

Materials List for:

Assessing the Multiple Dimensions of Engagement to Characterize Learning: A Neurophysiological Perspective

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Materials

Name	Company	Catalog Number	Comments
EGI GSN-32	EGI		Dense array EEG
Netstation v.5.0	EGI		EEG data collection software: EEG is collected with 32-electrode dense array electroencephalography (dEEG) geodesic sensor net using Netstation acquisition software and EGI amplifiers (Electrical Geodesics, Inc). The vertex (recording site Cz) is the reference electrode for recording. Impedance is kept below 50 kΩ with a sampling rate of 250 Hz.
Facereader v.4	Noldus		Facial emotion recognition software
Syncbox	Noldus		Syncbox start the co-registration of EEG and gaze data by sending a Transistor-Transistor Logic (TTL) signal to the EGI amplifier and a keystroke signal to the Tobii Studio v 3.2.
Logitech C600 Webcam		960-000396	Webcam used to gather video data sent to mediarecorder and that will be analyzed in Facereader
The Observer XT	Noldus		Integration and synchronization software: The Noldus Observer XT (Noldus Information Technology) is used to synchronize all behavioral, emotional and cognitive engagement data.
On-Screen LED illumination	Noldus		Neon positioned on computer screen in order to correctly light the face of subjects
MediaRecorder	Noldus		Video data collection software
Tobii 60X	Tobii		Collect eye-movement patterns : used to record subjects' eye movement patterns at 60Hz during the experiment.
Tobii Studio v.3.2	Tobii		Eye-tracking data collection and analysis software
Analyzer 2	Brainvision		EEG signal processing software

Acqknowledge v.4.0	Biopac	ACK100M	Physiological signal acquisition and processing software
Control III germicide solution	Maril Products.	10002REVA-20002-1	Disinfectant solution used with EEG helmets : recommended by EGI
Unipark	QuestBack AG		Online survey environment