GEORGE MASON UNIVERSITY

The George Mason ARISE Guide

Artificial Intelligence for Responsive, School Improvement

An Implementation Guide for Using Research and AI-Supported Tools to Support School Improvement Planning

This guide introduces the ARISE workflow and shows school and division teams how to use research and AI-supported tools to identify evidence-based interventions, interpret studies, and plan for implementation, progress monitoring, and program fidelity.

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
George Mason University

All Together Different

The Purpose of ARISE

ARISE is a research-informed, AI-supported process that helps school and division teams connect evidence-based interventions to local problems of practice. The goal is to make research easier to find, interpret, and apply while preserving professional judgment and local context.

- ✓ **Support research-informed school improvement planning.**
- ✓ **Help teams find and use evidence-based interventions.**
- ✓ **Use AI tools to make research more accessible and actionable.**
- ✓ **Connect evidence to implementation, monitoring, and fidelity.**

Educator Voices: ARISE in Practice

"ARISE helped us move from simply identifying a problem to actually finding research-based strategies that fit our school's context." Asst. Superintendent, Information Services & Technology

"The AI tools made the research feel less overwhelming, but the process still kept our professional judgment at the center." Coordinator, School Improvement

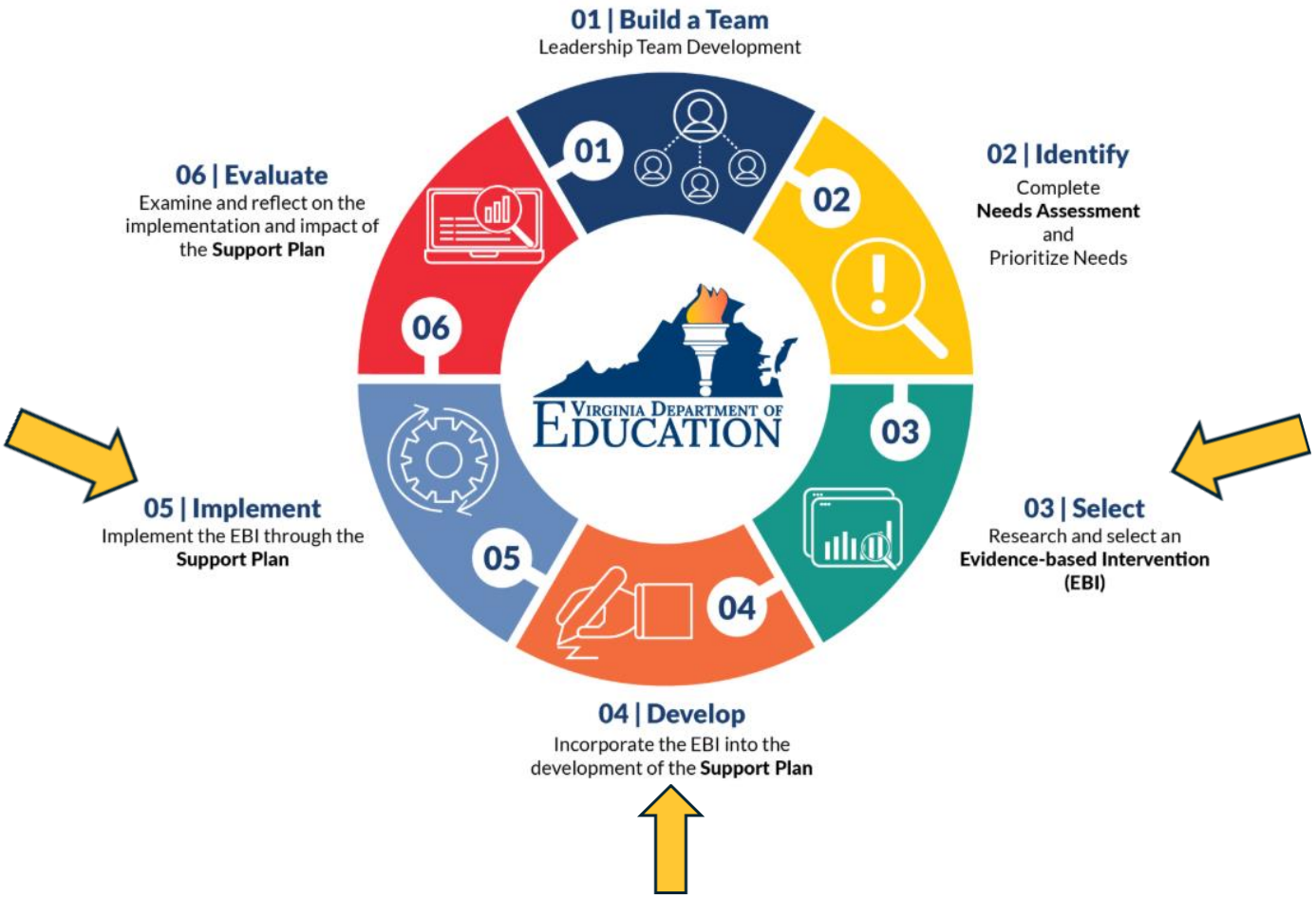
"ARISE made research feel usable. It helped our team connect evidence-based interventions to our local problem of practice while still honoring our knowledge of our students and school context." Supervisor, Student Services

Overview of the ARISE Workflow

The ARISE workflow is a step-by-step approach that supports existing school improvement processes rather than replacing them.

