Mentorship: Competitive Advantage in a Global Marketplace

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Mentorship: Competitive Advantage in a Global Marketplace

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SOTL Commons Conference
Savannah, Georgia

March 28, 2013
11:00–11:45 am
Room 115
Georgia College is the state’s designated Public Liberal Arts institution…

- located close to the geographical center of the state in Milledgeville
- liberal arts mission – focuses on a broadly based education
- student population: 6,444; undergraduates: 5,568
- demographics (Fall 2010)
  - SAT–1156; ACT–24.19
  - 60.2% – female; 85.2% – Caucasian
  - residents of Atlanta
  - growing population of international students
  - 319 fulltime faculty; 75% with a terminal degree
  - student to faculty ratio is 16:1

- concerned about
  - student retention, achievement and long-term post-baccalaureate success
  - Quality Enhancement Plan 2014-18: building a culture of engaged learning
  - the rapidly shifting context of higher education to online courseware
“The strength of the American economy is inextricably linked to the strength of America’s education system. Now more than ever, the American economy needs a workforce that is skilled, adaptable, creative, and equipped for success in the global marketplace”

(Whitehouse.gov 2012)
• aware of the role of pedigree (Payscale.com Study, 2010)

• pedigree may open the doors to a job but requisite skills help students keep jobs or design their own careers...

**The Elite College Bonus**

![Bar chart showing differences in wage premiums for graduates from different types of institutions]

This chart compares the earnings of students who graduated high school in 1982, then attended a four-year college. The wage premium for students six years out of school from each category of college is compared to alums of bottom-ranked public institutions.
Students, Employers at Odds; A College Degree Sorts Job Applicants, but Employers Wish It Meant More.

Survey Results

- fresh hires have the right technical know-how for the job
- colleges are not adequately preparing students
- job to job mobility is high; on the job training does not make economic sense
- expecting business to bring graduates up to speed is asking too much
- workforce preparation passed to higher ed

Higher Education

- higher education is meant to educate broadly, not train narrowly
- college graduates generally make better employees than high school graduates
- faculty members snob any instruction perceived as vocational

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Employers Prefer Experience Over Academic Record

<table>
<thead>
<tr>
<th>Category</th>
<th>Experience (%)</th>
<th>Academics (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science/technology</td>
<td>50%</td>
<td>19%</td>
</tr>
<tr>
<td>Service/retail</td>
<td>49%</td>
<td>14%</td>
</tr>
<tr>
<td>Media/communications</td>
<td>48%</td>
<td>20%</td>
</tr>
<tr>
<td>Government/nonprofit</td>
<td>47%</td>
<td>21%</td>
</tr>
<tr>
<td>Business</td>
<td>40%</td>
<td>23%</td>
</tr>
<tr>
<td>Health care</td>
<td>38%</td>
<td>30%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>37%</td>
<td>24%</td>
</tr>
<tr>
<td>Education</td>
<td>36%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Note: The original data included a category labeled “neutral.” It has been eliminated to focus on experience and academic considerations. As a result, the numbers do not add up to 100%.
Colleges are not adequately preparing students in

- written and oral communication skills
- decision-making skills
- analytical and research skills

"Here’s where you’ll work! I know it’s confusing, however we will provide paid training for you."

## Top Ten Things Employers Look for in New College Graduates

1. ability to work well with people different from yourself **[INCLUSIVE/TEAM PLAYER]**
2. understanding of science and math and use in real-world settings **[STEM-articulate]**
3. ability to write and speak well **[COMMUNICATOR]**
4. ability to think clearly about complex problems **[LOGICAL]**
5. ability to analyze a problem to develop workable solutions **[CRITICAL THINKER]**
6. understanding of global context in which work is now done **[GLOBALLY ADAPTABLE]**
7. ability to be creative and innovative in solving problems **[CREATIVE]**
8. ability to apply knowledge and skills in new settings **[TRANSFERABLE]**
9. ability to understand numbers and statistics **[REASON]**
10. strong sense of ethics and integrity **[ETHICAL, SELF-RELIANT]**

What Employers Want from College Graduates

- 100% - positive attitudes
- 100% - ability to work in diverse teams
- 98% - strong communication skills
- 91% - 1-2 internships by graduation
- 87% - internships > 3 months
- 50% - leadership positions in campus organizations

http://millennialbranding.com/case-studies/experience-study/
Bridging the Gap

What employers want

- ability to work well with people different from yourself
- understanding of science and technology and how these subjects are used in real-world settings
- ability to write and speak well
- ability to think clearly about complex problems
- ability to analyze a problem to develop workable solutions
- understanding of global context in which work is now done
- ability to be creative and innovative in solving problems
- ability to apply knowledge and skills in new settings
- ability to understand numbers and statistics
- strong sense of ethics and integrity

Outcomes of undergraduate research

- seeing oneself as part of a team
- intellectual curiosity
- effective communication
- critical-thinking skills
- logic and analytical skills
- creativity, innovativeness and independent thought
- flexibility/adaptability and leadership skills
- reasoning skills and skepticism
- strong ethical practices
- time management
- cooperation
- accepting criticism
- self-confidence
- stress management

Bauer & Bennett, 2003; Hathaway, Nagda, & Gregerman, 2002; Lei & Chuang, 2009; Mabrouk, 2009; Lorenz, 2009; Russell, Hancock & McCullough, 2007
Bored Brenda

You notice a super talented student in an introduction class for your field. She is brilliant (much smarter than the other students that you are used to in your field). You ask her to come by and discuss her academic/career planning options during office hours. When she does, you discover that she is a sophomore has only a 3.1 GPA when she clearly should be a 3.8-4.0. You surmise that she is clearly bored in her classes and therefore not doing well because she is not being challenged.

