Getting Results

MODULE 3:
Active Teaching and Learning

See how strategies such as hands-on activities or participating in group work increase student understanding and confidence.

Table of Contents
MODULE 3: Active Teaching and Learning

Section 1: Introduction and Intended Outcome

I. Preface

Sometimes instructors are so concerned with content that they fail to address the process of teaching and learning and the best ways to ensure real changes in student understanding. They may teach the way they were taught. They may follow a textbook. They may use trial and error to determine which teaching methods work best. They may find colleagues who can model successful activities.

Recent research indicates that students who actively interact with a subject learn far more than those who passively take in information. In this session, you'll learn several strategies for engaging your students in active learning.

Intended Outcome for This Module

As a result of this learning experience, you should be able to use teaching methods that encourage students to be actively and interactively engaged throughout a learning experience.

II. Module Overview VIDEO

Watch this video showing how a physics class combines new concepts with activities to test those concepts.

V Video Note

At this point in the module, please view the **Active Teaching and Learning** video. This video is available on the *Getting Results* course Web site at www.league.org/gettingresults or on the CD-ROM, available from the League (www.league.org).

Think About

How does this teacher use the opening (exploratory) activity to engage students in the learning experience? How does the opening activity relate to the objective of the lab students will perform?

V More about the class in the video

Joshua Phiri teaches Engineering and Technology at Florence-Darlington Technical College in South Carolina. Students use Computer-Based Labs (CBLs) in an introductory lesson on heat and temperature.

Now take a moment to reflect on your own experience.

Notebook

Identify one specific learning activity in which you personally got deeply engaged. What did the teacher do to create this situation?

What is your teaching style? Do you feel it is your responsibility to define what students learn and how they learn it? Is lecturing a significant part of how you teach? Do students work on course projects alone with little supervision from you?

Write down your thoughts, and then take the Teaching Styles Inventory at http://www.iats.com/publications/TSI.html. It requires less than 15 minutes and will help you reflect on different approaches in the classroom. If you are new to teaching, it will give you a way to think about the roles a teacher can fulfill. Did anything about your profile surprise you?

Section 2:
Myths and Facts About Learning

I. Myths and Facts About Learning

Instructors often equate teaching with lecturing. That's not surprising, because most of us had lectures throughout high school and college. But when asked to describe how they learn best, teachers' answers vary, from reading on their own to trying new things to talking about ideas with others. Research on learning backs this up.

Read the following myths and facts about learning.

Reveal

Myth
We must be sitting in a chair at all times in order to learn.

Fact
Our ability to learn by experience diminishes in direct proportion to the amount of time we spend sitting.

Myth
The person who does the most listening does the most learning.

Fact
The person doing the most talking, moving, or writing is doing the most learning.

Myth
The best way to teach is to give information in a well-planned lecture.

Fact
We remember 10 to 20 percent of what we hear. If we want someone to "hear" something, we lecture. If we want students to "learn," we need to work as a guide on the side and involve them.

Myth
If we'd only listen, we'd remember more.

Fact
We learn and remember 80 to 90 percent of what we do and say. In order to learn anything well, we need to talk about it with each other and do it a number of times.

continued

Myth
The more "serious" the learning is, the more we will remember.

Fact
We learn and remember best when we are engaged and enjoying what we're doing.

Myth
Fun is marginal to learning.

Fact
Not only do we learn best and remember more when we enjoy success at an appropriately challenging experience, we also will be more willing to seek out other challenging experiences.

Myth
The only person who should be the "sage on the stage" is the expert in the field.

Fact
We are all in the process of becoming experts in something. The more of our knowledge we share with others, the more we learn.

Adapted from the Association for Supervision and Curriculum Development, www.ascd.org.

Most people learn best by actively working with new concepts and ideas, solving problems, asking and answering questions, discussing, debating, brainstorming, researching, and explaining. Successful teachers provide students with opportunities to engage in these types of activities.

Effective Teaching and Learning

The following reading describes research on college teaching and learning.

1. Teachers' knowledge of the subject matter is essential to the implementation of important teaching tasks.

Teachers who know their subject matter thoroughly can be more effective and efficient at organizing the subject matter, connecting the subject with the students' previous knowledge, finding useful analogies and examples, presenting current thinking on the subject, and establishing appropriate emphases.

