Major Exploration
for the Truly Undecided
Student

Presenters:
Sara Radoff, Kresge College Advisor
Denise Booth, College Nine Advisor

Student Research Assistants:
Ulises Hernandez and Tyler Simowitz

Today's Goals

- **What?** Learn about theories and research related to major exploration and declaration.

- **So What?** Consider the literature in relation to a UCSC context.

- **Now What?** Begin to identify and share existing and potential best practices for UCSC.

Session Overview

- Define "undecided".

- What influences major selection?

- Decision-making.

- Best Practices in major exploration.

- Theoretical foundations for advising and program development.

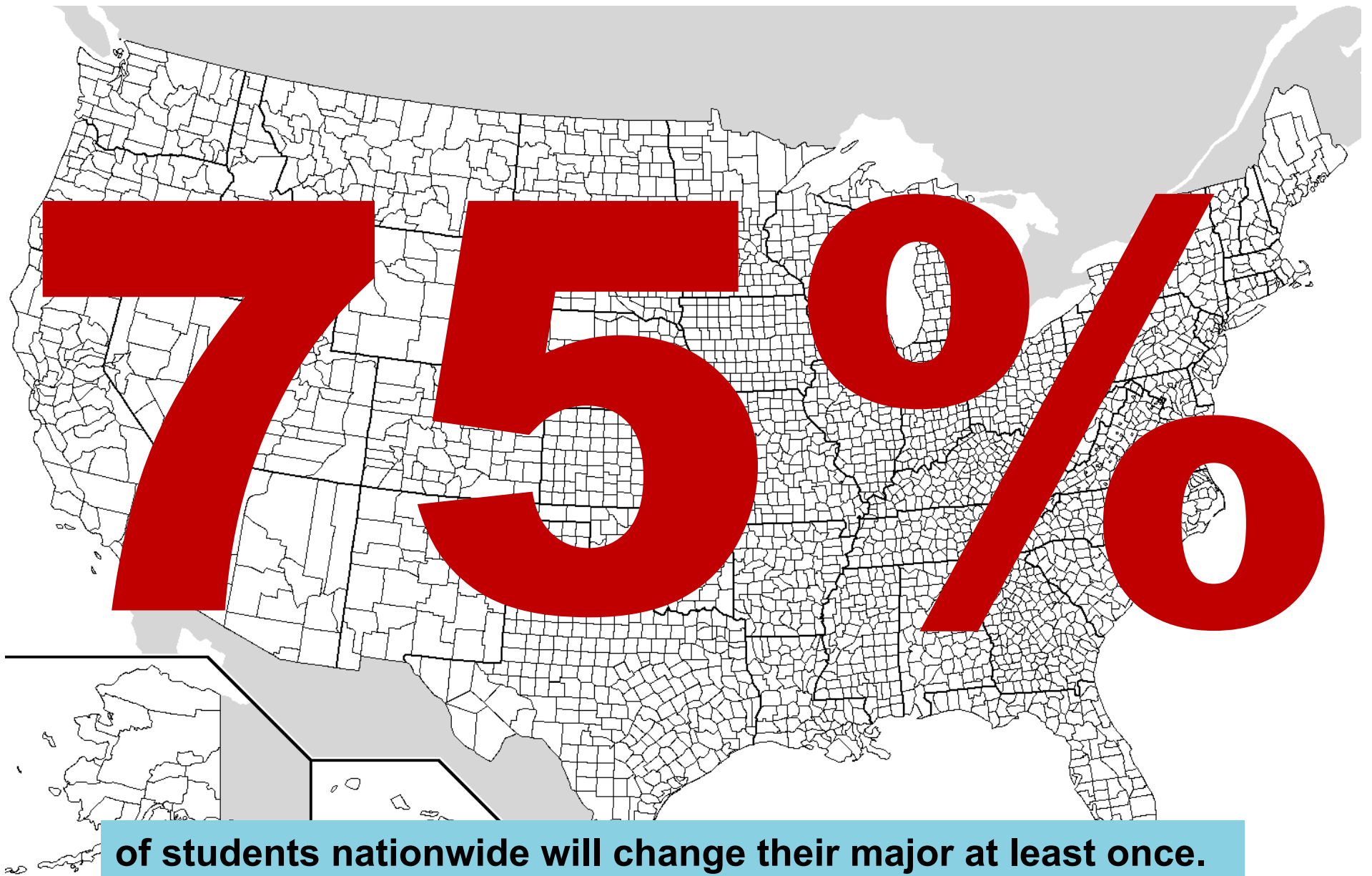- Unpacking the "Major Exploration for the Truly Undecided".

