# CQI in Recruiting – a New Slant on Recruiting at the Slopes

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### Abstract

This paper describes how the continuous improvement process is being applied to the student recruitment activity at Vermont Technical College, where there are eight Technology Accreditation Commission (TAC) of ABET, Inc. accredited degrees offered.

Under the ABET Technology Criteria 2000 (TC2K) criteria, programs are evaluated for their institutional support of the program in a variety of areas. One of those areas of support is "student recruiting, selection, advising, and counseling."<sup>1,2</sup> The focus of this paper is on student recruiting.

The ABET TC2K criteria also require that a program have a "written continuous improvement plan in place."<sup>1</sup> Both student recruitment and continuous improvement are important from the standpoint of viability of the program as well as the institution. Given that continuous improvement methodology is now a key component in the criteria of accrediting bodies, such as ABET, there is opportunity for campuses to expand Continuous Quality Improvement (CQI) from the program level into other aspects of the institution.

A continuous improvement plan was developed specifically for the student recruiting practices. CQI training was conducted for both faculty and staff who are involved in student recruiting. The major goal for this activity was to develop greater engagement and participation among the stakeholders. Additional goals were established, and metrics were developed. Thus far, twelve innovations and recommendations have been developed that will be phased in over the next three years.

### I. Introduction

Definition -- Continuous Quality Improvement (CQI) "is a philosophy that encourages everyone in your institution to know its mission and to adopt quality driven procedures that continuously improve on how the work is done in order to increase customer satisfaction."<sup>3</sup>

Background -- Vermont Technical College is the state's only public technical college, with an average student enrollment of approximately 1200. Vermont Tech has approximately 70 full-time and 55 part-time faculty, and approximately 110 administrators and staff members.

While many institutions of higher learning might have a focus on increasing the level of preparedness of their incoming students, Vermont Technical College has found itself in a different niche market over the years. Vermont Tech prides itself in being able to produce highly successful graduates from an incoming group of students who are not always well prepared academically. Vermont Tech has consistently attained career placement rates in the student's chosen field of study of 98 percent, or higher. Vermont Tech continues to maintain its academic rigor by offering lesser-prepared students a well-designed, three-year option for completing their associate degree in Engineering Technology.

Clearly, Vermont Tech would be pleased if the preparedness of incoming students were to improve. However, the strong local word-of-mouth reputation of Vermont Tech has been the driving element for enrollment management, and thus any change in the preparedness of the incoming student population is not likely to occur in the short term. In addition, since Vermont Tech is a state institution, it has the obligation of serving Vermont for the greater good, by providing technical educational opportunities for the population at large.

Goals -- With this background presented, the continuous quality improvement initiative established the following improvement goals:

- to increase the number of applicants, especially out of state applicants
- to increase the number of enrolled students, especially out-of-state students
- secondarily, to improve enrollment in under represented degree programs

Since Vermont Tech is part of the Vermont State College system, it has suffered from severe lack of state funding support for the past several years, as have most state colleges in the US. Only 20% of Vermont Tech's students are from out of state. Since the tuition for out of state students is significantly higher, the goal of increasing the number of out of state students results in financial improvement for Vermont Tech.

# II. CQI in Recruiting

A major CQI initiative was undertaken in the spring of 2004 to bring the CQI culture to all areas of the college. Five CQI Teams were established and received training from a private consulting firm on quality improvement principles. The five teams established were as follows: New Program Development; Bookstore; Multi-Campus Student Services; Class Scheduling; and, Recruitment. Each of the five teams met throughout the summer of 2004 to adopt a CQI plan for their area and to develop their improvement recommendations. This paper will present the CQI Recruitment team's initiatives and recommendations.

The CQI Recruitment Team used some of the classical CQI tools to help determine the underlying causes of the weak areas in student recruiting. The CQI tools used include the affinity diagram, force field diagram, and fishbone (cause-and-effect) diagram.<sup>3</sup> In addition, the team explored possible approaches to improving the overall campus energy and enthusiasm that is directed toward student recruiting.

After undergoing team training regarding CQI protocol, the Recruitment Team created a charter to use as its guide. In the process of creating its charter, the team arrived at the following purpose: "We will strive to continuously improve student recruitment with an emphasis on changing key stakeholders thinking from on-lookers to participants." The key question posed is – What must be done to shift the culture of the Vermont Tech Community into realizing that student recruitment is not solely the job of the Admissions office? The stakeholders, or "Vermont Tech Community," identified by the Recruitment Team are faculty, administration & staff, current students, and alumni.

The initial challenge of the Recruitment team was to search for root causes. Common root causes behind a lack of campus-wide participation in recruitment included: Over-extension of job duties and responsibilities, poor communication, and late or poor planning.

