

Developing Strategies that Encourage Hands-On Learning

Helpful Hints Series #9

from Dr. Barry Ziff

Something I remember vividly from a college course in educational methodology was the professor stating that teachers typically spend 80% of the time lecturing and students spend 20% of the time engaged in active participation. The professor went on to explain that these percentage numbers need to be reversed if significant and meaningful learning is to take place. He was a very wise professor and I was determined as a beginning teacher to put into practice his philosophy by involving my students in an active learning environment.

Everyone, including graduate students enjoy hands-on learning experiences. Hands-on refers to getting involved in the process. Students learn from each other, they learn from their mistakes and they learn from actually participating in the activity. We can all remember the “projects” we completed in grade school because we were actively involved in the process. The log cabin I built out of sticks to go along with my report on Abe Lincoln and the Native American Hopi village I constructed on a large piece of cardboard were all interesting and exciting activities. I remember the simulation activity that the eleventh grade history teacher involved us in to help the class understand and practice democratic principles. I also remember the time our math team won the competition to solve the difficult word problems. Snicker bars for everyone! School was fun and we were learning.

So, why do most teachers spend so much time talking? First let me remind you that most young people have an attention span of only 3 to 10 minutes depending upon their age, maturity level, and disability. So, why all the talking? Some teachers provide excuses such as they were not trained to provide creative opportunities for children to learn. Others state that the curriculum is structured and teachers are not to deviate from the school’s curriculum. Others complain that they do not have access to the necessary supplies and materials it takes to develop a more hands-on learning environment. Whatever the excuses, just know that your students will learn more and enjoy the process when they are given the opportunity to be actively engaged in learning.

For example, think about how much more exciting active math projects are compared to completing dittos day after day. Math is all around us. Students can actively count, measure, and graph almost anything. The teacher’s stool can be measured in inches, feet, hands, and apples. Students can graph and chart months that birthday occur, they can keep track of how much sugar products they consume daily, weekly, etc., or make a chart listing how many books can be found in their homes. There are endless examples of math games and activities that teach the basics of addition, subtraction, multiplication and division. We are only limited by our lack of creativity and willingness to take a risk and do something outside the textbook and realm of dittos.

Before we enter the school environment most of what we learn is through observation and participation with those in our immediate environment. We did not learn to speak by completing a ditto page. A page in an academic textbook does not change people’s lives. Interacting with others is the key to learning. Watching, listening and actively participating is how we all learn best. Our job as teachers is to act as a model and guide to support students and help point out and connect information so they can have meaningful and positive learning experiences in an organized fashion.

In order to provide a classroom environment that allows for active student participation the teacher needs to be prepared, well organized, have an abundance amount of supplies and materials and be a skilled manager of children. A strategy that is conducive for active student participation for all ages and most subject areas is to place students into smaller learning groups. Dividing the class into smaller and flexible learning groups can be accomplished by assessing students by need, ability or interest. The groups are flexible because students may move from group to group depending on the content area, their needs or interests.

Flexible Grouping

Three Groups:

Teacher: provides guided lesson

Assistant: provides practice and skill development

Independent: Students work independently at desk or in a learning center

Independent seatwork needs to be organized in such a manner that students are working at a functional level and do not need adult assistance to complete tasks. These activities can include but are not limited to:

Follow-up activities

Projects

Enrichment

Reading

Interest Center work

Educational games

Computer time

The time allotted each group is dependent upon several factors. The teacher needs to take into consideration the age, disability and maturity of the students. The content area is another factor to consider. However, for the purpose of explanation the time frame prepared here is to demonstrate a sixty-minute class period for an academic content area.

