

AGENDA ITEM C2: STUDENT DEVELOPMENT
BOARD RULE 400.0100.00
PROGRAM REVIEW
BOARD OF TRUSTEES MEETING: APRIL 28, 2011

The academic program review process is designed to assess the outcomes of degree programs and to support the continuous quality improvement of academic programs at Belmont Technical College. The report describes the academic program review process and documents how faculty and administrators use the program review process to develop action plans to encourage the success of Belmont students in acquiring knowledge and skills for meaningful employment (Board of Trustees, *Ends Policy* number 400.0100.00, Student Development).

Academic programs are monitored by the Student Learning Team, reviewed annually by program chairs and faculty members, and evaluated based upon 10-year enrollment trends and key performance criteria. Key performance criteria for evaluation include enrollment data, persistence rates, and graduation rates. Program reviews are conducted in order to systematically examine ten-year enrollment trends, persistence rates, and graduation rates in degree programs. Faculty members provide leadership for reviews by analyzing data, drawing conclusions on program viability and efficiency, making recommendations for future actions, and implementing action plans for improvement.

Ten-year trend charts

Ten-year enrollment trend charts are appended to this report in hard copy for degree programs and are based upon enrollment data from the last day of fall quarter in 2010. Data for the last day of the quarter includes enrollment data for courses that may have started after the 15th day census date and excludes enrollments for students who may have withdrawn from courses during the first two weeks of classes. The trend charts show fall quarter headcounts, credit hours, and full-time equivalents (FTEs) over a ten-year period from 2001/2002 through 2010/2011. Data are arranged alphabetically by majors, and for each degree program, there are three charts presented.

The purpose of the charts is to show enrollments within majors and to allow for a more detailed examination of trends within programs. Examination of trends facilitates a longer range view of program viability and provides formative feedback that can be used to measure outcomes and to set targets for improvement. Ten-year trends are especially useful for planning and predicting future enrollment patterns. Examples of ten-year enrollment trend charts are displayed in this report. Explanations of how a program chair might read each of the charts follow the examples. The charts displayed in the body of the report as examples represent trends in the Firefighter/Paramedic Program.

The first chart, *Ten-year enrollment trends, fall headcount, 2001-2010* displays a range of academic years across the horizontal axis. The ten-year period shows fall 2001/2002 on the extreme left and fall 2010/2011 on the right. The vertical axis is scaled in this example from zero to 250. The numbers of students who identified the paramedic /firefighter program as their major and were enrolled during fall quarters are plotted. This chart shows that during fall 2001/2002 the number of students enrolled in this program was slightly higher than 75. The trend over ten years shows a decline in the number of students enrolled in the program, with the lowest number in 2005/2006. That trend seems to have remained relatively stable for three years, and then the trend begins to increase steadily over the last three fall quarters. The fall 2010/2011 enrollment in this program appears to be recovering and increasing to the level recorded in 2001/2002. Chart

2, Ten-year trends, fall credit hours, 2001 through 2010 and Chart 3, Ten-year trends, fall FTEs, 2001 through 2010 show similar patterns of variability.