What is your course of action as her mentor?
Think-Pair-Share
The **Mentoring Third Space Model**

“As a result of blurring boundaries between activities, what might be described as third space has emerged between professional and academic domains” (Whitchurch 2008).

The *mentoring third space* is the location where the mentee and mentor become partners. This third space is the *place where the integration of knowledge moves the undergraduate into the community of practice where the academic and professional dispositions are attained.*
Mentoring: Bridging the Gap

The **Mentoring Third Space** builds a strong foundation of confidence and knowledge.

Mentorship leads to expanding employee toolbelts including leadership, research abilities and communication skills.

Mentorship finishes an undergraduates’ collegiate career with professional skills acquired as a result of faculty-student research collaborations.
MISSION STATEMENT OF SUCCESSFUL UNDERGRADUATE RESEARCH AT GEORGIA COLLEGE

The GC Undergraduate Research Initiative Committee crafted this mission statement at COPLAC in 2011.

Georgia College aspires to graduate students with creative and problem-solving dispositions that prepare them to be the next leaders of the free world. As the state’s designated public liberal arts university, Georgia College connects teaching excellence with learning beyond the classroom to provide unique undergraduate research experiences for students. A small student to faculty ratio coupled with student-centered faculty provides a platform for a faculty mentor to engage student scholars in inquiry investigations that make an original intellectual or creative contribution to the discipline.

A Road Map towards Institutionalizing URACE

- institutionalizing undergraduate research initiative
- islands of undergraduate research excellence across campus to continent of research distinction
- faculty professional development activities: symposia, mini-grants, teaching circles
The Mentoring Undergraduate Research Teaching Circle (2011-2013)

http://undergraduateresearchmentoring.blogspot.com

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Director, Science Education Center
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Teaching Circle

**Teaching Circle Goal:**
To enrich both student and faculty experiences in undergraduate research (UR) by exploring and applying best-practices for effective faculty-student mentoring.

**learned:**
Peers, common text: Effective Faculty Mentoring

**sought:**
External expertise
UR Symposium
USG Conference
Leading UR Workshop

**created:**
New intellectual spaces, knowledge

**shared:**
Mentoring samples, challenges, solutions

**better mentors to all**

**Mentoring Network**
- Peer mentors
- UR Ambassadors
- UR Advocates
- Empowerment
- Diversity = Strength

**Resources**
- Mentoring Handbook
- Scholarship
- Blog: UR mentoring
- Professional Development

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Undergraduate Research Initiative at Georgia College
Mentoring Workshops

- COPLAC 2012

- URACE Symposium 2013
Definition of Mentorship

• Mentoring of undergraduate research is defined as *undergraduate student engagement in authentic research conducted under the direct supervision of faculty researchers*.

• Although there are many undergraduate research faculty mentors, not all faculty mentor in the same way(s) due to the nature of their circumstances, workload, the mentees circumstances, discipline, etc.

• “A mentor is a person who oversees the career and development of another person, usually junior, through teaching, counseling, providing psychological support, protecting, and at times promoting or sponsoring.” (Zey, 1984).
The Mentoring Experience: Forms of Mentoring

Redmond (1990) asserts the mentor/protégé relationship can be used as an effective tool in universities to retain, motivate, and even graduate students.

One-to-One (Traditional) Mentoring
Mentor and Mentee pairings are not from the same age group; the assumption is the mentor will be able to share their career experience and insight to teach the mentees professionalism outside the classroom.

Peer-to-Peer
Mentors and Mentees are from the same age group or demographic; the assumption is psychosocial mentoring; is easier with a peer than with a faculty member.
The Mentoring Experience: Forms of Mentoring

Cross-Age Peer Mentorship
Mentors and Mentees are from the same age group or demographic—but there is a slight difference in age; in the collegiate setting, this would be the equivalent of pairing seniors and freshmen. The assumption is psychosocial mentoring is easier with a peer than with a faculty member, yet there is still some more respect than with regular peer to peer mentorship.

