

Adapting CSE to the Internet age

The Internet is a vast ocean of information sources, albeit with diverse reliability and quality. In Web 2.0 platforms, any participant can be a content creator. This “person plus” reality is challenging for both the instructors and the students. One implication is that higher-education students now have more alternatives for searching for information than previous generations had. We conducted semi-structured interviews with 12 Computer Science students and 8 instructors from two universities, in Israel and the UK.

We sought to (a) identify the difficulties students encounter, if at all, (b) identify the learning processes that students undergo, if at all, when using the Internet for their CS studies, in particular, programming tasks; and (c) elicit instructors’ perceptions of students’ use of the Internet.

We found that both students and instructors agreed that using the Internet is not trivial, and yet both thought that direct teaching of this skill is unnecessary. Instructors differed in their attitudes towards students’ use of the internet, especially in how to adapt their courses to this reality. They were all concerned. Indeed, we found that in the first year the students’ use of the Internet and their difficulties are similar to reports in the empirical literature, and echo the instructors’ concerns. However, after extensive experience, students undergo a learning process, and their ability to navigate the myriad sources, as well as to search, manage, and effectively evaluate Internet sources improves. Students mentioned their improved abilities to code as a means to effectively evaluate information sources. This study was published in Ben-David Kolikant, Y., & Ma'ayan, Z. E. (2018). Computer science students’ use of the internet for academic purposes: difficulties and learning processes. *Computer Science Education*, 28(3), 211-231.