
- This paper researches the students’ knowledge development during a course of concurrent and distributed computation in high school.
- The key assumption with this study was that computer science education is meant to provide CS practitioners. Based on the results, a course concept is proposed.
- The theoretic framework in this study is situated learning; learning occurs when newcomers participate in genuine activities in target community of practice.
- What cultural perspectives dominated the students’ processes of solving the problem?

A few important issues:
- ‘Core of computer science practice is programming’
- Three programming cultures: the academic, the industrial, the informal
- In teaching, CS academic and the informal cultures clash
- To resolve clash, CS courses should be designed as fertile zones of cultural encounter
- Learning is a process of entering a culture or a community or practice (CoP), by participating in a legitimate peripheral activity of the target CoP or culture.
- Socio-cultural emphasis on the social interaction regarding learning
- This paper aims towards improvements in the instructional setting
- Be aware of a cultural school-obstacle that enables surviving without learning and students’ needs of being part of CoP

Abbreviations
CoP Community of Practice
MMI Man Machine Interface
SG Synchronization Goal
SM Synchronization mechanism

Methodologies (videotaping / taking notes) were not comparable. Eventhough the point was to let the situations differ from each other. When taking notes, there should be two persons on an experiment, since one could make mistakes, or not notice all significant situations.

Categorization was as well a bit weird: Problem solving activities: analysis, design, verification; Perspectives: a user’s, a programmer’s and a school-member’s. Somehow understandable is the division between user’s and programmer’s view, when taking into account purely user interface –related issues. However, even this can be considered misinterpretation: also user interface is programmed. There is nothing non-programming about it. Then what about this school-member’s view? Well, after working in two companies as a programmer and/or designer, I must say, that the school-member’s view was pretty common among the professional team members.
I consider the whole setting, the fertile zone for cultural encounter, somewhat artificial. As my opinion I represent that school should provide the children as strong technical skills and tools as possible. Plus certain amount of project skills. After that, let the Siberia teach them. (As they will encounter the companies as junior or trainee programmers and the learning process will continue after graduation, or in this case after high-school is over.)

I think the whole paper could be categorized as ‘horse whisper’.

Barker L., Garvin-Doxas K., Jackson M. ‘Defensive Climate in the Computer Science Classroom’. SIGSE’02, February 27-March 3, 2002, Cetington Kentucky, USA

This paper is about defensive climate and competitiveness, judgments about others, superiority and other negative phenomenon in the computer science classroom. Both the physical and social aspects of learning environment influence student participation and satisfaction.

In this study, data has been collected via ethnographic enquiry. The goal of this enquiry was to capture the details and meanings of interaction from the perspective of members of a social setting. 10 courses were observed in academic year 2000-2001. The field notes recorded were: number of students attending, sex, and appearance, physical layout of classrooms and searing arrangements; descriptions of interaction and interactants. The analytical method used was kind of content analysis. (Researchers read through the data several times, labeling them and establishing a classification scheme.)

The social environment of many CS courses could be characterized impersonal, where it’s easy to remain anonymous and socially distant. (Yeah, just like in our department!) Introducing is so easy, so why don’t us all do it. The problems represented in this study are extremely common and it would be a just about the time to solve them permanently and start to build more student-friendly culture at our department.

Research method was very good! Data collected was sufficient and detailed.

I consider this research very important, valid and interesting. We could learn from this research also in our university. Let’s all encourage interaction in CS classes!

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