Prior to commencing the CQI efforts, traditional recruitment practices had fallen almost solely on the Admissions Office. Traditional recruiting practices include traveling to high schools and college fairs, doing campus interviews and tours, calling and e-mailing or corresponding with prospective students, and having special events, like an open house. These practices were working well in 1999 when the total number of applications for that year was 759. However, in 2003, Vermont Tech received 1411 applications. While applications nearly doubled over this four-year period, the size of the admissions staff remained the same. This clearly increased the workload of the admissions staff, requiring the staff to stay in the office more, doing administrative tasks. Travel was reduced significantly, and other personal touches were being overlooked. A large share of the increase in applicants is due to the increase in applicants for the college's Nursing programs.

With the advent of the Internet, it is believed that traditional recruitment practices have lost much of their effectiveness. Students learn more about colleges from the Internet than they do from a college fair. In addition, there has been a shift in student populations. In Vermont, traditional aged students are on a population decline<sup>4</sup>, and approximately 60% of Vermont's high school seniors enroll in a college out of state<sup>5</sup>. More colleges are competing for this declining pool of applicants, and the Admissions office is burdened with an additional workload resulting from an increase of nontraditional student applications. At the same time, there is a need to find more creative ways to reach prospective students and to increase the personal contact with prospective students. This is where the need for a CQI culture directed toward recruiting comes in.

## **III Recruiting PDCA**

The CQI training used the PDCA cycle, which stands for  $Plan - Do - Check - Act^{3, 6}$ . The team developed a "loop" specific to Recruiting that uses the PDCA model, as shown in Figure 1. Because CQI is not always easy for the constituents to understand and grasp<sup>7</sup>, diagrams such as this are developed as a tool to help in the cultural change necessary for CQI to become effective. Because the admissions cycle starts in September for the ensuing year, the loop begins with the Act phase in September; so it is effectively Act – Plan – Do – Check. The CQI Recruiting Team used this diagram as a guide during their efforts in order to keep from losing sight of the larger perspective while working on the details.

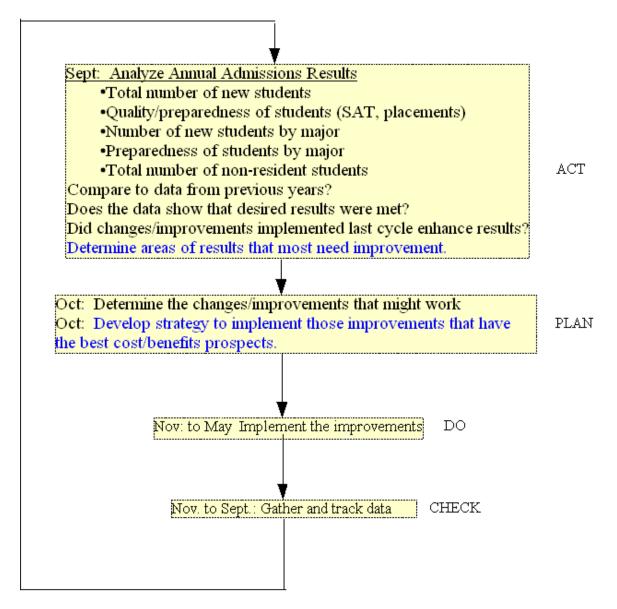


Figure. 1. Vermont Tech's Recruiting CQI loop

In order to "close the loop," baseline data are needed to verify improvements in results. The baseline enrollment data are shown in the following graphs.

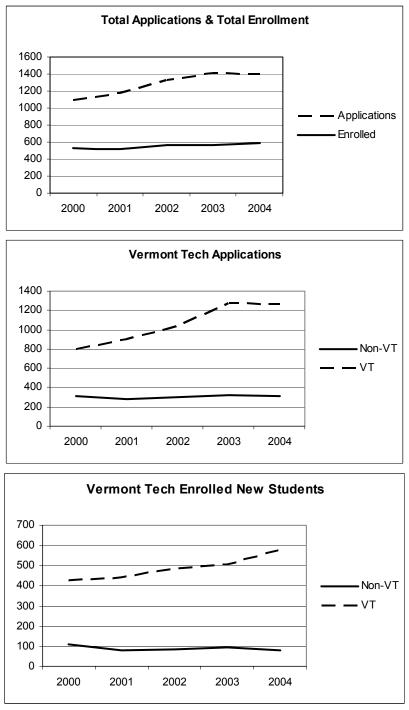


Figure 2. Enrollment Data

As shown in Figure 2., total applications have risen substantially, and total enrollments have risen modestly. What is noteworthy with respect to one of the goals of the CQI team is the trend in non-resident enrollment. This is flat or declining, and there is clearly room for improvement here, especially with the economic benefits of the non-resident tuition rate. Two initiatives were

developed that deal with improving the non-resident numbers, and these will be presented in detail.

