



There are many operational tasks necessary to effectively plan, implement, and use an early warning system. The following list of activities can assist state and local education agencies (SEAs and LEAs) as they implement a new or improve an existing early warning system. This list is not exhaustive or prescriptive, and agencies should modify the tasks and activities in this process to best meet their needs.

## System Planning Tasks and Activities

### *Form a planning team*

- √ Include agency representatives from multiple stakeholder groups.
- √ Develop roles and responsibilities for individual team members.
- √ Determine the purpose, scope, and focus of the system.

### *Conduct planning activities*

- √ Conduct a needs assessment to identify agency and stakeholder needs.
- √ Engage stakeholders through focus groups, interviews, or public presentations and meetings.
- √ Define valid early warning indicators, identify high-quality data, and develop appropriate analytical techniques and procedures.
- √ Develop goals and objectives for system planning, implementation, and use.
- √ Decide whether agency staff or an external vendor will develop the system.

### *Identify indicators and data*

- √ Review research on early warning indicators.
- √ Analyze internal longitudinal data for predictive trends and patterns.
- √ Identify potential early warning indicators.
- √ Select available, valid, and reliable data for each indicator.
- √ Validate early warning indicators and develop associated risk thresholds.

### *Develop an analytical model*

- √ Design the analytical model.
- √ Validate the accuracy of the model's predictive abilities.
- √ Document the model's analytical techniques and analysis procedures.

## System Implementation Tasks and Activities

### *Allocate resources*

- √ Develop a budget that includes a cost-benefit analysis and a projection of staff time necessary for system development, implementation, and maintenance.
- √ Assign responsibility for system development/procurement, implementation, and maintenance to appropriate departments and staff.

### *Develop/refine an early warning system*

- √ Create a system development plan or request for proposal that includes goals, timelines, and deliverables.

- √ Document system requirements and create detailed technical specifications.
- √ Establish system security procedures.
- √ Align the system with other information systems.
- √ Pilot test system quality and usability prior to implementation.

### ***Train staff***

- √ Create customized training materials to meet agency-specific needs.
- √ Provide targeted training to specific departments and/or staff.
- √ Schedule staff training before, during, and/or after system implementation.
- √ Incorporate the early warning system into training materials and activities on related topics.
- √ Ensure that staff protect student privacy and abide by all data privacy regulations.

### ***Collect/import data***

- √ Abide by all data privacy regulations.
- √ Assign data collection/import responsibilities to appropriate departments and staff.
- √ Enable automated data imports and quality checks.
- √ Establish a systematic data import, analysis, and reporting schedule.

### ***Analyze and interpret data***

- √ Test data accuracy and quality prior to analysis.
- √ Analyze data using the system's analytical model.
- √ Interpret system data with related student data.
- √ Implement data drill-downs to enable student-level data reviews.

## **System Use Tasks and Activities**

### ***Report and share data***

- √ Ensure that data reports protect student privacy.
- √ Create a communication plan to guide data reporting and sharing activities.
- √ Assign responsibility for data reports to appropriate departments and staff.
- √ Make early warning data accessible through dashboards, reports, or other data outputs.
- √ Disseminate data to specific departments and staff who use early warning data.

### ***Provide intervention programs and services***

- √ Encourage data-informed discussions and the systematic use of early warning data.
- √ Identify opportunities for the system to support current practices, programs, and processes.
- √ Promote data use through existing team-based structures and collaborative activities.
- √ Align the system with preexisting intervention systems, programs, and services.
- √ Assign responsibility for intervention development, assignment, and provision to appropriate departments and staff.

### ***Monitor student progress***

- √ Monitor students who are receiving interventions.
- √ Monitor students who are no longer at risk of dropping out to determine the effectiveness of specific interventions.
- √ Evaluate intervention program outcomes.

## **System Evaluation Tasks and Activities**

### ***Evaluate system accuracy and usefulness***

- √ Evaluate the need for system upgrades during routine system maintenance.
- √ Evaluate the system's accuracy in identifying students in need of intervention.
- √ Evaluate the system's usefulness in helping staff and stakeholders identify students in need of intervention.

### ***Document stakeholder feedback***

- √ Develop formal or informal methods of soliciting stakeholder feedback, such as surveys, meetings, or other methods.
- √ Solicit stakeholder feedback on the system's usefulness and actionability.
- √ Review user statistics, such as login data, to determine the frequency and consistency of system use.

### ***Determine needed improvements***

- √ Identify needed system improvements.
- √ Coordinate with agency staff and/or external partners to determine the feasibility and scope of system changes.
- √ Develop a plan for implementing system changes.