One-to-Many (Group) Mentoring
Group mentoring is an alternative for faculty who have large groups of students that are similarly situated and have similar needs. In small colleges with limited resources, this is a good option for maintaining a healthy third space while managing workload.
• **Globally Competitive**
  • graduates demonstrate research skills specific to their field
  • graduates demonstrate cultural sensitivity and the ability to work in diverse teams and situations
  • graduates demonstrate superior knowledge and communication skills in their fields due to internships/ co-ops and mentorships

• **Globally Competent**
  • GC2Y core course engage incoming freshman in global issues; integrate critical thinking, decision-making, diversity
  • GC2Y is an example of a global overlay course
  • Georgia College requires three global overlays unlike many universities
- no definition of mentoring
- no identification of the specific characteristics that exemplify good mentoring
- no responsibilities by mentors
- no measures of mentoring
to optimize a low-cost, low-tech pedagogy
anticipate a large ROI based on preliminary results of a pilot study
Mentoring Experience

• Students’ Perspective
• **Methods**
  • Mixed-methods study
  • An adaptive in-depth phenomenological interviewing technique (three step in a series) was used (Seidman 2006)

• **Measurements**
  • Two surveys
    – *Intake* - self-report online survey upon data to build an informed conversation in the second step of the process (interview)
    – *Exit* - self-report online survey measuring self-efficacy
  • In-depth interviews
    • Answering the why
Quantitative Measurements

- Two surveys
  - Survey #1:
    - 23 Intake Questions - self-report online collecting data to build an informed conversation in the second step of the process (interview)
  - Survey #2:
    - 27 Exit Questions – self-report online outcome data after the interview believed to created bias in interview process if collected before the interview
Sampling Technique

- Snowball
Qualitative Measurement

- **In-depth interviews (35 - 45 minutes)**
  - Exploratory in nature
  - Opening questions - respondent’s decision to engage in the mentoring process and development of a professional relationship with mentor
  - Transition questions - operational aspect of the mentorship relationship
  - Outcome questions - influence of the mentoring experience on graduate school and career decisions
  - Closing questions - key successes and value expectations of the experience
• **Gender**: of those completing study #1

  **Study 1**

  - Males: 38%
  - Females: 62%

• **Gender**: of those completing all three parts

  **Full Study**

  - Males: 39%
  - Females: 61%
<table>
<thead>
<tr>
<th>Major in College</th>
<th>Number of Respondents</th>
<th>Academic Status</th>
<th>Number of Respondents</th>
</tr>
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<tbody>
<tr>
<td>Accounting</td>
<td>1</td>
<td>Alumni</td>
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</tr>
<tr>
<td>Biology</td>
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<td>Senior</td>
<td>16</td>
</tr>
<tr>
<td>Chemistry</td>
<td>9</td>
<td>Junior</td>
<td>8</td>
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<tr>
<td>Criminal Justice</td>
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<td>5</td>
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<td>History</td>
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<td>Mass Communications</td>
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<tr>
<td>Math</td>
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<td>Political Science</td>
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<td>Psychology</td>
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<tr>
<td>Unreported</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>73</td>
<td></td>
<td></td>
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</table>
H$_{1a}$: Undergraduate research as a mentoring relationship adds value to the students’ degree within the third space by better preparing him or her for graduate school. (Supported - 87% agreed or totally agreed)
H₁b: Undergraduate research as a mentoring relationship adds value to the students’ degree within the third space by better preparing him or her for a career.

Mentoring Influenced Career Decision

- Yes: 38%
- No: 62%

“My Faculty Mentors played a huge role in answering personal, individual questions about my resume, unique school situations, and helping me make connections to be hired.”

“Good advice makes for a good career. And for that I am eternally grateful.”
**H₂**: The mentorship relationship between the mentor and mentee is expected to influence self-efficacy. **Supported.**

<table>
<thead>
<tr>
<th>Increase in Efficacy</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
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<tbody>
<tr>
<td>Increased Some</td>
<td>3</td>
<td>13.5</td>
<td>13.5</td>
<td>13.6</td>
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<tr>
<td>A Great Deal</td>
<td>15</td>
<td>68.0</td>
<td>68.0</td>
<td>81.8</td>
</tr>
<tr>
<td>Extensively</td>
<td>4</td>
<td>18.1</td>
<td>18.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
$H_3$: Mentees who present their research to aspirational or peer groups where feedback is given hold higher levels of self-efficacy than mentees who do not present to aspirational or peer groups. **(Findings Inconclusive)**

<table>
<thead>
<tr>
<th>Increase in Efficacy</th>
<th>Cross Tabulation</th>
<th>Presentation Made</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
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</tr>
<tr>
<td>Increased Some</td>
<td>% within Presentation</td>
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</tr>
<tr>
<td>Increased A Great Deal</td>
<td>% within Presentation</td>
<td>6</td>
</tr>
<tr>
<td>Increased Extensively</td>
<td>% within Presentation</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>% within Presentation</td>
<td>11</td>
</tr>
</tbody>
</table>

**Findings**
- Prepares undergraduates for graduate school
- Adds value by preparing undergraduates for careers
- Increases Efficacy Significantly
- Collect larger sample
Recommendations and Future Plans

- **Currently:**
  - collecting more data to...
  - developing a *Faculty Mentoring Handbook* (draft)

- **Plan:** to measure the *degree of effectiveness* of this pedagogy (Berk, Berg, Mortimer, Walton-Moss, & Yeo, 2005)
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