resources is evident in its ongoing initiatives to expand access to Kami and other high-quality digital tools. The LDOE is committed to ensuring that all Louisiana students can benefit from the transformative power of technology in education.

Internet Safety and Data Privacy

The LDOE recognizes that being truly digitally literate encompasses the ability to use technology effectively and a profound understanding of the responsibilities and ethical considerations that come with it. To that end, LDOE provides a wealth of resources and training programs targeting internet safety and data privacy, benefiting students and staff alike.

For students, LDOE's initiatives extend beyond the confines of the classroom, guiding them in becoming responsible digital citizens. In a world where online interactions are the norm, students have the knowledge and skills to navigate the digital world safely and ethically. They learn to protect their personal information and discern and respond to potential online risks. This includes understanding the importance of strong, unique passwords, recognizing phishing attempts, and knowing how to report any suspicious online behavior. Moreover, students gain insights into the ethical implications of their digital actions, fostering a sense of responsibility for their online behavior and its impact on others.

As the number of digital tools that schools access grows, the LDOE is working proactively to vet tools in their cyber stance to ensure students, teachers, and school systems have the information to evaluate what digital tools to implement.

The Federal Schools and Libraries (E-Rate) Program

The Federal Schools and Libraries (E-Rate) Program, administered by Universal Service Administrative Company (USAC) with oversight from the Federal Communications Commission (FCC), plays a pivotal role in bridging the digital divide and ensuring equitable access to essential telecommunications services for schools and libraries across the nation. This critical program provides funding toward eligible Internet access, telecommunications services, and related equipment, empowering schools to create technology-rich learning environments that foster engagement, promote more profound understanding, and prepare students for the demands of the 21st-century workforce.

Each year, schools must apply for E-Rate funding through USAC's E-Rate Productivity Center (EPC) portal, a streamlined online platform designed to facilitate the application process and ensure the timely disbursement of funds. As of December 2023, the E-Rate program has approved 534 Louisiana school applications for 45,641,813.03 in funding. Approved E-Rate funding continues to fall into four main categories:

- Data Transmission and/or Internet Access: \$24,419,034.04
- Internal Connections: \$18,664,919.28
- Managed Internal Broadband Services: \$2,208,839.48
- Basic Maintenance: \$349,020.23

These substantial funds enable Louisiana schools to make critical investments in their technology infrastructure, ensuring that students have access to reliable and high-speed internet connectivity, essential software applications, and up-to-date hardware.

In unwavering support of the E-Rate program, the LDOE remains committed to supporting school systems throughout the state. Through its Office of Technology Services (OTS), LDOE offers a wide range of services, including:

- **E-Rate Training:** Equipping school technology leaders with the knowledge and skills to navigate the E-Rate application process and maximize funding opportunities.
- **Applicant Filing Assistance:** Providing guidance and support to schools in preparing and submitting their E-Rate applications, ensuring accuracy, completeness, and compliance with program requirements.
- **Auditing and Appeal Support:** Assisting schools in responding to E-Rate audits and appeals, safeguarding their funding, and ensuring fair treatment.
- **Procurement and Contract Support:** Guiding schools through the procurement process for E-Rate-funded equipment and services, ensuring cost-effectiveness and adherence to best practices.

LDOE's commitment to the E-Rate program is a testament to its dedication to providing all Louisiana students with the digital tools and resources they need to succeed in their academic endeavors and thrive in an increasingly interconnected world. By working closely with school systems, technology partners, and policymakers, LDOE is actively driving the expansion of broadband internet access, promoting digital literacy, and fostering a culture of innovation in Louisiana's education system.

The Emergency Connectivity Fund Program

The Emergency Connectivity Fund (ECF) Program, administered by Universal Service Administrative Company (USAC) with oversight from the Federal Communications Commission (FCC), emerged as a lifeline for schools and libraries during the COVID-19 pandemic, providing much-needed funding to ensure that students, staff, and patrons had access to reliable internet connectivity and essential devices for remote learning and work. The program's positive impact continues today as schools utilize ECF funds to address connectivity gaps and expand technology access in underserved communities.

With steady support from the LDOE through the Office of Technology Services (OTS), Louisiana schools have successfully applied for and secured over \$79.1 million in ECF funding for computers, internet/broadband services, and network equipment. This significant investment has been pivotal in empowering schools to address the digital divide, ensuring that every student enjoys equitable access to essential technology resources.

