Assessment of Student Learning Outcomes: A Guide to the Process for Academic Departments

The following guide is a working draft designed to help faculty and administration with the purpose and process of assessment of student learning. Please contact me with questions and suggestions.

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Introduction

Georgia State University has engaged in ongoing assessment of student learning in the general education core and in its degree programs for nearly a decade. Our participation in assessment demonstrates our institutional commitment to student learning; as an institution we want to know how well our students are learning the complex knowledge, abilities/skills, values, and attitudes that faculty articulate as important. Engaging in assessment provides us with credible evidence about student learning that serves to guide us as we strive to improve our degree programs, as well as our introductory courses in the Core/General Education. Assessment results are also an important component in the external evaluation of our degree programs by our peers, policy makers, accreditation agencies, the Board of Regents, and the public. Indeed, both our regional accrediting agency (SACS) and the Board of Regents require that all post-secondary institutions engage in assessment of student learning and show evidence that assessment results are used to enhance student learning and thereby strengthen academic programs and General Education within the University. Further, accreditation requires that assessment data be used to inform curricular improvement, program review, and budgeting and strategic planning. Thus, as both part of the process to foster continuous improvement and to assure that students are learning what faculty expect them to learn, faculty within academic departments are becoming more engaged in academic assessment. The purpose of this guide is to provide a concise explanation of the process of assessment of student learning employed at the university and to clarify the roles, responsibilities, and expectations of faculty, staff, and administrators in this process.

The Structure of Academic Assessment at Georgia State University

Currently, each academic degree program, both undergraduate and graduate, along with departments that offer courses in the Core/General Education, are required to report annually on the student learning outcomes in their departments or schools. In addition, our Quality Enhancement Plan (QEP) approved by SACS for accreditation, requires that students in each undergraduate major take at least two courses that have been approved as Critical Thinking through Writing (CTW) in order to graduate from Georgia State University. Each undergraduate degree program, then, assesses student learning within this initiative as well.

Academic departments for the most part have identified one or more faculty members to serve as coordinators of assessment for their department (Ambassadors for the CTW Initiative). Assessment Coordinators and CTW Ambassadors are typically assigned responsibility for assuring that data on student learning outcomes is collected, reported, and shared with department faculty members and the department chair. In addition to review by department chairs and college deans, the reports of student learning for undergraduates and graduate students are reviewed by the Undergraduate Assessment Committee, the Graduate Assessment Committee, the Directors of Academic Assessment, and the Associate Provost for Institutional Effectiveness. The role of the Assessment Committees, the Director of Academic Assessment, and the Associate Provost for Institutional Effectiveness is to assure that academic degree programs are engaging in sound assessment practices and utilizing results of assessment to improve student learning and their educational programs.

Ambassadors for the CTW initiative have added responsibility for working with their respective faculty to design and revise, when needed, their CTW plan. This plan includes working with their faculty to choose appropriate courses in the major that focus on critical thinking, design syllabi and assignments, establish assessment rubrics and criteria, and upload the plans and materials to a database housed on the Critical Thinking through Writing website. In addition, the plan describes ways that the Ambassador will prepare faculty in their departments to teach these courses. Annual reports for CTW, including student learning outcomes, will be reviewed by the Undergraduate Assessment Committee, the Director and Associate Director of Critical Thinking through Writing, the Director of Academic Assessment, and the Associate Provost for Institutional Effectiveness. Again, these reviews are meant to assure that all undergraduate programs are engaging in "best practices" in assessment and utilizing results to enhance the critical thinking of their students.

Assessment Defined

Assessment of student learning has been defined as "an ongoing process designed to monitor and improve student learning" or "systematic monitoring of student learning." (Gray in Banta, 2002). To improve student learning, faculty must measure what students know, what attitudes students have developed, what values students have acquired, and/or what skills/abilities students can demonstrate at various key points throughout their academic career.

Assessment of student learning can occur and foster improvement at different levels, e.g., course level, the program level or the institutional level. Typically gathered at the course level, assessment data on student learning, when systematically collected and reviewed, can inform each degree program about how well its students have obtained the knowledge, abilities/skills, values, and attitudes expected. Such knowledge can lead to the identification of the program's strengths and weaknesses, and indicate where improvements might be needed. This formative aspect of assessment provides a feedback loop that enables faculty members to adjust instruction and programs and/or to redesign curricular offerings and requirements that improve learning. However, results of assessment also allow for us to evaluate the effectiveness of program elements and university-wide degree requirements, such as the general education learning outcomes (the Core) and the Critical Thinking through Writing (CTW) initiative. Assessment results should be used by departments to evaluate their programs and never presented in a manner that identifies individual faculty or students.