Chart 1, Ten-year enrollment trends, fall headcount, 2001 through 2010

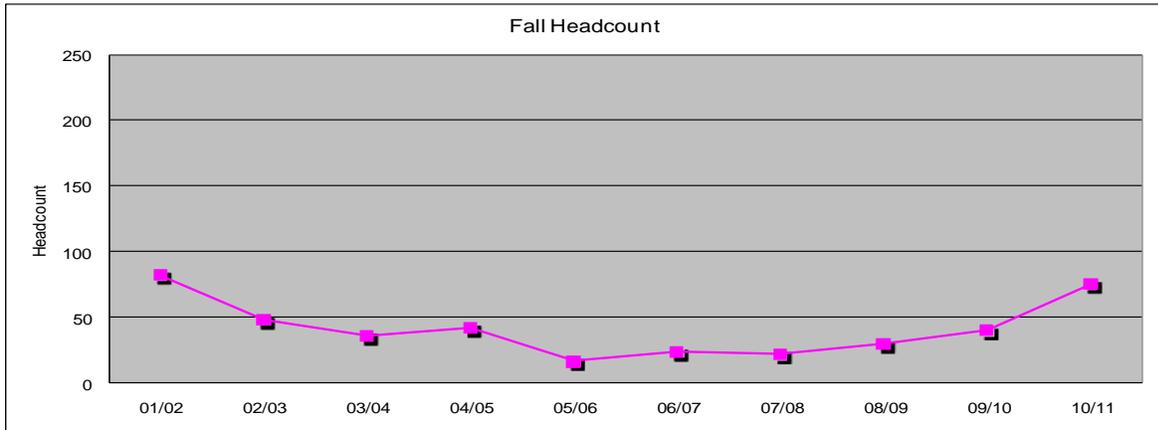


Chart 2, Ten-year trends, fall credit hours

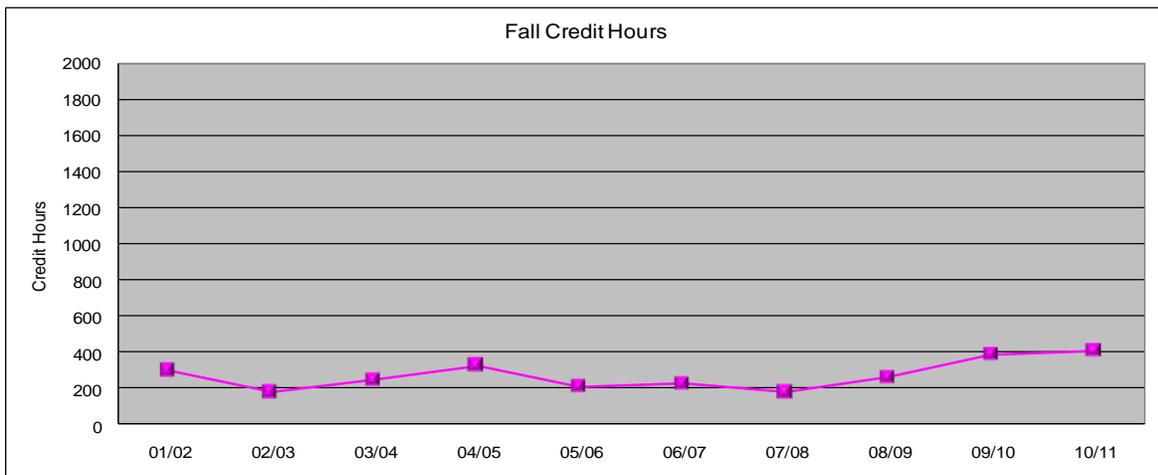
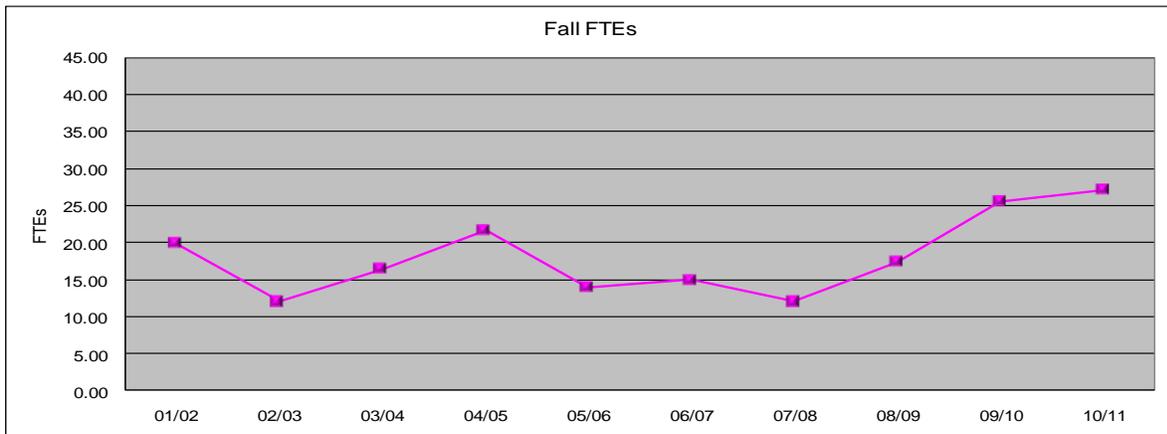


Chart 3, Ten-year trends, fall FTEs



The final element in the ten-year trends documents is a summary table showing the data with actual values for headcount, credit hours, and FTEs over the ten-year period. Table 1, Ten-

year trends summary, fall headcount, credit hours, and FTEs is an example of the summary tables program chairs use to analyze net losses and gains for the ten-year period leading up to fall quarter when the program review cycle is initiated each year.

Table 1, *Ten-year trends summary, fall headcount, credit hours, and FTEs*

Firefighter-Paramedic											
	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	Net loss/gain
Headcount	82	48	36	42	17	24	22	30	40	75	-7
Credit Hours	297.5	181	246	324	209	224	180.5	260.5	382	405.5	108
Fall FTEs	19.83	12.07	16.40	21.60	13.93	14.93	12.03	17.37	25.47	27.03	7.2

In this example from data for the Firefighter/Paramedic program, there was a net loss in headcount of seven students from fall 2001/2002 to fall 2010/2011; a net gain of 108 credit hours; and a net gain of 7.2 FTEs (full-time equivalent units).

Key performance criteria

In addition to reviewing ten-year enrollment trend charts, program chairs and faculty members use data on three criteria to analyze performance against benchmarks derived from best practices in two-year institutions and established by the Student Learning Team. Criteria and the benchmarks are: 1) Enrollment decline no greater than 25% from fall to fall annually; 2) Persistence rate 55% or higher from fall to fall annually; 3) Graduation rate equals a minimum of eight students per year. Based upon results from performance data, program chairs draw conclusions, formulate recommendations for future action, and implement action plans for improvement.

The program assessment report developed by the chair for the Firefighter/Paramedic program provides a well-documented and clear example of a data-based review process. That report is reproduced here as an example of the data analysis summaries that program chairs have completed and included in their program notebooks.