2. Active involvement of the learner enhances learning.

Learning is an active process that requires that the learner work with and apply new material to past knowledge and to everyday life. Some of the methods that encourage active learning in the classroom are: discussion, practice sessions, structured exercises, team projects, and research projects. In the words of philosopher and psychologist William James: "Teaching without an accompanying experience is like filling a lamp with water. Something has been poured in, but the result is not illuminating."

continued

3. Interaction between teachers and students is the most important factor in student motivation and involvement.

The opportunity to know a few faculty well often enhances students' intellectual commitment. Informal interactions can be just as important as what happens in class. Take time before or after class, during rides to field trips, or in other casual settings to get to know more about students and their interests, especially as they relate to the course.

4. Students benefit from taking responsibility for their learning.

Students are more motivated when they take control of their own learning. Consider ways to enable students to take such responsibility. For example, the teacher in the video has students hypothesize what they think might be true and then gives them the chance to test their personal hypotheses. Having students set personal goals for what they hope to achieve or improve upon can also encourage them to take responsibility.

5. There are many roads to learning.

Students learn in different ways and vary in their abilities to perform certain tasks. Some students learn best by hearing; others by seeing; still others by doing. All students get more out of a learning experience that incorporates all three modalities. Presenting a lecture accompanied by visuals and hands-on activities increases the likelihood that all students will understand what you are teaching. Some learners prefer to work independently; others thrive on interacting with others to make sense of new information. It is important to balance both types of learning experiences. Offering students a choice of activities for developing understanding and/or a choice of products to create to show that they understand key concepts and skills enables them to take responsibility for learning and to decide which activity will be the most effective for them.

6. Expect more and your students will achieve more.

Simply stated, if an instructor conveys to students that he or she believes in their ability to succeed, learning is enhanced.

7. Learning is enhanced in an atmosphere of cooperation.

Learning is enhanced when it is perceived as a collaborative and cooperative effort between students. The opportunity to share ideas without threat of ridicule and the freedom to respond to the ideas of others increases complexity of thinking and deepens understanding.

8. Material must be meaningful.

If new material is presented in a pattern or framework that the learner can relate to, it is more readily learned and retained. New material will be more easily learned if the learner is helped to see its relationship to what she or he already knows. Material seen by the learner as relevant to his or her own problems and experiences will be more readily learned.

Adapted from Tiberius and Tipping, 1990.

II. Thinking About Student-Centered Learning

This chart outlines different ways of thinking about learning.

	Teacher-Centered	Student-Centered
1. Knowledge	Transferred from faculty to students	Jointly constructed by students and faculty
2. Student purpose	Passive vessel to be filled by faculty's knowledge	Active constructor, discoverer, transformer of his or her own knowledge
3. Faculty purpose	To classify and sort students	To develop students' competencies and talents
4. Relationships	Impersonal interactions among students and between faculty and students	Personal transactions among students and between faculty and students
5. Context	Competitive, individualistic	Cooperative learning in classroom and cooperative teams among faculty
6. Assumption	Any expert can teach	Content expertise and teaching skill are both required
7. Assumption	All students can learn if they try hard enough	All students can learn if they understand their own learning styles and practice productive behaviors

Notebook

How could these ideas inform the teaching and learning experiences you design? What obstacles stand in the way of incorporating these ideas? How might you overcome those obstacles?

III. Strategies for Active Learning

There are many strategies for promoting active learning among your students. These include:

- Providing hands-on activities for students
- Guiding through questioning
- Facilitating group work

One way to move beyond the teacher-centered model is to give your students some hands-on experience with new concepts and ideas.

The advantages are twofold: Students are able to "discover" information on their own, giving them more ownership of the ideas than if they had been told. In addition, new material is generally better received and understood if students can relate it to their own experiences. Often these experiences are incorporated with information delivered through lectures.

The Role of Lecture

Lecturing can be of value in the classroom. It is often the fastest way of conveying information to students, and it's useful for students who learn well by listening.

Lecturing conveys information, but may not build understanding; it casts learners as passive receivers of information. Integrating lectures with discussion and activities will help students process and understand the information presented. During a pause in the lecture, have students turn to a peer and:

- Read/share notes with each other
- Respond to a question you pose (check understanding)
- Summarize what they have understood so far
- Make a connection to something they know or have experienced
- Solve a problem related to what you've presented

Students typically retain most information in the first 10 minutes of a lecture, so limit lecture. Find ways to have students create mini summaries throughout the lesson. Ask students with experience in industry if they have anything to add; ask students from other countries to compare their experience.

