

Classroom-based Assessment System Model

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Overview

- Develop a conceptual model for science assessment that can be used to meet NCLB requirements
- Present characteristics of the model
- Discuss implementation issues

Key Features

- Bottom - Up
- Educators use results from classroom assessments to make decisions about how students are achieving in science
- Capacity building through professional development
- Assessment quality monitored through external evaluation process

Model Origins

- Nebraska's Student-centered, Teacher-led, Assessment and Reporting System (STARS)
- Local control/local assessment decisions
- Not necessarily classroom assessments, but some districts have chosen to use these as part of their local system
- District assessment portfolios rated for technical quality by external evaluation team

Curriculum and Instruction

- State guidance for prioritizing science standards
- Professional development to infuse standards into instruction
- Teachers develop classroom assessments to measure student progress on standards integrated within instruction

Professional Development

- Curriculum alignment
- Instructional design
- Assessment design
- Assessment use
- Communication of assessment results

Technical Quality

- Criteria for technical quality
- District assessment portfolios
- External evaluation team
- Rating rubric (multiple levels)
 - Unacceptable
 - Exemplary

Illustration of Technical Quality Criteria

- Alignment of assessment content with standards
- Opportunity to learn content prior to assessment administration
- Fairness (bias/sensitivity; appropriate level)
- Score/decision consistency
- Appropriateness of performance level cut scores

Content quality

- Need system to ensure breadth/depth of content coverage and scientific accuracy
- Involve state science coordinators, teachers, and science experts

Accommodations

- Maybe some benefit from using classroom assessments, usual IEP procedures in place
- SPED teachers/coordinator involvement
- Distinguishing accommodations from modifications

Reporting

- Reports include
 - Percentages of students in performance levels
 - Technical quality rating
 - Content quality rating
 - Tailored to use and user
 - Classroom assessments form basis for parent/teacher/student conferences

Use

- Clear purpose for instructional/educational connection
- Opportunities for student remediation
- Teachers receive professional development experiences tailored to improve use of results
- Data for use for NCLB Reporting

Technology

- Critical to success due to lack of state level control; need for communication high
- Technology components
 - Professional Development
 - Communication
 - Collaboration/consortium
 - Reporting of results
 - Models of assessment strategies

Trends

- Through reporting percentage of students in performance categories
- Common definitions of performance categories
- Assessments will change but meaning of performance levels will not

Strengths

- Focus on classroom instruction and student achievement
- Buy-in through involvement, professional development opportunities
- Increasing assessment literacy, appropriate assessment use
- ROI

Weaknesses

- Strong need for communication
- Need for professional development resources
- Lack of control over assessment content and quality
- Equating/scaling not feasible except through performance level definitions
- Time commitment by educators

Implementation Issues

- Professional development needs
- Stakes of state accountability system
- Prior performance on national measures
- Technology infrastructure
- Political climate

Conclusions

- Integrating curriculum, instruction, and assessment
- Providing timely, quality information to educators who are well-positioned to use it
- Flexibility in how assessments are defined
- Developing assessment literacy skills that survive changing policies