

# NOLA Design Educators Conference

## Preparing Graphic Design Students for Interaction Design Work

### MODERATOR:

**Annabelle Gould**, University of Washington

### PANEL:

**Jennifer Bernstein**, Rutgers University–Newark

**Dan Boyarski**, Carnegie Mellon University

**Sarah Lowe**, University of Tennessee

Briefly describe your program.

How does your program define Interaction Design?  
How is IxD currently integrated into your curriculum?

Jennifer Bernstein  
Rutgers University–Newark

# Rutgers University (public)

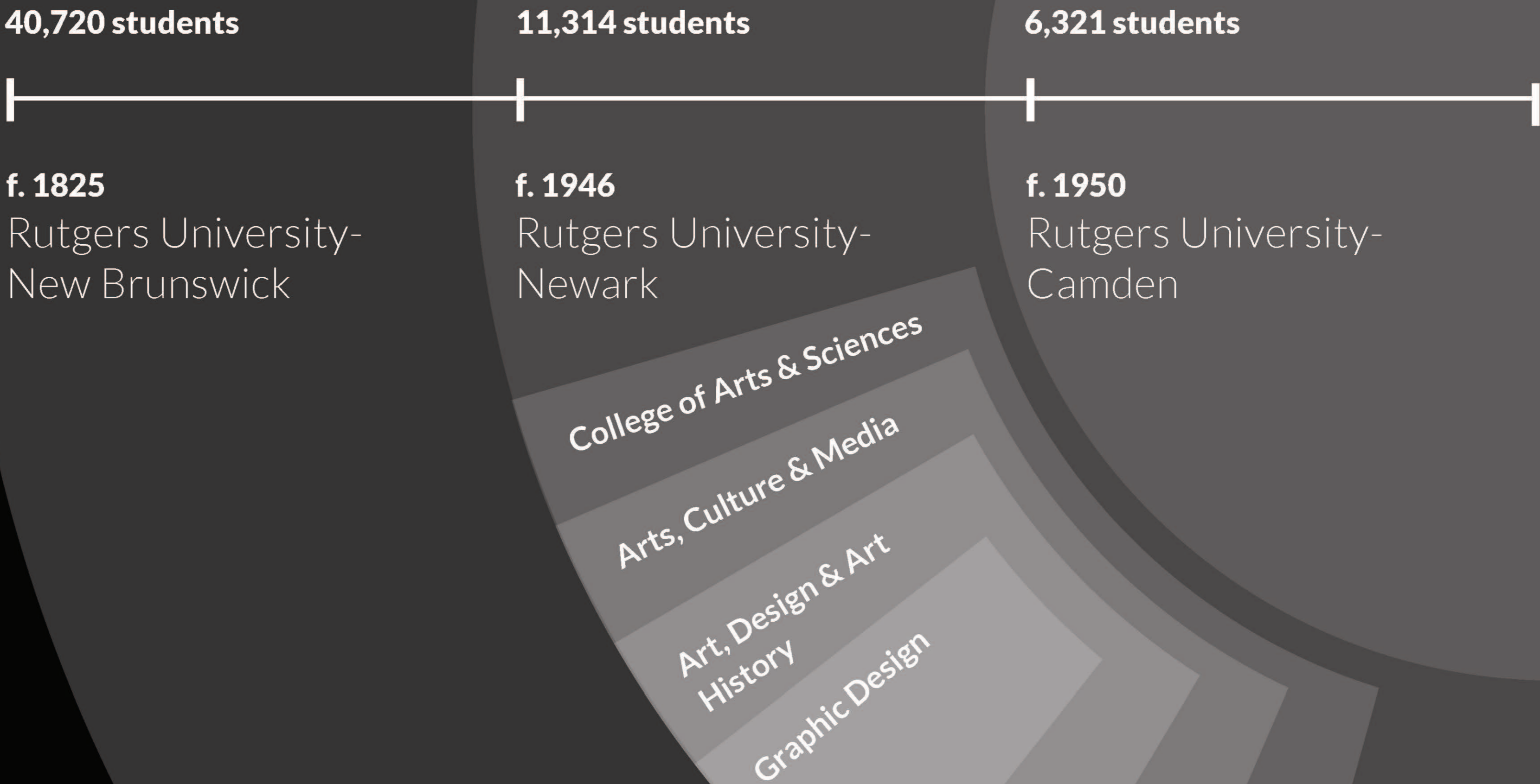
66,000+ students

8,000 faculty, 14,000 staff

31 schools and colleges  
in 3 main locations

100+ undergraduate majors,  
200+ graduate programs  
& degrees, & 300+ research  
centers & institutes