Assessment Process

Sound assessment of any program begins with the development of an *assessment plan*, a document that outlines what will be assessed, why, how, and when the assessment will occur. It should describe the process for tracking student learning throughout the degree program. While there are certainly many ways to go about developing such a plan, essential elements in an assessment plan should answer the following questions:

- What do the faculty expect students to learn in their degree program (student learning objectives/outcomes) and where in the curriculum will this learning will occur?
- How will faculty (and students) know if the learning objectives/outcomes are being met (e.g., how will student learning be measured and what are the target levels of expected performance of students?)
- Who is responsible for gathering evidence of student learning from courses or projects (compiling, analyzing, and summarizing data) and reporting this information?
- How will information on student learning be shared and reviewed with the faculty members of the degree program?
- What actions need to be taken to improve student learning? (e.g., what changes should be made to some or each of the elements of

assessment: revision of outcomes/ objectives, measures, targets, action plans, etc. to improve student learning? And what changes need to occur at the course or program level that affects and improves student learning?)

Once the plan is established, the *process of assessment* is best portrayed as continuous loop or cycle of activity (see below). The cycle of assessment begins with the degree program defining its mission. A mission statement typically includes a general statement focused on student learning related to the department mission. The Mission Statement is followed by a list of goals, or general expectations of faculty for student learning. Following the goals are objectives or outcomes statements which must be observable and measurable. Student learning outcomes are mapped to specific courses or experiences designed by the degree program. Once identified, the *specific* measures for each student learning outcome need to be articulated, as well as a target level of performance expected on each measure. Next, evidence is gathered from the measures and *findings* reported. Based upon review of findings, the degree program develops an *action plan* for the next cycle. The most critical step in the assessment cycle is the formulation and followthrough on any action plan recommendation. Actions can include: revisiting the original goals, objectives, curriculum content or sequencing of courses or experiences, expansion or modification of measures; refinement of target performance levels, etc.

Although most assessment guides and explanations use a cycle or circle as visual (see below) to explain continuous improvement, the reality is that what we hope for is improvement that takes on more of a spiral shape. We revisit processes and products of assessment, make changes, and visit them again, but each time, the primary purpose of assessment is to see positive change, growth, and improvement.



At Georgia State University, we currently use the reporting software developed by Virginia Commonwealth University, called WEAVEonline. WEAVEonline is structured to capture this assessment loop and serves as a repository for our annual assessment reports. The practice and scholarship of assessment has its own terminology, and WEAVEonline assumes knowledge among the faculty and staff concerning assessment language. Some of the terms and definitions may be unfamiliar or used differently from one discipline to another. However, it is important that those involved in assessment here at GSU have a common understanding of what various terms mean within the context of assessment. Throughout this guide, we will highlight some key terms and their definitions in the assessment context in order to enhance a common understanding of assessment. The following definitions and descriptions are intended to help us come to agreement about the terms we use as we work through course and program changes that enhance student learning and program development. The examples highlighted in text boxes in this guide come directly from reports written by our colleagues from various departments on campus. Some examples have been edited or shortened for clarity of the element of assessment discussed, but the content has been preserved.

Components of Assessment Defined

Mission Statement

A mission statement refers to the very broad faculty expectations for student learning. Ideally, these should flow from the broader mission statement of the program, department, institute, or school, as well as be clearly aligned with the overall educational mission of the university. More specifically, the mission statement expresses the knowledge, skills, and attitudes that students will possess upon completion of the educational program or degree. These broad statements should focus on student (not teacher) behaviors and describe the overall goals accomplished by students when they complete the degree program (or the course in the Core).

The Mission Statement:

- is a broad statement of philosophy, role, scope, etc. that relates to students learning and faculty expectations
- provides a general sense of identity for the program, department, institute, or school
- states what we do and who we do it for
- should be faculty driven
- is within the scope of the University's mission and strategic plan

Below are a few samples of mission statements drawn from baccalaureate degree programs at GSU:

Early Childhood Education: The purpose of the Bachelor of Science Program in Early Childhood Education at Georgia State University is to prepare instructional personnel who will be qualified to direct the education of young children from preschool through elementary grades. The theme of this program is to develop teachers as facilitators of learning. Coursework, extensive field experience and collaboration among school and university faculty combine to develop a program that supports the professional growth of the novice educator.

