Seeking to Serve More: An Analysis of Capacity to Meet Student and Industry Demands

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Introduction

The proposed Tennessee Board of Regents' 2010 – 2015 strategic plan identifies four key priorities: Access, Student Success, Quality, along with Resourcefulness and Efficiency. Tennessee Colleges of Applied Technology (TCATs) must provide access to a quality education to adults seeking to enrich their lives and ensure they are successful. Currently, many forecasters are predicting a statewide enrollment increase at TCATs and community colleges due to the adoption of the Complete College Tennessee Act (2010) and other educational initiatives. TCATs must review their current handling of wait lists and interest lists to ensure the lists are being utilize by all schools in an efficient manner to improve access to the classes that the students desire. When unemployment rates rise, TCATs can be swamped with students and many students may not be able to attend their desired programs due to lack of capacity. For students who are unable to enroll in a desired program TCATs must find creative solutions to ensure student demand is met.

The goal of this project is to analyze the benefits of administering a structured wait list and interest list within the TCATs system. The project will be a presentation on the importance and the benefits of adhering to the current TCATs' wait list guidelines, and will review the topic of interest lists and highlight the benefits of a structured interest list. Lastly this project will attempt to establish a correlation between wait lists and interest lists and the ability of the system to meet the TBR's 2025 completion delivery unit goals.

Project Summary

In order to gain a better understanding of the needs of TCATs for waitlists and interest list, it was necessary to determine each list's purpose as it was intended by the Senior Administrative Staff of the TCATs.   A survey was distributed to the twenty-seven TCATs in order to obtain data for this project. The TCAT Directors received an email requesting that they complete an online survey comprised of multiple choice and open ended questions. Of the twenty-seven surveys sent to participants twenty-two were completed and returned which translates into an 85% response rate.

Overall, the purpose of the survey was to gain a better understanding of the current practices regarding TCAT's Wait List programs to determine the advantages and disadvantages of a potential interest lists at TCATs, and to obtain feedback on the different methods that TCATs could utilize to meet the completion goals regarding increasing capacity. Secondly, the survey will determine which campuses are following the current priority list guidelines and which campuses are not. For the campuses not utilizing the priority list guidelines, it is important to determine whether additional training is needed. Respondents were asked to list programs with the shortest and longest wait-times and to provide enrollment estimates. Based on the data from the survey there were numerous courses listed with immediate availability. Table 1 illustrates the ten programs with the longest estimated wait times which ranges from four months to eighteen months.

**Campuses Using the Priority Waitlist
Guidelines**
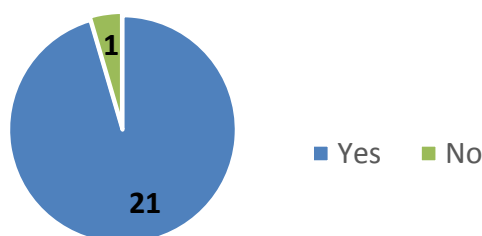
To determine what factors impact the estimated wait time each campus was asked to list the frequency of enrollment in the courses. Automotive Technology, Diesel Powered Equipment Technology, and Welding were the three programs with the longest wait times. Each program had a variety of enrollment frequencies ranging from every Monday to the beginning and middle of the trimesters. There was no correlation between the frequency of enrollments and campuses who reported the longer wait times.

The current TCATs' Wait List guidelines require schools to ensure that potential students complete an application, provide all required documentation, and select a program or desired class. Once all the information is provided then the school will provide the student with a detailed cost breakdown for the selected program or class and instructions on how to apply for financial aid. Once the potential student completes all the requirements the student's name will be added to the SIS System for the Priority Waitlist. As program openings occur, the school will notify the student. Institutions will purge their waiting list twice a year in May and November.   Institutions have the option to modify the Wait List guidelines by requiring potential student to perform additional steps such as

taking a WorkKeys assessment, attending an orientation, or meeting with instructors prior to adding the student's name to the priority waitlist. The new guidelines became effective in January and all campuses were required to purge their current waitlists by the end of February to be in compliance. Of the twenty-two campuses who participated in the survey, twenty-one stated that the new guidelines were being followed. One campus stated that they're not utilizing the priority waitlist guidelines since student demands are being met with enrollments occurring each trimester, therefore, there are no names to be added to the priority waitlist.

