# AC 2009-1990: SURVIVING THE ACCREDITATION DOUBLE WHAMMY: ABET AND SACS ACCREDITATION IN THE SAME YEAR

#### Austin Asgill, Southern Polytechnic State University

Dr Austin B. Asgill received his B.Eng.(hons) (E.E.) degree from Fourah Bay College, University of Sierra Leone, his M.Sc. (E.E.) degree from the University of Aston in Birmingham and his Ph.D. (E.E.)from the University of South Florida. He is currently a Professor and Department Chair in the Electrical and Computer Engineering Technology department at Southern Polytechnic State University (SPSU). Prior to joining the faculty at SPSU, he was an Associate Professor of Electronic Engineering Technology at Florida A&M University (FAMU), where he served as Program Area Coordinator and Interim Division Director. With over 21 years of teaching experience in Electrical/Electronic Engineering and Engineering Technology, he currently teaches in the areas of networking, communication systems, biomedical instrumentation, digital signal processing, and analog and digital electronics. He has worked in industry in the areas of telephony, networking, switching and transmission systems, and RF and MMIC circuits and system design. Dr. Asgill also has an MBA in Entrepreneurial Management from Florida State University. He is a member of the IEEE, the ASEE and is a licensed professional engineer (P.E.) in the state of Florida.

**Omar Zia, Southern Polytechnic State University** 

# Surviving the Accreditation Double Whammy – ABET and SACS Accreditation in the same year

### Austin B. Asgill, Omar Zia Southern Polytechnic State University

#### Abstract

The era of continuous improvement is upon us and many academic institutions of higher learning, and their academic programs, have come to realize some of the challenges involved in satisfying the mandates imposed by different accrediting agencies. For those institutions in the southern United States, the Southern Association of Colleges and Schools (SACS) is the main accrediting agency. For Engineering and Engineering Technology programs within such institutions, ABET inc., is the main accrediting agency for their programs. While it is very rare that an institution will have both accreditation agencies visiting in the same year, it does occasionally occur. The Electrical and Computer Engineering Technology (ECET) department at Southern Polytechnic State University has recently had to deal with this occurrence. Since a total of six Engineering Technology programs on campus were up for accreditation, the institution felt that it was necessary, and important, to co-ordinate the preparations for the visit, and at the same time to prepare for the SACS visit which followed. In preparing for these visits, several challenges were encountered that contributed to making the task more arduous than usual. Apart from the fact that not all of the programs were within the same college, were under the administration of different Deans, and were in various different stages of preparedness, the language of accreditation that is used by ABET inc., was sometimes found to be in conflict with that used by SACS. This paper discusses some of the issues encountered in preparing for the two visits and the efforts made to reconcile the ABET and SACS accreditation requirements.

#### I. Introduction

Southern Polytechnic State University (SPSU) is a Science, Engineering and Technology focused university located in Marietta, Georgia. It is an urban institution with a population of approximately 4,500 students who are predominantly commuters. The university serves a sizeable population of non-traditional students. As such, many programs offer courses at night as well as during the daytime. Being located in southeastern United States, the university is accredited by the Southern Association of Colleges and Schools (SACS).

The ECET department at SPSU offers three Baccalaureate degree programs in Engineering Technology; the B.S in Electrical Engineering Technology (BSEET), the B.S. in Computer Engineering Technology (BSCpET) and the B.S. in Telecommunications Engineering Technology (BSTCET). All three programs are ABET accredited. During the last accreditation cycle, ABET allowed the option of going by the old criteria or opting for the new accreditation

criteria. Since the university and the Technology departments did not have any of the continuous improvement requirements in place at that time, the faculty opted to utilize the old criteria for accreditation of the six (6) E.T programs offered on campus.

During the fall semester of the 2008/2009 academic year, all of the Engineering Technology programs on campus were up for re-accreditation by ABET, Inc.<sup>1</sup> Around this same time frame, the university was also preparing for its accreditation cycle through SACS<sup>2</sup>. Since this was not a normal occurrence, and in order to minimize the duplication of efforts, the administration felt that it was necessary, and important, to co-ordinate the preparations for the ABET visit, while at the same time preparing for the SACS visit which scheduled for March, 2009. Unfortunately, in preparing for these visits, several challenges were encountered that contributed to making the task more arduous than usual. This paper examines some of the issues and challenges encountered in preparing for the two visits and examines some of the efforts made to reconcile the ABET and SACS accreditation requirements, and makes recommendations that can assist this institution, and others like it, with their preparations for future accreditation visits, should they be confronted with a similar situation.