French: The mission of the Department is to give students majoring in French the opportunity to develop appropriate proficiencies in the French language, to acquaint them with the literature and culture of francophone countries, to promote their interest and involvement in international exchanges through study abroad programs, and to provide them the opportunity to acquire critical skills through linguistic, literary and cultural analysis as they prepare for careers in teaching, business, translation and interpretation and other areas.

Respiratory Therapy The purpose of the Bachelor of Science Program in Respiratory *Therapy is to prepare respiratory therapists* and future leaders in the profession of respiratory care who are qualified to *deliver respiratory care* therapeutic modalities to patients who have breathing or other cardiopulmonary disorders. The theme of this program is to *develop respiratory therapists as consultants* who can recommend changes as needed to patients and families about lung disease so they can maximize their recovery. *Coursework, extensive clinical practice* experience, and collaborations among healthcare professionals combine to develop a program that supports the professional growth of novice respiratory therapists.

Biology: The Department of Biology is firmly committed to the twin goals of Excellence and Distinctiveness set forth in the University's Strategic Plan. The Mission of the Department is:

a. to provide students with a basic core of scientific literacy in biology that is essential for success in the society of tomorrow;

b. to increase the understanding of biological processes through cutting edge research programs, thereby providing students with the opportunity to explore exciting new frontiers through *biological research; and* c. to work with others in the University system and the state of Georgia in reaching out to the public and communicating the many ways in which new *discoveries in biology impact* our daily lives and affect the future of our community.

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Mathematics BS:

Mathematics is one of the great unifying themes in our modern culture. It is a language, a science, an art form, and a tool of tremendous power. The Department of Mathematics and Statistics, in its courses for both majors and non-majors, seeks to introduce students to this vast area of knowledge and to show them how mathematics can be used to solve problems. The overarching goals of any program in mathematics are that mathematics instruction should: (from MAA's Source Book for College Mathematics Teaching, Schoenfeld, 1990) Provide students with a sense of the discipline of mathematics. Develop student's understanding of important concepts in core areas of mathematics. Develop student's ability to explore problem situations in a range of settings, at several levels of difficulty, and with a variety of methods. Help students to develop a mathematical point of view – perceive and represent structure and structural relationships. Help student's to develop the ability to read and use mathematical literature and reference material.

Goals

Goals are often defined as general or broad statements about the *types* of learning that are expected of students within the discipline or in general education (Core courses). Sometimes these might be stated in a few general phrases or words:

- students will become better problem-solvers;
- students will become critical thinkers;
- students will become experts in the field;

Below is an example of a Goal statement taken from an assessment report written in the last year by GSU faculty:

Criminal Justice: Our goals for student learning include: 1) students become critical and ethical thinkers. 2) students become experts about the issues of crime and justice, and 3) students become leaders in public and private sector agencies that address crime and justice problems.

Finally, as with other aspects of the assessment cycle and report, there is no right or wrong way to express the goal(s) for a department's student learning. The important thing to remember is that the goal should strive to be more specific than the Mission Statement and at the same time more general in scope than the measurable outcome of the student learning. It should focus on what we expect students to become once they graduate with a particular degree.

Student Learning Outcomes /Objectives

Once the department's mission and goals are established, specific ٠ learning outcomes/objectives should be identified. Learning outcomes or objectives describe what students must do to demonstrate proficiency in a given area. The purpose of using both words for this part of the process (outcomes/objectives) comes from the definition of these words from one discipline to another. For our purposes, either word indicates that which translates learning goals into measurable descriptions of performance. Whereas departmental goals describe what a program aims to accomplish in terms of student learning, outcomes/objectives provide the detailed (and, importantly, measurable) description for the attainment of these goals. Faculty measure outcomes/objectives in order to ascertain success of student learning and to recommend revisions or actions that need to occur for continuous improvement of these.

