CSS & UNIVERSITY EDUCATION

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What Should we Teach?

- Importance of CSS
- CSS and Project development
- Multi-disciplinary teams
- Multi-modal solutions
- Communication skills

Purpose & Learning Objectives

- To introduce the concept of CSS
- To demonstrate the process of context sensitive transportation solutions
- To understand reliance on other experts
- To experience the process through case studies and projects
Basic Tenets: Flexible Design

- Guidance
- Final design more than formulas
- Starting point for designs
- Understand area context

Basic Tenets: Collaboration

- Stakeholders
- Purpose & Need
- T E A M
- Public Involvement
- Facility

Basic Tenets: Design Principle

- Well designed transportation facilities
- Handle traffic efficiently and safely
- Fit nicely into their surroundings
- Address community’s needs and desires
Basic Concepts: Balancing

Environment  Economics

Society  Safety

Capacity  Mobility

Basic Tenets: Balancing

Basic Tenets: Different Answers

70-ft ROW

Basic Tenets: Listen to the Public
Basic Tenets: Team Work

Basic Tenets: Open Mindness

In Summary...
NEVER Question an Engineer’s Opinion, You Thundering Moron!

To Whom Should we Teach What?

CE/LA/UP/PAD/HP/GEO

Undergraduate
Awareness
Discipline specific skills
Communication skills
Teamwork skills
Collaboration

Graduate
Teamwork
Cross-discipline skills
Communication skills
Management skills
Innovative design

Case studies/Project
Univ. of Kentucky Example

- Undergraduate CE
  - Two courses
  - CSD emphasis
  - Case studies/design project
- Graduate
  - Two courses, year-long program
  - Multi-discipline
  - Case studies/community project

Obstacles

- Academic structure
  - Discipline oriented education
  - Credit hours for degree programs
- Resources
  - Faculty
  - Time
- Faculty