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Developing an Interactive Case to Support Student Learning of Educational Psychology

Victoria Denardis
Clemson University

Elizabeth Mercer
Clemson University

Julia Roman
Clemson University

Penelope Vargas
Clemson University

Meihua Qian
Clemson University

See next page for additional authors

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Authors

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Victoria Denardis[1], Elizabeth Mercer[1], Julia Roman[1],
Penelope Vargas[2], Meihua Qian[2], and D. Matthew Boyer[2]

1 - Undergraduate Student; 2 – Assistant Professor

Abstract This poster presents samples of our ongoing work developing an interactive case study for use in teaching behaviorist concepts to undergraduate Teacher Education students. During the first phase of a larger project, we created a case study that involves teacher decision-making about student actions as viewed through a behaviorist lens. We piloted the study in Summer 2014 with a graduate-level educational psychology course in order to determine the perceived value of the case as an instructional tool. During the pilot we collected feedback on the case narrative and functionality and the influence on student efficacy regarding their ability to understand and implement behaviorist principles. The pilot also allowed us to assess instrument and case design for the continuing study. We used the findings from the pilot study to revise the interactive cases and hone our data collection and analysis procedures. In Fall 2014 and Spring 2015, we continued the research by implementing the cases with undergraduate educational psychology courses. This work shares initial findings from these latest implementations.
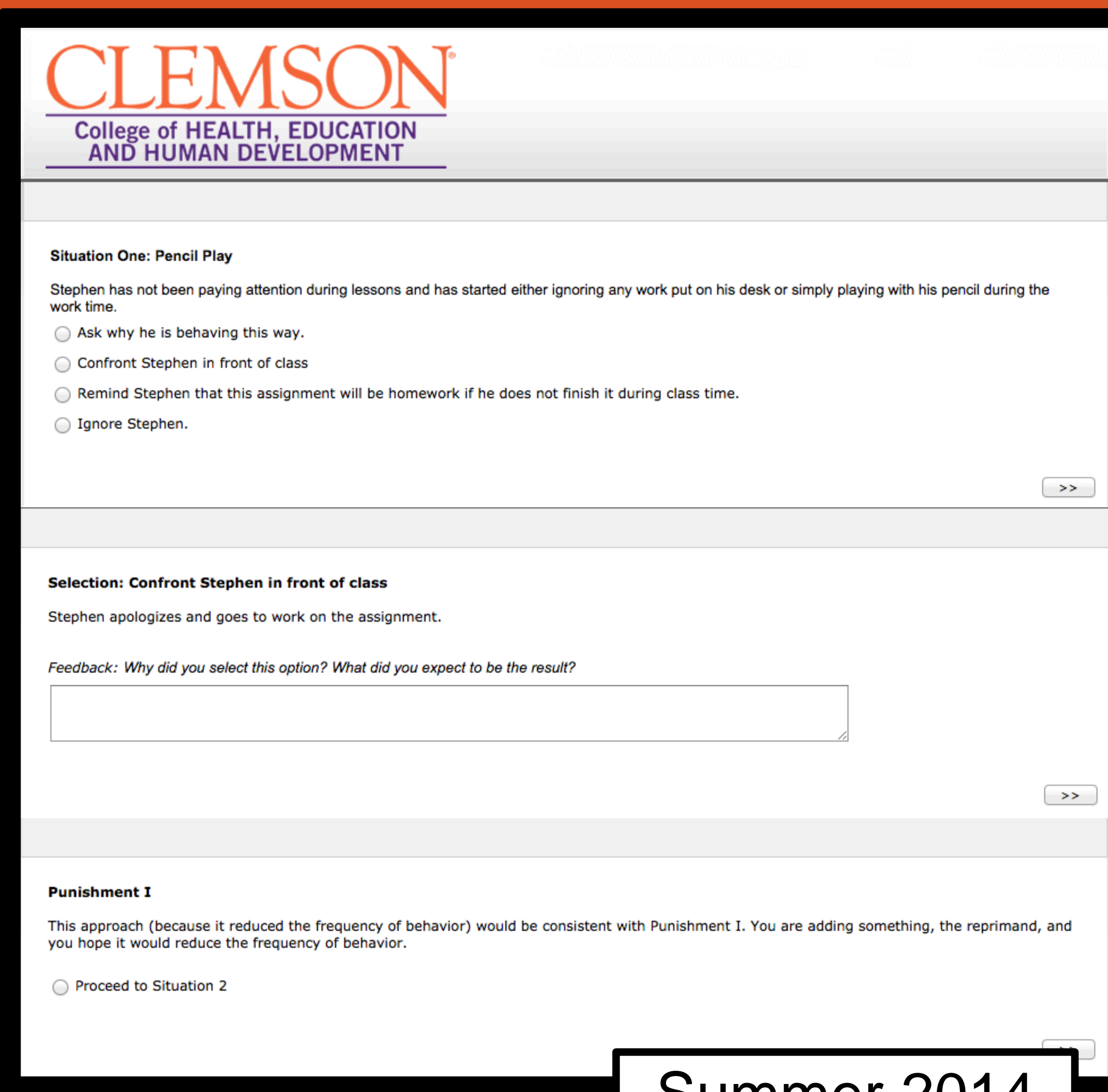
Summer 2014
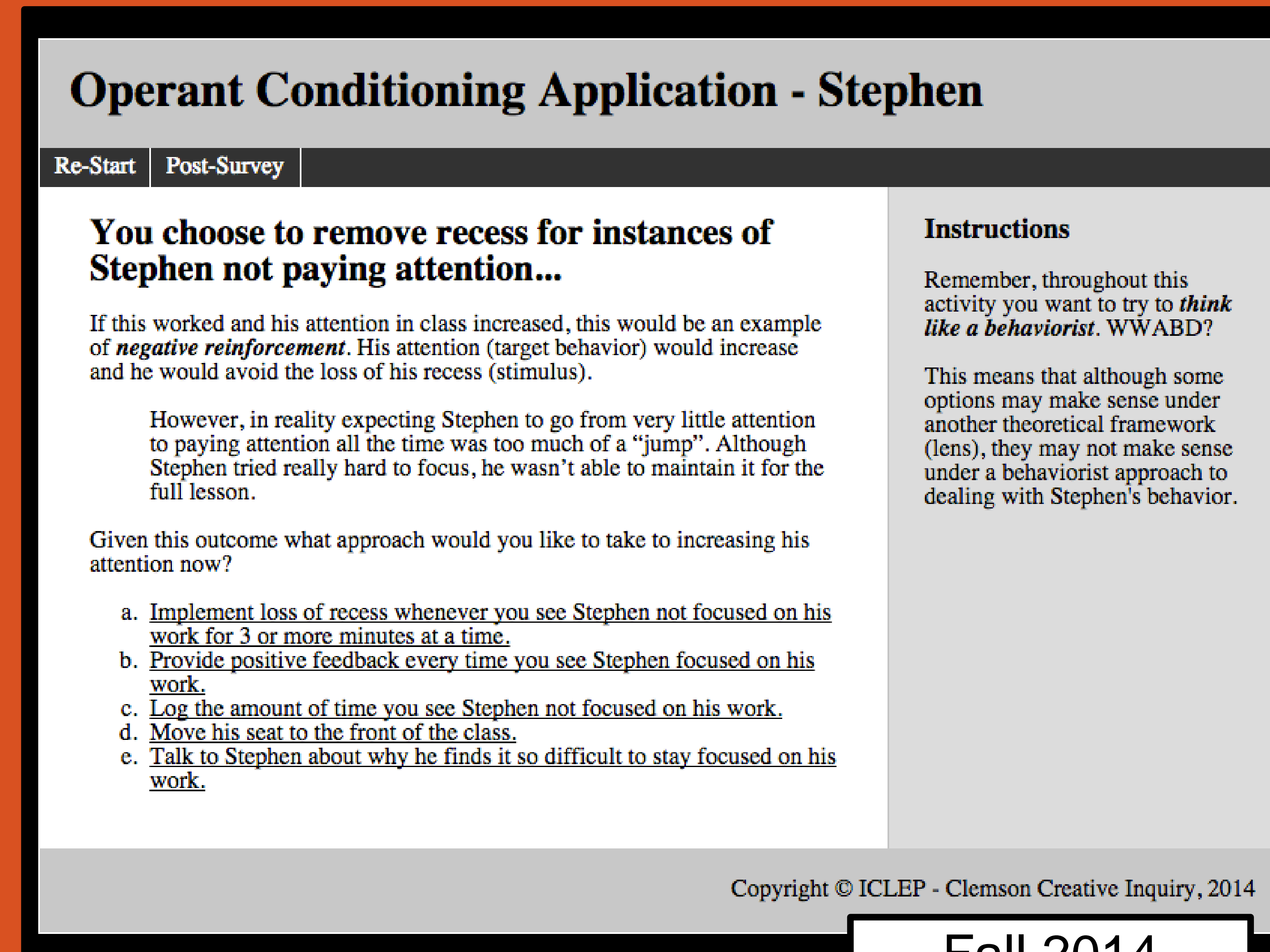
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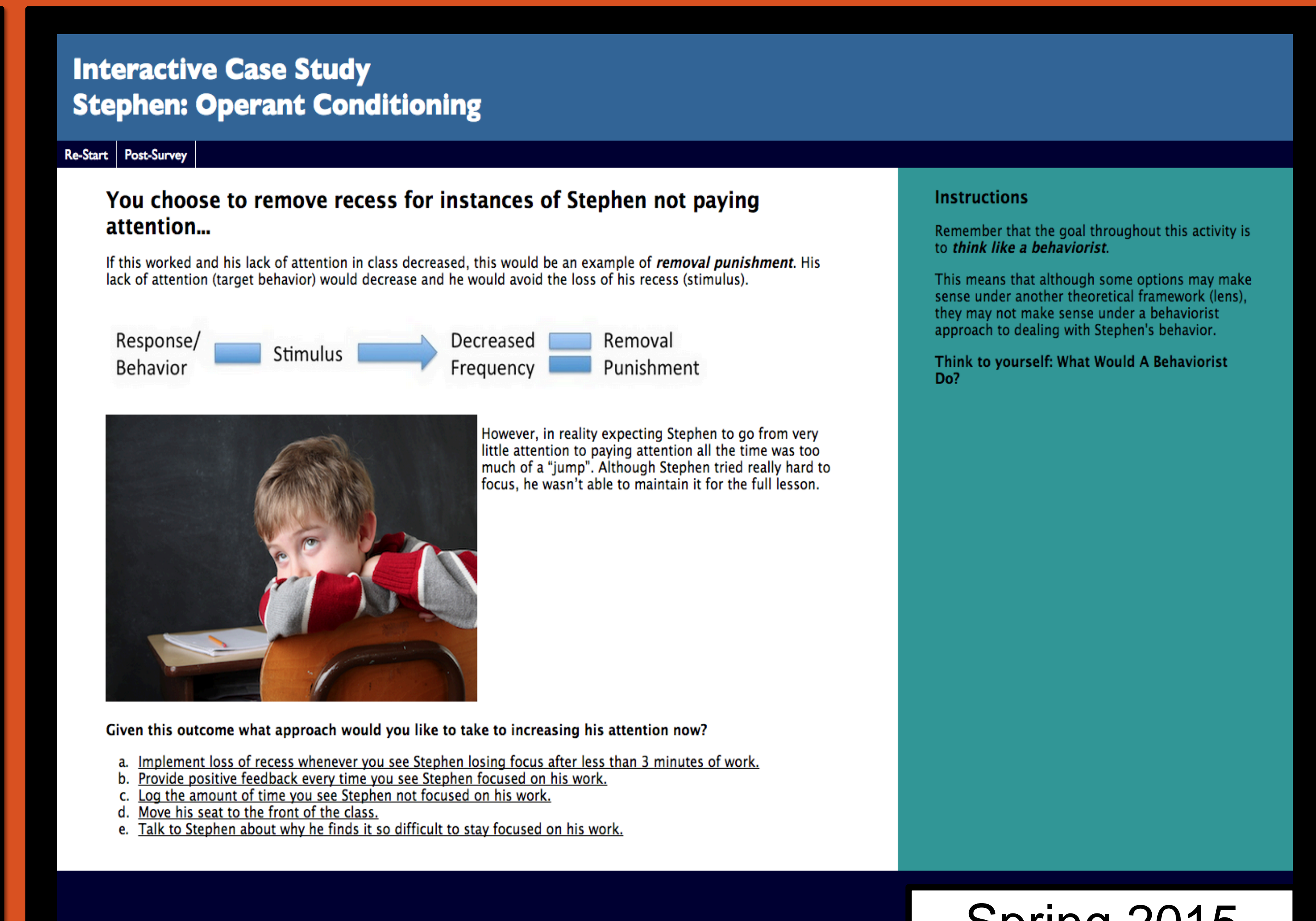
Spring 2015

