

Designing Submersibles Instrument

Reliability Report

Scales for the Designing Submersibles (SB) instrument were constructed from a sample of 64 students completing the assessment (version 3/4/2010). Corrected answers to the 17 questions on the post-assessments were summed to form the “All” scale, which was tested for internal reliability. The “All” scale was found to have a Cronbach’s α of .729 (n=59). The table below presents the Science and Engineering subscales for the SB instrument.

Scale	N of Students	# Items	Items	Reliability: Cronbach’s α
All	59	17	1-17	.729
Science	62	6	3, 4, 6, 9, 10, 14	.614
Engineering	60	7	1, 8, 11-13, 15, 17	.655