60% of undergraduates  
engage in original research



# Arts, Culture & Media (ACM)

Graphic Design	Fine Art	Art History	Journalism	Music	Theater	Video Production
B.F.A. Visual Arts (Graphic Design)  B.A. in Art (Graphic Design)	B.F.A. Visual Arts (Fine Art)  B.A. Art (Fine Art)	B.A. Art History	B.A. Journalism	B.A. Music  M.A. Music (Jazz History)	B.A. Theater	B.A. Video Prod.
54 students  3 faculty	33 students  4 faculty	2 students  3 faculty	80 students  3 faculty	25 students  5 faculty	20 students  2 faculty	25 students  2 faculty

B.F.A. in visual art (concentration in Graphic Design)

first year		second year		third year		fourth year	
Design Fundamentals	3-D Design Fundamentals	<b>Graphic Design I</b>	<b>Graphic Design II</b>	<b>Graphic Design III</b>	<b>Graphic Design IV</b>	<b>Senior Studio Seminar I</b>	<b>Senior Studio Seminar II</b>
Introduction to Drawing	Figure Drawing	<b>Computers in Graphic Design</b>	<b>Motion Design</b>	<b>History of Design</b>	<b>Seminar in Contemporary Design</b>	<b>Cross-media Design Studio</b>	<b>Design Consortium*</b>
Introduction to Art History I	Introduction to Painting	Development of Modern Art	Art Since 1945	<b>Interactive Design I</b>	<b>Interactive Design II</b>	<b>Design Consortium*</b>	Art Elective
English Composition	Introduction to Art History II	Introduction to ACM	Introduction to Photography	Art Elective	Introduction to Printmaking	Seminar in Contemporary Art	Art History for Minor
Quantitative Reasoning	English Composition	History and Literature	History and Literature	Social Science	Seminar in ACM	Arts and Media Elective	Other Liberal Arts
	Natural Science	Natural Science			Social Science		

# Interaction Design | vs | Interactive Design

**What/how users interact**  
= interaction design

**How information flows to users**  
= interactive design

graphic design

interactivity

interaction design

# Interaction Design

Research, planning, design, and development of interactive experiences. Components include:

+	+	+	+	+	+	+
<b>human-centered design process</b> (research and observations)	<b>visual language</b> (form, typography, composition, color, hierarchy)	<b>systems</b> (components work together, influence each other)	<b>narrative and storytelling</b> (narrative arc, point of view, & message sequence)	<b>information as experience</b> (messages can be experiential)	<b>time and motion</b> (flow of experience, time as an element, sequence; motion as kinetic behavior & dynamism)	<b>basic knowledge of HTML &amp; CSS</b> (structure and style layers)

**The design of cues, visual and other, to facilitate user interaction with a dynamic system.**

**Exploring the nature of the medium: the element or quality of interactivity.**

# Dan Boyarski

## Carnegie Mellon University

School of Design

Carnegie Mellon University

Pittsburgh, PA

a private, research institution

13,000 students

5,000 faculty & staff

College of Fine Arts:

Architecture, Art, Design, Drama, Music

1937, first Design degree granted

1967, BFA in Graphic Design and Industrial Design

2014, BDes in Design (Communications, Products, Environments)

20 full-time faculty

10 adjunct faculty

~150 undergraduate students

Alumni working at R/GA, Apple, Pinterest, Siegel+Gale, Microsoft,  
MoMA, Whitney Museum of Art, athenahealth, IBM, Google, ...

1982

1986

1992

graphic design + interfaces + interactions

Designing for interaction in

print, physical spaces, screens, networked devices, smart devices, ...

scale

complexity

technology

communication

form

# 2014, Design for Interactions:

**We focus on the quality of interactions between people,  
the built (designed) world, and  
the environment (natural world).**

context : content : purpose : action : context :

(research & analysis) (iteration of prototyping & evaluation) (delivery)

## Design for Interactions:

an overarching theme for all our programs

a way of thinking when approaching problems

an attitude of thoughtful, purposeful action

Integrated into all four years

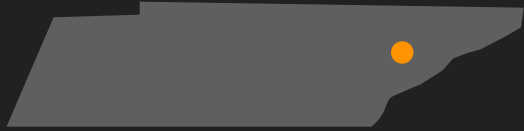
variety of ways: existing & new projects, research, collaborations

variety of contexts: information, healthcare, transportation, activism,  
education, retail, civic action, publishing, ...

Sarah Lowe  
University of Tennessee



University of Tennessee, Knoxville  
*student population: 27,410*



Agricultural Sciences & Nat. Res.

Architecture & Design

Arts and Sciences

Business

Communication and Information

Education, Health, and Human Serv.