Case Description: The case consisted of multiple options for the students to choose from all options returned to the same point after the students received feedback from their choices.

Self-Efficacy: Students' perceived self-efficacy toward understanding and applying operant conditioning significantly increased after the activity ($p<0.05$ or $p<0.01$).

Interactions: Students took approximately 10 minutes to work through the activity and were reticent to explore more than once.

Design: Students specifically mentioned: immediate feedback, promotion of critical thinking, classroom application, the lack of right or wrong choices and the ability to reflect on their choices as useful aspects of the design.

Case Description: 84 pages, options branched out and led to different situations, feedback, and outcomes to the case.

Self-Efficacy: While students felt the activity improved their understanding of and ability to apply behaviorism, they also felt an urge to find the correct answer which interfered with their exploration of the activity.

Interactions: The results from the Fall 2014 indicated it took students approximately 15 to 20 minutes to complete the activity. They also felt the activity was "done" once they had made selections that resulted in a satisfactory resolution to the problem behavior.

Design: Students in the Fall frequently vocalized a focus on selecting the "right answer" rather than using the activity as an activity to explore. Students suggested more options, better feedback, and pictures as improvements to future iterations of the case.

Case Description: 241 pages and has the most strands (i.e. nodes, branches) of the three versions.

Self-Efficacy: Students felt that the activity was beneficial in helping with their understanding of behaviorism, helped them see how to use behaviorism in a real life setting, and was a good study tool.

Interactions: Following the changes to the case and presentation, the data collected during the Spring 2015 semester indicated that students spent an average time of 29 minutes and 33 seconds, clicking on an average of 41 links.

Design: These initial results therefore indicate that the changes we made to both the case itself and the ways the instructor presented the activity, led to students being more engaged with the exercise. Discussion data collected following the activity also reflects this.

Future Directions: Increase interactivity and responsiveness, integrate additional theories, and develop more student cases.