



# Challenges and Opportunities for Inclusive Design in Graduate Architecture

Beth TAUKE

Megan BASNAK

Edward STEINFELD

Center for Inclusive Design and Environmental Access  
University at Buffalo—State University of New York, U.S.A.

June 16, 2014

2014 International Conference on Universal Design  
Lund, Sweden



When you include the extremes of everybody, that's to say differently abled people of all sorts, then you produce things that are better for all of us.

-Michael Wolff, Wolff Olins

Design for the young and you *exclude* the old; design for the old and you *include* the young.

-Bernard Isaacs, Birmingham Centre for Applied Gerontology

Recall the face of the poorest and weakest man you have seen, and ask yourself if this step you contemplate is going to be of any use to him.

-Mahatma Gandhi



**UB** University at Buffalo *The State University of New York*

## Inclusive Design Graduate Research Group

- Challenges to starting UD educational programs
- Description of the program
- Lessons learned for starting programs



# Challenges for Universal Design Education





The tradition of architectural education is style and form based.



U.S. accrediting bodies for architecture programs have not included universal design in their primary evaluation criteria.



Inclusive design educators often focus on research topics that lack appeal for creative-minded students.



Popular media focuses on content with high entertainment value.





Inclusion through design is essential to global practice.

*National Geographic*



# Inclusive Design Graduate Research Group at Buffalo (IDGRG)

*Megan Basnak*

Topics that appeal to students include:



*Colourful Army, Maistora*

## Human Diversity

Topics that appeal to students include:



*Senses*, Shaula Haitner

## Sensory Perception



Topics that appeal to students include:



G.A. Volb

**Health + Safety**

Topics that appeal to students include:



*Playin' the Blues*, Dustin Gilbert

## Social Justice



# Master of Architecture: Inclusive Design Curriculum

---

2-year or 3.5-year accredited program designed for those interested in engaging research and potentially following the path to licensure

## Semester 1:

Research Studio  
The Social Nature of Architecture  
Design for Inclusive Environments  
Environmental Controls 2

## Semester 2:

Research Studio  
Ergonomics in Building Design  
Human Responses to Intentional Environments  
Professional Practice

. . . continued



# Master of Architecture: Inclusive Design Curriculum

---

2-year or 3.5-year accredited program designed for those interested in engaging research and potentially following the path to licensure

## Semester 3:

**Research Studio/Directed Research**

Elective\*/Thesis Methods

Elective

Structures 3

## Semester 4:

**Research Studio/Thesis**

Elective

Elective

Elective

\*Electives allow students to enhance skills or focus on a specific issues. Can be taken from any department in the university.





# Master of Science in Architecture: Inclusive Design Curriculum

1.5-year program designed for those interested in engaging research and specialized scholarship in architecture

## Semester 1:

- Design for Inclusive Environments
- The Social Nature of Architecture
- Research Methods
- Elective
- Elective

## Semester 2:

- Ergonomics in Building Design
- Human Responses to Intentional Environments
- Directed Research
- Elective
- Elective

## Semester 3:

- Thesis
- Community Design Service
- Elective
- Elective

Studio projects include:



*Nicholas Karl*

Children's Museum  
Buffalo, NY, U.S.A.

Studio projects include:



*Patrick Connolly & Todd Graci*

**Public Toilets**  
Silo City, Buffalo, NY, U.S.A.

Studio projects include:



## Global Informal Settlements



*Karen Kim*



# Studio projects include:



*Maryam Sadeghi*

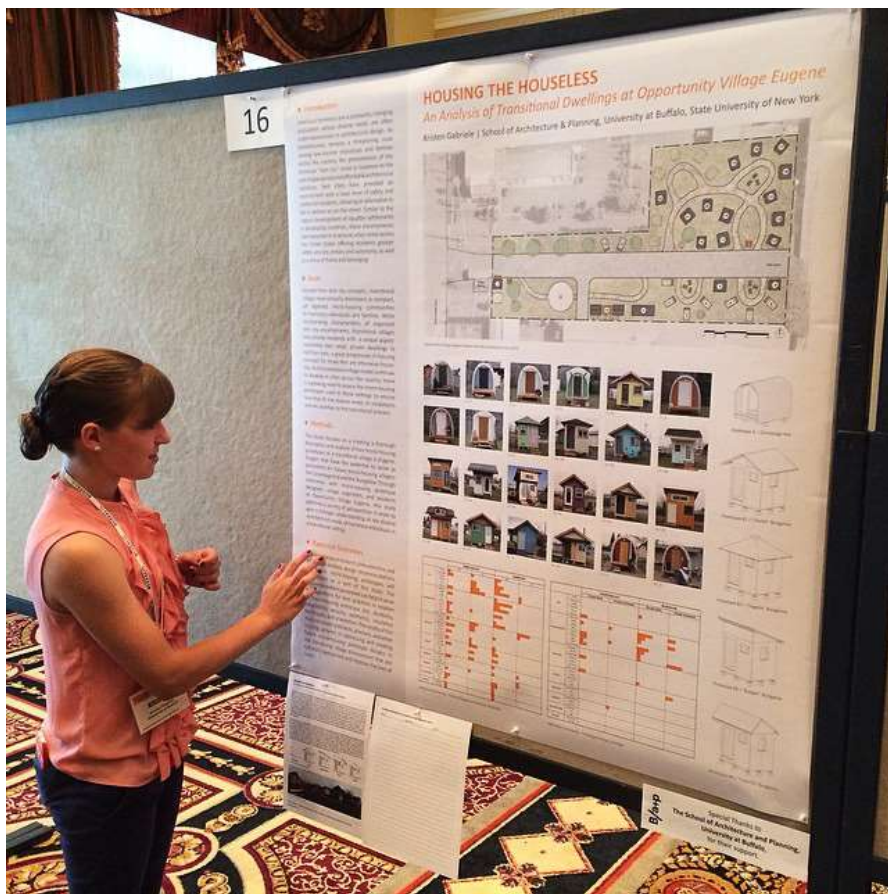
## Office Building Dublin, Ireland

Studio projects include:



*Hashim Ajlouni*

Affordable Housing  
Prototype Design  
Buffalo, NY, U.S.A.



Kristen Gabriele

## Individualized Programs of Study

Thesis research includes:



## Stairway Safety

Karen Kim



Thesis research includes:



# Senior Housing Standards

Mary Jane Carroll

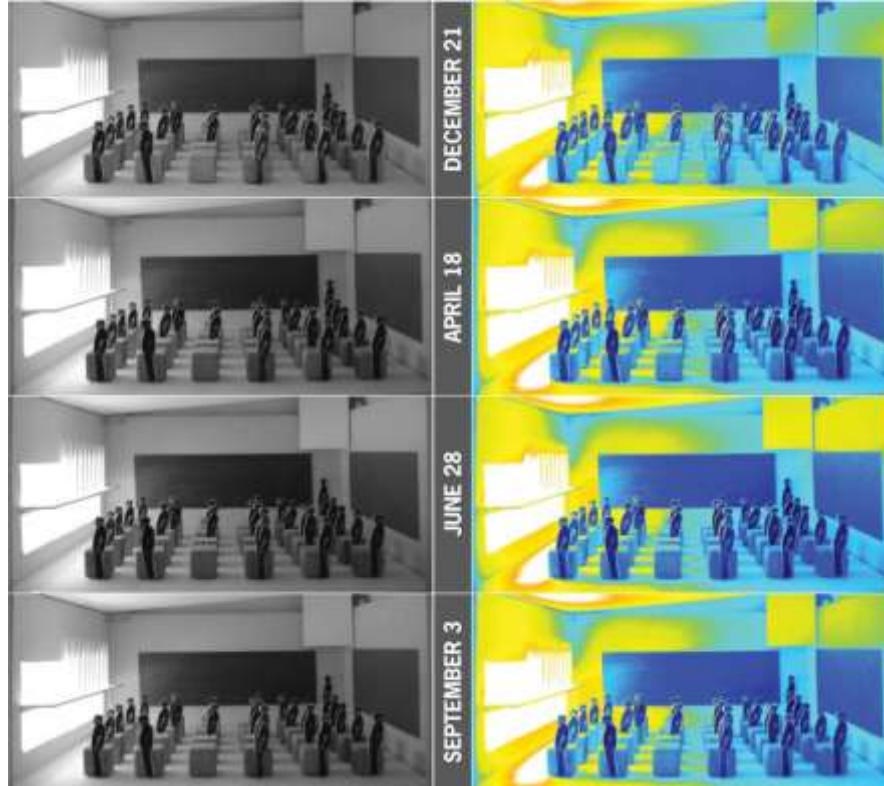
Thesis research includes:



# Architectural Practice in Small Towns

Megan Basnak

Thesis research includes:



# Lighting in Primary Schools

Jonathan White

Thesis research includes:



# Wellness Centers for Women

Ghada Mohamad



Thesis research includes:



# Classroom Design for the Autism Spectrum

Alexey Mokhov

Thesis research includes:



## Temporary Housing

Kristen Gabriele



Why does the IDGRG have the highest enrollment of all graduate research groups?