#### **II. Challenges to the Process II.1 Administrative Changes**

Some of the main challenges encountered during the whole re-accreditation process can be attributed to administrative changes within the institution. Prior to the previous accreditation cycle, the university administration had opted for an administrative structure that had one of the six Engineering Technology programs, Civil Engineering Technology, being moved from the School of Engineering Technology and Management (ET&M) to the new School of Architecture, Civil Engineering Technology and Construction. This meant that two different Deans were now responsible for coordinating the ABET re-accreditation process for our Technology programs. Compounding this problem, the administration of the School of ET&M has changed through three Deans and two Interim Deans between accreditation cycles. In addition, the university itself had gone through three Academic Vice-Presidents during the same time frame. This meant that accreditation initiatives were not successfully followed up by succeeding administrators, thereby delaying the implementation of some of the requirements for re-accreditation, most notably, the continuous improvement cycle. The changes in the upper administration also resulted in changes at the departmental level. The ECET department went from having a Department Head to having a Department Chair with increased responsibilities. Since the 2006-2007 academic year, the ECET department had established an ABET Task Force Committee (TFC) to work on ABET re-accreditation issues for the three programs in the department. This committee was headed by a senior faculty member who had previously worked on program reaccreditation and had experiences as a ABET program evaluator. The rest of the committee was made up of the program coordinators for the EET, CpET, and the TCET programs along with one other senior faculty member with ABET program evaluation experience. This committee was tasked to develop criteria and procedures for all programs to satisfy the ABET reaccreditation criteria. It worked closely with the Department Chair and the Dean to coordinate its efforts with those of other programs within the School of Engineering Technology and

Management. The ECET Department Chair served as an Ex-officio member of the TFC to provide critical support and input, as well as coordinating the timely receipt of information from other departments on campus. Coordination with the Dean responsible for the Civil Engineering Technology program was left up to the Dean of Engineering Technology and Management.

### **II.2 Procedural Changes**

Initially, SPSU did not have a coordinator for accreditation issues. Instead, a faculty member was appointed as "SACS Liaison" in 2006 to coordinate the university's SACS accreditation efforts. Since the Engineering Technology programs were up for re-accreditation within the same time frame as the SACS visit, it was decided that the coordinator would work in concert with the affected Deans, and their Department Chairs, to co-ordinate their re-accreditation efforts. This individual worked diligently in trying to establish policies and procedures for achieving a successful outcome. However, due to the sheer volume of effort required and the fact that the faculty member had other responsibilities, the administration decided to hire a full time individual with the title of Director of Institutional Effectiveness and Planning during the 2007-2008 academic year. Part of the responsibilities for this individual was to take over the duties of the "SACS liaison". This individual had a strong background of working with SACS accreditation, but was not as familiar with ABET requirements. The result was that significant changes were made to the procedures that had already established by the "SACS Liaison" for fulfilling the re-accreditation requirements. As would be expected, this added a measure of confusion, and more complexity into the campus processes.

### III. The ABET/SACS Conundrum

The goal of ABET accreditation is to ensure minimum quality standards are adhered to by individual programs. In visiting programs for re-accreditation, ABET evaluators look for evidence of procedures that have been established for continuous improvement, evidence that these procedures have been followed, and that the continuous improvement loop has been closed. They will also look to see that the course offerings meet the stated outcomes and objectives for the program, and that the courses are being offered as stated. Faculty qualifications are also reviewed.

Accreditation by SACS on the other hand applies to the whole university. Besides looking at programs and faculty qualifications, SACS also looks at the administration, library, and other support entities within the university. Off-campus program offerings are of particular concern in terms of quality and similarity of standards with on-campus offerings.

Since the goals of the two accrediting entities differ, there are complex issues involved in attempting to use the same procedures to prepare for accreditation by these two bodies.

### **III.1** Terminology

One of the most obvious differences occurs in their use of terminology. In its general criteria for evaluating Engineering Technology programs, ABET, Inc. utilizes the following terminology <sup>1</sup>:

**Program Educational Objectives** – Program educational objectives are broad statements that describe the career and professional accomplishments that the program is preparing graduates to achieve.

**Program Outcomes** – Program outcomes are narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students acquire in their matriculation through the program.

**Assessment** – Assessment is one or more processes that identify, collect, and prepare data to evaluate the achievement of program outcomes and program educational objectives.

**Evaluation** – Evaluation is one or more processes for interpreting the data and evidence accumulated through assessment practices. Evaluation determines the extent to which program outcomes or program educational objectives are being achieved, and results in decisions and actions to improve the program.

