

Research Agenda - Empirical Educational Neuroscience

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*Empirical Educational Neuroscience** (EEN) represents a new paradigm of inquiry. The supporting research involves the investigation of multi-modal biometric indices of learning and performance using real-world tasks in authentic settings.

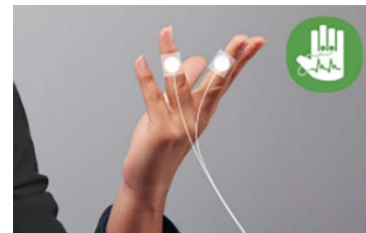
Empirical Ed Neuro Lab – The lab currently includes functionality for stimuli presentation and synchronization of multi-modal data, collection and integration of data for EEG (Electroencephalography), GSR (Galvanic Skin Response), and screen-based Eye Tracking. The EEG and GSR hardware has been acquired; currently pursuing purchase of the screen-based Eye Tracking hardware.



EEG

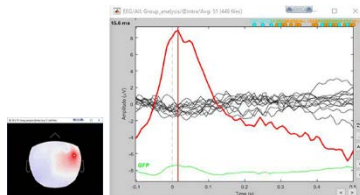


Eye Tracking

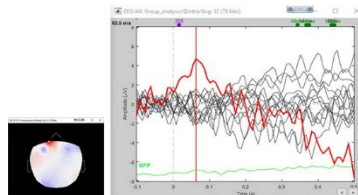


GSR

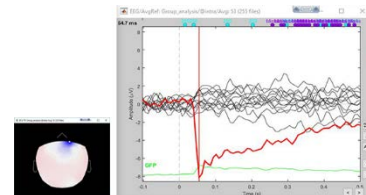
Sample Study – Ingram, R.E. and Wilson, S.E. (in review). Electroencephalography (EEG) and Instructional Design - Exploratory Replication of Knoll.



Condition 1



Condition 2



Condition 3

Research in progress

Ingram, R.E. and Fredericks, T.F. (in progress). Nearby Peer Effects: An Exploratory Replication of Sana using biometrics.

Research needs

Access to undergrad subject pool.

Collaboration

Actively seeking faculty colleagues with whom to partner.

External funding

Actively pursuing development of proposals for external funding. Collaborators welcome.

Brainstorming

Empirical Educational Neuroscience carries with it the significant possibility of transforming the way we think about human learning and performance and the types of related research possibilities. Would greatly enjoy brainstorming with colleagues about such opportunities.

**Empirical Educational Neuroscience is distinctly different than the line of inquiry called Translational Neuroscience.*