To capture students' interest:

- Provide a skeletal outline of your presentation as a "big-picture" overview
- Include real-life anecdotes
- Use visuals (pictures, graphic organizers, models) with presentations
- Involve students in demonstrations

IV. Engaging Students in Lecture and Lab

VIDEO

Watch this video in which students move from lecture to lab teams and use algebraic functions to program robots.

V Video Note

At this point in the module, please view the **Engaging Students in Lecture and Lab** video. This video is available on the *Getting Results* course Web site at www.league.org/gettingresults or on the CD-ROM, available from the League (www.league.org).

Think About

What kinds of questions do the instructors ask? How do their interactions with students (asking questions, responding to student questions, pausing after asking questions) encourage these students to find their own answers?

V More about the class in the video

Robert Chaney and Jeanne Carlson teach Technical Mathematics at Sinclair Community College in Ohio. In this robot activity, students apply the concepts of variables and functions to program a robot.

Now we'd like you to consider your own practice.

Notebook

The teachers in this video ask questions of students, survey their current understanding of the topic, and connect new information to what the students already know. How might you use these strategies? How else might you engage students?

V. Asking Questions

Questioning is a powerful way of increasing student participation and encouraging understanding. You can ask questions during a lecture, when students work on small group projects, or when they are studying independently at desks or lab tables.

There is a difference between questioning that prompts students to think more deeply about their learning and questioning that requires recall of facts. The right kind of question at the right time can help a student clarify her thoughts, recognize a pattern, or overcome a conceptual hurdle.

Brain Fact

The brain needs time to reinforce information from a lecture. After 10 minutes of input, build in at least two minutes of activity or good question-and-answer time to reinforce or expand an idea.

Good questions can help teachers, too, by highlighting students' misconceptions, and can serve as models for students who are learning how to ask their own questions during scientific investigations.

Any Questions?

Read the following excerpted article by Richard Felder for examples of questions that do and don't elicit analytical thinking.

If I ask the whole class a question and wait for someone to volunteer an answer, the students remain silent and nervously avoid eye contact with me until one of them (usually the same one) pipes up with an answer. On the other hand, if I call on individual students with questions, I am likely to provoke more fear than thought.

No matter how kindly my manner and how many eloquent speeches I make about the value of wrong answers, most students consider being questioned in class as a setup for them to look ignorant in public—and if the questions require real thought, their fear may be justified.

I find that a better way to get the students thinking actively in class is to ask a question, have the students work in groups of two to four people to generate answers, and then call on several of the groups to share their results. I vary the procedure occasionally by having the students formulate answers individually, then work in pairs to reach consensus. For more complex problems, I might then have pairs get together to synthesize team-of-four solutions.

Following are some different things we can ask our students to do that can get them thinking in ways that "Given this fact, calculate that" never can.

Define a concept in your own words
Using terms a bright high school senior or your grandmother could understand, briefly explain the concept of vapor pressure (viscosity, heat transfer coefficient, ideal solution, etc.).

Explain familiar phenomena in terms of course concepts
Why do I feel comfortable in 65-degree still air, cool when a 65-degree wind is blowing, freezing in 65-degree water, and even colder when I step out of the water unless the relative humidity is close to 100%?

Predict system behavior before calculating it
Without using your calculator, estimate the time it will take for half of the methanol in the vessel to drain out (for all the water in the kettle to boil off, for half of the reactant to be converted).

Think about what you've calculated
Find two different ways to verify that the results you have calculated are accurate or that the formula you have chosen to solve the problem is the correct one. The computer output says that we need a tank volume of 3,657,924 cubic meters. Any problems with this solution?

Brainstorm
What are possible safety (environmental, quality control) problems we might encounter with the process unit we just designed? Once a list of problems has been generated, you might follow up by asking the students to prioritize the problems in terms of their potential impact and to suggest ways to minimize or eliminate them.

Formulate questions
Write on an index card two questions you could ask a classmate to verify that he or she read and understood the assigned material for today's class.

Felder, 1994.

