LOUISIANA DEPARTMENT OF EDUCATION

Computer Science Landscape Analysis Tool

Teaching & Learning: Computer Science

Purpose: School systems should use this tool to map the most relevant computer science data to accomplish the system actions outlined in the K-12 Computer Science Education Plan.

Step 1: Gathering School System Computer Science Data

Gather data and use the chart below to guide discussions on staffing needs at school locations to achieve the desired state based on the target dates listed in step 2.

Grades 9- 12 Computer Science Certification and Training Data	Current Data	Desired State
A. How many grade 6-12 computer science teachers are within the school system and currently have the 6-12 Computer Science endorsement listed on their teacher license?		
B. How many teachers are trained by the College Board to teach AP Computer Science A?		
C. How many teachers are trained by the College Board to teach AP Computer Science Principles?		
D. How many teachers are trained to teach International Baccalaureate (IB) Computer Science?		
Add the total number of teachers from letters A to D to obtain your school system's total number of teachers *eligible* to instruct a computer science course in grades 9-12.		
How many grade 9-12 teachers have completed the Energize! Initiative in the school system?		
How many grade 9-12 teachers are pursuing an add-on computer science teacher certification endorsement by taking the Praxis (5652) Computer Science Content Area Exam?		

Grades 9 - 12 Computer Science Coursework and Enrollment Data	Current Data	Desired State
What local internships that the school system offers currently involve computing work as the primary job task?		
How many school locations serve grades 9-12 in your school system?		
How many school locations serving grades 9-12 in your school system lack a computer science teacher, per Bulletin 746 guidance?		
How many grade 9-12 teachers are authorized to teach an approved CS course on one of these JUMP Start 2.0 pathways STEM Renaissance Computing & Cybersecurity course or a STEM Renaissance Digital Design & Emergent Media course in the school system?		
How many grade 9-12 teachers teach an Industry-Based Credential course focused on computer science from the school system's Jump Start 2.0 Pathways — Information Technology?		

Grades 6, 7, and 8 Computer Science Data	Current Data	Desired State
What is the number of grade 6-8 computer science teachers with a 6-12 Computer Science certification on their teaching license in the school system?		
How many school locations teach grades 6, 7, or 8?		
How many schools currently offer a full-year computer science exploratory elective course for students in grades 6, 7, and 8?		All Schools

Grades K-5 Computer Science Staff With Computer Science Training Data	Current Data	Desired State
How many grade K-5 teachers have completed the Ignite! Initiative in the school system?		
How many elementary schools (grades K-5) offer a specialized or designated time for computer science? If this is provided, how many minutes per week do students attend?		

Computer Science Logistical Data	Current Data	Desired State
For each school location, what is the student-to-computing device ratio?		1:1 ratio of student to computer
For each school location, specify the type of computing device that students utilize to complete classwork. Are the student computing devices adequate for the course and curriculum needs of student users?		All devices are upgraded to support instructional needs and curriculums.
For each school location, specify how each student can access the Internet.		All school locations have student-accessible Internet access.
What is the percentage of students with Internet access in their personal dwellings for each school location?		≥ 80%
What Industry Based Credentials in computer science are offered at each 9-12 school location?		A minimum of 1 Programming Language IBC per school location.

*Attach additional computer science data your school system has collected for the team to review.

Step 2: Analyze data and determine action steps

The school system will implement the K-12 Louisiana Student Standards for Computer Science during the 2025-2026 school year. The chart below suggests dates starting in January 2025 to guide school systems toward full K-12 CS implementation within three years. The targeted dates aid the local CS team in creating a unique implementation timeline using computer science landscape analysis data.

Step 3: Revisit Data and Monitor Progress

Revisit the data gathered in the Landscape Analysis Tool regularly and add updated data related to teacher certification, course offerings, and system-wide progress toward identified goals. Utilize Instructional Leadership Teams (ILT) to center progress monitoring efforts and to support high-quality professional learning structures.