Think like a frosh!

- What was your proposed major as a freshman?

- How did you pick your major?

Who is truly undecided?

75%

of students nationwide will change their major at least once.
(Gordon, 2007; Steele & McDonald, 2008).

Why does major exploration matter?

Major changers have a **70-85%** graduation rate, in comparison to a graduation rate of **45-50%** for those who retain original major (Murphy, 2000; Micceri, 2002; as cited in Gordon, 2007, p. 87)

Students deserve an opportunity to identify and pursue educational goals that are meaningful to them.

Major indecision is normal.

Reasons for Being Undecided

- Lack of concrete, realistic information.

- Lack of independence in decision-making.

- Lack of knowledge of the decision-making.

- Multiplicity of interests… learning lovers.

- Lack of interests or the ability to articulate interests.

- Lack of ability or knowledge of abilities.

- Lack of knowledge about educational and occupational relationships.

- Lack of desire to attend college (Gordon, 2007, p. 143)

- Perceived cultural barriers to certain careers: race, gender, etc. (Swanson, Daniels, & Tokar, 1996).

- Institutional pressures (Cuseo, 2005).

- Developmentally not ready to make decision (Cuseo, 2005).

Influences on Major Selection

- Teacher, counselor, adviser

- Family

- Friends

- Media

- Social and economic pressures

- Perceived career barriers

- Cultural values

First generation college students are _not_ more prone to major indecision (Pearson & Dellman-Jenkins, 1999)

Factors That Further Complicate a Decision for Transfer Students

University policies (Cuseo, 2005; Gordon, 2007; Lewallen, 1993)

"…the University of California system now expects all two-year college graduates to complete 60 transferable units, including all areas of its general education curriculum and all pre-major courses prior to transfer (e.g., business, engineering, and health sciences), this policy essentially forces full-time, continuously enrolled, community college students to select a major during the *first term* of college—if they expect to transfer to a four-year university in a reasonable amount of time. The ugly irony associated with this policy is that it exerts the most academic decision-making pressure on students in community colleges, which enroll the highest percentage of academically underprepared and economically disadvantaged students" (Cuseo, 2005, p. 7).

Factors That Further Complicate a Decision

- Some decided students may be at greater risk of attrition because they have made a decision that is premature, unrealistic, uninformed, or grounded in extrinsic factors (Cuseo, 2005, p. 3).

- **Retention goals** (Cuseo, 2005; Gordon, 2007; Lewallen, 1993)

- Many studies suggest that undecided students are at greater risk of attrition (Gordon, 2007).

- Lewallen (1993) found in a national sample of 18,000 first year students that there was no predictive correlation between retention and whether students were decided on their major or not (p. 1).

Student Perspectives on UCSC Factors

- Planning to meet the major declaration deadline
- Major qualification policies
- Classes only offered some quarters
- Impacted majors: getting into classes
- Large classes with lack of connections with professors
- Limited tutoring opportunities
- Placement exams

Freshman and Transfer Comparison

- Frosh must declare major by Spring of sophomore year.

- Programming for major declaration is developed for frosh.

- Frosh have had opportunity to make connections and a life at the university early on.

- Transfers must select major by second quarter of enrollment.

