Academic Advising Delivery Models: Implications for First Year Student Outcomes

2014 NACADA Annual Conference
October 10, 2014 10:00 – 11:00 a.m.
Concurrent Session #141

Brett L. McFarlane, Ed.D.
Director of Academic Advising
Office of the Vice Provost and Dean for Undergraduate Education
University of California - Davis
Overview of Presentation

- Introduction
- Research Questions
- Methods
- Discussion of Findings
- Implications for Practice
Habley’s Organizational Models

- Faculty-Only
- Supplementary
- Split Advising
- Dual Advising
- Total Intake
- Satellite
- Self-Contained

Habley (1983)
Problems with Habley’s Organizational Models

• Dramatic change in the manner in which advising is delivered
• Previous models do not reflect institutional practice
• Research minimal on effectiveness of models
Miller’s Four Variables of Advising

Who is advised?

How responsibilities divided?

Who advises?

Where advising is done?

Miller (2012)
Changing Landscape of Advising

• Changes in who does advising: Fewer faculty, more professional advisors
• Changes in desired outcome of advising: Student learning
• Changes in the philosophy of advising: Integration across the curriculum
Changing Landscape of Advising

The consequences of these changes remain largely unexamined
Present Study

Is there a relationship between advising delivery variables and student outcomes?
Outcome #1: Satisfaction

Satisfaction with advising low

What students want and get does not match

Allen, Smith, & Muehleck (2012)
Astin, Green, & Korn (1987)
Astin (1993)
Keup & Stolzenberg (2004)
Low (2000)
Lyons (1991)
Nordquist (1993)

Allen & Smith (2008)
Satisfaction Matters

• Has been shown to predict retention (Schreiner, 2009)

• Has been tied with “time to degree” (Guillen, 2010)
Outcome #2: Advising Learning

- Through advising, students acquire the knowledge, skills, and values to be successful in college
Outcome #3: Retention

- The ultimate outcome
Research Questions

Is there a relationship between the various advising delivery variables and student satisfaction with advising, advising learning outcomes, and student retention?
Methods

• Oregon’s academic advising research collaborative
• Study institution
  • First year students
Measures

- *Inventory of Academic Advising Functions- Student Version* (Smith & Allen, 2006)
- Student demographic and enrollment data
- 2011 interviews with advising administrators from study institution
# Participants

<table>
<thead>
<tr>
<th></th>
<th>Sample</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>628</td>
<td>3624</td>
</tr>
<tr>
<td>Female</td>
<td>58%</td>
<td>47%</td>
</tr>
<tr>
<td>White</td>
<td>72%</td>
<td>70%</td>
</tr>
<tr>
<td>High School Mean GPA</td>
<td>3.65</td>
<td>3.51</td>
</tr>
<tr>
<td>Mean SAT Math</td>
<td>568</td>
<td>548</td>
</tr>
<tr>
<td>Mean SAT Verbal</td>
<td>552</td>
<td>528</td>
</tr>
</tbody>
</table>

Sample was from first-time freshmen at study institution who came directly from high school.
Data Analysis - ANCOVA

- Allows for control of variables (covariates) known to be related to satisfaction, learning, retention
ANCOVA Confounding Variables

*Satisfaction with Advising*
- Gender (male/female)
- Ethnicity (White/non-White)
- First-Generation (neither parent earned a bachelor’s degree)

*Advising Learning Outcomes*
- GPA
- Size of student’s major

*Retention*
- First-Generation
- Financial Need (eligible/not eligible for Pell grant)
- GPA
Research Question One

Is there a relationship between who advises first-year students and student satisfaction with advising, advising learning outcomes, and retention (first-year to second-year)?
Who Advises?

Professional Advisors: 75%

Faculty Advisor: 20%
What is Quality Academic Advising?