The ECF program operated through three application windows, each offering distinct funding priorities. The table below provides an overview of the current status of ECF applications in Louisiana:

	ECF Window 1	ECF Window 2	ECF Window 3	Totals
Total Funded Applications	273	73	175	564
Total Pending Applications	0	1	0	1
Funded Equipment	\$52,316,681.08	\$8,117,699.83	\$7,309,844.10	\$67,755,954.71
Pending Funding for Equipment	\$0	\$11,689.70	\$0	\$11,689.70
Funded Internet/Broadband	\$4,809,927.56	\$987,751.92	\$5,608,645.09	\$11,406,324.57

Broadband Access

Adequate internet bandwidth is critical for seamless access to online resources and digital learning platforms. LDOE assists schools in evaluating their bandwidth needs and in securing the necessary infrastructure upgrades to ensure reliable and high-speed internet connectivity.

In today's digital landscape, broadband internet access is crucial for students to engage with online learning resources. The COVID-19 pandemic highlighted the critical role of broadband access in ensuring equitable learning outcomes. In response, Governor John Bel Edwards established the Broadband for Everyone in Louisiana Commission, bringing together private and public entities to bridge the connectivity gap. The commission's Granting Unserved Municipalities Broadband Opportunities (GUMBO) grant program funds school systems to expand broadband access in underserved areas.

Despite significant progress, 15% of households with school-aged children still need broadband access. To address this, the LDOE is working with the Office of Broadband Development and Connectivity (OBD) to implement a broadband strategy that includes:

- Expanding broadband infrastructure
- Promoting digital literacy
- Encouraging affordable broadband options
- Leveraging Federal Funding Opportunities

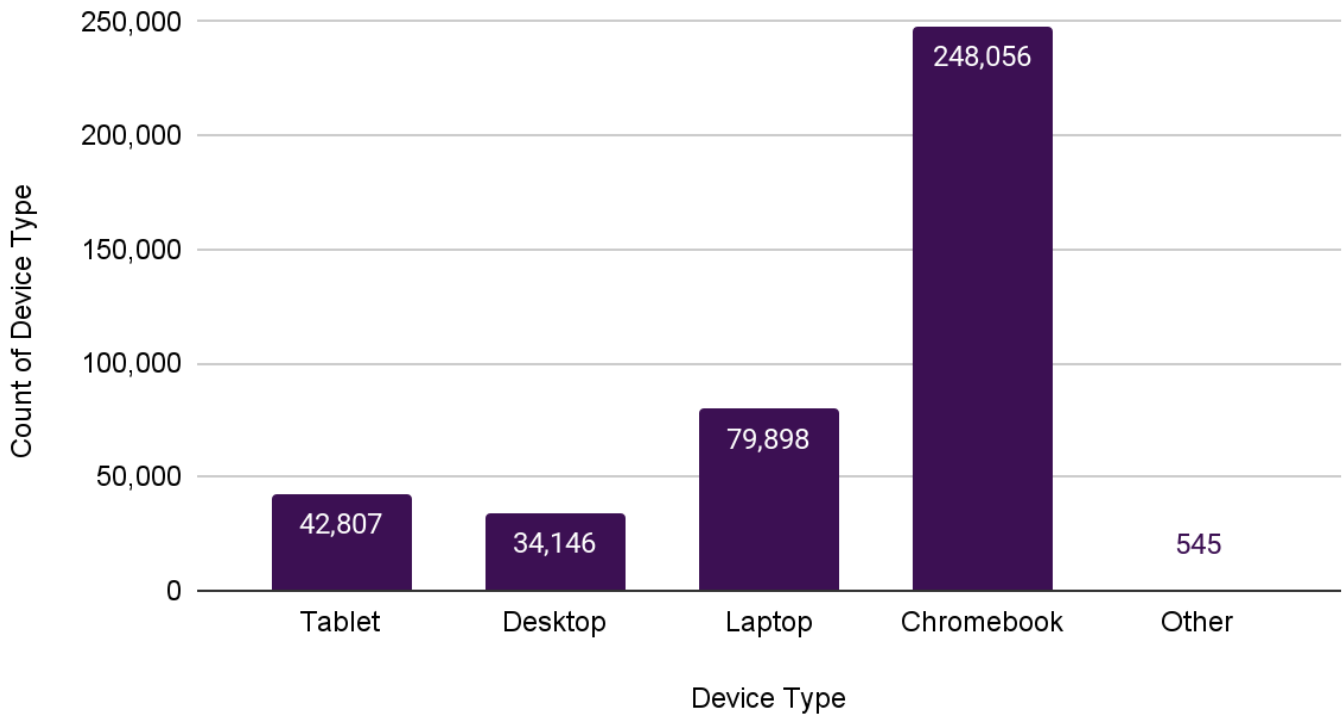
Through these efforts, LDOE is committed to ensuring that all Louisiana students have equal access to broadband internet, empowering them to reach their full potential.

