In the 1990's, educational reformers are seeking answers to two fundamental questions: (1) How well are students learning? and (2) How effectively are teachers teaching? Classroom Research and Classroom Assessment respond directly to concerns about better learning and more effective teaching. Classroom Research was developed to encourage college teachers to become more systematic and sensitive observers of learning as it takes place every day in their classrooms. Faculty have an exceptional opportunity to use their classrooms as laboratories for the study of learning and through such study to develop a better understanding of the learning process and the impact of their teaching upon it. Classroom Assessment, a major component of Classroom Research, involves student and teachers in the continuous monitoring of students' learning. It provides faculty with feedback about their effectiveness as teachers, and it gives students a measure of their progress as learners. Most important, because Classroom Assessments are created, administered, and analyzed by teachers themselves on questions of teaching and learning that are important to them, the likelihood that instructors will apply the results of the assessment to their own teaching is greatly enhances.

Through close observation of students in the process of learning, the collection of frequent feedback on students' learning, and the design of modest classroom experiments, teachers can learn much about how students learn, and more specifically, how students respond to particular teaching approaches. Classroom Assessment helps individual college teachers obtain useful feedback on what, how much, and how well their students are learning. Faculty can then use this information to refocus their teaching to help students make their learning more efficient and more effective.

College instructors who have assumed that their students were learning what they were trying to teach them are regularly faced with disappointing evidence to the contrary when they grade tests and term papers. Too often, students have not learned as much or as well as was expected. There are gaps, sometimes considerable ones, between what was taught and what has been learned. By the time faculty notice these gaps in knowledge or understanding, it is frequently too late to remedy the problems. To avoid such unhappy surprises, faculty and students need better ways to monitor learning throughout the semester. Specifically, teachers need a continuous flow of accurate information on student learning. For example, if a teacher's goal is to help students learn points "A" through "Z" during the course, then that teacher needs first to know whether all students are really starting at point "A" and, as the course proceeds, whether they have reached intermediate points "B," "G," "L," "R," "W," and so on. To ensure high-quality learning, it is not enough to test students when the syllabus has arrived at points "M" and "Z." Classroom Assessment is particularly useful for checking how well students are learning at those initial and intermediate points, and for providing information for improvement when learning is less than satisfactory.

Through practice in Classroom Assessment, faculty become better able to understand and promote learning, and increase their ability to help the students themselves become more effective, self-assessing, self-directed learners. Simply put, the central purpose of Classroom Assessment is to empower both teachers and their students to improve the quality of learning in the classroom.

Classroom Assessment is an approach designed to help teachers find out what students are learning in the classroom and how well they are learning it. This approach has the following characteristics:

- Learner-Centered
  Classroom Assessment focuses the primary attention of teachers and students on observing and improving learning, rather than on observing and improving teaching. Classroom Assessment can provide information to guide teachers and students in making adjustments to improve learning.
Teacher-Directed
Classroom Assessment respects the autonomy, academic freedom, and professional judgement of college faculty. The individual teacher decides what to assess, how to assess, and how to respond to the information gained through the assessment. Also, the teacher is not obliged to share the result of Classroom Assessment with anyone outside the classroom.

Mutually Beneficial
Because it is focused on learning, Classroom Assessment requires the active participation of students. By cooperating in assessment, students reinforce their grasp of the course content and strengthen their own skills at self-assessment. Their motivation is increased when they realize that faculty are interested and invested in their success as learners. Faculty also sharpen their teaching focus by continually asking themselves three questions: "What are the essential skills and knowledge I am trying to teach?" "How can I find out whether students are learning them?" "How can I help students learn better?" As teachers work closely with students to answer these questions, they improve their teaching skills and gain new insights.

Formative
Classroom Assessment's purpose is to improve the quality of student learning, not to provide evidence for evaluating or grading students. The assessment is almost never graded and are almost always anonymous.

Context-Specific
Classroom Assessments have to respond to the particular needs and characteristics of the teachers, students, and disciplines to which they are applied. What works well in one class will not necessary work in another.