**Continuous Improvement** - a documented process incorporating relevant data to regularly assess its program educational objectives and program outcome, and to evaluate the extent to which they are being met.

SACS on the other hand refers to a Quality Enhancement Plan (**QEP**) defined as follows <sup>2</sup>:

The Quality Enhancement Plan (QEP), submitted four to six weeks in advance of the onsite review by the Commission, is a document developed by the institution that (1) includes a broad-based institutional process identifying key issues emerging from institutional assessment, (2) focuses on learning outcomes and/or the environment supporting student learning and accomplishing the mission of the institution, (3) demonstrates institutional capability for the initiation, implementation, and completion of the QEP, (4) includes broad-based involvement of institutional constituencies in the development and proposed implementation of the QEP, and (5) identifies goals and a plan to assess their achievement. The QEP should be focused and succinct (no more than seventy-five pages of narrative text and no more than twenty-five pages of supporting documentation or charts, graphs, and tables).

While there are clearly some overlaps in the requirements for ABET and SACS accreditations, there were some differences in interpretation of the terminologies used. One of the first issues encountered was in reconciling the term "outcomes" between the ABET requirements and the SACS requirements. There were some major differences in interpreting what was meant by ABET Inc., compared to what was meant by SACS.

#### **III.2 Requirements**

At first, we were advised by the 'SACS Liaison" of our university that if we meet the ABET requirements we would certainly meet SACS requirements. It turned out that it was true only to some extent, not entirely. For example, in preparation for the SACS visit, we were asked by the liaison to do the following:

Establish our Assessment Methods for our Programs. Establish a matrix of assessment for each method chosen. Create a matrix mapping the method, frequency of assessing, data collection media, how collected, from whom collected, responsible party for collection, who evaluates the data, how often evaluations are done for improvement. Establish our Performance Criteria for EACH assessment method. Since TAC/ABET had exactly the same requirements, in our case (ECET programs) this was not an additional load. However, as it turned out we could meet SACS requirements by utilizing two of the tables developed by the ECET ABET Task Force Committee as shown in Tables 1 and 2 below <sup>3</sup>.

Table 1. F	Program	Outcomes	Table
------------	---------	----------	-------

Program Outcome	Course Linkage	Performance Criterion
Demonstrate an appropriate knowledge of the fundamentals of computer engineering technology, mathematics and science	ECET2110	80% of students should score 70% or more
Demonstrate an appropriate mastery of knowledge, techniques, skills and modern tools of the technical components of the curriculum	ECET3220	80% of students should score 70% or more

#### Table 2. Summary of Results of Program Outcomes Table

Program Outcome	Course Linkage	Performance Criterion	Student Scores
Demonstrate an appropriate knowledge of the fundamentals of computer engineering technology, mathematics and science	ECET2110	80% of students should score 70% or more	82% of students scored 75%
Demonstrate an appropriate mastery of knowledge, techniques, skills and modern tools of the technical components of the curriculum	ECET3220	80% of students should score 70% or more	78% of students scored 72%.

As we found out there are many overlaps, but what makes SACS requirements to some degree distinct from the TAC/ABET requirements are the following:

- Institution has to demonstrate that each educational program for which academic credit is awarded a) is approved by the faculty and the administration, and b) establishes and evaluates program and learning outcomes.
- The institution identifies expected outcomes for its educational programs and its administrative and educational support services; assesses whether

it achieves these outcomes; and provides evidence of improvement based on analysis of those results.

- the institution provides evidence of ongoing professional development of faculty as teachers, scholars, and practitioners
- The institution publishes policies on the responsibility and authority of faculty in academic and governance matters.

### IV. Making it all work

The work for SACS preparation started in the summer of 2006 and continues. Table 3 shows the timeline established by the institution for preparing for the visits.

The ABET visit took place in October of 2008, and the institution is still awaiting the final report from ABET, Inc. Due to delays in getting some of the continuous assessment tools in place, it is anticipated that there will be some recommendations for improvement in this area. The use of the TFC was considered to be a very effective way to get a lot of the preparation work done. Since the TFC included the program coordinators, it was effective in distributing the workload, and in getting the majority of faculty members involved in the effort. The team also worked together in proofreading and critiquing the individual program self-study reports before submission to ABET. This allowed us to get most of the kinks out of those documents.