Student Devices and Technology Readiness

Recognizing the critical role of hardware in digital education, the LDOE actively supports schools in acquiring and managing various digital devices. Our efforts encompass guidance on device selection and procurement processes.

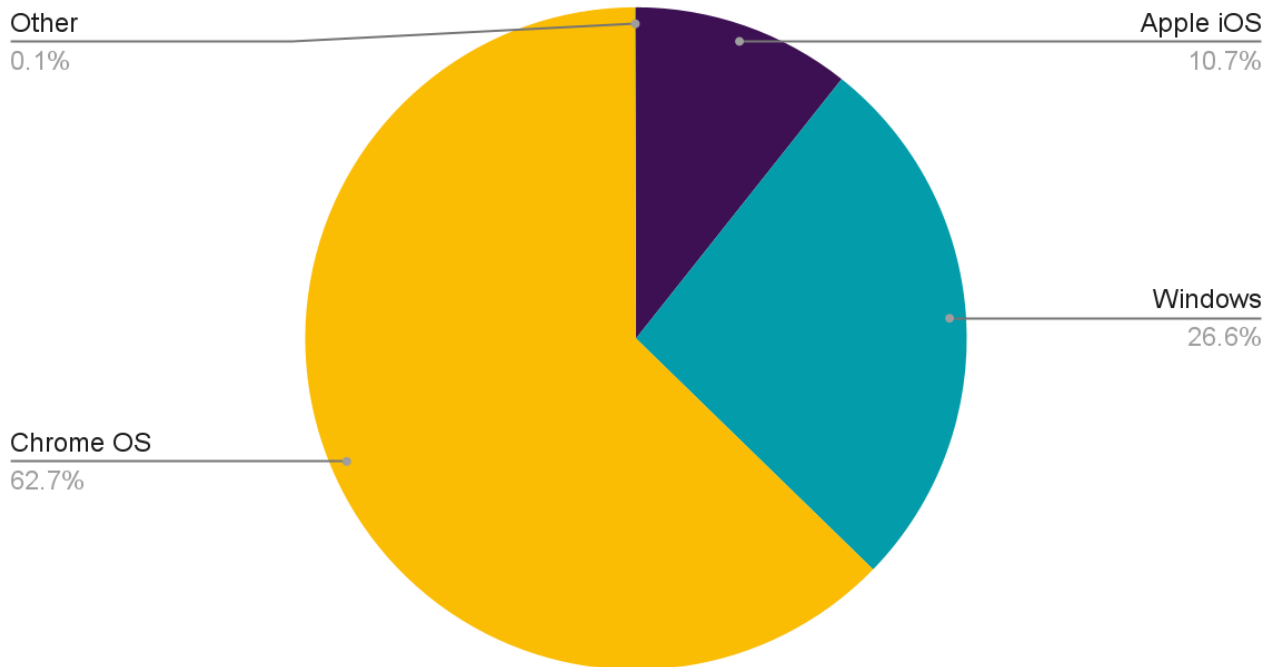
Devices like tablets, laptops, and desktop computers are fundamental in creating interactive and engaging learning environments. Most of our school systems have preferred Chromebooks primarily due to their user-friendliness, cost-effectiveness, and beneficial functionality. Chromebooks offer a range of educational applications and tools tailored to the K-12 environment.

Device Types Statewide



Moreover, most of these systems run on Chrome OS, which provides a stable and secure platform for educational activities. The use of Chrome OS aligns with our commitment to providing safe, easily manageable, and student-friendly technology solutions. Its cloud-based architecture integrates with numerous educational apps and services, facilitating a versatile and interactive learning experience.

School System Operating Systems



Through our dedicated efforts, LDOE ensures that technology integration is not just about the hardware but also how these tools can effectively enhance the educational process. By providing ongoing support and guidance to our school systems, we strive to maximize the benefits of digital education, ensuring that our students are well-equipped for the demands of the 21st century.