When developing or revising student learning outcomes, several questions come to mind:

- What do students need to know or do to be successful in the discipline as it plays out in specific courses?
- Under which circumstances will students be expected to demonstrate their knowledge and skills (e.g., tests, written responses or assignments, oral presentations, etc.)?
- In which courses will we map the outcomes and the measurements? All outcomes and measures for undergraduates should be mapped to specific courses, and when possible, for graduate students as well.
- What standards or targets does the department hope to reach for students as they measure their learning? (Remember that our targets are not *evaluated* by anyone; instead, they are an indicator of what faculty expect and hope to achieve. They give us an upper range to work toward.)

The following samples Student Learning Outcomes were written by GSU faculty. The short description of the outcome or objective is stated first, followed by the full description of the expectations for student learning. Note that the verbs in these fuller statements are active and performative.

Biology: Scientific Inquiry. Students will be able to: 1) ask scientific questions and construct reasonable hypotheses; 2) design and conduct investigations; 3) perform laboratory skills and procedures; 4) understand and analyze results; 5) formulate and defend alternative explanations and models on the basis of evidence; and 6) solve problems addressing biological questions.



Measuring the Objectives

What's the evidence? That's the primary question for every person who does any type of assessment. How do we know what we think we know about the progress of student learning or a program as it develops? What if what we think we know is not what we find out when we measure the data we have? These questions, and many more, are part of assessment. They are not evaluative questions, but rather questions for thought and potential change. They are intended to be guiding questions that help faculty consider what students are learning and what to do in order to facilitate their learning.

Many types of assessment tools are used in order to ascertain whether or not outcomes are being met. In most cases, the learning outcome or objective itself will help determine the kinds of measures best used. For example, if the learning outcome refers to communication skills, a random sampling of papers or written responses considered against a rubric or set of criteria might be an effective tool. If a learning outcome has to do with specific knowledge or skill, departments may choose tests or specific items on a test to determine if the students learned what they expected them to know. However, it is important to distinguish between the "grade" that may or may not measure the specific learning outcome (grades often include more information about students than what exactly they learned) and "score" on the measure, which is what faculty will use as information for revision or re-forming instruction or to get closer to understanding what students are learning in our courses or programs.

Many faculty want to know why course grades are not sufficient assessment tools. Course grades measure many factors that do not always directly relate to specific learning outcomes; they often include attendance and participation, for example, as well as behavior, late work, etc. These parts of the course grade do not tell us clearly what students learned in a course, and they do not tell us how close students come to meeting a target for a specific learning outcome or objective. In addition, a single test may actually measure several learning outcomes; therefore, many faculty and assessment coordinators choose to use a few test items or a few criteria for written samples to be sure they are getting information about the outcome specified.

Indirect and Direct Assessment

Assessment literature describes two basic forms of assessment: indirect and direct. **Indirect assessment** includes surveys, questionnaires, course evaluations, and general student responses to the course materials or to questions about what they think they learned. These are valuable types of assessment in many fields. However, they reveal perceptions associated with learning, rather than characteristics of the learning itself. It is difficult to say whether a learning outcome has actually been achieved with indirect assessments, though they are informative in terms of what students and others might think about the program or a course as a whole. Therefore, indirect assessments may supplement the student learning assessment, but should not be the only type of measure used in academic assessment.

Direct assessments focus on student work and give the best indication of student learning because they highlight evidence of what students have learned and can do.

- Direct assessment includes exams that focus on a particular area or perhaps specific test questions embedded within a longer exam. These questions might be pulled out to assess student success in a particular area of expertise.
- Other types of direct assessments involve written assignments whereby specific learning outcomes are considered against a response or paper.
- Analyses of projects, portfolios, oral presentations, etc. are also viable measures when they are seen through a list of criteria or a rubric that ensures inter-rater reliability and common measurement.
- Even major field exams can reveal information about student learning that is helpful in guiding the program or major in its goals and objectives for students. The caution for using these types of measures exclusively is that they sometimes do not provide enough detail to help the department know which courses would best fit the measure in order to make improvements for students within the coursework. When the exam can be broken down into discrete knowledge or skills, degree programs may be able to use these exams to provide faculty

information for issues to cover in particular courses within the program.

If an assessment tool does not provide enough information to make improvements, then it has limited value. Often more than one assessment tool is selected to assess the same learning outcome in order to validate the results with multiple measures.

Here are a few examples of measures from GSU faculty, one Indirect and several Direct measures. The first few words or phrases set up the general type of measure followed by a richer description of the measure. Note, too, that in each sample the faculty member identified the course or courses where measures were taken.



