

Increasing Students' Intrinsic Motivation to Learn



EMPIRICAL EVIDENCE FROM A NATIONAL STUDY

**MARK SALISBURY, AUGUSTANA COLLEGE
CHARLIE BLAICH, WABASH COLLEGE
CHAD LOES, MOUNT MERCY UNIVERSITY**

Motivation and College Students



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 - I breathe because I love to experience life!
 - ✦ It feels good to learn stuff
 - I breathe because I get good things when I breathe!
 - ✦ If I learn a lot I'll be rich and famous
 - I breathe because it hurts when I don't!
 - ✦ If I don't learn, my parents will kill me

Motivation and College Students



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 - ✦ The kids these days . . .

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 - Students' lack of motivation seems a constant faculty complaint
 - ✦ The kids these days . . .
 - Among Wabash National Study students, academic motivation scale scores dropped substantially in the first year and never recovered
 - ✦ Worst performance of any outcome measured by WNS

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Motivation, College Students, and Learning



- Many argue that a fundamental goal of higher education is to instill a desire to **learn for learning's sake** (ACE, 2011)
- This suggests instilling or increasing a certain type of motivation
 - Not all motivations are created equal

Not All Motivation is Create Equal



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 - I learn something because I am interested in it
- **Extrinsic motivation (performance)**
 - I learn something because I can achieve a reward for it
- **Apersonal motivation (failure-avoidance)**
 - I learn something because bad things will happen if I don't

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- **Motivation scholars suggest an integration of extrinsic motivation within an intrinsic framework**

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- But the bulk of studies tend to focus on motivation as a predictor of achievement
- Our focus here is to investigate the factors that impact change in intrinsic and extrinsic motivation

So What Do We Want to Know?



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 - Data analyzed comes from the 2006 cohort of the Wabash National Study of Liberal Arts Education
 - ✦ 2,980 first year students from 19 institutions
 - ✦ Data gathered at beginning and end of first year
 - ✦ Institutional and self-reported data
 - ✦ With pretest and post-test items, we can begin to examine factors that might influence change over time

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 - A parallel pretest
 - Pre-college demographic traits
 - Pre-college values correlated with learning epistemologies
 - Institutional differences
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- **The two dependent variables were:**
 - (5-point likert scale response set - strongly disagree to strong agree)
 - “I am willing to work hard in a course to learn the material even if it will not lead to a higher grade.” (Intrinsic Motivation)
 - “Getting the best grades I can is very important to me.” (Extrinsic Motivation)

What Did We Find Out?



- On average, our measure of intrinsic motivation dropped significantly during the first year
 - Fall – 3.87 . . . Spring – 3.60
- On average, our measure of extrinsic motivation did not change significantly during the first year
 - Fall – 4.31 . . . Spring – 4.26
- However, our regression equation revealed multiple positive and negative predictors of change

Table 1. The Effect of Educational Good Practices on Change in Two Motivational Orientations during the First Year (N=2980).

| Independent Variables | Intrinsic Motivation | | Extrinsic Motivation | |
|--|----------------------|------|----------------------|------|
| | Coef. | S.E. | Coef. | S.E. |
| Parallel Pretest | .335*** | .018 | .468*** | .018 |
| Race (white=1) | -.032 | .044 | -.021 | .037 |
| Sex (male=1) | -.059** | .035 | -.052*** | .030 |
| Parents' education | .015 | .008 | -.008 | .007 |
| Socioeconomic status (Pell Grant=1) | .006 | .048 | -.017 | .041 |
| Intends to earn more than a four year degree | -.021 | .043 | .020 | .036 |
| ACT Score | .027 | .005 | .036 | .004 |
| Regional university (compared to a liberal arts college) | .001 | .047 | .045** | .039 |
| Research university (compared to a liberal arts college) | -.038* | .043 | .042* | .036 |
| Community college (compared to a liberal arts college) | .010 | .090 | .033* | .075 |
| Importance of getting good grades in fall of first year | -.035* | .021 | see parallel pretest | |
| Willingness to work hard in a course regardless of grade in fall of first year | see parallel pretest | | -.050*** | .015 |
| Politically conservative views | -.050** | .019 | .057*** | .016 |
| Importance of personal/professional success | -.016 | .027 | .095*** | .022 |
| Positive peer interactions | -.034* | .025 | .001 | .021 |
| Hours spent involved in extracurricular activities | -.039* | .017 | .003 | .015 |
| Cooperative learning experiences | .001 | .027 | -.014 | .022 |
| Diverse interactions | .053** | .033 | -.047** | .028 |
| Faculty interest in teaching and student development | -.002 | .030 | -.012 | .025 |
| Frequency of higher-order exams and assignments | -.024 | .028 | -.049** | .024 |
| Faculty in class expectations of students | -.025 | .031 | -.014 | .026 |
| Frequency of feedback | .035 | .026 | .018 | .021 |
| Integrative learning experiences | .113*** | .041 | -.035 | .035 |
| Academic challenge and effort | .157*** | .043 | .182*** | .036 |
| Quality of student-faculty interactions | .093*** | .027 | .084*** | .022 |
| Instructional organization and clarity | .086*** | .032 | .088*** | .027 |
| R-squared | .302 | | .392 | |

What Does This Mean?



... hmmm ...

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- **We need to know more about how experiences impact various types of students differently**
- **We need to alter the factors that produce differences across institutional contexts**