The guidelines were established to help decrease the wait list numbers and to increase availability at all TCATs regardless of the classes or the programs. Reducing wait lists will ultimately increase enrollments by providing more educational opportunities for students. TBR's 2025 completion delivery goals are to increase enrollment with an estimated goal for TCATs of 10,535. In order to meet or exceed the TBR's goals TCATs must analyze the other methods of training students such as Dual Enrollments, Community Partnerships, Evening Courses, and blended/hybrid courses, which are currently being utilized by some TCATs campuses to provide more training to more students.

PROGRAMS WITH THE LONGEST WAIT TIMES

Program Name	# of Campuses	Estimated Wait Time
Administrative Office Technology	1	4 months
Automotive Technology	3	8 months *
Aviation	1	6 months
Cosmetology	3	4-6 months
Diesel Powered Equipment Technology	2	12-18 months *
HVAC	1	4 months
Industrial Electricity	1	4 months
Industrial Maintenance	6	4-8 months
Welding	3	4-12 months *

Table 1

Interest lists are a low cost marketing tool that will enable TCATs to track prospective students who have not been added to the priority waitlist. To determine if interest lists are being utilized, the second question on the survey asked if prospective student data is being collected and compiled to create interest lists. The interest lists contains the names, addresses, and program(s) of interest of these students. Eighty-one percent of the survey respondents stated that they are currently utilizing interest lists (Figure 1) and provided a response on how the information was being utilized to increase enrollment. Several of the respondents provided an explanation on the interest list's purpose and the most common use of the list was course creation. The data on the list was also used for tracking of incomplete applications, as a follow-up and recruitment tool, and for general mailings. Interest lists can be used to increase enrollments in courses that have a lower enrollment.

A structured interest list will allow TCAT's to build relationships with potential students while identifying future educational needs and tailoring programs. Applicant's demographic information and desired classes or programs will be documented in an access database. The information will be compiled by creating educational categories based on the students' commonality. The interest lists from all TCATs could be compiled quarterly to identify educational needs and industry employment trends. For example, a potential student visits a TCAT interested in taking courses to become a Certified Health Unit Coordinator; however, the school doesn't offer this certification course, the student's name and information would be added to the TCATs Interest List Access Database. Annually the information in the database should be reviewed by the TCATs to determine if there is a market for the courses or programs requested, determine if the new courses, certifications or programs will attract new students or companies who desire to provide continuous education to their employees. Another example of a student who would be tracked on the interest list is a high school junior who desires to take Diesel Powered Equipment Technology courses upon graduation. The student does not qualify to be added to the wait list nor does the student currently meet the enrollment criteria. For tracking purposes, the student's name and information would be placed on the interest list. The school would proactively follow-up with the student to encourage him or her to apply for priority wait list eligibility as early as January of his or her senior year.
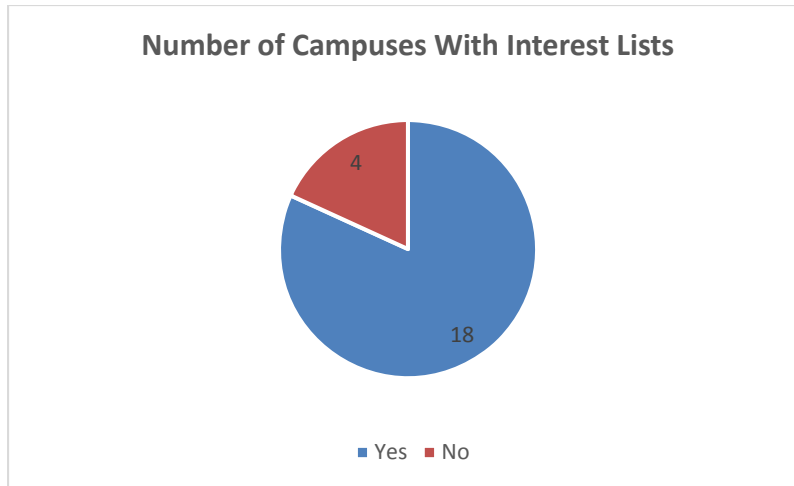
Figure 1

Flexible Learning Options

Many colleges offer a variety of flexible learning options by blending formal and informal learning programs, which has provided greater flexibility and convenience for students. Flexible learning offers a wide range of learning methods such as dual enrollment courses, evening and distance education, online courses, institutional partnerships, hybrid courses and workforce development. Traditional classes are still the most popular learning option (Figure 2) however all TCATs must explore and implement flexible learning options in order to meet and exceed the TBR's 2025 completion delivery goals and the demands of industry.