Time Schedule (60 minutes)

<u>Time</u>	<u>Activity</u>
3-5 minutes	Introduction, Demonstration/Directions
7-15 minutes*	Group 1: Directed lesson (teacher) Group 2: Follow-up (Assistant) Group 3: Enrichment (Independent)
	*Groups rotate every 15 minutes
3-5 minutes	Closure Activity
5 minutes	Review and Clean up

The teacher must be flexible and creative to meet the needs of their students. The grouping procedure works well as an organizational structure to meet the unique needs of the students in most academic content areas. The teacher needs to provide instruction to all students regarding the logistics and traffic patterns of this type of learning environment. Often, students need time to practice and get used to the movement around the classroom. Transition is a difficult time for some children, therefore, the wise teacher takes the time to present, model and reinforce students for cooperating during practice times. A carefully developed classroom management system is also key for the successful operation of this type of learning environment. In my experience, I found that when the students were actively engaged in meaningful experiences they were more enthusiastic and cooperative. Students were on task, focused and engaged and there were fewer disruptions.

Suggestions for Enrichment Activities

Art	Puppetry	Flash Cards
Computer Center	Quiet Reading	Manipulatives
Educational Games	Listening Center	Environmental Center
Music Center	Story Writing	Complaint Area
Math Center	Letter Writing	Science Center

When a teacher implements this type of learning environment in their classroom or in a collaborative setting it is imperative that they have planned well, involved the paraprofessional and have accumulated all the materials so that the students can enjoy a successful and satisfying learning experience. You may begin by incorporating this model in your math or reading programs. Once you and the students are comfortable with the process you can expand the structure to include other academic areas during the school day.

Things to Remember

- *Be organized
- *Prepare all materials in advance
- *Have a separate folder for each group to store lesson plans and materials
- *Practice switching groups
- *Have additional materials for those who complete assignments early
- *Provide consistent praise and positive reinforcement to all groups
- *Collaborate with your paraprofessional
- *Provide a “heads up” before transition time
- *Review rules and procedures on a regular basis
- *Provide a space for storage of projects
- *Allow students to have fun

Where to Go to Get Stuff

Local stores for learning games and activities
Garage sales
Super market (posters and displays)
Museum of Natural History Lending Library
Beg and borrow from friends and relatives
Local Library
Write a Grant
Ask parents to donate supplies
Swap meets
Community businesses
Chuck-e-cheese (internet)
99 cent store
Dollar Tree
Thrift stores

Effective Teachers

Can you do this? Are you an effective teacher? Listed below are the characteristics of effective classroom teachers. These are strategies you can implement to promote active student participation in your learning environment.

Assesses for student needs and abilities
Provides and utilizes structured materials
Solicits high levels of student participation
Allows students to make choices related to learning
Allocates sufficient time to complete assignments
Provides extensive content coverage
Utilizes a variety of strategies integrating visual, auditory, tactile and kinesthetic experiences
Monitors student performance consistently
Utilizes tangible and verbal reinforcers
Provides opportunities for students to be successful
Provides academic feedback to students in a timely fashion

Organizes students into smaller learning groups
Allows students to enjoy learning
Brings in outside resources to enhance learning
Involves families in the process

Effective Lesson Structure

Gain learner's attention
Provide connection to previously learned material/experiences
Communicate the goals of the lesson
Model skill(s) to be learned
Allow students ample time to practice
Prompt for correct responses
Check for mastery
Provide closure to lesson
Following day review and reinforce learning before moving on to new skill or experience
Provide multiple opportunities to utilize new skill or learning

Everyone wants students to be happy and successful. The parents, community and teachers all need to work together to make school a place where children can learn and have access to the American dream of freedom and prosperity. We need to hold to the belief that schools can make a difference in the lives of our children. Effective schools, research has asserted, can overcome many of the issues that our students face daily. What needs to occur in order to provide an effective learning environment requires the awareness, support and cooperation of the community as well as properly trained teachers working collaboratively with colleagues.

I am convinced that if you are willing to take the initiative to conceptualize an ideal situation and strive to implement your vision you will be taking the necessary steps to provide a meaningful and worthwhile education for your students.

“Teaching begins where the subject matter ceases to be subject matter
and changes into inner power.”

Franz Rosenzweig: His Life and Thought, 1976