**IP1: Users, Uses and Usability**

"…the usability evaluation stage is an effective method by which a software development team can establish the positive and negative aspects of its prototype releases, and make the required changes before the system is delivered to the target users"  (Issa & Isaias, 2015, p. 29).

“…the design and production of a new entity…amounts to a process of configuring its user, where 'configuring' includes defining the identity of putative users, and setting constraints upon their likely future actions” (Woolgar, 1990).

Overview

This foundational IP will provide the theoretical background to your [core activity for this course,](https://canvas.ubc.ca/courses/119865/assignments/1525686) and you will be returning to these constructs for that project.

Your Task

This IP asks you to:

1. Formulate a conception of ***usability*** (based on the Issa and Isaias (2015) chapter on HCI and Usability). Use what you've learned about usability from that chapter—but you are not summarizing or repeating their ideas. Rather, you are setting out the idea of 'usability' **you** have put together from reading that chapter. Do NOT overly rely on quotes. And remember to use proper citation practices. If you are using text that is not your own, quote and cite it, including page numbers.
2. Then, think about *what is missing* from this conception, from a specifically *educational*perspective, and on that basis try and patch together a reasonably grounded and defensible conception of ***educational usability.***
3. Revisit Woolgar’s (challenging but rewarding!) account of “usability gone wrong,” which demonstrates several ways a usability study ended up configuring ‘users,’ thereby undermining the usefulness of usability. **Identify and discuss 2 of Woolgar’s examples.**
4. Finally, discuss the two excerpts quoted at the top of this IP, that have been drawn from your readings for this unit, and discuss differences you see in these 2 positions on the uses of usability.

HINT: Before you begin (and probably a few times while you are working on this) look up what "configuring" means, especially in the context of computer science. The purpose of the question is to help you to see, understand, and be able to explain how users are *configured in the usability trials* Woolgar observed. Elucidating and explaining user configuration in usability trials is necessary in order to understand Woolgar's article and, therefore, in completing this task.

1. In system development process, usability refers to the “usefulness” of the interface that can be measured through user efficiency, effectiveness and satisfaction. Good usability would mean the user is able to accomplish their goals or tasks in a way that is “efficient, effective, safe, utility, easy to learn, easy to remember, easy to use and to evaluate, practical visible and provide job satisfaction to the users” (Issa & Isaias, 2015, p. 19). To ensure the best user experience, utility evaluations are iterated throughout the design process that sees constant refining of the user interface including how users troubleshoot errors. Good usability can be seen as a well-engineered road system that allows drivers to navigate easily, safely and efficiently from one point to another. Usability ensures that users can find their way through good signage, traffic lights and paved roads so that they can reach their desired destination without getting lost or delayed.
2. Educational usability would then refer to the “usefulness” of the educational tool or technology in the form of educational games, software or online classrooms that can be measured through user efficiency, effectiveness and satisfaction. Good educational usability would be highly customizable to adapt to the diverse needs of teachers and students in learning, instructional design and assessment. It would be efficient, effective, easy to learn, easy to remember, easy to use, easy to evaluate and would support effective and enjoyable teaching and learning experiences. Educational usability is like a superhero’s sidekick in a comic book. It supports, complements and adapts to the superhero (education, teacher, student) by providing valuable assistance, feedback and guidance through fun and engaging interactions that make the journey more enjoyable and thus more memorable. How empowering it must be to have such a sidekick!
3. **Usability Gone Wrong #1**: Constructing natural users. The subjects (users) interacted too much with testers (observers) thus creating an unnatural user experience. In particular, when subjects were lost and needed “saving”, testers intervened. This deprived subjects the true experience of troubleshooting on their own and called into question who or what was really being tested.

**Usability Gone Wrong #2**: The ‘wrong socket’ episode. Given some manuals, Ruth was tasked with connecting the (new) Stratus 286 to a printer. She starts by asking if she should turn off the machine before plugging in the printer cable. After some time, she locates the switch and turns the machine off. Then, she goes back and forth between the manuals and the machine before announcing she’s stuck. She is able to troubleshoot by asking Nina a series of questions where she discovers the task is impossible. The machine is the text to be interpreted and Ruth misinterpreted it. She had to reconfigure her relationship to the machine in order to better understand what she was faced with, namely the printer cable was incompatible with the printer socket and thus the task could not be completed. Not only did her actions as the user influence the machine but the machine too influenced her actions, and in fact made her doubt herself when her expectations of it did not align with reality.

1. In the first excerpt by Issa and Isaias (2015), improving the usability of software through usability evaluation focuses on the specific changes that can be made on the technical aspects of the software by a development team. It is an iterative process of refining and improving the product before the final, most practical version is released to their target users. It is very engineering-centric. However, Woolgar (1990) takes a different, broader approach and seeks to configure the user during the design and production of a new entity. The emphasis is on changing the user’s behaviour by setting constraints to their predicted future actions. This approach focuses on how users are influenced by design choices and limitations placed on them rather than the technical aspects of the software itself. Overall, the difference between Issa & Isaias (2015) and Woolgar’s (1990) approaches to the uses of usability lie in the specific context and emphasis of usability. Issa and Isaias (2015) focuses on usability evaluation as a way to improve software usability whereas Woolgar (1990) explores the concept of configuring the user during the design process.

Word Count: 703

**Works Cited:**

Issa, T., & Isaias, P. (2015). [Usability and human computer interaction (HCI)](https://doi-org.ezproxy.library.ubc.ca/10.1007/978-1-4471-6753-2_2). In *Sustainable*

*Design*(pp. 19-35). Springer.

Woolgar, S. (1990). [Configuring the user: The case of usability trials](https://courses.library.ubc.ca/i.CN9L5N). *The Sociological*

*Review*, *38*(1, Suppl.), S58-S99.