Participation In Learning Options

32%

77%

100%

73%

■ Hybrid or Blended Courses   ■ Dual Enrollments
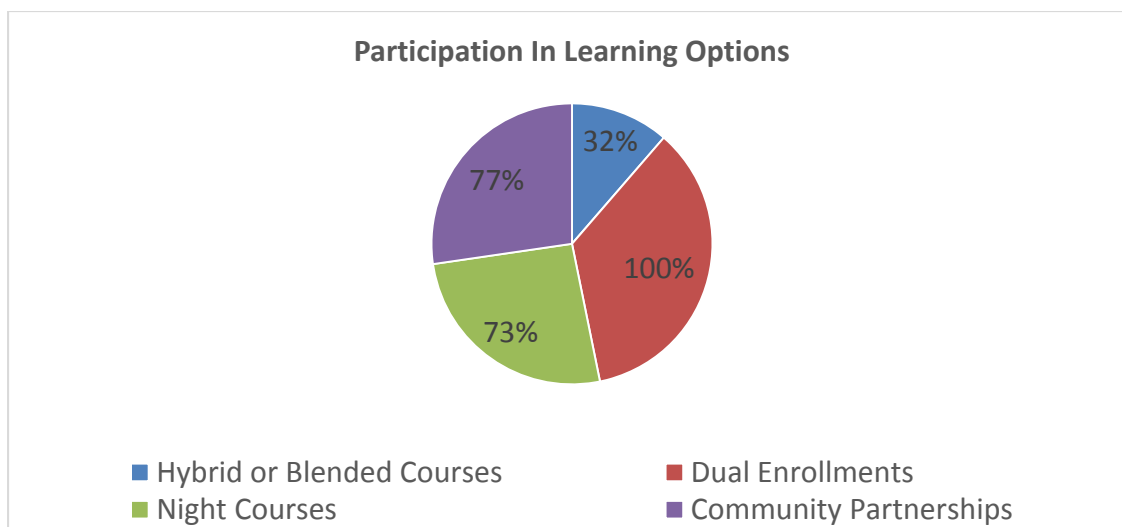■ Night Courses   ■ Community Partnerships

Figure 2

Dual enrollment programs have been successfully implemented at each of the

twenty-two TCATs locations based on the results from the survey. Research shows that

"providing high school students with an early college experience through dual enrollment

may have the potential to improve their academic and nonacademic skills, help them

understand what will be required of them in college, and encourage their future college

attendance by showing that they are indeed capable of doing college-level work" (Karp,

2006). With dual enrollment, high school students can enroll in courses taught by a TCATs

faculty member on local TCATs campuses. Many of the students attend three or five hours

per day during their junior or senior year. There are many benefits to dual enrollment for

both the high school students and the high schools. The students get a head start on their

education, and the high schools can expand their curriculum by offering their students a

richer selection of courses. "Previous research has found dual enrollment participation to

be correlated with positive high school and college outcomes, including college enrollment

and persistence" (Karp, Calcagno, Hughes, Jeong, & Bailey, 2007; Speroni, 2011a, 2011b).

To transition students from dual enrolled, fourteen TCATs offer priority enrollment to the dual enrolled students with a select number of seats reserved in classes. Students can continue their course without remaining on a priority waitlist before beginning school. The table below illustrates the number of seats withheld for priority dual enrollees for full-time classes.

Campus	Number Withheld
Covington	12 (6 days and 6 evenings)
Crossville	4 (each program offered)
Crump	The equivalent of 4 full-time students
Dickson	2 for courses with full enrollment and for programs without full enrollments more dual enrollees are accepted
Elizabethton	1 - 2
Harriman	2 in each program
Hartsville	10 (5 days and 5 evenings)
Hohenwald	The number varies by course
Jacksboro	A minimum number of seats are designated for dual enrollees
Jackson	Up to 4
McKenzie	AOT-4; AT-8; CIT-8; Electronics/Green Technology-8; HVACR-4; IM-8; MT-8; Welding-4
McMinnville	No designated number
Morristown	20
Murfreesboro	10
Nashville	No designated number
Newbern	No designated number
Oneida/Huntsville	This number fluctuates depending on current adult enrollment.
Shelbyville	No designated number
Whiteville	No designated number

Table 2

TCATs must not only look to meet the needs of students but must seek to meet the employment needs of the local companies in the communities. Community partnerships are another type of flexible learning option that has been adopted by 77% of the survey respondents. The institution and local business both benefit from this type of partnership. Special industry training, apprenticeships, and Tennessee Department of Workforce and Labor are examples of current community partnerships offered by TCATs. One campus

partnered with a local employer to create a part-time apprenticeship program that provided training on specialize equipment. The apprentices are required to complete 2,160 hours by attending classes three days a week in order to complete the program however in some instances the employer can deem that the apprentices have sufficient skills to complete the program without completing the full 2,160 hours normally required of the program.