Engineering

Law

Nursing

Social Work

Veterinary Medicine

**Humanities**

Classics  
English  
History  
Modern Foreign Languages & Lit.  
Philosophy  
Religious Studies

**Natural Sciences**

Biochemistry & Cellular and Mol. Biol.  
Biology, Division of  
Chemistry  
Earth and Planetary Sciences  
Ecology and Evolutionary Biology  
Mathematics  
Microbiology  
Physics and Astronomy

**Social Sciences**

Anthropology  
Geography  
Political Science  
Psychology  
Sociology

**Visual & Performing Arts**

**Art, School of**

Music, School of  
Theatre

**Interdisciplinary Programs**

Africana Studies  
American Studies  
Asian Studies  
Cinema Studies  
Comparative Literature  
Global Studies  
Judaic Studies  
Latin American and Caribbean Studies  
Linguistics  
Medieval and Renaissance Studies  
Neuroscience  
Sustainability  
Women's Studies

BA Art History / BA Studio Art / BFA Studio Art / **BFA Graphic Design**

*FACULTY*

*13 across 5 areas*

*STUDENTS*

*45 in major (approx)  
24 applying Dec. 2015*

*FACULTY*

*STUDENTS*

Sarah Lowe  
*Interaction Design,  
Digital Storytelling,  
Research Methods*

**31** in major (currently)  
**33** applying Dec. 2015

Deb Shmerler  
*Branding + Identity,  
Social Design Research,  
Typographic Narrative*

Cary Staples  
*Info Visualization,  
Gaming, Intro Design*

+

1 year adjunct

**2009-2013** • 80 grads

87%

employed in design field

56%

employed as full time  
web / interactive /  
UX / interaction  
designers

**Altr'd State / Knoxville**

**Amazon / Seattle**

**Auto Zone / Memphis**

**Bloomberg / NYC**

Cabedge Design LLC / Nashville

**Capital One / Richmond**

**Channel Company / Raleigh**

Coca-Cola Studio / Atlanta

Combustion / Memphis

**Deco-Pac / Minneapolis**

**Design Sensory / Knoxville**

**DIY Network / Knoxville**

**Facebook / NYC**

FH Design Co. /Nashville

**FirstBorn Multimedia / NYC**

Georgia Society of CPAs / Atlanta

**Google / NYC**

**Gramercy Tech / NYC**

**Harvest Creative / Memphis**

Healthcare Partners / Los Angeles

**HGTV / Knoxville**

**HHUGE / NYC**

Houghton Mifflin Harcourt / Boston

**Jack Henry / Nashville**

Live Hive / San Francisco

Madeline Weinrib / NYC

Matchstic / Atlanta

**Microsoft / Seattle**

**MondoRobot / Boulder**

Morris Creative / Knoxville

Morvil Advertising /Jacksonville

New Hope Natural Media / Boulder

Nike / Los Angeles

Perky Brothers LLC / Nashville

**Pyxl / Knoxville**

**Red Pepper / Atlanta**

**Robin Easter Design /Knoxville**

Roots Rated / Chattanooga

**Scripps Network / Knoxville**

**Sparkart Group / Oakland, CA**

ST8MNT / Nashville

Stone Profit System / Chicago

Superlectric Industries / UK

**The Tombras Group / Knoxville**

**Work & Company / NYC**

**Yahoo / NYC**

INTERACTION DESIGN

Transmission across/alongside/through/  
within digital spaces with a focus on the  
user’s experience.

IxD at UTK

Concepts of user-centered  
experience + engagement within  
digital spaces

Relevance of design principles +  
elements within digital spaces

Skills that are likely to withstand  
technical advancements in the near  
future.

