

Bringing Design Research into Engineering Classrooms Workshop

Notes and Handouts

Bringing Design Research into Engineering Classrooms

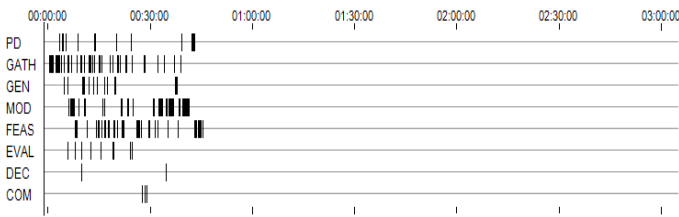
Jim Borgford-Parnell

Workshop Goals:

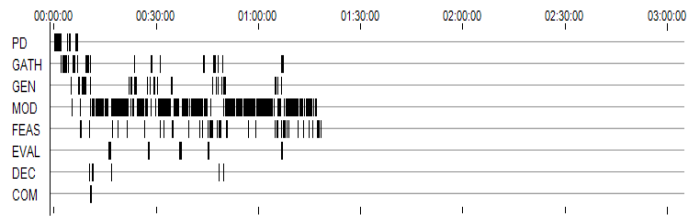
- 1. Give a background of CELT's Design Research**
 - Characterize how engineering students and practicing professionals solve engineering problems.
 - 2. Interact with participants on possible implications for engineering pedagogy and student learning.**
 - 3. Participants leave with something helpful**
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Design Activity Timeline

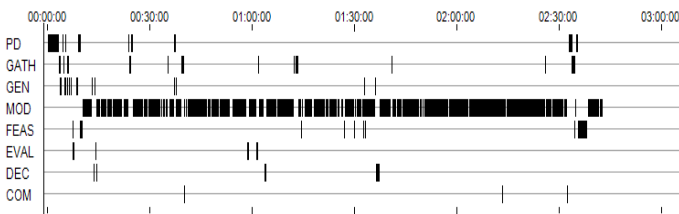
Freshman #1 (Quality Score = 0.37)



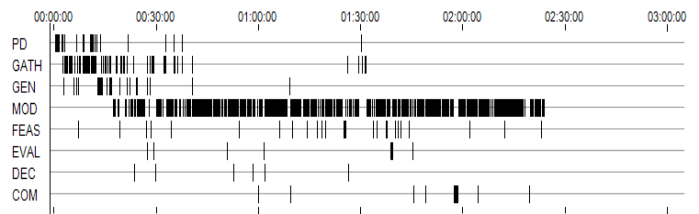
Senior One (Quality Score = 0.38)



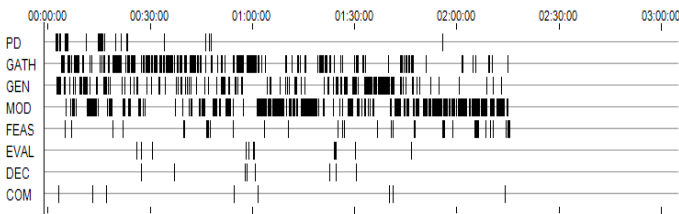
Freshman #2 (Quality Score = 0.45)



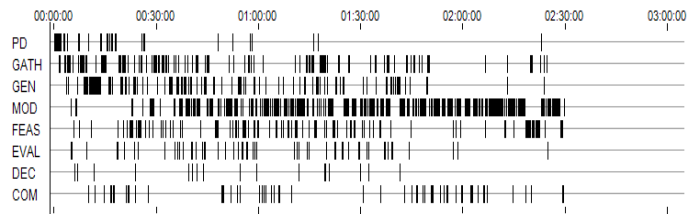
Senior Two (Quality Score = 0.53)



Freshman #3 (Quality Score = 0.62)



Senior Three (Quality Score = 0.63)



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

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?

Bringing Design Research into Engineering Classrooms Bibliography

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