Finally, when assessing a small group of students, all members of the group should be included in the assessment procedure. However, a sample

is sufficient for larger groups. Be sure that the sample is representative of the entire group.

Setting the Target Level

Once the department knows what it wants students to know and do, and how they are going to measure these objectives, targets should be set. We set targets for a number of reasons. They give us direction as well as help define/describe our expectations for students in our courses and programs. Although most faculty would like to see 100% of students scoring at the top of the rubric or scale used to measure learning, 100% targets are often not realistic. However, we do not want to set a target so low that we are satisfied with a relatively low success rate for students either, unless we really believe this is the best they can do. Each department will need to discuss with its faculty what the realistic expectations are for the particular outcomes and measures used in the assessments. Keep in mind that targets are set for each measure in each department; they are not intended to serve as an evaluation of the job we are doing, but rather as a point of measure for how our students are doing.

Here are a few samples from GSU faculty:

Women's Studies: All students should receive at least a 3, with 70% receiving a 1 or 2 on a 5 point scale (a score of 1 as high to 5 as low, see findings)

Anthropology: It was anticipated that students would rank as excellent or good on the learning outcomes associated with analytical skills on a 4 point scale: excellent, good, fair, and poor.

Criminal Justice: On an annual basis the portfolios of 20% of all students completing the capstone courses will be randomly selected and reviewed to assess students` performance. Ninety percent (90%) of the portfolios chosen will receive a satisfactory rating of 70% or better.

Describing the Findings

Interpretation of the findings does not need to involve sophisticated statistical analyses. A clear description of the findings is sufficient for the purpose of assessment. When necessary, a description of the rubric or criteria may be helpful, and because WeaveOnline provides a repository for charts and links, specific charts or graphs of findings may be reported and kept in the archives as they occur and are appropriate for the discipline.

One of the important things about describing the findings is to be sure that they link clearly to the learning outcome/objective, as well as the measure, of course. Findings should be explained in such a way that colleagues may understand the significance of them in terms of the goals and objectives and the possible actions that follow. These examples from our faculty illustrate a few ways to report findings:

> **Anthropology:** Faculty rankings ranged from 1.0 to 1.5 for the analytical skills cluster. Students performed extremely well in designing and implementing research and received somewhat lower scores for identifying major themes in the literature and utilizing information technology for research. These patterns are similar to those obtained from the previous assessment of learning outcomes. Link to <u>data</u>

Women's Studies: We (the undergraduate studies committee) scored the exams on a 3-part rubric: 1) Demonstrates and applies feminist/womanist knowledge, 2) Developed and well-argued response to questions, and 3) Clear and coherent expression of ideas. The first rubric corresponds with outcome 2, and the second two rubrics correspond with outcome 1. On the first rubric, the average was a 1.75 (on a 5 point scale with one as best and 5 as worst) with 87.5% receiving a 1 or 2, so that our target goal was met for the outcome: demonstrates theoretical knowledge. On the second two rubrics, our averages were 2.2 on the rubric that measures development and 1.9 on the rubric that measures clear and coherent writing. One student in each category (the same student) received less than a 3, and the percentages of students receiving a 1 or 2 were 75% and 87.5 percent respectively. As such, we came quite close to our target performances, with the exception of that single student. Below is a look at several aspects of assessment together. The Anthropology Department identified 5 learning outcomes to assess. Here is a copy of their report for Outcome 4. Note that the connections among the areas of assessment are clear. The reader knows what the anthropology faculty want students to know and demonstrate knowledge about, the course(s) that map to the learning outcome, how they will know if students master the objective, and what they learned about student knowledge during this cycle of assessment.

Anthropology: Outcome/Objective 4: Acquisition of Knowledge. The focus of this cluster is demonstrating the acquisition of fundamental anthropological knowledge, and includes (1) understanding the basis of social inequality; (2) mastering key concepts in anthropology; (3) identifying new insights and relationships.

Measure: Tests, Quizzes, Labs, and Projects. The faculty evaluated the acquisition of anthropological knowledge using tests, quizzes and lab assignments (Anth 2010), exams, quizzes and projects (Anth 2030), midterm and final exams (Anth 4020) and papers and exams (Anth 4970). Six faculty members were asked to rank students in five courses; two of the courses had two evaluators (and were averaged) and one faculty member evaluated two courses

Target: Considering the efficacy of this cluster to capture a measure of overall course performance, the students were expected to be ranked as excellent in acquisition of knowledge

Findings: The students generally performed well in this cluster, although mastering key concepts in anthropology was ranked slightly lower than the other two outcomes in the cluster. Understanding the basis of social inequality, a core concept in anthropology is heavily emphasized in the curriculum and the students were uniformly ranked as excellent for this learning outcome. Link to <u>data table</u>

Developing Action Plans

The Action Plan is the place for departments to "close the loop" so to speak. It is perceived by many assessment experts to be the most important step in the assessment process because the major objective of assessment is finding ways to make things better, to improve what already exists, and to suggest formative change.