VI. Responding to Questions

Make sure you give students adequate time to formulate a response to your questions. Just by adding more "wait time" to a question, you often get better results.

Respond by acknowledging students' comments with a few words ("That's an interesting point"), probing a little deeper ("Do you think that's true for all circumstances?"), paraphrasing a long-winded or confusing answer ("So what you're saying is..."), or asking other students to respond to the answer ("John, do you agree with Lauren?").

Wait Time

Allow a three-to-five-second minimum of intentional silence after posing a question and after a student first responds. Thirty years ago, Mary Budd Rowe discovered that instructors almost never waited after asking questions. When they did wait, they found that students were more likely to answer in full sentences, they engaged in more analytical thinking, and they were more likely to comment on each other's answers.

Look at your students and wait until they are finished talking before responding. Make a conscious effort to try and wait a while longer during question-and-answer sessions.

Read these comments from Jeanne Carlson about responding to students in a way that encourages learning.

When a student asks a question, the tendency is to answer them. What we need to do is answer their question with a question. Well, you've done this, so what do you think? What do you think you need to measure? What would you have to do to come up with an answer? So I try not to just answer directly ever. We just try to guide them on the pathway that will allow them to figure it out, because if they can figure it out, they're going to remember it a lot longer than if they just get a direct answer from us.

— Jeanne Carlson, Mathematics Instructor, Sinclair Community College

VII. Collaborative Learning

No one strategy so profoundly changes the dynamic in the classroom as much as cooperative work does. When students work in groups, their learning is active and personalized. Collaborative work reflects the workplace, and it is refreshing for both students and teacher.

Collaborative learning gives students an opportunity to develop many skills:

- Negotiation and debate
- Responsibility and time management
- Teamwork and leadership
- Creative and critical thinking

Although not specifically linked to course content, these skills support lifelong learning in both personal and career situations. That's especially important in technical fields, such as computer science and nanotechnology, in which information quickly becomes obsolete.

When considering group work, you might feel more comfortable starting small. Try incorporating collaborative learning in small doses. Start by asking students to chat with a neighbor after a short lecture to come up with what they consider to be the most important points covered in the lecture, or to formulate two questions they still have.

From there, try using established cooperative learning strategies such as:

Think-Pair-Share

Students first think about or write answers to a question separately, then pair with a partner to discuss their answers, and share answers when called upon.

Jigsaw

This is a learning process that can replace lecture. Working in groups of four or more, assign two or more articles, but have each person on a team responsible for only one article. Each article should have a different content focus. The students then teach the content to their team members and try to analyze a case or solve a problem using the shared information.

Create Academic Controversies

Assign a topic with powerful pro or con positions, giving opposite positions to pairs of team members. After research and planning, students must convince their opponents of their positions. Then the pairs take the opposite position and argue that.

Eventually, you may decide to modify these strategies or come up with your own cooperative learning methods to best reflect your teaching style.

Although some collaborative activities can be done in informal pairs or small groups, most instructors prefer to assign larger groups for long-term projects.

Strategies for Grouping Students

In most cases, groups of three to four students tend to work best. Although working in pairs may guarantee that each student is involved, they tend to lack for diversity of ideas and will fall apart if one member drops out or gets sick. On the other hand, groups larger than four tend to be unwieldy and make it easier for timid students to sit back and let others participate.

continued

Ideally, each group will have some stronger and some weaker students so that the groups are fairly evenly matched according to range of life experience, understanding of topic, and balance of work/study time. In mixed teams, weaker students benefit by seeing how more experienced students go about solving problems, and stronger students reinforce their knowledge by teaching someone else. Homogeneous groups don't get this benefit, and they also tend to divide the work among themselves with no interaction.

Also consider different aspects of diversity. If you only have two female students, for example, don't initially separate them in an attempt to create multiple diverse teams. They may learn better together at the beginning of the class and later integrate into other teams.

Pay attention to how you give directions for group work. Practice giving concise instructions out loud the first time you try a new activity. Or try them out on a friend or fellow teacher to see if they are clear.

As the groups work, move around the room to facilitate and make sure that each person has a role or a way to contribute.

VIII. Balancing Skills and Theory VIDEO

Watch this video of a biotechnology class learning lab skills before they are introduced to the theory involved.