- **In Virginia, ARISE aligns with the Virginia Department of Education's continuous improvement process by helping teams use data to identify needs, connect those needs to evidence-based strategies, and develop clear plans for implementation and monitoring.**
- **Divisions and schools may already have their own needs-assessment processes, strategic planning cycles, or improvement templates.**
- **ARISE adds a structured evidence-use process that helps teams move from problem identification to research-informed action while preserving professional judgment and local context.**
- **The arrows below illustrate the key stages of the ARISE process as it supports school leaders in evidence-informed decision-making.**

VIRGINIA CONTINUOUS IMPROVEMENT PROCESS



Tools Used in the ARISE Workflow

The tools in the ARISE process are complementary rather than interchangeable. Each tool supports a different part of the workflow, and teams should match the tool to the task. AI tools can increase efficiency, but professional judgment remains essential throughout the process.

Tool	Primary Use	Beginner and Advanced Use
Consensus	Research discovery; identifying school-based interventions tied to a root cause.	**Beginner:** search broad questions to identify interventions. **Advanced:** refine searches by population, outcome, intervention type, or study design.
Mason Libraries	Retrieving full-text articles and addressing paywall or access barriers.	**Beginner:** locate full-text studies. **Advanced:** conduct deeper database searches and compare related studies.
ChatPDF	Summarizing and analyzing research; comparing themes; considering contextual fit, developing communication and implementation strategies.	**Beginner:** summarize one article. **Advanced:** compare multiple studies, identify implementation conditions, and generate fidelity questions.

Scan Here to view the workflow

Consensus ChatPDF Mason Libraries

Applying the ARISE Workflow in Practice

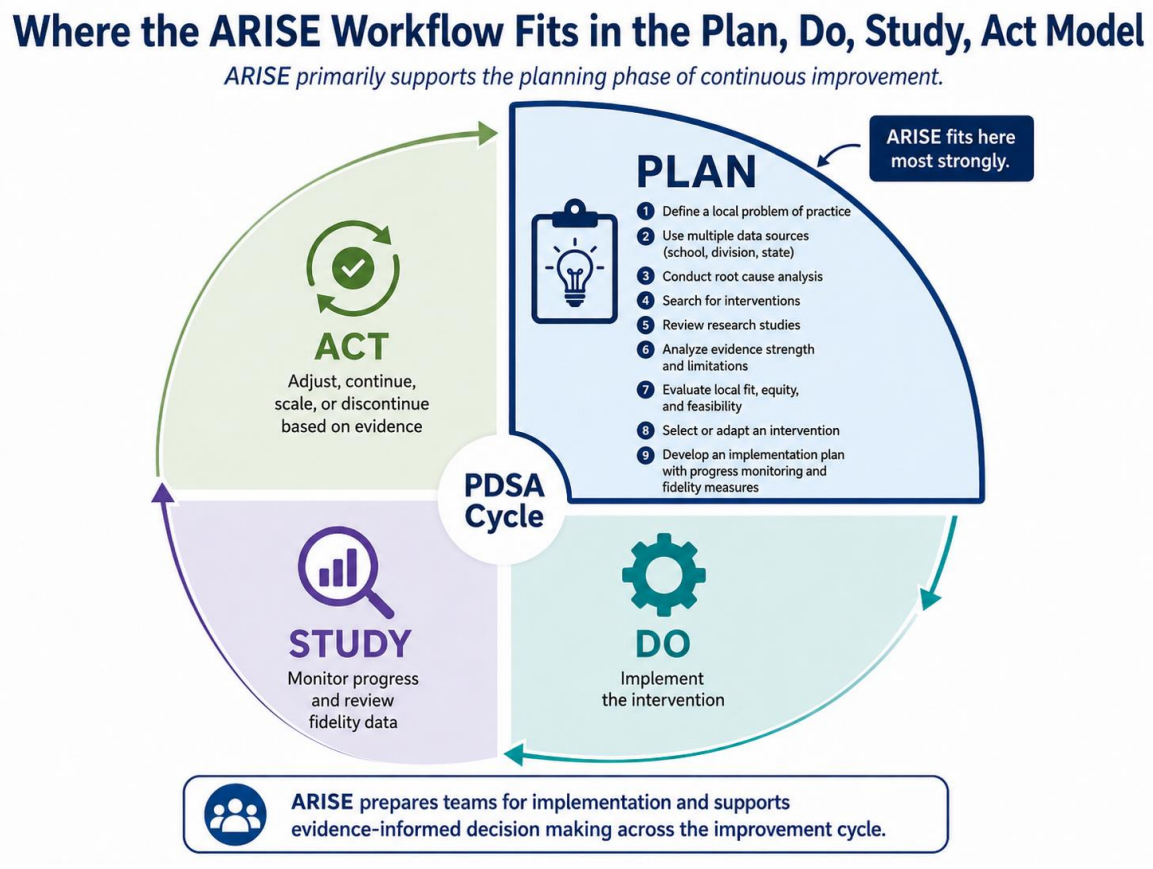
The ARISE workflow begins with a clearly defined local problem of practice and uses multiple sources of data to understand the need, identify root causes, and guide evidence-informed action. The process works best when stakeholders collaborate around a clearly defined need.