Cybersecurity Support

GOHSEP

The LDOE and OTS partner with the Governor’s Office of Homeland Security and Emergency Preparedness (GOHSEP) to support schools in cybersecurity prevention, management, and response. This partnership ensures school systems have the resources and expertise to protect their data, systems, and networks from cyberattacks.

The LDOE, OTS, and GOHSEP work together to provide schools with a comprehensive cybersecurity plan that includes:

- Cybersecurity assessments: School systems can request cybersecurity assessment resources to identify and address vulnerabilities in their systems.
- Cybersecurity training: School systems can access cybersecurity training resources for teachers, staff, and students.
- Cybersecurity incident response: School systems can access resources and support from GOHSEP in the event of a cyberattack.

Conclusion

All these support efforts align with LDOE's five strategic goals outlined in the 2022 Educational Technology Plan. These goals include preparing educators to integrate technology, creating equitable access to digital learning, cultivating impactful systems and partnerships, providing high-quality technology environments, and implementing programs for technology fluency.

LDOE's strategies for school support demonstrate a proactive approach to integrating technology into education. By addressing these focus areas, LDOE aims not only to enhance the quality of education through technology but also to ensure that Louisiana's students are well-prepared for the future in an increasingly digital world. The LDOE's commitment to these objectives underscores its role as a leader in educational innovation and its dedication to fostering environments where every student can thrive.

Strategies for Ongoing Support

The LDOE remains steadfast in its dedication to fostering technology-rich learning environments in schools. Its support initiatives align and represent the critical objectives outlined in the 2022 Educational Technology Plan. By empowering students with access to essential digital tools and resources, the LDOE aims to equip them with the skills and knowledge they need to thrive in a rapidly evolving technology-driven world.

Strategic Goal 1: Prepare Teachers and Educational Leaders for Technology Integration

The LDOE prioritizes equipping educators with the skills and resources needed to integrate technology effectively in the classroom. Key initiatives under this goal include:

- **Expansion of Digital Curriculum:** Encourage curriculum vendors to provide a broader range of digital options to enhance the variety and accessibility of digital learning materials.
- **Educator Development Support:** Support internal and external educator development groups to foster a continuous learning and skill enhancement community among educators.
- **Guidance on System-Wide Goals:** Offer strategic guidance to school systems on setting and achieving educational technology goals.
- **Professional Development Resources:** Provide a wealth of resources and strategies to support professional development, ensuring educators are well-equipped to integrate technology meaningfully in their classrooms.
- **Utilization of Educational Data:** By improving the ease of use of LDOE data repositories, encourage schools to use educational data for informed decision-making.
- **Standards and Software Guidance:** Provide recommendations for learning management systems and student information systems to ensure high-quality learning environments are established and maintained.

Strategic Goal 2: Equitable and Inclusive Learning Environments

The LDOE is deeply committed to fostering and maintaining equitable access to high-quality, inclusive learning environments for parents and learners of all ages. This commitment is rooted in the understanding that equal access to education is fundamental to ensuring that every individual, regardless of their background or abilities, has the opportunity to acquire essential knowledge and skills. Such inclusive learning environments are not only welcoming but also accessible, designed to accommodate the diverse needs of all students. Efforts in this area include:

- **Curating Resources for Family Technology Proficiency:** The LDOE actively compiles and makes available a range of resources aimed at helping families develop technology proficiencies. This includes teaching and modeling the safe use of the Internet, a crucial skill in the digital age, to support children's learning using digital resources.
- **Parent Training Resources and Examples:** The LDOE empowers parents to become more involved and knowledgeable in their children's digital learning journey by providing resources and examples of effective parent training. These resources cater to varying levels of digital literacy and are user-friendly and accessible.

- **Developing Digital Literacy Programs for Parents:** Recognizing the crucial role of parents in the educational ecosystem, the LDOE creates resources to assist school systems in identifying the digital literacy needs of parents. This involves developing tailored programs to support and enhance parents' digital literacy, enabling them to participate actively in their children's education.
- **Models for Implementing Technology Help Desks in Schools:** The LDOE will provide school systems with models to implement technology help desks to integrate technology further. Building these help desks will serve as vital resources for addressing technical issues and queries, ensuring that technology is a facilitator, not a barrier, to learning.

