* Title: Conditions for Effective Use of Interactive On-line Learning Objectives: The case of a fraction computer-based learning sequence
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This paper focuses on the challenges of students’ understanding about fractions from students’ perspectives and teachers’ perspective. Not using factions daily is one of the factors that makes it difficult to embed the significance of learning fractions as part of students’ life. The success of supporting students’ understanding lies on the design of instructions. The traditional teaching methods lack the emphasis at students’ conceptual understanding with little connections to students’ existing knowledge. However, technology-assisted learning is introduced as a successful model in enhancing students’ understanding with challenging math concepts.

The paper takes a main point on a computer-based learning package named CLIPS-Critical Learning Instructional Paths Supports. The package consists of its own characteristics and learning tasks for students. Even though students make meaningful progress in understanding of fractions under CLIPS, there are limitations and exceptions that students would not benefit from the program. Through case studies, the paper concludes the importance of building the direct relationships between online learning tasks and in-class learning tasks. The necessity of having in-class activities that are within students’ zone of proximal development. The full participation or involvement in the CLIPS will make a difference, and the pair work between students will support each other in completing the CLIPS tasks. Last but not the least, since the CLIPS program is computer-based learning, students can keep their own pace and go back for checking their work. The educators believe that students go with the sequence order to understand the content better than those who were absent and chose the tasks randomly.

* Why do you think learning fractions is challenging for middle grades students in your own opinion?

First of all, there are different ways to represent fractions: division sign, colon, and fraction bar. Fractions are divided into proper fraction, improper fraction, and mixed fractions. They will have questions involving mixed fractions, but what they need to do first it to convert them to improper fractions to make computation easier. If a teacher cannot make his or her students understand the meaning of proportionality, it is going to be extremely hard for students to complete a task associated with fractions or understanding the significance behind ratio. From the reading, I learned that a computer-based learning might be a possible way to assist students to have a better understanding of something that was not clear to them through vivid images and audio. At the same time, there are challenges to implement technology in a classroom. The learning objectives from the sites should be correlated to the lesson itself. Schools need financial support to provide students’ access to computers. There are also technical issues along with computers that might happen in the classroom, which will make it unsuccessful for students to keep a consistent attention during the tasks. In conclusion, I agree that students need some technology in their learning if students can use it wisely with their goals of learning in mind.

When students are learning fractions, they will be able to understand what a ratio is. How to complete a ratio table is considered one of the basic and important tasks for students when they learn fractions from my observation experience. Thus, there are a lot of definitions that students need to know in order to understand fractions.

Without access to the reading, I learned that students struggle to factions because they are familiar with whole numbers. They are good at simple operations with these numbers, but students will have difficulty with whole numbers with different signs. They are likely to make conceptual errors when they subtract negative whole numbers. It is going to be a higher level when students learn fractions.

* What are the strategies that you think can help students build a good habit of using internet?
* What are possible ways that we can negotiate with students’ parents’ involvement with students’ online assignments at home? (like sit there with the students for half-hour)