- Developmental Advising vs Prescriptive Advising
- Learning Centered Advising
- Quality academic advising
Quality Academic Advising

Integration

Shared Responsibility

Individuation

Referral

Information

Smith & Allen (2006)
Advising Functions: Integration

1. Advising that helps students connect their academic, career, and life goals *(Overall Connect)*

2. Advising that helps students choose among courses in the *major* that connect their academic, career, and life goals *(Major Connect)*

3. Advising that assists students in choosing among the various general education options that connect their academic, career, and life goals *(Gen Ed Connect)*
4. Advising that assists students with deciding what kind of degree to pursue (e.g., BS, BA) in order to connect their academic, career, and life goals (Degree Connect)

5. Advising that assists students with choosing out-of-class activities that connect their academic, career, and life goals (Out-of-Class Connect)
Advising Functions: Referral

6. When students need it, referral to campus resources that address academic problems *(Referral Academic)*

7. When students need it, referral to campus resources that address non-academic problems *(Referral Non-Academic)*
Advising Functions: Information

8. Assisting students with understanding how things work at their institution with regard to timelines, policies, and procedures (*How Things Work*)

9. Ability to give students accurate information about degree requirements (*Accurate Information*)
Advising Functions: Individuation

10. Taking into account students’ skills, abilities, and interests in helping them choose courses (Skills, Abilities, Interests)

11. Knowing the student as an individual (Know as Individual)
Advising Functions:
Shared Responsibility

12. Encouraging students to assume responsibility for their education by helping them develop planning, problem-solving, and decision-making skills *Shared Responsibility*
Measures of Satisfaction

12 advising functions measured by 6 point Likert-type scales

- How satisfied are you with the advising you receive on this function?
  1 = Not Satisfied       6 = Very Satisfied

Overall advising satisfaction measured by one item

- Overall I am satisfied with the academic advising I receive from *study institution*.
  1 = Strongly disagree   6 = Strongly agree
# Who Advises – Satisfaction

1 = Not Satisfied  
6 = Very Satisfied

<table>
<thead>
<tr>
<th>Advising Function</th>
<th>Professional Advisors</th>
<th>Faculty Advisors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>$M$ (SD)</td>
</tr>
<tr>
<td><strong>Overall Advising Satisfaction</strong></td>
<td>441</td>
<td>4.34 (1.33)</td>
</tr>
<tr>
<td><strong>Integration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overall Connect</strong></td>
<td>418</td>
<td>4.29 (1.30)</td>
</tr>
<tr>
<td><strong>Major Connect</strong></td>
<td>418</td>
<td>4.35 (1.28)</td>
</tr>
<tr>
<td><strong>Gen Ed Connect</strong></td>
<td>411</td>
<td>4.25 (1.29)</td>
</tr>
<tr>
<td><strong>Degree Connect</strong></td>
<td>406</td>
<td>4.24 (1.31)</td>
</tr>
<tr>
<td><strong>Out-of-Class Connect</strong></td>
<td>402</td>
<td>3.64 (1.43)</td>
</tr>
<tr>
<td><strong>Referral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Referral Academic</strong></td>
<td>397</td>
<td>4.17 (1.35)</td>
</tr>
<tr>
<td><strong>Referral Non-Academic</strong></td>
<td>391</td>
<td>4.00 (1.36)</td>
</tr>
<tr>
<td><strong>Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>How Things Work</strong></td>
<td>397</td>
<td>4.03 (1.36)</td>
</tr>
<tr>
<td><strong>Accurate Information</strong></td>
<td>402</td>
<td>4.57 (1.30)</td>
</tr>
<tr>
<td><strong>Individuation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skills, Abilities, Interests</strong></td>
<td>396</td>
<td>4.13 (1.35)</td>
</tr>
<tr>
<td><strong>Know as Individual</strong></td>
<td>396</td>
<td>3.78 (1.52)</td>
</tr>
<tr>
<td><strong>Shared Responsibility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shared Responsibility</strong></td>
<td>390</td>
<td>4.21 (1.29)</td>
</tr>
</tbody>
</table>
Cognitive Advising Learning Outcomes

- I know what requirements I must fulfill in order to earn my degree (*Knows Requirements*)
- When I have a problem, I know where at *name of institution* I can go to get help (*Knows Resources*)
- I understand how things work at *name of institution* (time lines, policies, and procedures) (*Understands How Things Work*)
- I understand how my academic choices at *name of institution* connect to my career and life goals (*Understands Connections*)
- I have a plan to achieve my educational goals (*Has Educational Plan*)

Smith & Allen (2014)
Affective Advising
Learning Outcomes

• I have had at least one relationship with a faculty or staff member at *name of institution* that has had a significant and positive influence on me (*Has Significant Relationship*)

• It is important to develop an advisee/advisor relationship with someone on campus (*Values Advisor/Advisee Relationship*)

• There should be mandatory academic advising for students (*Supports Mandatory Advising*)

