

# Lake Washington Technical College Bachelor in Applied Technology Program Feasibility Study

## Report Summary

The report was prepared for Lake Washington Technical College [LWTC] in accordance with a Request for Proposals issued in April 2004. The RFP and the resultant work plan entailed both a determination of need and feasibility for a Bachelors of Applied Technology [B.A.T.] program and an estimate of the time required to perfect and establish such a program. The study was conducted over the course of the summer and autumn months of 2004.

It concludes that there is demonstrable need for a B.A.T. program at LWTC and that such a program is feasible and wanted in the institution's service area. The envisaged model also is appropriate and in full alignment with the College's mission.

The recommended program would lead to a Bachelor of Applied Technology degree built on the education that graduates of Associate of Applied Science or Applied Technology programs have with an "umbrella" of upper-division courses to prepare them for managerial and supervisory positions in commerce and industry. It not only would accommodate the A.A.S. preparation of students at LWTC but that of students at other technical colleges as well.

The upper-division component would comprise a structured sequence of courses addressing such matters as business statistics, economics, communications, finance, organization management, business operations, planning, personnel, safety and security, business law, ethics, risk management, cost estimating, quality assurance, and purchasing.

The same upper-division management program would apply to all associate degree technical programs regardless of the specific or particular lower-division major. Coursework would be balanced with real-life projects and interactions with business leaders. The program schedule would be designed around the needs of working adults.

The preferred B.A.T. program is intended to address a number of considerations:

- State interests in increasing capacity at the Bachelors level in high demand fields;

- Employers' needs for managers in high technology fields, improving the skill level of the work force, and making firms more competitive;
- Student needs for opportunities to advance their education qualifications by surmounting the "terminal degree" connotation of the A.A.S. degree, which impedes their access to a bachelor degree and better paying careers;
- The institution's need to attract high school graduates into high technology fields and high demand industries.

The program also would attract community partners and improve the associations and partnerships that well from those relationships, reducing the demand on state funding. Through such a program, LWTC could become fiscally stronger and more diversified as an institution and as a business model. Most of all, the program is essential to fulfilling the institution's mission "to prepare students for today's careers and tomorrow's opportunities"

The indications of need and evidence of support for the program in the community are strong. People at Lake Washington consider this particular form of B.A.T. program to be the right degree at the right place; they also believe that a pilot program can be started and up and brought to running speed quickly with little exposure to the state and without disruption of the existing high quality technical education the institution provides.

The three major categories of need – consumer, community, and institution -- are addressed with an overview of the demographic and economic characteristics of LWTC's service area, the contributions and relevance of other institutions and programs, and summaries of the qualitative and quantitative survey research involving institution staff, faculty, students, local employers, and community residents that was conducted as part of the study.

The major findings of the employer survey include the following:

- Half of the responding employers reported that a bachelor's degree was the preferred credential for new supervisory and managerial staff.
- Management and specific occupation preparation constituted the preferred majors.
- Most (64%) direct their main recruitment efforts to the East Lake Washington and Puget Sound regions.
- Half reported there are unmet needs for a bachelor's program such as the one described in the questionnaire (lower division occupational specialization/upper-division management)

- More than half (58%) felt such a program should be offered at LWTC.
- Most also believed the quality of such a program at LWTC would be sufficient to their needs.
- Nearly half indicated their company would be likely to offer incentives to employees attending such a program.
- Nearly two-thirds agreed that the presence of such a program at LWTC would make the community a better place to live and work.
- A similar portion believed that such a program would help attract new firms and retain those already there.
- Similarly, 62% reported that such a program at LWTC would help their staffing and recruitment efforts.

Although the employer responses regarding the envisioned program were favorable, responses from members of the communities directly served by LWTC were even more so.