- Transfer students tend to be more knowledgeable in their academic, vocational, personal skills.

- Transfers students may have no background in major related courses.

- Yet some transfer students may enter a four-year university at a lower developmental stage than other students attending the university for multiple years

Choosing a major can be a tough decision!

- Think about the last time you made a difficult decision.

- What were some of the specific strategies that you used? What resources did you draw from?

Decision-Making

- **Complex process** that encompasses: personal, social, economic, cultural influences, individual's past experiences, decision-making style (Gordon, 2007, p. 171)

- Involves **ambiguity** and **doubt** (Galotti, 1999)

- **Fluid** and **evolving** over time (Smart, et al, 2000)

- Different people have **different decision-making styles**: rational, intuitive, dialog, critical thinking (Bertram, 1996; Mau, 1997)

Seriously, guys, let's get real.
Why am I undecided?

- I'm not sure of my strengths.

- I'm not sure what's available.

ACTIVITY #1

- I LOVE everything and can't decide!

- I'm not even sure about what I want to do career-wise.

- It feels scary to choose just one path.

- I'm worried about disappointing my family.

Best Practices in Major Exploration

- Highly effective and specially trained advisers work with first-year students.

- Ongoing relationship with caring and supportive adviser who knows students interests, abilities, needs and values and can provide individualized interpretations and feedback. College should initiate supportive action.

- Provide incentives for first-year students to meet regularly with advisers to clarify and discuss long-term educational plans

(Brown, et al, 2003; Cuseo, 2007; Gordon, 2007)

Best Practices in Major Exploration

- Programming with an organized approach to exploration and decision-making: models and workbooks

- Collaboration and integration between Academic Advising and Career Advising

- Infuse academic and career planning into the curriculum.

- Ongoing program evaluation and development.

(Brown, et al, 2003; Cuseo, 2007; Gordon, 2007)

Best Practices: Adviser Roles

- Establish a supportive and caring environment.

- Identify where student is at in the decision-making process and help student identify and articulate why he or she is undecided.

- Understand students' purpose and goals in coming to college.

- Help organize a plan for the exploration process and gathering information related to personal, academic and career dimensions.

- Support student while he or she makes a decision.

- Help student initiate an action plan

- Encourage follow-up contact

MEET THE STUDENTS WHERE THEY ARE.

Praxis: Grounding our Practice with Theory

- Developmental

- Constructivist

- Career Decision Theory

- Holland's Theory of Personalities and Work Environments

- Strength-based Approaches

- Multicultural Education

Framing the Theories

- Fundamental differences in theories:
  - Objective, rational facts about reality and people, static descriptors.
  - Subjective, meaning-making through experience, people evolve and identities are fluid.

- Need a framework that is responsive to diverse student body.

- Major exploration is a process.

Guiding Theories: Developmental

DUALISM
Absolutes. Black and white.
"Biology good, Environmental Studies bad."

MULTIPLICITY
Uncertainty exists. Everyone has their own opinion.
"Prove it."

RELATIVISM
Knowledge and values contextualized and relative. Complexity and ambiguity are expected.
These are our graduates!

COMMITMENT
Integrate knowledge learned from others with personal experience and reflection

William Perry's Intellectual Scheme (1999):

Common Developmental Positions of Freshmen

- See the world in dualistic terms when they enter, and finish their year in either a multiplicity or and emerging relativistic position

- Tend to lack autonomous decision-making skills.

- Looks to those in authority positions for the right answers

- May experience difficulties taking responsibility for a final decision.

- Preference for simplicity

MEET THE STUDENTS WHERE THEY ARE.

Activity #2 – Part One: Quick Self-Assessment
Take a couple minutes to assess what you feel are your strengths and weaknesses. These may be mostly academic but feel free to include other things such as good people skills, detail oriented, enjoy routine, etc.

Strengths:

_____
_____
_____
_____
_____
_____

Weaknesses:

_____
_____
_____
_____
_____
_____

Tip: Weaknesses aren't a bad thing! They can tell as much about what you might enjoy doing as one of your strengths!