**BELMONT TECHNICAL COLLEGE
PROGRAM ASSESSMENT**

DATA ANALYSIS SUMMARY

Program: Paramedic/Fire Science

Today's Date: March 8, 2011

Person(s) Responsible for Assessment Item: Ailsa Vogelsang

Key Evaluation Criteria Results:

Enrollment: +72.79%

Persistence Rate: 42%

Graduation Rate: 2 degrees and 2 PCRM certificates

Benchmarks for achievement:

Enrollment decline <25% from fall to fall.

Persistence rate of 55% or more.

Graduation rate of 8 graduates per year.

Goals set to Measure Action Plan Implemented 2009 – 2010	Results/Outcomes
1. Transition of the fire program to the new coordinator is complete and the program is still under review.	1a. All state paperwork and criteria have been completed for the transition and evaluation of the program has begun. Changes at the state level are being put into place to align the program with ODPS standards.
2. Revised the student handbook and paperwork to facilitate classroom evaluation and clinical completion.	2a. Expansion of skills section gave students the hands on preparation before entering the clinical setting. Clinical requirements were restructured to facilitate completion. Students were able to complete the required skill set and hourly requirements within a few weeks of the program end instead of months.
3. Implemented instructor meetings and education to enforce a unified approach to meeting state standards and criteria in the classroom.	3a. A unified body of course material, tests, active learning activities, and skill sets are emerging in the classroom. Updated instructor materials have been made available to instructors so that texts, curriculum, and presentation of materials match.
4. Inventoried and are in the process of purchasing key training equipment for the program.	4a. Equipment for the fire courses is much needed to upgrade the classroom experience and provide effective and safe training to our students. The purchase of a simulation manikin, heart monitor and other manikins allows students a more realistic and challenging learning experience during EMS courses. Effective simulation provides students with an opportunity to utilize and combine a complex set of skills as required in the field. Upgrades and replacements are still being evaluated.
5. Improved clinical internship experiences for students to facilitate completion of program requirements.	5a. Additional contracts were added in 2009 – 2010 so that students had more options for clinical experience and to support the enrollment growth in the program. Students were able to complete the required skill set and hourly requirements within a few weeks of the program end instead of months.

Analysis of Evaluation Criteria Data:

The Benchmark for enrollment has been met. However, many students complete only the courses required for state certification and do not complete a degree causing persistence and

graduation rates to fall. Increased head count has not yet been translated into graduation rates. The employment opportunities for paid firefighter/Paramedics are limited in the Ohio Valley and many students wish only to become volunteer firefighters. A total of 73 students earned state certification as Firefighters last year providing the community with a valuable resource. The firefighter degree is being completely redesigned for semester conversion. The new firefighter degree will be more focused on fire education and we are in the process of adding new courses to help students acquire the skills required in today's workforce. We are working to ensure that our fire courses will qualify for transfer as we redesign the courses to meet upcoming state guidelines. Additionally, students have cited difficulty completing the paramedic courses currently required as the stumbling block for degree completion. During the semester conversion process these courses will be removed and options for EMS education will be put in their place. These changes are also necessary to meet the credit hour requirements for the degree. We expect that graduation rates will slowly continue to rise as these changes are put in place and as the number of graduates catch up to increases in enrollment.

Conclusions based upon 2009 - 2010 Action Plan:

Program enrollment is up and improving. Since students must successfully complete state certification at the EMT Basic level before enrolling in a Paramedic program it may take time for the increase in program enrollment to manifest in graduation rates. We hope to see improvement for graduation and retention rates with the increased head count in the PFS program. Graduation and Retention data are confounded by the financial advantage to students enrolling as a degree-seeking student, when there is a strong likelihood that students will not complete a degree after they have completed state certification and found a position in the workforce or on their local fire department.

Recommendations for 2010 – 2011 Measurement Goals and Action Plans:

1. Clinical contracts will continue to be expanded to meet the needs of the students and additional opportunities will be designed to meet the upcoming state/national curriculum changes.
2. Plans to utilize and expand the Fire Board are underway.
3. Courses will be evaluated and brought on-line with state level. Changes include the expansion of classroom and clinical components, which may need to be put in place in 2011.
4. Reevaluation of entrance paperwork and requirements to facilitate curriculum changes and eliminate stumbling blocks for the students will be implemented.
5. Consider moving PCR/M students to the EMT program for monitoring since the new PFS degree will no longer include students seeking Paramedic certification. The degree will include entry level EMS courses but due to credit hour requirements will no longer hold the expanded Paramedic curriculum.
6. Evaluate our ability to provide Pro-Board firefighter certifications as the fire program is updated to reflect state changes to all fire courses.
7. Begin aligning fire courses to meet TAG approval.
8. Evaluate our ability to accept transfer for state certified firefighters who did not attend a traditional program. All chartered Ohio fire programs are required to use the same curriculum and students who earn state certification have met the same level of competency as those that complete our classes. Students often state the inability or difficulty of transferring their previous courses so that they can complete degrees as reasons for not seeking the degree.