### **IV. The Improvement Initiatives**

Vermont Tech's Recruitment CQI Team generated twelve initiatives in the following areas: 1) Open House; 2) Ski Area Mutual Recruiting; 3) Phone Campaigns named "Tech Talk"; 4) Graduation Day; 5) Early Decisions; 6) Student Participation in Recruiting; 7) Alumni Participation in Recruiting; 8) Snowmobile Trail Marketing; 9) Increased institutional and market research; 10) Employee Orientation to Recruitment; 11) Potential Fast Track Programs; and, 12) Changing New Student Registration and Orientation.

We have chosen to focus on the improvement initiatives that would be the most beneficial to the greater academic community: Open House & Graduation Day, Ski Area Mutual Recruiting Partnership, and Snowmobile Trail Marketing. The latter two initiatives were chosen for their uniqueness, while Open House & Graduation Day were chosen because it demonstrates some of the typical findings revealed during classical CQI activities.

### Ski Area Recruitment

Vermont Tech devotes reasonably significant resources toward the recruitment of out-of-state students. In addition, perhaps attributed to the recruiting CQI initiatives, a new admissions counselor has been hired. Along with other duties, this person will do all of the out-of-state recruitment related traveling.

Vermont is known as the Green Mountain State, with its mountainous terrain and ski resorts. Vermont is also a prominent tourist state that offers year round attractions. The Recruiting CQI team devoted considerable time and effort to identify means to market Vermont Tech to people visiting the state. The big challenge was to find a way to market Vermont Tech to visitors and tourists in a prominent way. The ski resorts came to mind, but how can marketing be done in a prominent way? A member of the CQI team had a connection with one of the owners of the Sugarbush Ski Resort, and he gave him a call. During the call, it quickly became clear that Sugarbush Resort was interested in improving marketing of its ski resort to Vermont Tech students. Clearly, the opportunity for a mutual marketing relationship became apparent. Sugarbush Resort agreed to allow Vermont Tech to set up a staffed admissions table in the main base lodge in return for their being allowed access to Vermont Tech's dining hall lobby for marketing of student season ski passes.

Sugarbush Ski Resort was invited to come to New Student Registration and Orientation at Vermont Tech in August to market their student season passes. Sugarbush Resort also selected dates in September and October to set up their booth in the dining hall lobby. Vermont Tech selected four dates on a Saturday during peak high school vacation times to have an information booth in the main ski lodge at Sugarbush Resort. The dates selected are February 5, February 26, March 19 and March 26, 2005. All prospective students identified at Sugarbush Resort will be

tracked and followed up. The results will be presented at the Conference in June. The CQI plan for ski area recruitment is shown in Table 1.

Plan	Do	Check	Act		
Late summer and early fall 2004	Spring semester 2005	Late spring- early summer 2005	Adjust for 2005-2006 ski/travel/tourist		
Measures:         Number of student applicants resulting from Sugarbush Ski Resort marketing.					
Table 1 COL Plan for Ski Area Recruitment					

#### Table 1. CQI Plan for Ski Area Recruitment

## **Open House**

Vermont Tech provides two open houses to the general community - - a smaller spring open house in April, and a large open house in October. The spring open house has between 60 - 80 prospective student participants, with 100 to 150 people in attendance overall. The fall open house has between 170 - 200 prospective student participants, with between 500 - 600 people overall in attendance. The Recruiting CQI team concluded that improvement is needed in the planning, participation and communication phase of open house preparation. The root causes for these areas of concern included fragmented and late communications. Some of the miscommunications have related to guidance given to tour guides and the information that appears in the open house flyers. The Recruiting CQI team established a special open house committee, comprised of key players in the open house event. This committee included a representative from facilities, faculty, student life, dining services, admissions, marketing/publications, and financial aid. The committee had total responsibility for open house planning for fall 2004. The preliminary efforts to improve open house did result in open house running more smoothly for the fall 2004 open house. The CQI plan for Open House at Vermont Tech is shown in Table 2.

Plan	Do	Check	Act		
January through June 2005, including publication reviews, selection of dates, and assignment of responsibilities, promotion	April and October 2005 (the actual events)	Surveys and Debriefing, April/May and October- November.	December 2005, revise as needed for improved 2006 open houses		
Measures: Number of prospective students attending open house. Number of applicants resulting from open house. Comparative levels of satisfaction from surveys.					