ACTIVITY #2

KEEP CALM AND CIRCLE SOMETHING

Activity #2 – Part Two: Quick Exploration
Below is a list of all the majors on campus. Read down the list and circle any that spark an interest in you.
Don't overthink a selection, just circle it and you will be able to go back and research it more!

Anthropology
Applied Physics
Art
Biochemistry and Molecular Biology
Bioengineering
Bioinformatics
Biology
Business Management Economics
Chemistry
Classical Studies
Cognitive Science
Community Studies
Computer Engineering
Computer Science
Computer Science: Computer Game Design
Earth Sciences
Economics
Electrical Engineering
Environmental Studies
Feminist Studies
Film and Digital Media
Ecology and Evolution
German Studies
Global Economics
History
History of Art and Visual Culture
Human Biology

Italian Studies
Jewish Studies
Language Studies
Latin American and Latino Studies
Legal Studies
Linguistics
Literature
Marine Biology
Mathematics
Molecular, Cell, and
Developmental Biology
Music
Network and Digital Technology
Neuroscience
Philosophy
Physics
Physics (Astrophysics)
Physics Education
Plant Sciences
Politics
Psychology
Robotics Engineering
Sociology
Spanish Studies
Technology and Information Management
Theater Arts

KEEP CALM AND CIRCLE SOMETHING

Not ready to pick out specific majors? Try circling a cluster that encompasses some general interests:

Business and Economics
Education
Environmental Sciences
Human Psychology, Culture, and Society
Engineering and Computing
Languages, Literature, and Communication

Liberal Arts and Area Studies
Life and Health Sciences
Physical Sciences and Math
Visual and Performing Arts and Media

SOME MAJORS BASED ON CLUSTERS

BUSINESS AND ECONOMICS
ECONOMICS
GLOBAL ECONOMICS
BUSINESS MANAGEMENT ECONOMICS
LALS/ECONOMICS
ENVIRONMENTAL STUDIES/ECONOMICS

EDUCATION
THE MINOR!
ANY MAJOR FOR K-6
HIGH SCHOOL/JUNIOR HIGH…
- BIOLOGY EDUCATION
- EARTH SCIENCE EDUCATION
- PHYSICS
- MATH EDUCATION

ENGINEERING AND COMPUTING
BIOENGINEERING, BIOINFORMATICS,
COMPUTER ENGINEERING, COMPUTER
SCIENCE, GAME DESIGN, ELECTICAL
ENGINEERING, ROBOTICS,
TEHCNOLOGY INFORMATION
MANAGEMENT

ENVIRONMENTAL SCIENCES
ENVIRONMENTAL STUDIES/BIOLOGY
ENVIRONMENTAL STUDIES/EARTH SCIENCES
ENVIRONMENTAL STUDIES/ECONOMICS
ENCIRONMENTAL STUDIES
MARINE BIOLOGY
PLANT SCIENCES

HUMAN PSYCHOLOGY, CULTURE AND SOCIETY
ANTHROPOLOGY, COGNITIVE SCIENCE, COMMUNITY
STUDIES, LATIN AMERICAN LATINO STUDIES, LEGAL
STUDIES, POLITICS, PSYCHOLOGY, SOCIOLOGY

LANGUAGES, LITERATURE, AND COMMUNICATION
CLASSICAL STUDIES, GERMAN SUTIDES, ITALIAN
STUDIES, JEWISH STUDIES, LANGUAGE STUDIES, LATIN
AMERICAN AND LATINO STUDIES, LINGUISTICS,
LITERATURE, SPANISH STUDIES

LIBERAL ARTS AND AREA STUDIES
CLASSICAL STUDIES, GERMAN SUTIDES, HISTORY, JEWISH
STUDIES, ITALIAN STUDIES, HISTORY OF ART AND VISUAL
CULTURE, LATIN AMERICAN AND LATINO STUDIES,
PHILOSOPHY