# Center for Inclusive Design and Environmental Access

Multi-disciplinary research center that includes architects, planners, behavioral scientists, occupational therapists, and industrial engineers



## **Mission:**

To produce knowledge and tools that will increase social participation of groups such as people with disabilities and the older generation, who have been marginalized by traditional design practice

## **Work:**

Practice of inclusive design through research, development, service, dissemination, and educational activities





## As a whole, the faculty have:

- 10+ teaching awards
- 16 books published
- \$20+ million in research grants
- 1,000+ public lectures and publications in more than 15 countries

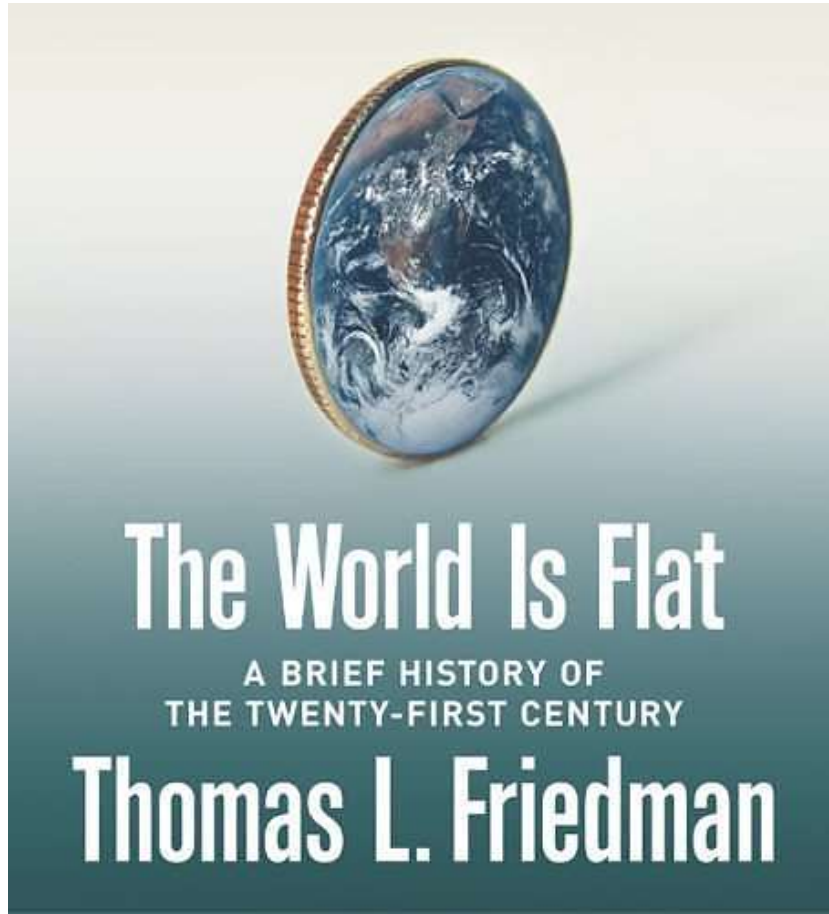


# Making UD Education Meaningful



Yoshikazu Tsuno/Agence France-Presse

World  
demographics are  
changing.



World economies  
are leveling.





Gavin Kemp

More societies are valuing human diversity.



Rodman Schley

Attitudes about consumption are changing.



Mass customization makes UD solutions easier.



USA Today

Digital technologies  
are increasing  
complexity.





*Project WeCan*

Governments are seeking new ways to improve life for all.



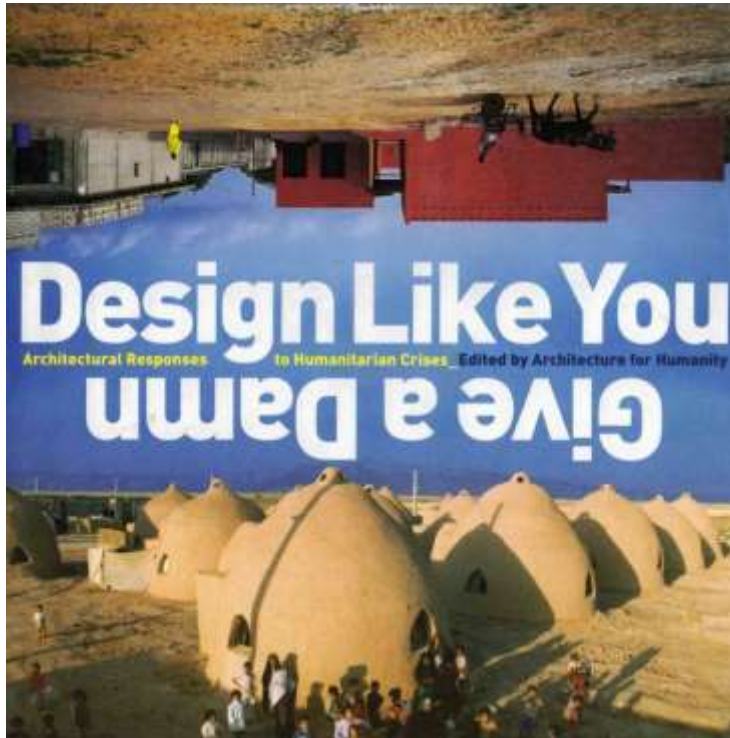
*Day of Giving*

Gen Y is more interested in social issues.



