How College Affects Students: Lessons Learned from Recent Evidence

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Since at least the early 1960s with the publication of *The American College* (Sanford, 1962), higher education has occupied a distinct and well-defined area of research within the social and behavioral sciences. We have benefited from several comprehensive syntheses.

1. **THE PROJECT**

**Up to the 1960s**
- Sanford (1962): *The American College*
- Feldman & Newcomb (1969): *The Impact of College on Students*

**1970s, 1980s**

**1990s**
- Pascarella & Terenzini (2005): *How College Affects Students, Vol 2*
1. THE PROJECT: WHY & WHAT

To build on the legacy of Pascarella & Terenzini (1991, 2005):

- Covered evidence from 1967 to 2001
- Together, cited over 9500 times
- Each reviewed 2500+ studies

To update the field on recent evidence: 2002-2013

- Reviewed and synthesized over 1800 rigorous empirical works
- Organized across eight outcome categories:
  - Development of Verbal, Quantitative, and Subject Matter Competence
  - Cognitive Development
  - Psychological Change
  - Attitudes & Values
  - Moral Development
  - Educational Attainment & Persistence
  - Quality of Life After College
  - Career & Economic Impacts
For each outcome category, literature was examined in relation to the following six research questions:

1. **Q1: Change During College**
   - What evidence is there that individuals change during the time they are attending college?

2. **Q2: Net Effects of College**
   - What evidence is there that change or development during college is the result of college attendance rather than maturation?

3. **Q3: Between-College Effects**
   - Does attending different kinds of institutions have a differential influence on student change and development?

4. **Q4: Within-College Effects**
   - Does engaging in different experiences affect student change and development during college?

5. **Q5: Conditional Effects**
   - Does the college experience produce conditional, as opposed to general, effects on student change or development?

6. **Q6: Long-Term Effects**
   - Are there long-term effects of college?
How College Affects Students implies causality. But, causal research is rarely achieved. Stronger designs were favored over weaker designs, strengthening the validity of findings.

**1. THE PROJECT: METHODS**

**Design over Analysis**
- Experimental and quasi-experimental designs
- **Multi-institution** vs. single-institution samples
- **Longitudinal** vs. cross-sectional designs
- **Objective measures** vs. self-reports

**A Series of Trade-offs**
- Greater internal validity reduces external validity
- Enhanced rigor often results in smaller sample sizes
2. KEY FINDINGS: ECONOMIC EFFECTS

- Does a College Degree Matter for Future Earnings?
- Do Majors Matter?
- Do Institutions Matter?
- What about Gender?
Does College Matter for Future Earnings?

2. KEY FINDINGS: ECONOMIC EFFECTS

Per Year of College
- AA/VOC Degree: 3-7%
- BA/BS Degree: 15-27%
- GRAD Degree: Substantial Variation by Degree

Return on Investment for Bachelor’s Degree
- 15-20%
- PUBLIC INST
- PRIVATE INST
2. KEY FINDINGS: ECONOMIC EFFECTS

Do Majors Matter?
- Engineering: 40-50%
- Business: 30-36%
- Math: 28-46%
- Health Sciences: 25-56%
- Social Sciences: 8-20%
- Health: 25-56%
- Social Sciences: 8-20%
- Business: 30-36%

Do Institutions Matter?
- Barron’s Index Highest vs. Lowest Categories: 13-20%
2. KEY FINDINGS: ECONOMIC EFFECTS

- **Per Year of College (Female > Male)**: 9-25%
- **BA/BS**
  - **Degree Attainment (Female > Male)**: 45%
- **GRAD**: 5-10%
- **Science**
  - **Major Field of Study (Female > Male)**: 17-33%
  - **Philosophy Engineering**: 25%
- **Social Sciences**: 6%
- **Business**: 9%
- **Major Field of Study (Male > Female)**: 6-13%

What about Gender?
2. KEY FINDINGS

- Confirming Previous Findings
- Adding Nuance
- New and Surprising Results
2. KEY FINDINGS – CONFIRMING PREVIOUS FINDINGS

• Overall positive impact of college
  - Learning and cognition
  - Attitudes and values
  - Moral reasoning
  - Economic and career outcomes
  - Physical health
  - Intergenerational effects

• Impact of attending college and participating in experiences versus choosing a college

• Role of some college experiences (e.g., undergraduate major)
2. KEY FINDINGS – ADDING NUANCE

- Broad effects of good teaching and diversity experiences
- Nature of effective peer and faculty interactions
- Types of financial aid
- Link between achievement and persistence
2. KEY FINDINGS – NEW AND SURPRISING RESULTS

- On-campus residence
- Online coursework and degree programs
- Programmatic retention efforts
- Religious/spiritual engagement
- Institutional expenditures
3. IMPLICATIONS: FOR PRACTICE

Empowering the message: Higher Education works.

Educating the educators

Channeling resources toward instruction, less toward administration

Diversifying without diversity in organization, instruction, and education?
3. IMPLICATIONS: FOR PRACTICE

- Recasting learning potential of residential education, as living-in has smaller influence than ever before
- Expanding the reach of curricular innovations, like Honors Colleges, to those that stand to benefit the most, including first-generation students and those from lower family economic narratives
- Unleashing the quantitative reasoner
- Emphasizing the role of career services in helping students make strategic decisions about major and employment
3. IMPLICATIONS: FOR PRACTICE

- Adopting a comprehensive retention strategy including Student Affairs
- Reframing the potential for peer engagement as networking opportunities
- Using data to evaluate, expand, eliminate
- Framing solution-building through the use of equity-mindedness makes room for innovative practice
Q & A

What about the findings/implications resonated with you?

What would you like to learn more about?

What will you do differently as a result of the findings?