Strategic Goal 3: High-Impact Systems and Broadband Access

The LDOE recognizes the critical importance of cultivating high-impact systems, structures, and partnerships that provide access to essential educational resources and foster a culture of continuous learning and development. A vital component of this initiative is ensuring that broadband Internet access is widely available to students, equipping them with the necessary tools and support to excel in their academic and professional pursuits. Integrating high-quality learning materials, access to experienced teachers, and other vital educational resources is pivotal in enhancing students' academic outcomes.

In today's digitally-driven world, broadband internet access is indispensable for connecting students to a wealth of online resources and facilitating communication, vital for learning and development. The LDOE aims to create an environment where all Louisiana students can learn and reach their full potential by providing access to these technological resources and support systems.

To support this ambitious goal, the LDOE has implemented several key initiatives:

- **Partnership with the Broadband Office:** The LDOE has established a collaboration with the Broadband Office to expand broadband internet service across Louisiana significantly. This expansion aims to reach every classroom, home, and business, ensuring that every student has access to vital online educational resources.
- **Internet Safety Training Resources:** Recognizing the importance of safe internet use, the LDOE provides high-quality internet safety training resources. These resources are designed for educational systems, teachers, and families, fostering a safe and secure online environment for students.
- **Cybersecurity Information and Best Practices:** The LDOE actively curates and disseminates ongoing information about cybersecurity threats and best practices to mitigate these risks. This includes providing timely, accurate, and actionable alerts to network users. The focus is also on raising awareness and offering training for staff, students, and families in cybersecurity, student privacy, and internet safety, all aimed at reducing the threat posed by malicious cyber attacks.
- **Maximizing Benefits from the E-Rate Program:** Ensuring that school systems are well-informed and adequately trained to take full advantage of the E-Rate program is another critical area of focus. This federal program offers significant financial support for telecommunications and internet access, which is crucial for educational institutions.
- **Cyber Audit and Risk Mitigation Guidance:** The LDOE provides guidance and example plans for cyber audits and risk mitigation. These resources assist school systems in identifying potential cyber risks and implementing effective strategies to safeguard their digital infrastructure.

Through these concerted efforts, the LDOE is enhancing the technological capabilities of educational institutions across Louisiana and ensuring that the state's students have the skills and resources necessary to

thrive in an increasingly interconnected and digital world. These initiatives represent a commitment to creating a technologically advanced and secure educational environment, paving the way for the future success of Louisiana's students.

Strategic Goal 4: High-Quality Teaching and Learning Environments

The LDOE acknowledges the fundamental role of connectivity and device access as cornerstones for integrating educational technology. Recognizing that the effectiveness of such integration hinges on its reliability and inclusivity, LDOE is committed to ensuring that all students across the state have access to the necessary educational technology. This commitment has manifested through various support measures to establish an effective and equitable technological infrastructure in schools.

To realize this vision, the LDOE has undertaken several key initiatives:

- **Funding Programs for Device Maintenance:** LDOE has established funding programs to support school systems in maintaining an ongoing supply of internet-connected devices. This initiative ensures that more than one device is available per student, allowing uninterrupted access to digital learning resources.
- **Collaboration with Technology Vendors:** Active collaboration with technology vendors is crucial to ensure the availability of high-quality, age-appropriate technology. This partnership aims to secure technology at prices that enable school systems to maintain a 1:1 student-to-device ratio, essential for personalized and effective digital learning.
- **Guidance on Software and Hardware Standards:** LDOE disseminates guidance on software and hardware standards suitable for students, teachers, and educational leaders. This guidance considers factors such as student age, curriculum requirements, and individual student needs, ensuring the technology is relevant and practical.
- **Classroom Equipment and Fixtures:** To assist school systems in creating high-quality teaching and learning environments, LDOE offers guidance on selecting appropriate classroom fixtures and equipment. This includes integrating technology-friendly furniture and devices that enhance the overall learning experience.
- **Tech Readiness Endorsement for Instructional Materials:** Implementing the Tech Readiness Endorsement for instructional materials ensures that curriculum content is compatible with and supports classroom technology integration. This endorsement signifies a curriculum's readiness for digital learning environments.
- **IT/EdTech Staffing Guidance:** LDOE provides detailed guidance on what IT and educational technology staffing should entail, including the roles and responsibilities. This guidance is crucial for schools to build competent teams that effectively manage and support technological integration.
- **Best Practices for Hybrid and Virtual Learning:** Recognizing the growing importance of hybrid and virtual learning formats, LDOE offers guidance on best practices for implementing and sustaining these models. This includes strategies to ensure that remote and digital learning is high quality and accessible to all students.