LIFE AND HEALTH SCIENCES
BIOLOGY, COGNITIVE SCIENCE, ECOLOGY AND
EVOLUTION, HUMAN BIOLOGY, MARINE BIOLOGY, MCD
BIOLOGY, NEUROSCIENCE, PLANT SCIENCES

PHYSICAL SCIENCES AND MATH
CHEMISTRY, BIOCHEMISTRY AND MOLECULAR BIOLOGY,
EARTH SCIENCES, MATHEMATICS, PHYSICS

VISUAL AND PERFORMING ARTS
ART, FILM AND DIGITAL MEDIA, HISTORY OF ART AND
VISUAL CULTURE, MUSIC, THEATHER ARTS

Guiding Theories: Constructivist

- Creating meaning through activities and purposeful reflection (Peavy, 1995)
- Emphasis is in relationship and process. Students learn about self holistically within a developmental framework (Brott, 2004)
- Views indecision as a sign of identity transformation in progress (Savickas, 1995)

- Subjective, narrative, storied approach

- Qualitative techniques can compliment more traditional quantitative measures such as Myers-Briggs or Holland Codes to generate the student's story.

Guiding Theories:
Career Decision Theory

Four steps in career decision-making:

- Exploration

- Crystallization

- Choice

- Clarification

David Tiedeman & R. O'Hara (1963)

Guiding Theories:
Holland's Theory of Personality and Work Environments

Categorizes people in six interest types:

- Realistic

- Investigative

- Artistic

- Social

- Enterprising

- Conventional

Organizes work environment into six models with the same names.

Realistic people choose a realistic working environment, etc.

(Holland, 1997)

Almost 50% of students ultimately majored in a discipline different from the Holland code identified in their freshman year (Smart, Feldman & Ethington, 2000).

Guiding Theories: Strength-Based Approaches

- Counseling model built on strengths, talents and motivations (Smith, 2006)

- Focus on possibilities rather than problems (Schreiner & Anderson, 2005)

- Student feel understood and heard (Schreiner & Anderson, 2005)

- Appreciative advising (Bloom, Hutson & He, 2008)

Guiding Theories: Multicultural Education

- Most research on major decision-making has not considered cross-cultural differences.

- Advisers should draw from culturally responsive approaches that explore cultural strengths, assets and values.

- Strengths and decision-making styles are performed differently across cultures.

- Listening, observing, and critical reflection are central to advising work.

(Nieto & Bode, 2008)

Dimensions of Major Exploration

Choosing a major is a process of…

Personal Exploration
Values, skills, interests, hobbies, identity, family, past experiences, hopes and dreams

Academic Exploration
Course requirements, role of GE in finding a good major, knowing the skills that lead to success in major, how you learn the best, how subject is taught.

Career Exploration
Knowing job market, understand the nature of the career, realistic idea of what career is about, internships, shadowing.

Take Aways

- Undecided majors are a diverse group and undecided for diverse reasons.

- Frosh and a lot of transfers go through a major exploration process.

- Undecided students cut across all identities and social groups: class, race, first generation.

- Choosing a major is a process that we all facilitate.

- Different theoretical lenses will lead to different tactics.

Why does major exploration matter?

Major changers have a **70-85%** graduation rate, in comparison to a graduation rate of **45-50%** for those who retain original major (Murphy, 2000; Micceri, 2002; as cited in Gordon, 2007, p. 87)

Students deserve an opportunity to identify and pursue educational goals that are meaningful to them.

What's Next?

- Research:
  - What are students' perspective on major exploration and declaration at UCSC?
  - What resources and strategies do students find helpful in their decision-making?
  - What do they recommend that advisers develop?

- Are you interested in continuing this conversation?
  - How can we collaborate as a campus to strengthen our major exploration program?
  - What are you already doing to help students explore majors?
  - What ideas do you have to develop our approach to major exploration?

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