

# Creating and Sustaining Change: Assessment of Student Learning Outcomes

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## ABSTRACT

Change is a constant condition within organizations, due to the introduction of new technologies, market place demands, external forces, and pressures to improve organizational effectiveness. However, large-scale organizational change efforts tend to fail more than 70 percent of the time. One of the recent large-scale movements within higher education institutions is towards accountability and assessment on student learning outcomes, which is higher education institutions should assess whether students learn what they should and retain the knowledge once learned. In addition, assessment findings should become a feedback mechanism to improve students' education experiences. In this paper the author describe a change effort within a research university for compliance with regional accrediting commission requirements and program specific (engineering) accreditation requirements and procedures in defining and implementing assessment of student learning outcomes. The main issue is not just introducing new contents to the member of the faculty, but making sure that the assessment effort is meaningful. Issues arrived and solutions in creating and sustaining the change effort will be discussed.

## INTRODUCTION

In 2006, the Commission on the Future of Higher Education (Spellings Commission) issued a report about the future of American higher education. The report stated that American higher education needs to demonstrate accountability and to show improvement especially in student learning outcomes [12]. According to Lubinescu, Ratcliff and Gaffney [6], federal and state government are concerned about assessment of student learning outcomes and accreditation because they want to ensure that the funding given to higher education institutions is used effectively. In addition, higher education institutions, as organizations that receive funding from tax payers, must demonstrate that they are producing the outcomes that align with their mission statement which is to educate students. Therefore, accreditation agencies and the states are adopting assessment practices to increase public accountability, ensuring universities and colleges' performance, identifying new funding criteria for higher education institutions, and increasing the quality of higher education so they can compete within the nation and internationally [8].

As the middle ground between the policy makers and institutions, accrediting agencies support the demand for accountability and improvement by demanding new accreditation criteria and review by introducing the institutional effectiveness concept. Institutions should engage in ongoing processes for improvement and demonstrate how they fulfill their missions [10][23]. Hence, each academic program must conduct assessments to determine whether students learn what they should and retained it effectively.

The University of Texas at Dallas (UT Dallas) is accredited by the Southern Association of Colleges and Schools (SACS) and some programs within UT Dallas are accredited by specialized

accrediting agencies, such as ABET for undergraduate engineering programs, AACSB for programs within business schools, AUD for audiology program, etc. In addition, UT Dallas also must comply with the state regulations; for example, recently Texas legislature enacted House Bill 2504 that requires every public higher education institution within the state of Texas to post information online regarding course instructions, faculty credentials, course evaluations, and course syllabi.

One of the major changes that the SACS requires higher education institutions to have is a process of assessment of student learning outcomes within their academic programs service units, and general education core curriculum courses. SACS reaffirmation comes once every ten years, and the last UT Dallas SACS accreditation was completed in 2008. Consequently, UT Dallas started its university-wide assessment process in 2006 making for a tight schedule, because SACS mandates every institutions collect at least two years' worth of data. This paper discusses assessment as a change effort at UT Dallas within academic programs.

## ASSESSMENT PROCESS

In June 2006, the UT Dallas' Vice Provost, created an assessment team with a mandate to work with program heads, unit directors, and faculty who teach general education core courses to create assessments of student learning outcomes to fulfill the SACS (Southern Association of Colleges and Schools), an accrediting commission that accredited higher education institutions within the Southern states. Assessment of student learning is not considered new within higher education institutions; every faculty assesses what students know and can do. The difference with the assessment that SACS requires is that it is a program assessment and not a course assessment.

Program assessment needs collaboration among program faculty and each program has to define its program mission, create student learning outcomes, and map the core courses within the program to the student learning outcomes. Program assessment should look like a road map, and it can be used not just by the program faculty but also for students within the program [13]. With a clear road map all faculty know how their courses contribute to the overall program objectives and learning outcomes. UT Dallas also mandated new regulations regarding course syllabi: all faculty members must create syllabi for every class they teach and state the learning outcomes for the courses. Starting a university-wide program assessment process proved to be difficult, because it had never been done before at UT Dallas. In 2006 UT Dallas had a large number of academic programs; there were 145 programs ranging from bachelor's degree to doctoral degree programs. Support and participation from faculty and staff were important in implementing this new institutional change; therefore, members of the faculty had to own the activity and process to make the assessment process successful [3][11]. Nichols [8] argues, that the primary factors that can hinder the assessment implementation are: lack of faculty and/or staff commitment; lack of credence from faculty and staff that assessment activities will result in departmental improvements or in student learning improvements; the need for budgetary constraint such as faculty release time to do

assessment; and difficulties integrating the assessment process with other campus processes.

