The Economic Benefits of Pre-baccalaureate College: What Can We Learn from W. Norton Grubb?

The NCTN Research to Practice Briefs are designed to disseminate emerging college transition research from a variety of sources in a user-friendly format.

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Introduction

Postsecondary education offers a variety of important benefits for the adult student, but higher income or earning power is not always one of them. Professor W. Norton Grubb, of the University of California at Berkeley, has focused on the economic benefits of community college education by examining research data sets at the national, state, and local levels. This Research to Practice Brief summarizes some of the key points of his investigation, information that may be especially helpful for counselors in their work with adult students considering college.

There are two important considerations to keep in mind in looking at the trends discussed here. First, this analysis adopts a nationwide perspective that smoothes out variations and contradictions from study to study, college to college, and state to state. Second, the analysis does not take into account whether the students begin with a high school diploma, GED, or other type of non-traditional diploma (Tyler, 2002).

What is pre-baccalaureate education?

The term pre-baccalaureate education refers to a wide variety of educational experiences, from as little as one college-level course to the completion of an associate degree program. The economic returns to pre-baccalaureate education depend heavily on the number of courses completed, and whether or not a credential such as a certificate or degree is actually earned. For example, an adult student might decide to pursue an associate degree in a high-growth occupation such as computer support specialist, legal assistant, medical records technician, or physical therapist. While he or she will learn many new skills in each of the courses taken in pursuit of that degree, Grubb has found that the student will realize an economic benefit only if he or she actually completes the program and receives a diploma. Students who do not complete find they have spent time and money without getting the benefits of increased earnings. Accordingly, it is useful to classify pre-baccalaureate educational attainment into three categories:

- **Completion of 12 credits or less.** This is a category used by many community colleges to divide “casual students” from “serious students,” yet many students never reach 12 credits. Twelve credits or less generally brings zero or insignificant economic returns (less than 5% increase in earnings), especially when students “mill around” and do not focus on a specific program of study. The benefits of completing a low number of credits tend to accrue to those students who chose courses closely tied to their immediate employment goals.

- **Certificates.** These are generally one-year programs recognized by the state that focus on occupational preparation without the academic or general-education content of the associate degree. Research on certificate programs is plagued by a lack of good data. The research that has been done has led to conflicting conclusions. “Given the apparent increase in these credentials, this [lack of research] is a potentially serious problem” (Grubb, 2002a, p. 306).

- **Associate degree.** This credential, which requires the average adult student more than five years to earn, does provide a statistically-significant economic return, with women standing to gain proportionally more than men. While not as helpful as a baccalaureate degree, an associate degree generally enhances wages, employment, and earnings by significant amounts with men earning 18% more and women earning 23% more than high school graduates” (Grubb, 2002a, p. 306). Another benefit of an associate degree is that it is an intermediate step toward a baccalaureate degree and its even greater economic benefit.

In so far as an academic degree is the connection to a baccalaureate degree, students do benefit if they transfer and complete a baccalaureate—a credential with well-known economic benefits. Students who do not complete find they have spent time and money without getting the benefits of increased earnings.

“The take-home message is: credential programs are better than non-credential programs; longer programs are better than shorter; and, students need to worry if certificates have any established LOCAL market value.” — W. Norton Grubb

What are the implications for the pre-baccalaureate job market?

Education is just part of the picture. To realize the full economic benefit of a credential, students must actually find a job in the field in which they trained. Students who complete a credential but end up in unrelated employment may experience little economic benefit from their education.

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Table 1. Understanding the Pre-baccalaureate Employment Market.
**LOCAL**
- Employers look locally to fill positions for occupations requiring less than a baccalaureate.
- Two-year colleges market to local employers.

**Benefits of pre-baccalaureate education are geographically bound— if students fail to find local employment in their field of study, moving to another location may not increase opportunities because employers hire from their own local programs.**

**INFORMAL**
- Hiring is highly informal with specific experience often preferred to formal schooling.
- Preparation in military, on the job, and through hobbies may be as valuable as formal schooling.