- Use multiple sources of data, including school-level, division/district-level, and state-level data.
- Review student outcome data, attendance, discipline, assessment results, survey data, and stakeholder input.
- Conduct a root cause analysis using local evidence.
- Search for interventions that address the identified root cause. Consensus
- Retrieve and review promising studies. Mason Library
- Analyze the strength, relevance, and limitations of the evidence. ChatPDF
- Evaluate fit with the local context, including equity and feasibility.
- Select or adapt an intervention and identify how the supporting evidence aligns with the Virginia Department of Education tiers of evidence: ChatPDF
    - **Tier 1:** Strong Evidence, **Tier 2:** Moderate Evidence, **Tier 3:** Promising Evidence, or **Tier 4:** Demonstrates a Rationale.
    - AI tools can help organize findings, summarize studies, and compare evidence, but they cannot determine the evidence tier for the team.
    - Stakeholders must verify the research, apply professional judgment, and make the final determination.
- Develop an implementation plan with process-monitoring and fidelity measures. ChatPDF

Best Practices & Key Considerations

- Start with a clearly defined problem and root cause before searching for interventions.
- Use evidence critically, not mechanically. A study may be promising but still require adaptation for local context.
- Consider contextual fit, transferability, feasibility, and equity before selecting an intervention.
- Match each tool to the task: search, retrieval, analysis, or implementation planning.
- Keep humans in the loop when using AI tools. AI can summarize and organize information, but teams must verify claims and make professional judgments.
- Plan for barriers such as limited time, access to research, approval processes, governance expectations, and the need for training or interpretive skills.
- Treat implementation as shared responsibility among school leaders, teachers, central office staff, and research partners.

Click Here to use The Hexagon: An Analysis Tool



Sample Prompts for ARISE Teams

The following prompts can help teams use tools more intentionally. Prompts should be adapted to the local problem of practice and reviewed carefully for accuracy and fit.

Tool	Sample Prompt
Consensus	What evidence-based school interventions have been studied for improving ninth-grade attendance and student belonging?
Consensus	Which interventions show evidence of effectiveness for addressing [root cause] among [student group] in K-12 schools?
ChatPDF	Summarize the purpose, sample, intervention, outcomes, and limitations of this study in language that a school improvement team can use.
ChatPDF	Identify the implementation conditions, staffing needs, fidelity indicators, and possible barriers described in this article.
ChatPDF	Draft email communication to parents and staff about the implementation of the intervention, goals and expectations.
ChatPDF	Compare these studies and identify common intervention components, differences in context, and cautions for local implementation.

Scan the QR Code for more information on Prompts.

ARISE in ACTION

A school team identifies chronic absenteeism among ninth-grade students. After reviewing attendance and engagement data, the team identifies weak school belonging and inconsistent family communication as possible root causes. Using Consensus, Mason Libraries, and ChatPDF, the team searches for relevant interventions, retrieves full-text studies, summarizes findings, and compares implementation conditions. The team then selects an intervention that fits its staffing and schedule, develops a communication plan, and creates progress-monitoring measures such as attendance trends, student check-ins, and fidelity logs.

Implementation Checklist

- ☐ Root cause has been identified and discussed by the team.
- ☐ Research search terms are aligned to the root cause.
- ☐ Full-text studies have been retrieved and reviewed.
- ☐ Evidence has been analyzed for strength, relevance, and limitations.
- ☐ Contextual fit, equity, feasibility, and transferability have been considered.
- ☐ Implementation roles, timeline, resources, and training needs are identified.
- ☐ Progress-monitoring indicators are selected.
- ☐ Program fidelity measures are defined.
- ☐ The team has a plan for revisiting evidence and adjusting implementation over time.

Moving Forward

- **ARISE provides a practical, capacity-building framework for helping school and division teams use evidence more effectively. By combining search functions, article retrieval, AI-supported analysis, contextual interpretation, and implementation planning, ARISE makes research use more manageable and meaningful.**
- **The goal is not simply to select an intervention, but to support continuous improvement through informed decision-making, progress monitoring, and attention to program fidelity. Used thoughtfully, ARISE balances AI-supported efficiency with professional judgment, collaboration, and local expertise.**

Connect with Us

Dr. Seth Baxter Hunter: shunte@gmu.edu

Dr. Elizabeth Davis: edavis32@gmu.edu

GEORGE MASON UNIVERSITY

Artificial intelligence tools were used to support the development of selected images and portions of the written content in this ARISE guide.