According to Slevin [11], the reason why members of the faculty tend to distance themselves from the assessment process is because they do not find connections with what they do and the program assessment process. In addition, members of faculty perceive the assessment process as a threat to their academic freedom. The method used to start the assessment process at UT Dallas was for the assessment team to work one on one and have good working relationships with each program head. In addition, the institution decided to buy a web-based assessment tool to organize the assessment contents. There are seven schools/colleges within UT Dallas and each assessment staff member was responsible for two to three schools (there were three assessment staff at that time). The work was very tedious and took a lot of time, because the assessment team had to educate the program heads and program faculty about the assessment process, concepts, and content before creating program assessments. Program assessments contained program mission statements, student learning outcomes, measurements, and criteria of success. One of the concepts that were introduced is Bloom's Taxonomy and degree programs that have bachelor's degree, master's degree, and doctoral degree had to be able to show progressive curriculum. Several university-wide meetings regarding issues arose were held alongside the weekly one-on-one meetings with program heads and program faculty.

The institution decided to create an in-house web-based assessment tool to amend problems encountered with the current tool, after using the old assessment tool (bought from a vendor) for a semester. The new web-based tool took the concept and the look of the old tool with additional features such as the ability for the reviewer to add comments to the system; allowing faculty to read comments from the reviewers within the tool then make adjustments on their assessments.

### **EVALUATING THE ASSESSMENT PROCESS**

In 2007 the author sent out a survey to the UT Dallas faculty and staff to find how they perceived the assessment process and solicit ways to improve the process. The research data was surprisingly not as negative as the researchers expected. The data revealed that half of the respondents stated that assessment is important for institution's improvement. The researcher used survey questions employing both the likert-scale and open-ended questions through a web-based survey. There was a 42.3 percent response rate from the program heads and 64.2 percent response rate from faculty who taught general education courses.

The percentage of program heads and core course faculty who strongly agree/agree that assessment will improve teaching and improve student learning is almost the same. Seventy percent of the program heads agreed with the statement that assessment is important in shaping academic priorities and 57 percent of the core course faculty agreed that assessment helps improve student learning. The number of respondents who had a negative view for the assessment process in average was 41 percent and only a small percentage stated that the assessment processes should be eliminated. Based on current literature and studies, the researcher expected more respondents to have negative views of the assessment process.

Astin [1] makes an interesting argument about academic games, which can be used to explain the faculty's response toward the assessment process: rationalization (avoiding taking action based on the findings by stating that the actions have been

implemented or that they are in the process of being implemented), passing the buck (saying there is a need for further study before we can take real action), obfuscation (creating the impression of genuine concern and interest by invoking high sounding generalizations that lead to nowhere), recitation (making comments that the assessment results are not coherent, therefore there is no action to be taken), and displacement and rejection (questioning the assessment findings by commenting that the measures are not reliable).

An assessment process that does not yield meaningful assessment findings can be the reason why members of the faculty feel that the assessment process wastes their time [14]. Therefore, UT Dallas' assessment team should consider changing the academic program assessment approach to make it more meaningful. In addition, comments about the assessment process reveal that there is a need for clear and regular communications about the assessment process, assessment findings, and improvement from the assessment team, institution leaders, such as the provost and the deans. Creating a communication plan for a new effort is important and the assessment team can use theories on how humans perceive change and methods to influence people to create an effective communication plan [9]. Explaining the importance of the assessment process in rigorous ways such as: why (why do we need to do the continuous assessment), what (what are the outcomes of the assessment process and the benefit of doing it), who (who will be affected by the new effort and who should be involved in the assessment process), how (how to do the assessment), and when (what is the time frame and when the message about assessment findings and improvement can be communicated) will make the new process be more successful [9].