**Formal schooling is less likely to be an absolute requirement. Resumes should reflect the student’s full range of experience related to type of skills required by a particular job.**

**LESS STABLE**
- More likely to undergo cycles of unemployment than jobs requiring baccalaureate level schooling but more stable than those requiring only a high school diploma.
- Employers are more likely to lay off less-educated workers or those without company-specific training.

**Investigation of an occupational field should include job stability and patterns of unemployment along with availability of work. Once in the job, students should take advantage of opportunities in which the employer invests in training.**


**How do the economic benefits differ by race, age, and gender?**

**Race.** The few relevant studies that have been done show that attending community college, whether or not an associate degree program is completed, confers a greater proportional economic benefit to African-Americans than to whites. Grubb notes, however, that African-American (and Latino) students are less likely to complete the associate degree, and “therefore the slightly higher returns for blacks are undermined by low completion rates” (Grubb, 2002a, p. 312).

**Age.** Older students (over age 30) tend to experience a decline in earnings prior to entering college. Once there, they see little economic benefit from basic or remedial education courses, or from course work in the humanities. Over time, however, these students appear to reap the same economic benefits as younger students. Displaced workers completing courses in the health-care, science, math, trades, and repair (e.g., air conditioning service) fields were found to realize a substantial positive return on their education.

**Gender.** Grubb (2002a, p. 313) found that economic "returns are particularly high for associate degrees in health occupations, in technical fields for men, and in ‘other’ fields (like communications and design) for women; the returns are negative though insignificant for agriculture, marketing (i.e., retail sales), and education for men.” Gender segregation is high in this sector of postsecondary education with some interesting results. Women pursuing a certificate in business may end up in lower paying positions, such as data-entry clerk or secretary, while women who earn an associate degree in business see positive economic returns. Also, women may find that they reap greater economic benefit by moving into non-traditional occupations (e.g., engineering and computer fields) rather than more traditional occupations, such as education.

**What Can Transition Counselors Do?**

While there are many benefits to postsecondary education (such as personal satisfaction and growth, increased health and well-being, etc.), the vast majority of students see postsecondary education primarily as a way to find a higher-paying job. Unfortunately, counselors and teachers in transition programs find that personal and academic counseling, rather than career counseling, consumes most of their time. Dr. Grubb’s work points out, however, that careful career planning, counseling, and an understanding of how different pre-baccalaureate programs are connected with local employers can all have a significant positive long-term impact on the student’s economic well-being. To make their career counseling more effective, transition counselors can pursue the following strategies:

**Research the local market value of various college programs and credentials (especially certificates).** Likely resources include the local college’s Career Services Office, faculty or staff members who are coordinating specific occupational programs, career workshops at local Economic Opportunity Center, and State Gateway to Career.
**OneStop** services.

- **Develop career exploration activities** that require students to create a detailed analysis of career pathways of interest to them.

- **Feature guest speakers**, especially graduates from local community college occupational programs who have gone on to obtain employment.

- **Familiarize students with online career resources.**

  “**Education in a community college is necessary but not sufficient for all this to pay off. The student needs to earn a credential, in the right occupational area, AND find related employment for all this to payoff.**”
  — W. Norton Grubb

A Special Thank You: Dr. Grubb graciously gave of his time to help the NCTN condense his important investigation in pre-baccalaureate education.

**Key Definitions**

**Human capital.** Assets that cannot be separated from the person who possesses them: knowledge, skills, health, etc. Like other forms of capital, human capital can be employed to generate income for the owner.

**Credential.** A document representing competency or completion of a specific course of study. High school diplomas, the baccalaureate degree, and various professional degrees are the most familiar and heavily-researched credentials.

**Disaggregate the data.** Separate a set of information into its component parts. For example, Grubb notes that by looking closely at the actual fields of study that students choose, we see that are some fields are more economically-beneficial for women than men.

**Academic credits.** College credits not exclusively connected to a vocational pathway but rather designed to transfer to four-year institutions. In general, they tend to correspond to credits earned during the first two years of a four-year baccalaureate degree.

**References**