Smith & Allen (2014)
Measures of Advising Learning Outcomes

8 advising learning outcomes measured by 6 point Likert-type scales

1 = Strongly Disagree  
6 = Strongly Agree
### Who Advises – Advising Learning

1 = Strongly Disagree  
6 = Strongly Agree

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Professional Faculty</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Knows Requirements</td>
<td>412</td>
<td>4.73 (1.14)</td>
</tr>
<tr>
<td>Knows Resources</td>
<td>410</td>
<td>4.32 (1.30)</td>
</tr>
<tr>
<td>Understands How Things Work</td>
<td>411</td>
<td>4.28 (1.18)</td>
</tr>
<tr>
<td>Understands Connections</td>
<td>407</td>
<td>5.02 (1.01)</td>
</tr>
<tr>
<td>Has Educational Plan</td>
<td>442</td>
<td>5.36 (0.85)</td>
</tr>
<tr>
<td>Has Significant Relationship</td>
<td>440</td>
<td>3.67 (1.53)</td>
</tr>
<tr>
<td>Values Advisor-Advisee Relationship</td>
<td>412</td>
<td>5.14 (1.03)</td>
</tr>
<tr>
<td>Supports Mandatory Advising</td>
<td>412</td>
<td>4.43 (1.44)</td>
</tr>
</tbody>
</table>
Who Advises: Retention

No difference between students advised by professional advisors and students advised by faculty
Who Advises: Summary of Results

• **Satisfaction**: Students advised by professional advisors (vs. faculty advisors)
  - More satisfied overall with advising
  - More satisfied on 7 of the 12 advising functions

• **Learning**: Students advised by professional advisors scored higher on 5 of the 8 learning outcomes

• **Retention**: No difference between the two groups
Research Question Two

Is there a relationship between where first-year students are advised and student satisfaction with advising, advising learning outcomes, and retention (first-year to second-year)?
Where advised?

- Advising Center Centralized by College: 26%
- Advising Center Centralized by School or Major: 49%
- Decentralized Individual Offices: 25%
Where Advised: Summary of Results

**Satisfaction**
- Major Connect (college more satisfied than decentralized)
- Gen Ed Connect (college more satisfied than major & decentralized)

**Learning**
- Has Educational Plan (major higher than decentralized)
- Values Advisor-Advisee Relationship (college higher than decentralized)

**Retention**
- No difference
Where Advised - Discussion

- Found few differences among the groups
- “Where” overlaps somewhat with “who”
Research Question Three

Is there a relationship between how frequently first-year students are required to see an advisor and student satisfaction with advising, advising learning outcomes, and retention (first-year to second year)?
Required Frequency of Advising?

- Once per Year: 68%
- Required Frequency
- Once per Term: 32%
Required Frequency of Advising – Summary of Results

Satisfaction:
• 1 of the 12 advising functions varied by required frequency with once per year group more satisfied than once per term group

Learning:
• 5 of 8 learning outcomes varied by required frequency with once per year group higher than once per term group

Retention:
• No differences
Required Frequency of Advising - Discussion
Research Question Four

Is there a relationship between how frequently first-year students actually see an advisor and student satisfaction with advising, advising learning outcomes, and retention (first-year to second year)?
Self-Report Frequency of Advising?

- Once per year or less: 12%
- More than once per year: 88%*

* Only 32% of students are required to see an advisor more than once per year.
## Self-Report Frequency – Satisfaction