Ongoing
Classroom Assessment is an ongoing process, best thought of as the creating and maintenance of a classroom "feedback loop." By using a number of simple Classroom Assessment Techniques that are quick and easy to use, teachers get feedback from students on their learning. Faculty then complete the loop by providing students with feedback on the results of the assessment and suggestions for improving learning. To check on the usefulness of their suggestions, faculty use Classroom Assessment again, continuing the "feedback loop." As the approach becomes integrated into everyday classroom activities, the communications loop connecting faculty and students -- and teaching and learning -- becomes more efficient and more effective.

Rooted in Good Teaching Practice
Classroom Assessment is an attempt to build on existing good practice by making feedback on students' learning more systematic, more flexible, and more effective. Teachers already ask questions, react to students' questions, monitor body language and facial expressions, read homework and tests, and so on. Classroom Assessment provides a way to integrate assessment systematically and seamlessly into the traditional classroom teaching and learning process.

As they are teaching, faculty monitor and react to student questions, comments, body language, and facial expressions in an almost automatic fashion. This "automatic" information gathering and impression formation is a subconscious and implicit process. Teachers depend heavily on their impressions of student learning and make important judgments based on them, but they rarely make those informal assessments explicit or check them against the students' own impressions or ability to perform. In the course of teaching, college faculty assume a great deal about their students' learning, but most of their assumptions remain untested.

Even when college teachers routinely gather potentially useful information on student learning through questions, quizzes, homework, and exams, it is often collected too late -- at least from the students' perspective - to affect their learning. In practice, it is very difficult to "de-program" students who are used
to thinking of anything they have been tested and graded on as being "over and done with." Consequently, the most effective times to assess and provide feedback are before the chapter tests or the midterm and final examinations. Classroom Assessment aims at providing that early feedback.

Classroom Assessment is based on seven assumptions:

1. The quality of student learning is directly, although not exclusively, related to the quality of teaching. Therefore, one of the most promising ways to improve learning is to improve teaching.
2. To improve their effectiveness, teachers need first to make their goals and objectives explicit and then to get specific, comprehensible feedback on the extent to which they are achieving those goals and objectives.
3. To improve their learning, students need to receive appropriate and focused feedback early and often; they also need to learn how to assess their own learning.
4. The type of assessment most likely to improve teaching and learning is that conducted by faculty to answer questions they themselves have formulated in response to issues or problems in their own teaching.
5. Systematic inquiry and intellectual challenge are powerful sources of motivation, growth, and renewal for college teachers, and Classroom Assessment can provide such challenge.
6. Classroom Assessment does not require specialized training; it can be carried out by dedicated teachers from all disciplines.
7. By collaborating with colleagues and actively involving students in Classroom Assessment efforts, faculty (and students) enhance learning and personal satisfaction.

To begin Classroom Assessment it is recommended that only one or two of the simplest Classroom Assessment Techniques are tried in only one class. In this way very little planning or preparation time and energy of the teacher and students is risked. In most cases, trying out a simple Classroom Assessment Technique will require only five to ten minutes of class time and less than an hour of time out of class. After trying one or two quick assessments, the decision as to whether this approach is worth further investments of time and energy can be made. This process of starting small involves three steps:

Step 1: Planning
Select one, and only one, of your classes in which to try out the Classroom Assessment. Decide on the class meeting and select a Classroom Assessment Technique. Choose a simple and quick one.

Step 2: Implementing
Make sure the students know what you are doing and that they clearly understand the procedure. Collect the responses and analyze them as soon as possible.

Step 3: Responding
To capitalize on time spent assessing, and to motivate students to become actively involved, "close the feedback loop" by letting them know what you learned from the assessments and what difference that information will make.

Five suggestions for a successful start:
1. If a Classroom Assessment Techniques does not appeal to your intuition and professional judgement as a teacher, don't use it.
2. Don't make Classroom Assessment into a self-inflicted chore or burden.
3. Don't ask your students to use any Classroom Assessment Technique you haven't previously tried on yourself.
4. Allow for more time than you think you will need to carry out and respond to the assessment.
5. Make sure to "close the loop." Let students know what you learn from their feedback and how you and they can use that information to improve learning.