V Video Note

At this point in the module, please view the **Balancing Skills and Theory** video. This video is available on the *Getting Results* course Web site at www.league.org/gettingresults or on the CD-ROM, available from the League (www.league.org).

Think About

How is this lab experience set up to encourage active learning? How are lab reports built into this lesson?

V More about the class in the video

Leslie Barber teaches biotechnology at New Hampshire Community Technical College. Students are looking at DNA and working on isolating proteins.

Now that you've seen the video, compare it to your own practice.

Notebook

The instructor referred to "bite-sized" pieces of information. What is a similar-sized bit of important information or theory in your field that could lead to a lab or field experience?

Section 3:
Teaching and Learning in the Lab

I. Lab Experiences

We've talked about active learning as an alternative to traditional lecture-style teaching. But you can use active learning strategies in the lab as well. Labs may seem like "cookbook" experiments with a prescribed set of steps and one predetermined outcome. There is little room for true experimentation. Students may feel that the focus is on getting the right answer rather than really learning from the experience.

Simple tweaks can help alleviate this problem. For example, you might try scheduling a lab first and then working with your students on theory. Because students don't know what to expect, they will approach labs with genuine curiosity rather than a set of steps they must follow to get to a predetermined outcome.

Another idea is to ask students to make predictions before they begin a lab so that they are more invested in the outcome. Your students may also be more interested in lab activities as they relate to work or problems in the world.

Devoting more time to a complex problem can result in richer learning than trying to cover every detail of a topic.

II. Covering the Material

Many teachers are reluctant to take on active teaching and learning because of concerns about "covering" all the material they need to in their courses.

If your main goal is to help students learn the material in a meaningful way, covering every chapter might not be so important. You might decide that learning to interpret and apply new information is as important as the information itself. Here is one instructor's experience:

> *Over time, I learned that completeness is not good instruction. Part of the role of the instructor is to decide what's really essential, because instead of covering things at a high level, in many cases what you need to do is provide students a more vertical depth and understanding of a particular topic. It took me a long time to get to that point. I tried to build in projects at the end of the quarters based on my experience in industry, and that was successful.*
>
> *I saw how excited they got when they were actually working in small teams. So I've learned you don't have to cover every topic. You need to get the students to a level where they can comfortably do some of that on their own.*
>
> *— Jim Houdeshell, Instructor, Quality Engineering Technology*

III. Using Real-World Problems VIDEO

Watch this video in which students must design a remote-operated vehicle (ROV) to respond to a simulated chemical canister accident in a harbor.

V Video Note

At this point in the module, please view the **Using Real-World Problems** video. This video is available on the *Getting Results* course Web site at www.league.org/gettingresults or on the CD-ROM, available from the League (www.league.org).

Think About

How is this lab experience set up to encourage active learning? How does the type of problem chosen engage students?

V More about the class in the video

Frank Barrows teaches Introduction to Submersible Technology at the Marine Advanced Technology Education Center at Monterey Peninsula College in California. Students participate in interactive labs and lectures that will guide them when constructing underwater robots.

Now that you have considered a range of strategies to make your students active learners, think about other ways to improve classroom dynamics.

Notebook

Students dealt with many variables to solve the problem presented in the video. Consider your own area of expertise. What kinds of variables might students later encounter in the class or in the workplace?

IV. Putting It in Students' Hands

This activity is intended to help technical faculty develop increasingly active classrooms by examining what typically happens in the classroom, then determining ways to let students take over as many activities as possible.

Creating a more active learning environment doesn't have to involve radical change or a huge shift in mind-set. Simply by putting the equipment—dry erase marker, microscope, projector, control panel—into the hands of students, faculty can dramatically alter the classroom dynamic and help students experience a sense of ownership, control, and heightened motivation.

Some transitions to student-centered classrooms require a bit more planning. In this exercise, complete the worksheet at the end of this document, called **Putting It in Students' Hands: Simple Active Learning Strategies**. Outline common classroom activities and strategize ways to get students involved in those activities. Use the first few common activities as a guide.

If you're new to active learning, start small and plan to add more student-controlled activities each time you teach the course. Continue to add classroom activities to your lists and observe student responses to taking charge.