Summer of	Establish Leadership Team (President, SACS Liaison).
2006	Set up the Office of Planning & Assessment
	Set up SACS Preliminary Budget (SACS Liaison, Leadership Team).
	Set up SACS Preliminary Calendar (SACS Liaison, Leadership Team)
	Begin holding Leadership Team meetings (SACS Liaison)
Fall 2006	Develop Documentation for campus information on QEP & Self-Study
	Continue Leadership Team meetings throughout rest of SACS time-table
	Develop SACS Website (SACS Liaison)
	Solicit ideas for Quality Enhancement Plan Project from campus
	Solicit volunteers for both QEP and Self-study committees (President, SACS Liaison)
	Conduct workshops with Dept. Heads on Assessment (Deans, SACS Liaison)
Spring 2007	Begin work on Dept & support area comprehensive self-studies (Leadership team, Dept.

### Table 3. Timeline for the Preparation for ABET and SACS visits

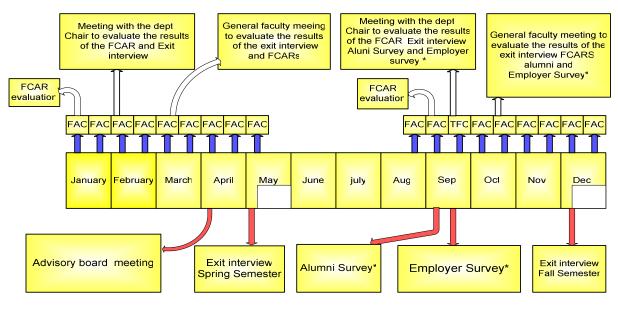
	Heads, Division Heads)		
	Complete work on Department and Support areas self-studies (Leadership Team)		
	Begin writing Core Requirement & Comprehensive, Standards document (Self-Study Committees)		
Summer 2008	Complete writing Core Requirement & Comprehensive, Standards document (Self-Study Committees)		
	Complete writing Quality Enhancement document		
Fall 2008	Off-site review conducted – $2^{nd}$ week in Nov. (Leadership Team)		
	Plan for visit in spring (Leadership Team)		
Spring 2009	SACS on-site review (March 15-April 30) – (campus)		
	Quality Enhance Plan due – 6 weeks prior to on-site visit (SACS Liaison)		

#### **IV. Recommendations and Conclusions**

Trying to survive the ABET and SACS double whammy has proven to be an arduous and difficult task as best. It can sometimes prove to be a frustrating and unpleasant experience to go through, but the results are well worth it. Some valuable lessons have been garnered from the experience that will prove helpful during future re-accreditation visits and should provide some useful insight for programs that face the same dilemma in the future. Based on the experiences, and insight gained, the authors would like to make the following recommendations:

- 1. Start planning for your visits as early as possible. In the ideal case, as soon as the current accreditation cycle is completed.
- 2. Establish an institution-wide liaison person whose sole responsibility is dealing with accreditation matters. It would help greatly if the individual is familiar with all the agencies responsible for accreditation of the different programs on campus and understands their various requirements and terminology. They should be able to advise individual departments on best practices for meeting their goals.
- 3. Establish departmental task forces (TFCs) with responsibility for the establishment of all criteria necessary to meet the goal of obtaining re-accreditation for their programs. It is imperative that the department chair and all program coordinators are part of this effort. Moreover it is of the utmost importance that the Faculty Task Force committee has a clear and strict timeline for its activities as shown it Figure 1.

## Figure 1. Timeline for the process of assessment and evaluation of the Program Evaluation Objectives and Outcomes



Legend

FAC Faculty Assessment Committee FCAR Faculty Curriculum Assessment Report \* Employer and Alumni Surveys that takes place every three year

- 4. Ensure that by its composition, the TFC has enforcement capability to ensure that the faculty members comply with requests for information in a timely manner.
- 5. Ensure that all faculty members, full-time as well as part-time, are fully aware of their responsibilities vis-a-vis accreditation and continuous improvement expectations.
- 6. Ensure that the preparation work is evenly divided among faculty, as best as possible.
- 7. Lastly, if at all possible, avoid major administrative changes in the middle of the process, especially close to a visitation when policies and procedures have already been established.

The authors did not get an opportunity to compare their experiences with those at other institutions who have recently gone through a similar effort. This will be a follow-up effort to this paper in an effort to develop a set of best practices.

### References

- [1] ABET Inc., Criteria for Accreditation of Engineering Technology Programs Effective for Evaluations During the 2008-2209 Accreditation Cycle, ABET Inc. Web Page: <u>http://www.abet.org</u>
- [2] Southern Association of Schools and Colleges Commission on Colleges, *Principles Of Accreditation: Foundations for Quality Enhancement* (2008 Edition), SACSCOC Web Page: <u>www.sacscoc.org</u>

[3] SPSU Internal ECET document, ABET Self- study Report for the Electrical Engineering Technology Program, 2008