How To Ensure Rigor in Usability Tests

Factors	Ways to ensure rigor in usability test
Credibility (internal validity)	 ✓ Write scenarios to reflect the user's perspective. Use think-aloud protocol to get user's direct impressions. ✓ Use direct observations of user actions (versus indirect reports such as surveys). ✓ Check out conclusions or observation with the user through protocols such as teach-back, guided recall, or post-scenario interviews.
Transferability (external validity)	 ✓ Select participants based on a set of criteria that defines the end-user of the product. (external validity) ✓ Write scenarios that involve realistic tasks. ✓ Use platforms and equipment typical of what end-users have. ✓ Use actual or realistic prototypes of packaging and documentation that will be supplied with the product.
Dependability (reliability)	 ✓ Use an observation team with multiple perspectives. (reliability) ✓ Retest to verify improvements. ✓ Use an external consultant to review process and findings. Source: Hughes (1999)