Resourcefulness

INTERNET OF THINGS  
*Transform analog object into a  
smart object*

PROTOTYPING  
USER WORKFLOW

NODES + PATHS  
*Process + Information  
Architecture*

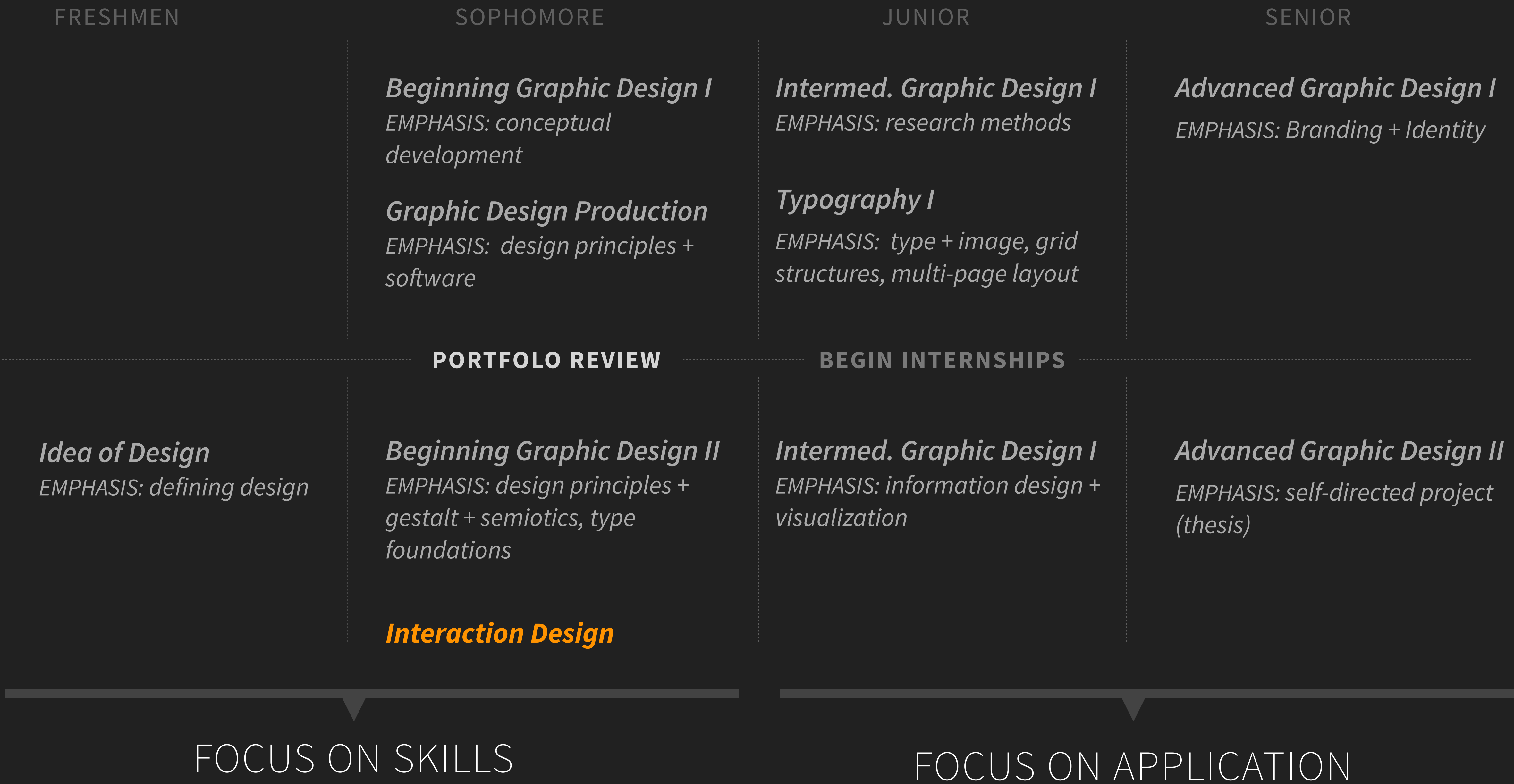
SITEMAP  
WIREFRAME  
NAVIGATION

PATTERNS  
*Understand known  
methods of interaction*

UI KITS  
CONSISTENCY  
ACTION, FEEDBACK,  
RESPONSE

APPLY

MOBILE PROJECT      CMS PROJECT



What skills do you/your program believe are important for a Graphic Design major/graduate who plans to work as an Interaction Designer?

How are IxD-oriented skills represented in a graphic design portfolio?

How important is “form giving/visual ability” when representing Interaction Design oriented work?

Who teaches (or will teach) your IxD courses—  
current graphic design faculty, new hires, guests?

What are the benefits/drawbacks of introducing Interaction Design into an existing Graphic Design curriculum?

What kind of feedback have you received from professionals regarding how prepared your graduates are for IxD-oriented work?

What advice do you have for educators who would like to introduce Interaction Design into their curriculum?

# Q + A: Preparing Graphic Design Students for Interaction Design Work

## MODERATOR:

**Annabelle Gould**, University of Washington  
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www.design.washington.edu

## PANEL:

**Jennifer Bernstein**, Rutgers University–Newark  
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acm.newark.rutgers.edu + levelnyc.com

**Dan Boyarski**, Carnegie Mellon University  
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design.cmu.edu

**Sarah Lowe**, University of Tennessee  
slowe@utk.edu  
art.utk.edu/graphic\_design

# Thank you!

Share your thoughts on this panel at #aigadesign and #aigadec

*Don't forget to attend one of the Educator Roundtables during lunch today!*  
*Celestin FGH 12:30–1:30pm*