- Ninety-one percent felt there are unmet needs in the community for a bachelor's program such as the one envisioned by LWTC.
- Sixty-one percent believe the absence of such a program creates problems for them with respect to their education needs.
- Eighty-nine percent felt such a program should be offered by LWTC.
- More than half believe it should be offered by LWTC alone; 38% believed it should be provided collaboratively with another institution.
- Eighty-five percent reported they would be comfortable with the quality of such a program.
- Sixty-one percent believed there are unmet needs for still other types of bachelor programs in the community as well.
- Sixty-five percent considered it very likely or likely that they or a member of their household would enroll in such a program if offered.
- Eighty-seven percent either agreed or tended to agree with the statement that such a program at LWTC would make the community a better place to live and work.
- Two-thirds felt that present higher education programs and services in the area were not adequately meeting employer, student, and community needs for bachelor degree programs.

Bachelors programs in community and technical colleges are increasing in number throughout the country. According to one recent estimate between as many as 200 community colleges either offer or provide access to a bachelors-degree program. Two basic models have formed. One involves collaboration between two- and four-year institutions [“university centers”]; the other involves indigenous community/technical college baccalaureate degrees [C/TCBs].

The appearance of these programs relates mainly to the needs of place-bound students, people who experience restricted mobility because of a family, a home, or a job. They also may be community college students whose lower-division technical program credits do not transfer in substantial share to an upper-division university program; who discover that the upper-division programs offered by the university do not align with their technical career aspirations; who cannot get in because the queue for admission to the university program is too long and there is no room at the top; or who encounter obstacles because of scheduling, price, or travel.

The different cultures and the educational experiences available in the two types of institutions also are a consideration. Universities tend to cater to full-time students between the ages of 18 and 22 who want an on-campus academic program experience; community and technical colleges specialize in services to part-time students, including single and working parents and older students. Many are pursuing programs that emphasize work skills over theoretical knowledge. Although the graduates of both types of institution may have similar career and professional plans, it can be more difficult for the technical college graduate to make the transition from the technical to the professional ranks in the workplace because of the difficulties of acquiring the relevant upper-division, baccalaureate program credentials. Whatever the reason, the effects are the same: the aspiring student is stuck, or, more conventionally, place-bound.

A number of internal and external factors are converging to affect higher education in many ways. Community/technical colleges are reacting to these forces by revisiting campus missions, visions, and organizational priorities. It is in this context that community/technical college bachelor degrees are capturing the attention of higher education policymakers, college faculty, and administrators alike. Such changes have been underway for at least the last ten years, and they are occurring in all regions of the country.

The concerns about mission drift such endeavors seem to prompt probably are more routed in the clichés about duplication and competition than the needs of local employers and the aspirations of students. If community college baccalaureate programs are addressing previously unmet needs, in this case baccalaureate opportunities for local residents and the workforce requirements of local employers, and they are not detracting

from public institutions with established programs, it is difficult to understand how a charge of mission drift should apply.

Lake Washington Technical College is particularly suited to provide well-qualified bachelor's degree graduates in high demand technical-management fields. The anticipated LWTC BAT/Technology Management program is intended to prepare students to:

- Utilize technology from a variety of disciplines to assume managerial level positions;
- Use entrepreneurial skills to develop and manage resources;
- Supervise and manage the financial operations of a business;
- Apply human relation skills, as well as team-building, and motivational skills to create high-performing work teams;
- Use project and quality management strategies to manage specialized technology projects;
- Apply oral and written communication skills and leverage technology to enhance communications;
- Manage a business or a business unit within legal and ethical boundaries;
- Employ creative and critical thinking to problem solving in a service or manufacturing environment;
- Utilize personal and business interactions within the organization to enhance the quality the product;
- Employ sound organizational behavior principles;
- Use appropriate electronic commerce strategies to increase profitability of the enterprise or business unit; and
- Exhibit analytical thought, informed judgment, ethical behavior, and an appreciation for diversity.

The report reviews expected costs and implementation stages and determines that both are manageable, and it concludes that such a program is feasible and needed. Thus it recommends that LWTC be encouraged and authorized to proceed with program development and implementation.