

Question 6	In the Handbook of Usability Testing, Rubin, the author, claims that testing the usability lab under experimental procedures can “expose all major usability deficiencies and their causes for the most common tasks.” Do you agree with this claim? Justify your answer with specific examples. What other evaluation techniques would you consider worthwhile? Why?
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I would disagree with this claim. While it is ideal that all major usability deficiencies and their causes can be exposed in experimental procedures in the usability lab; there are too many factors that effect use for this to be true. Furthermore, how would it be possible to know what all the usability problems are at the time the experimental procedures are conducted for this claim to be true.

Jonas Lowgren describes 5 perspectives on usability and what these perspectives view as the important property behind usability, where the usability can be studied, and how usability can be achieved? Of the five perspectives (General Theory, Usability Engineering, Subjectivity, Flexibility, and Sociality), only 3 of them can be studied in labs (General Theory, Usability Engineering, and Sociality). The Subjectivity and Flexibility perspectives believe that usability must be studied in real use contexts. This makes sense because the usability is a property of individual usage situations and long-term use. For those two specific perspectives, usability is achieved by design for unique use situations or by continued design in use (respectively). If this is the case, then it contradicts the fact that all major usability deficiencies can be exposed. Usability in the first instance is subjected to the situation which would be hard to be modeled in a laboratory setting. In the second instance usability is variable and ever changing. Thus it would be hard to say if a system is usable before it is actually in use. Finally, the Sociality perspective does not say that usability can be determined in the labs. Usability sometimes can be a property of social use situations. Given that this is the case, it too must be studied in real use context.

Another example of where this claim would break down is when the technology is so new that there are no rules to guidelines as to whether or not a design for it is usable or not can be accurately produced. That's not to say that obvious user testing of the system could not remove flawed designs, but rather that some flaws could be hidden until it is actually in use.

It would seem that the best evaluation technique would be to study the usability of the system in the context of real use. Thus a worthwhile technique is to deploy a system to study of usability as well as its impact, through some observational techniques including ethnography. It might be important to see the co-evolution that exists between the actual system and the people before it is possible to say if there are usability issues. However, before deployment one could also perform usability studies such as thinking aloud, cognitive walkthrough, and heuristic evaluation. Of these I believe heuristic evaluation is a worthwhile technique to perform in tandem with actual deployment because 1) it is early in the development process and 2) has the good return while using only a small number of people.

Jakob Nielsen's Heuristic Evaluation method proposes about 3-5 evaluators evaluate an interface using a set of 10 heuristics individually and then together as a group to get the best results (in terms of the number of usability problems being identified before diminishing returns). This method is cheap, and can be done during the development process. I believe this is a worthwhile technique because it is not difficult to conduct, and can come early enough in the development process to inform the design.