Another example of meeting the employer needs is one TCAT providing specialized electrical training. The employer worked closely with the TCAT instructor to develop a short-term course that trained students to perform key skills that the employer required. The partnership was successful by creating flexibility in the curriculum in order to meet the employer's needs. The partnerships will help to identify, support, and communicate opportunities for TCATs to become more engaged with the employers while ultimately strengthen the relationship between both organizations.

Evening courses are offered on many campuses on either a full-time or part-time basis. For adults who choose to continue to work, full time evening courses provide opportunities to continue their education. Evening courses allow students the flexibility to obtain an education while still maintaining work and family responsibilities. Approximately, 73% of the campuses offer night courses in either the full-time or part-time capacity.

The least utilized option to train students is hybrid or blended programs. Only 32% of the campuses are benefiting from offering these types of courses to students. Successful blended or hybrid courses are a practical, convenient, and accessible method of training. Blended courses combine traditional classroom-based learning and remote

distance e-learning. Students are required to attend some classes on campus while completing a portion of the curriculum online. The advantages of offering hybrid courses are increased enrollment, which helps to resolve capacity issues, increased student engagement (active learning), and improves writing and computer skills. Hybrid courses may present such challenges as less social and intellectual stimulation among students.

A good example of a successful hybrid program is the Motorcycle and Marine Technology program offered at TCAT Chattanooga where "20% of the course is completed outside of regularly scheduled classroom program meeting times" (Hiser 2014). Students are automatically enrolled in hybrid courses during the start of the term. Students who fail to maintain a "B" average and satisfactory attendance are no longer eligible to participate in the hybrid program, which includes non-scheduled classes on Fridays. The program is successful because students are allowed access to on-line coursework each weekday from 2:30 pm – 7:00 am and from 2:30 pm – 8 am during the weekends.

Current Techniques to Increase Enrollment without Expanding Facilities

It's essential for TCATs to gain greater efficiency by increasing enrollment without expanding facilities to meet TBR's 2015 Strategic Plan goals. The campuses listed nine suggestions for increasing enrollment without expanding facilities. The respondents identified the most common way to increase enrollment without expanding facilities was to provide additional funding to purchase equipment and hire additional faculty and provide them with benefits. With additional faculty, it would allow TCATs to offer more classes and reduce wait lists. The second most common way to increase enrollment is adding night or evening courses. Students selecting this option are not forced to choose between earning an income and securing a competitive advantage. The third most common response was to

explore space sharing opportunities with local high schools or community colleges. At least one campus listed the need to employ qualified candidates to instruct courses. One recommendation is for the campus to seek out qualified candidates from local business and industry.

Conclusion

By instituting additional partnerships, workforce development, growth in dual enrollment and additional blended learning courses, TCATS can attract more students and reduce the current wait list times. All TCATS must continue to support the ongoing needs of local businesses and industries by providing custom training and building relationships with the businesses. An interest list is a low cost marketing tool that would allow TCATs to send personalized messages to potential students. For profit universities spend millions each year to gather data on potential students. Interest lists will start the process of cultivating a relationship with the future student. A structured interest list program would allow each school to send a simple thank you letter or email and detailed information on the courses of interest once the student's name is added to the list. A follow-up communication will be sent every 30 days for a period of time. The interest list information can also be utilized to send invitations to open house events or other recruiting events. This will better ensure that students will not lose interest in attending TCATs. It will also provide a more accurate estimate of wait times. Campuses should consider participating in more hybrid courses. Since Automotive Technology, Diesel Powered Equipment Technology, and Welding all have extremely long wait times, it would be beneficial to consider piloting the courses as hybrid courses. In order to meet and

exceed the TBR's 2025 completion delivery goals all flexible learning options must be

explored by all TCATs to determine suitability.

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