How Prepared Are You? Compare Your Engineering Skills with Other Graduating Seniors

Notes and Handouts
How Prepared Are You? Compare Your Engineering Skills with Other Graduating Seniors

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Purpose:
Design has long been considered a central activity of engineering. The goal of this classroom presentation is to help engineering students to become more conceptually and metacognitively aware of engineering design processes.

Agenda:
The intended time for this classroom presentation is 60 minutes.

Topics for this workshop include:
- How engineering students and practicing professionals solve engineering problems
- Discuss relevance to MSE 491
- Develop and understand design processes

Goals:
1. Give a background of CELT’s Design Research
2. Participants leave with something helpful
Activity 1 Worksheet

ACTIVITY:
In the design process timelines shown above, what similarities and differences do you see between the freshmen and senior engineering students? Do these similarities also involve the quality scores? How so?

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Design Activity Timeline

PD: Problem Definition  MOD: Modeling  DEC: Decision
GATH: Gathering Information  FEAS: Feasibility  COM: Communication
GEN: Generating Ideas  EVAL: Evaluation

Freshman #1 (Quality Score = 0.37)
Freshman #2 (Quality Score = 0.45)
Freshman #3 (Quality Score = 0.62)
Senior One (Quality Score = 0.38)
Senior Two (Quality Score = 0.53)
Senior Three (Quality Score = 0.63)
How Prepared Are You? Compare Your Engineering Skills with Other Graduating Seniors Bibliography