 Table 2. CQI Plan for Campus Open House

### **Graduation Day**

Each year, Vermont Tech hosts two graduations, the traditional graduation day in May, and the Practical Nurse graduation day in June. During these events, most of the campus academic buildings are locked. This seems to be one of those classical CQI issues: "Why have you been doing it this way?" With the Recruiting CQI team taking a fresh look at how graduation is conducted, the team put forth recommendations to make graduation day more of an open house event with displays and demonstrations in the academic labs. With graduation day possibly being the last day students spend on campus, an open campus provides for a much more memorable impression for new graduates, their parents, family, and friends. This leads to improvement in the word of mouth marketing of the college. The CQI plan for Graduation Day is shown in Table 3.

Plan	Do	Check	Act	
Fall 2004 and Early Spring 2005	May and June 2005	July 2005, surveys of graduate and family satisfaction and employee satisfaction	Fall 2005	
Measures: Comparative levels of satisfaction from surveys				
Number of applicants resulting from open house.				
Number of visitors viewing academic displays and demonstrations.				
Table 3. CQI Plan for Graduation Day				

### **Snowmobile Trail Marketing**

There is an extensive snowmobile trail system throughout the state of Vermont operated by the Vermont Association of Snow Travelers (VAST). VAST has over 5,000 miles of snowmobile trails<sup>8</sup>, including a major artery that runs through the Vermont Tech campus. Many snowmobilers travel over the campus fields on their sleds each year, perhaps not even knowing they are on a college campus. Additionally, large numbers of snowmobilers come to Vermont from other states, sometimes towing four or more snowmobiles down the highway on their way to Vermont. This presents another excellent opportunity for marketing access to potential nonresident students. The Recruiting CQI team concluded that the best approach for this first attempt at marketing to the snowmobilers should strive to get more snowmobilers to plan snowmobile trips to our campus. Planned CQI efforts entail the identification of "hot spots" such as diners, restaurants, and gas stations where snowmobilers rest from their travels. Once the "hot spots" are identified, arrangements will then be made to display targeted marketing posters and brochures about Vermont Tech. In addition, the posters and brochures will include the trails that lead to the Vermont Tech campus. In addition, consideration will be given to erecting signs on the VAST trails on campus that welcome travelers to our campus, along with a campus map. The CQI plan for snowmobile trail recruiting is shown in Table 4.

Plan	Do	Check	Act		
Fall 2005	Winter 2006	Spring 2006	revise for 2007		
			recruitment		
Measures: Number of student applicants resulting from snowmobile marketing.					
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Table 4. CQI Plan for Snowmobile Trail Marketing.

### **V.** Conclusion

The Recruiting CQI team utilized classical CQI tools such as the "affinity diagram" and "fishbone diagram" to develop improvements in the recruiting processes at Vermont Tech. It was discovered that the Recruiting CQI Team functioned more effectively once a CQI cycle or "loop" was developed that was specific to the area of focus (recruiting), yet general enough to be adapted to any particular improvement initiative. We have presented several innovative techniques in this paper that could perhaps be adapted at other institutions. While not all campuses in the country are located close to ski areas or snowmobile trails, with some creative thinking, colleges from other regions in the country may be able to discover similar mutual marketing opportunities. To assess the possibilities of mutual marketing opportunities, colleges may wish to pose these questions: 1) Where do large crowds gather in the region on a regular basis? 2) Do tourists frequent these locations? 3) Do these attractions tend to have an engineering technology slant, such as snowmobiling, auto racing, or aviation show? 4) Does the attraction draw high school aged folks and/or their parents? 5) Is there potential for the college to gain exposure at the attraction? 6) Are there potential opportunities for mutual marketing agreements between the college and the attraction? Clearly, there are additional questions to consider, but it is possible that most colleges have at least one valuable marketing opportunity that they hadn't ever considered.

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### **Biography**

RICH WARREN is an Associate Professor of Electrical and Computer Engineering Technology at Vermont Technical College, Randolph Center, VT. He holds a Master's degree in Electrical Engineering from Cornell University, and has attained ABD status in Computer Systems Engineering at the University of Massachusetts. He has held the following positions at Vermont Tech: Head of the Division of Technology, Co-chair of the Electrical and Computer Engineering Technology department, and co-advisor to Tau Alpha Pi.

DIANA MELLAR is the Associate Director of Admissions at Vermont Tech. She is involved in the continuous quality improvement measures at Vermont Tech as the team lead for Recruitment. She has also led the marketing initiatives at Vermont Tech from 2000 to 2003. Currently, she is the international student advisor, co-advisor to Tau Alpha Pi, director of a high school program known as the Vermont Academy of Science and Technology, and teaches as an adjunct instructor in the Business department. She earned an M.B.A. from Franklin Pierce College in New Hampshire.