**What is being learned? What mathematics is the focus of the activity/technology? Is relational or instrumental understanding emphasized?**

Students learn to apply the chain rule to various functions in order to take the derivative. This site builds an instrumental understanding of the process.

**How does learning take place? What are the underlying assumptions (explicit or implicit) about the nature of learning?**

Learning takes place by practicing, then evaluating how well the problem was solved, by comparing the student’s work to the provided solution. This is a “practice makes perfect” website. There is also the underlying assumption that students will see what they did wrong in one problem and strive to adjust their method in the next problem.

**What role does technology play? What advantages or disadvantages does the technology hold for this role? What unique contribution does the technology make in facilitating learning?**

The technology provides access to information about the chain rule, and how to apply it. It also speeds up the task of checking answers, since students don’t have to flip to the back of the book or wait for the teacher to provide feedback. They have immediate access via a hyperlink. The drawback is that students may go straight to the solution instead of working the problem out on their own, first.

**How does it fit within existing school curriculum? (e.g., is it intended to supplement or supplant existing curriculum? Is it intended to enhance the learning of something already central to the curriculum or some new set of understandings or competencies?)**

The information on this website supplements the current curriculum. The chain rule is an important derivative shortcut, because it allows implicit differentiation.

**How does the technology fit or interact with the social context of learning? (e.g., Are computers used by individuals or groups? Does the technology/activity support collaboration or individual work? What sorts of interaction does the technology facilitate or hinder?)**

While the technology itself doesn’t support social interaction, it is entirely possible to make this activity social. Students enjoy talking through problems together, and then checking their solution. This activity could also be done individually. The largely non-interactive format of this website allows for that flexibility.

**How are important differences among learners taken into account?**

The site is doesn’t provide support for differences among learners – there are no visuals, no audio, no interactive features, etc. It’s designed in a manner similar to most textbooks, and so caters mostly to the logical/mathematical thinkers.

**What do teachers and learners need to know? What demands are placed on teachers and other "users"? What knowledge is needed? What knowledge supports does the innovation provide (e.g., skills in using particular kinds of technology)?**

Students should be a somewhat familiar with the chain rule before trying these problems. There are no technology hurdles. As long as a person can navigate to the website, they can do the activity.