Developing action plans should be a departmental endeavor. Once the assessment coordinator(s) have described the findings for the measures of the learning outcomes, the department or a significant group within the department should suggest improvements. Several points might be considered during this step:

- Procedures should be in place to facilitate and encourage change (e.g., results should be sent directly to the Chair, the Executive or Curriculum Committees of the department);
- Improvements made should be responsive to the assessment findings;
- Recommended improvements should be monitored to ensure implementation;
- Sometimes assessment may result in the learning goals and objectives being modified or another assessment tool being selected if further validation or consideration of the learning outcome needs to take place.
- Not every change needs to be significant; sometimes continuous improvement occurs in small steps.

Samples from GSU faculty/departments include two action plans from Psychology and one from Women's Studies:

Psychology: 1) Implement peer tutoring program for statistics. The peer tutoring program (see analysis) was proposed to improve learning and retention of students, which we hope will lead to improved post-test scores. Briefly, undergraduates who have demonstrated excellence in PSYC3010 will be recommended by instructors to serve as peer tutors in later semesters, and undergraduates who need extra help will be able to meet with them as needed. This program has been approved and funded, and will go into effect in Fall, 2008.

2) Refine PSYC1101 Measure We will continue to refine the PSYC1101 Mastery Test, our only measure of objective 11, contemporary issues, which is our core measure. We will update questions on a yearly basis to better reflect current events. We will also conduct an item-by-item analysis of the 50 question test and eliminate questions which do not meet the following criteria: fewer than 70% of students answer correctly AND discrimination index of less than 0.40. This would indicate that answering the question correctly does not predict good overall performance on the measure.

Women's Studies: Early intervention We are designating our 3010 course, Feminist Theories, as a Critical Thinking Through Writing Course, which should focus attention on student writing earlier in the program.

Action Plans should be reviewed each year as the degree program faculty decide whether it is still in a planning stage, finished, on-going, etc. Assessing the Action Plan is crucial for continuing improvement. Reporting the success and the outcome of the actions we plan help us to stay current with the progress and success of our students' learning.

Analysis

The Summary/Analysis section of Weave Online provides space for departments to think about the overall assessment for the year, as well as what they hope to accomplish, and what they need in order to accomplish it for the following year. It's tempting to repeat the information from the Findings or Action Plan in this section, but its purpose really is reflective in nature. In past years, this section highlighted the "Strengths and Attention Needed" after each assessment. As we learn more about "best practices" in assessment, we have begun to ask specific reflective questions that focus on changes in assessment processes, the impact of assessment on our programs and courses, and, most importantly, the impact of our assessments on student learning. For example, we want to know how the process of assessment has changed for each degree program, as well as how the findings within the assessment might impact the program. As a result of this year's assessment, did the department add a course, add something within the course, change the curriculum in any way? This is where the purpose of assessment comes in to play. Finally, what is the *evidence* of student learning that faculty expect from students within a major, and how might we better prepare them to know or do what each major requires?

Document Management

The Weaveonline software also includes a location in which degree programs might save charts and data. The Document Management element allows us to establish a history of rubrics, test items, assignments, data spreadsheets, etc., in a secure space online. Having the hard data or chart in one place over time allows us to review how our students are doing, the kinds of measures we have used, our findings, etc. with the security of an online database.

Conclusions

More than ten years ago, Georgia State University began to consider academic assessment of student learning as a way to record and track the relationship of university's mission, goals, plans, and improvements with what our students actually learn in the classroom. We must all understand that assessment is not a negative endeavor, not punitive, nor is it static. Instead, assessment of student learning is a dynamic, ever-changing measure of an important aspect of our work as a university. Through our assessments we assure students, faculty, administrators, staff, and the community that our work here is worthwhile, rigorous, and valued. We provide evidence of our excellence as a diverse research university, as well as our willingness to improve.

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