LDOE addresses the education system's immediate technological needs through these multifaceted supports and lays the groundwork for a future where technology is seamlessly woven into Louisiana's education fabric. These initiatives represent LDOE's dedication to building a digitally inclusive and technologically advanced educational solution, ensuring every Louisiana student can benefit from high-quality digital learning experiences.

Strategic Goal 5: Technology Fluency for Future Readiness

The LDOE recognizes that more than simply providing students with digital devices is required to achieve true technology fluency. Technology fluency, the ability to use digital tools and resources effectively and creatively, is increasingly recognized as a critical skill for students to become productive participants in a modern economy. To this end, the LDOE is committed to fostering technology fluency among students through a comprehensive and collaborative approach.

The LDOE's strategy for promoting technology fluency encompasses several key initiatives:

- **Collaborative Efforts Across Educational and Professional Sectors:** A cornerstone of LDOE's strategy is the collaboration among state education departments, K-12 schools, higher education institutions, businesses, industries, and military organizations. These partnerships focus on determining and promoting the authentic use of technology, tailoring it to the diverse needs of college, careers, and military service. This collaboration is crucial for ensuring that the technology skills taught in schools are relevant and applicable in real-world settings.
- **Integration of Digital Literacy Guidance:** The LDOE incorporates clear and evolving descriptions of technology fluency and proficiency into its Digital Literacy Guidance. This guidance grows alongside technological advancements, ensuring that the curriculum remains relevant and that students are prepared for the changing technology.
- **Strengthening Computer Science Education:** Recognizing the importance of foundational computer science skills, the LDOE is dedicated to enhancing computer science standards and programs throughout Louisiana. This initiative aims to provide students with a strong foundation in computer science principles and practices, preparing them for various technological and computational challenges.
- **Partnerships with Industry for Pathway Creation:** Collaborating with industry partners is critical to providing pathways that facilitate technology fluency. These partnerships create opportunities for students to apply their technological skills in real-world contexts, enhancing their understanding and proficiency.
- **Professional Development in Educational Technology Integration:** The LDOE provides comprehensive professional development resources and opportunities focused on educational technology integration. These resources will equip educators with the skills and knowledge necessary to effectively teach and integrate technology into their curriculum, thereby enhancing the overall learning experience for students.

The LDOE addresses the immediate need for technological competence through these initiatives and prepares Louisiana's students for future challenges and opportunities. By fostering technology fluency, the LDOE is ensuring they will prepare students with the skills needed to navigate and contribute to a digital world, positioning them as capable and confident participants in the economy of the future.

Conclusion

The transformative power of educational technology in Louisiana's schools is undeniable, offering an unparalleled opportunity to revolutionize teaching and learning. Technology has opened new educational horizons by providing students with diverse educational resources and tools. It enables teachers to employ more interactive and engaging teaching methods, thereby enhancing the overall learning experience for students. This evolution in educational methodologies enriches the curriculum and actively engages students in their learning journeys.

Louisiana classrooms have made significant progress in integrating technology. Today, students have more opportunities than ever to interact with and utilize technology in their daily learning. This integration has been instrumental in bridging learning gaps and providing students with a more comprehensive and interactive educational experience.

Despite these advancements, there remains a considerable journey ahead to fully realize the goal of providing every student in Louisiana with a learning environment that effectively leverages technology to its fullest potential. Such an environment is crucial for equipping students with the necessary skills to thrive in today's global economy, which is increasingly driven by technological innovation and digital competency.

The strategies and supports detailed in this report reflect the LDOE's unwavering commitment to this goal. LDOE's dedication is evident in its collaborative efforts with school systems, technology partners, and policymakers. These stakeholders aim to overcome existing challenges and bridge technology access and integration gaps by working together.

As we move forward, this collective momentum must continue to grow. The LDOE, alongside its partners, is dedicated to exploring innovative solutions, investing in technological infrastructures, and fostering environments where technology is not just an adjunct but an integral part of the educational experience. By doing so, LDOE aims to transform the vision of a technologically empowered educational system into a tangible reality for every student in Louisiana.

In conclusion, the path toward a fully integrated and technologically advanced educational system is challenging and rewarding. With continued commitment, collaboration, and innovative thinking, the LDOE will lead Louisiana's schools into a future where technology enhances learning, empowers students, and prepares them for the demands and opportunities of the global economy. This commitment to technological advancement in education is not just an investment in technology but an investment in the future of Louisiana's students and, by extension, the future of the state itself.

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