SCHOOL IMPROVEMENT NETWORK®

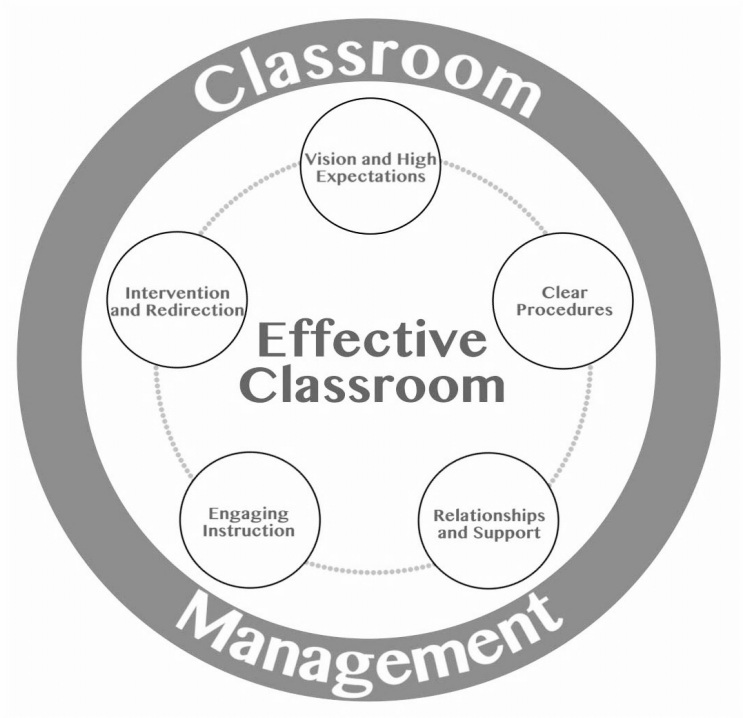
Hands-On Science Activities - Elementary

Classroom Management

The *Classroom Management* series provides examples of teachers working with students to create learning environments that foster achievement and growth. The segments in this series complement each other within a framework of five evidence-based components: Vision and High Expectations, Clear Procedures, Relationships and Support, Engaging Instruction, and Intervention and Redirection.

Pre-viewing Discussion Prompt

1. What is your experience with hands-on activities in your classroom? How do these activities affect student engagement and promote critical thinking?



About this Segment

One component of an effective classroom management system is engaging instruction. In this segment, teachers demonstrate hands-on activities in science lessons. Hands-on learning involves the child in a total learning experience, which enhances the child's ability to think critically. The child must plan a process to test a hypothesis, put the process into motion using various hands-on materials, see the process to completion, and then be able to explain the attained results.

Post-viewing Discussion Prompts

1. How does increased student engagement in science lessons affect classroom management?

2. In terms of a holistic approach to classroom management (see below left), how do strategies that develop engaging Instruction contribute to other components in this model?

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Reflection Questions

Following the discussion, participants can use the following to reflect on new learning and ideas.

1. How were the elements of hands-on activities (listed to the right) demonstrated effectively in this segment?
2. How can you incorporate hands-on activities into your lessons to aid with your own classroom management practice?
3. How else might you develop more engaging instruction for your students?

Hands-On Activities

- Draw on students' attention and curiosity
- Require clearly communicated instructions for every activity, including teacher modeling where appropriate
- Allow students to work individually and in groups
- Encourage participation of all students

Benefits include

- Engaged students
- Efficient instructional time – students are motivated to focus on the lesson
- Increased critical thinking

Resources from School Improvement Network

Classroom management: A framework for student success. *Classroom Management*. Edivation. https://www.pd360.com/index.html#resources/videos/7562

Engaging instruction. *Classroom Management Framework.* Edivation. https://pd360.com/ - resources/videos/7566

Designing lessons for engagement. *Conscious Classroom Management – Elementary Edition.* Edivation. https://pd360.com/ - resources/videos/626

Additional Resources

Center for Teaching and Learning: University of Washington. (n.d.). Promoting student engagement through active learning. Retrieved September 22, 2014 from http://www.washington.edu/teaching/teaching-resources/promoting-student-engagement-through-active-learning/

Simonsen, Brandi, et al. (2008). Evidence-based practices in classroom management: Considerations for research to practice. *Education and Treatment of Children, 31*(3), 351-380. Retrieved from http://www.mepbis.org/docs/cace-11-15-10-PBISclassroom.pdf

Resources for Classroom Practice

Successful STEM Education. (n.d.). Improving STEM education and instruction: Engaging students and raising standards. Retrieved September 22, 2014 from http://successfulstemeducation.org/resources/improving-stem-curriculum-and-instruction-engaging-students-and-raising-standards