Leaders' commitment is important for successful strategic planning [4]. Hence, there is the need to enhance the leaders' involvement in the assessment process to make it successful and to communicate verbally and in print, the importance of assessment and using assessment findings for improvement [5]. In addition, the university should acknowledge the concerns people have about doing assessment. Thirty-two percent of respondents from academic programs and 16 percent of respondents from support services stated that they were concerned that assessment findings would be used against their programs or their departments. The university administration should address this perception of the potential use of assessment findings in order to facilitate a genuine assessment process for program improvement [8][15].

### **SUSTAINING THE ASSESSMENT PROCESS**

In 2009, UT Dallas started a new process for program assessment. Instead of making each program do a yearly assessment, program heads, with program faculty approval, can choose the timeline for each academic program assessment. This program will run for five years and within five years each academic program will be comprehensively assessed, reviewed, and revamped at least one time. The assessment is divided into three phases: planning, collecting data, and closing the loop. After the third phase, the process returns to the first. The process is called a five-year assessment loop. For example the Criminology Department within the School of Economic, Political and Policy Sciences (EPPS) which has a B.S., M.S., and PhD. in Criminology, chooses to do the planning for the B.S in Criminology in year one and then in year two they will plan the assessment for M.S in Criminology while collecting assessment data for the B.S in Criminology. In year three, they will create an assessment plan for the PhD in Criminology,

collecting data for M.S in Criminology, and analyzing data and making improvements for the B.S in Criminology.

This process has proven to work well and faculty members have less stress because the new process encompasses a program's and school's culture. However, this process cannot be done if the person in charge of the program does not support the assessment effort because this process needs thorough assessment efforts including the use of assessment findings for program improvement, the alignment of the program curriculum, and continuity. Better organizational structure within each school/colleges is also important. Furthermore, support from the schools' leadership is needed to make the process successful.

Another change within the assessment process is to make the assessment process aligned with the university program review process. Consequently, the web-based assessment tool is also being revamped to match the new process. The school of engineering purchased a web-based assessment tool because they need a tool that will work well with the ABET new assessment requirements. The other schools are using SharePoint to store assessment documents.

### ASSESSMENT IN THE ENGINEERING SCHOOL

The School of Engineering (ECS) is the second largest school at UT Dallas, with about 3,000 students in fall 2009. Its undergraduate programs are accredited by ABET, which is an international accreditation commission for applied science, computing, engineering and technology education programs. The UT Dallas ABET accreditation is due in 2012. ABET is considered as the leading accreditation agency in terms of assessment of student learning outcomes. Recently, they have reinvigorated their regulations on program assessment. Each program now has to create its program educational objectives and student learning outcomes encompassing the ABET a to k learning outcomes (and courses within the program must align with the program performance criteria [13]. In short, a program's curriculum should be mapped and aligned. The new requirements create new challenges for the ECS School. Hence, the school has decided to adopt a new tool, produced by Untra Corporation called the Academic Evaluation, Feedback and Intervention System--AEFIS, to help them with the new process. The UT Dallas assessment staff and the school ABET staff work together to make sure that the new effort is compliance with not only ABET but also SACS and state requirements. The ECS will adopt the customizable AEFIS Solution Platform over the in-house tool, as it will better suit its assessment needs.

The use of a new tool creates different challenges within the ECS school faculty. First, there are issues on implementing the new tool in the school's server and connecting it to the university system and database. This process took longer than anticipated. Then, there are issues with introducing the new tool to the ECS' faculty and ECS' students. Creating a process for effective assessment cannot be done using a whole-sale process. It needs to be tailored to the departments' culture to make it work.

### CONCLUSION

The assessment process at UT Dallas is a changing process that needs time to become established. The process and concept were forced upon the institution's stakeholders because of the pressing SACS accreditation due date. The old process proved successful in collecting assessment data, but it failed to make

the point that assessment should be meaningful. Furthermore, members of the faculty must to support the assessment effort to make it meaningful. To sustain its assessment effort, the institution should recognize schools' and programs' cultures and efforts should be communicated effectively to gain faculty support. Changing the process from yearly assessment to a five-year process is an effective idea for pursuing better assessment feedback. In addition, aligning other accreditation requirements and university programs review into one process will make the assessment most effective.

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