*Study Abroad, Costa Rica*

Attitude shifts open opportunities for inclusive design education.



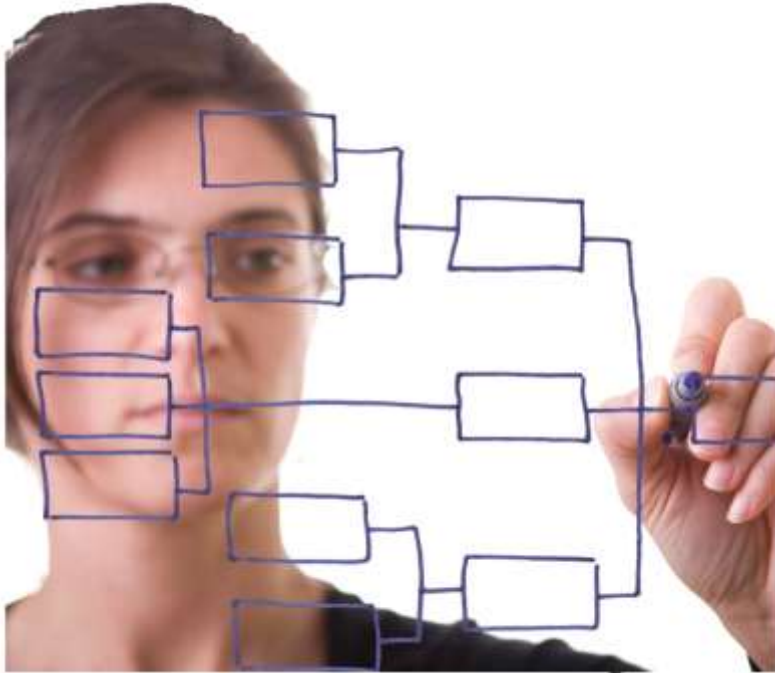
Architecture is responding with organizations such as Architecture for Humanity and Design Corps.



*Educators are responsible for ensuring that students have the knowledge and skills they need.*



# Starting a program requires:



A comprehensive plan  
and set of goals

# Starting a program requires:



## Administrative buy-in

# Starting a program requires:



Committed faculty core (and a plan for supporting new faculty)

# Starting a program requires:



## Student interest

# Starting a program requires:



A rigorous,  
interesting and  
realistic curriculum



# Starting a program requires:



*Grain Elevators, Buffalo, NY U.S.A.*

Interesting research opportunities

# Starting a program requires:



*Children's Museum, Buffalo, Maryam Sadeghi*

Real world design opportunities

# Starting a program requires:



Internal and  
external support  
systems

# Starting a program requires:



A focus on the common goal of improving the world through universal design



The cultural climate for universal design education is right.





We want to help...



## **Universal Design: Creating Inclusive Environments**

Edward Steinfeld

Jordana Maisel

Wiley, April 2012

## **Inclusive Housing: A Pattern Book**

Edward Steinfeld

Jonathan White

W.W. Norton, May 2010



Wabeeja  
 Medawagse  
 Mersi  
 unalchéesh  
 Tingki  
 Komapsumnida  
 Shukuria  
 Paldies  
 Hatur  
 anitha  
 Maake  
 Denkauja  
 Fakaau  
 Spasibo  
 Ekhmet  
 Tashakkur  
 hui  
 Sanco  
 Maketai  
 bolzin  
 Spassibo  
 gozaimashita  
 Fakaau  
 Spasibo  
 Nenchalthya  
 Mehribani  
 Yaqhanyelay  
 Efcharisto  
 Dankscheen  
 YOU  
 Baika  
 Yusparátam  
 Minmonchar  
 Atto  
 Gaejtho  
 Maiteka  
 ekoju  
 Tavtapuch  
 suksama  
 Sikomo  
 Merci  
 Shukria  
 lah  
 Merastawhy  
 Dhanyabaad  
 Chaltu  
 Thank  
 Biyan  
 Grazie  
 Snachalhuya  
 Juspaxar



## Center for Inclusive Design & Environmental Access

School of Architecture & Planning

State University of New York at Buffalo

114 Diefendorf Hall | 3435 Main Street

Buffalo, NY 14214 – 3087

tel: +1 (716) 829.5902  
fax: +1 (716) 829.3861  
email: [ap-idea@buffalo.edu](mailto:ap-idea@buffalo.edu)  
web: [idea.ap.buffalo.edu](http://idea.ap.buffalo.edu)  
web: [www.udeworld.com](http://www.udeworld.com)