As you get more comfortable, brainstorm new ways to work active learning into the curriculum, such as standardizing group discussion roles or division of responsibilities or allowing students to select some curriculum components. You can also invite a colleague, department chair, or teaching expert into the classroom to help you repurpose and rearrange the dynamics of your course offerings. Make a commitment to add one or two additional student-centered activities each semester.

V. Test Yourself

Think back to a course you've taught recently. Do any of the following statements describe your practice? How might you work towards accomplishing more of the strategies in the following list?

Effective Teaching and Learning

- I ask my students to present their work to the class.
- I ask my students to summarize similarities and differences among different theorists or research findings.
- I ask my students to relate outside events or activities to the subjects covered in my courses.
- I ask my students to undertake research or independent study.
- I encourage my students to challenge my ideas, the ideas of other students, or those presented in readings or other course materials.
- I give my students concrete, real-life situations to analyze.
- I use simulations, role playing, or labs in my classes.
- I encourage my students to suggest new readings, research projects, field trips, or other course activities.
- My students and I arrange field trips, volunteer activities, or internships related to the course.
- I carry out research projects with my students.

TA Handbook, University of Toronto, 1990.

Section 4: Self-Assessment and Resources

I. Looking Back at Your Notebook

Think over all the strategies covered for active learning and review previous pages in the module. Which activities could you begin doing on a regular basis to get students more engaged in learning? Which activities could increase collaboration between students? Review ideas and decide what you could do the next time you are in class. Record these ideas in your notebook. If possible, discuss them with another instructor.

II. Resources and Readings

The following text has more information on brain theory and student-centered learning:
Smilkstein, Rita. Six Principles of Learning and Their Implications for Teaching. In *We're Born to Learn.* Thousand Oaks, Calif.: Corwin Press, 2002.

The following resource has more information on questioning strategies:
Felder, Richard. Any Questions? *Chemical Engineering Education,* 28(3), 174–175 (Summer 1994). http://www.ncsu.edu/felder-public/Columns/Questions.html.

This text provides more information on the strategies and research base of active teaching and learning:
Tiberius, Richard, and Jane Tipping. Principles of Effective Teaching and Learning. *Twelve Principles of Effective Teaching and Learning for Which There Is Substantial Empirical Support.* Toronto: University of Toronto, 1990.

For more information on think-pair-share, jigsaw, or academic controversies, visit the following Web sites:

Think-Pair-Share:
http://clte.asu.edu/active/usingtps.pdf

Jigsaw:
http://clte.asu.edu/active/usingjig.pdf

Academic Controversies:
http://clte.asu.edu/active/acadcontr.pdf

III. Summary of Module 3

Students learn more when actively engaged. Moving around the classroom, doing hands-on activities, and participating in group work are strategies that encourage students to learn and discover information on their own.

When thinking about active teaching and learning:

- You should *integrate questioning opportunities* into lectures and help students make connections between what they are hearing and what they already know. If the learning is meaningful to them, it is less likely to be forgotten.
- You should *create collaborative learning opportunities* in which students will use real-world problems that are likely to be found in career situations.
- You should *allow students to take an active role in the daily activities of class*, such as setting up technology, taking notes on the board, or distributing handouts, and gradually build the level of activity each time you teach the course. Notice how the students respond to these roles. You will find that active involvement often increases motivation.

Putting It in Students' Hands: Simple Active Learning Strategies

Getting Started – *The first 5–10 minutes of class*	
1. Coordinate sign-in or sign-up sheets	
2. Distribute handouts	
3. Arrange classroom for daily activities	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Presentations – *Conveying information, presenting lessons, visuals*	
1. Summarize outside readings	
2. Create overheads, visuals during class	
3. Run digital presentations	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Technology Setup and Operation – *Equipment, instructional technologies, etc.*	
1. Prepare lab equipment	
2. Collect data, sampling	
3. Maintain inventory controls	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Discussions – *Talking points, main ideas, creating information*	
1. Write notes, problems on the board	
2. Report main ideas, findings to group	
3. Conduct polls, surveys, ask questions	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Other – *Course-specific activities, unique events*	
1. Greet and escort guests	
2. Share class notes electronically	
3. Coordinate study sessions outside class	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Closings – *Wrapping up a session, preparing for the next one*	
1. Conduct/collect daily assessment	
2. Summarize lesson content	
3. Put equipment away	
4.	
5.	
6.	
7.	
8.	
9.	
10.	