1 = Not Satisfied  
6 = Very Satisfied

<table>
<thead>
<tr>
<th>Advising Function</th>
<th>More than once per year</th>
<th></th>
<th>Once per year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M (SD)</td>
<td>n</td>
<td>M (SD)</td>
</tr>
<tr>
<td><strong>Overall Advising Satisfaction</strong></td>
<td>515</td>
<td>4.36 (1.29)</td>
<td>67</td>
<td>3.22 (1.38)</td>
</tr>
<tr>
<td><strong>Integration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Connect</td>
<td>510</td>
<td>4.25 (1.29)</td>
<td>40</td>
<td>3.60 (1.55)</td>
</tr>
<tr>
<td>Major Connect</td>
<td>510</td>
<td>4.32 (1.25)</td>
<td>40</td>
<td>3.38 (1.50)</td>
</tr>
<tr>
<td>Gen Ed Connect</td>
<td>504</td>
<td>4.18 (1.31)</td>
<td>38</td>
<td>3.29 (1.39)</td>
</tr>
<tr>
<td>Degree Connect</td>
<td>493</td>
<td>4.18 (1.31)</td>
<td>40</td>
<td>3.63 (1.58)</td>
</tr>
<tr>
<td>Out-of-Class Connect</td>
<td>493</td>
<td>3.62 (1.41)</td>
<td>39</td>
<td>3.00 (1.49)</td>
</tr>
<tr>
<td><strong>Referral</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referral Academic</td>
<td>488</td>
<td>4.20 (1.34)</td>
<td>36</td>
<td>3.56 (1.42)</td>
</tr>
<tr>
<td>Referral Non-Academic</td>
<td>481</td>
<td>3.98 (1.33)</td>
<td>36</td>
<td>3.69 (1.55)</td>
</tr>
<tr>
<td><strong>Information</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How Things Work</td>
<td>487</td>
<td>4.00 (1.33)</td>
<td>36</td>
<td>3.36 (1.57)</td>
</tr>
<tr>
<td>Accurate Information</td>
<td>491</td>
<td>4.56 (1.30)</td>
<td>38</td>
<td>3.95 (1.58)</td>
</tr>
<tr>
<td><strong>Individuation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills, Abilities, Interests</td>
<td>484</td>
<td>4.09 (1.35)</td>
<td>37</td>
<td>3.35 (1.38)</td>
</tr>
<tr>
<td>Know as Individual</td>
<td>486</td>
<td>3.78 (1.51)</td>
<td>36</td>
<td>2.64 (1.44)</td>
</tr>
<tr>
<td><strong>Shared Responsibility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Responsibility</td>
<td>478</td>
<td>4.18 (1.28)</td>
<td>37</td>
<td>3.49 (1.45)</td>
</tr>
</tbody>
</table>
# Self-Report Frequency – Learning Outcomes

1 = Strongly Disagree  
6 = Strongly Agree

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>More than once per year</th>
<th>Once per year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Knows Requirements</td>
<td>483</td>
<td>4.77 (1.14)</td>
</tr>
<tr>
<td>Knows Resources</td>
<td>482</td>
<td>4.37 (1.21)</td>
</tr>
<tr>
<td>Understands How Things Work</td>
<td>482</td>
<td>4.29 (1.17)</td>
</tr>
<tr>
<td>Understands Connections</td>
<td>477</td>
<td>4.98 (1.00)</td>
</tr>
<tr>
<td>Has Educational Plan</td>
<td>515</td>
<td>5.31 (0.89)</td>
</tr>
<tr>
<td>Has Significant Relationship</td>
<td>514</td>
<td>3.77 (1.50)</td>
</tr>
<tr>
<td>Values Advisor-Advisee Relationship</td>
<td>485</td>
<td>5.12 (1.03)</td>
</tr>
<tr>
<td>Supports Mandatory Advising</td>
<td>484</td>
<td>4.47 (1.42)</td>
</tr>
</tbody>
</table>
Self-Report Frequency: Summary of Results

**Satisfaction**
- Students who reported getting advising more than once per year (vs. once per year or less) were
  - more satisfied overall with advising
  - more satisfied on 11 of 12 advising functions

**Learning**
- Students who reported getting advising more than once per year scored higher on 7 of 8 learning outcomes

**Retention**
- No difference between the two groups
Limitations

- Design was not experimental
  - Students self-selected into survey
- Used self-report data
- Longitudinal only in relation to retention
- Single institution with a mandated advising structure
Implications: “Who” Advises Matters

• First year students are more satisfied and learn more with advising delivery models that rely on professional advisors rather than faculty.
• But it is not always possible for professional advisors to advise all first year students.
• So how can we improve advising of first year students?
Implications: “Who” Advises Matters

• Be strategic with which faculty advise first year students
• Implement a uniform first year student advising syllabus across all academic areas
• Provide all advisors (faculty and professional) with knowledge and skills to implement the syllabus
Implications: Frequency of Advising Matters

- The more frequently students choose to meet with an advisor, the greater their satisfaction and learning
- Mandatory advising should be more than distribution of PINs to access registration
Future Research

- In addition to studying advising delivery variables, we need to also examine actual advising encounters.
- By identifying advising practices that have a positive influence on student satisfaction, learning, and retention, we can develop structures that support these practices.
- Examine impact first year advising practices have on retention beyond second year.
- Search for mechanisms through which advising impacts retention.
Questions & Discussion
Contact Information

Brett McFarlane

bmcfarlane@ucdavis.edu