Idaho's math vision,
in daily practice.

Built on how students actually learn math.

ALEKS aligns with all eight practices of the Idaho Mathematics Teaching Framework.

1. Establish mathematics goals to focus learning

ALEKS personalizes goals for every learner by identifying exactly what each student is ready to learn next. Teachers monitor progress toward those goals while students see their own learning pathway.

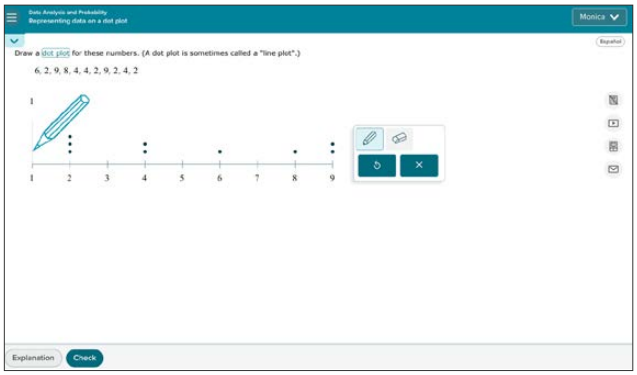


In ALEKS, this shows up through:

- Course alignment to standards and individualized pacing
- Ready to Learn topics and personalized learning paths
- Pie progress and student goal setting

2. Implement tasks that promote reasoning and problem solving

Students uncover understanding by doing mathematics, not by watching it. *ALEKS* delivers appropriately challenging tasks and shows teachers where reasoning breaks down.



In ALEKS, students experience this through:

- Open-ended tasks and adaptive questioning
- Multiple representations of each concept
- Problem work before a teacher-led discussion

3. Use and connect mathematical representations

Many *ALEKS* topics use visual models, graphs, number lines, and symbolic notation so students connect multiple representations of the same idea.



In ALEKS, this connects through:

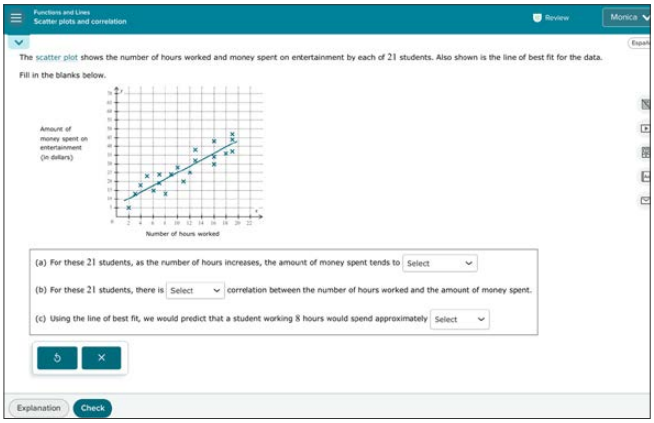
- Graphs, number lines, and coordinate planes
- Fraction models and geometric diagrams
- Symbolic notation tied to visual models

See *ALEKS* aligned to your Idaho classrooms.
mheducation.com/ID-framework

4. Facilitate meaningful mathematical discourse

ALEKS data gives teachers authentic material for classroom and small-group conversations. The Data Huddle framework helps students talk about their own math learning.

Thoughtful usage, more growth.



In ALEKS, this shows up through:

- Review of common misconceptions from reports
- Discussion of multiple solution methods in small groups
- Whole-class conversations framed by *ALEKS* data

5. Pose purposeful questions

Because *ALEKS* knows what each student is ready to learn, every question lands at the right level of challenge and builds on prerequisite knowledge.

In ALEKS, this happens through:

- Adaptive, algorithmically generated problems
- Questions built on prerequisite knowledge
- Knowledge Checks that probe long-term understanding

6. Build procedural fluency from conceptual understanding

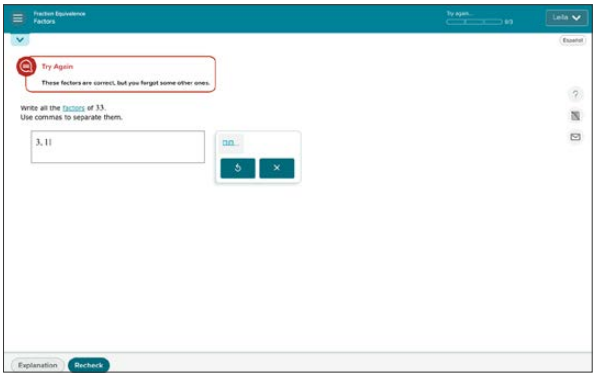
Powered by Knowledge Space Theory, ALEKS sequences learning by readiness, so fluency builds through systematic mastery. Students demonstrate mastery before advancing, and Knowledge Checks reinforce retention over time.

In ALEKS, this builds through:

- Knowledge Space Theory which sets the learning sequence
- Systematic mastery before advancing
- Spaced practice

7. Support productive struggle in learning mathematics

ALEKS keeps every student in their Zone of Proximal Development, challenged but not overwhelmed. Adaptive sequencing and just-in-time support scaffold struggle rather than frustration. Because *ALEKS* continuously models what each student knows, it skips practice on skills they've already mastered and focuses time on meaningful next steps.

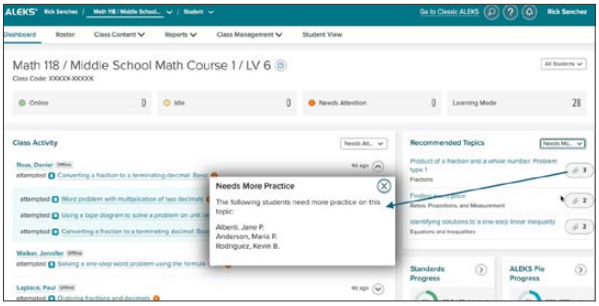


In ALEKS, this happens through:

- Adaptive pathway and Ready to Learn topics
- Immediate feedback with chances to revise
- Individualized challenge that builds persistence

8. Elicit and use evidence of student thinking

Every student interaction generates evidence through continuous formative assessment. Indicators make their thinking visible so teachers can group students and act right from the dashboards.



In ALEKS, teachers see this through:

- Personalized, adaptive learning pathways
- Frequent Progress Knowledge Checks
- Real-time reports that suggest student groups