

## abstract

Information overload is a commonly reported problem in distance education literature. To address this problem, a button was created in an online learning environment that allows learners to “like” a note to bring more attention to it. Graduate students in fully online courses were surveyed to capture why and how the Like button is used and if it supports learning. Analysis of the results indicate three types of situations where the button is used: 1) when someone has similar thoughts or feelings students identify with; 2) when someone offers a new or interesting perspective, or 3) when someone provides a deep analysis of the subject matter. These findings support the clarification of use and re-design of the Like facility.

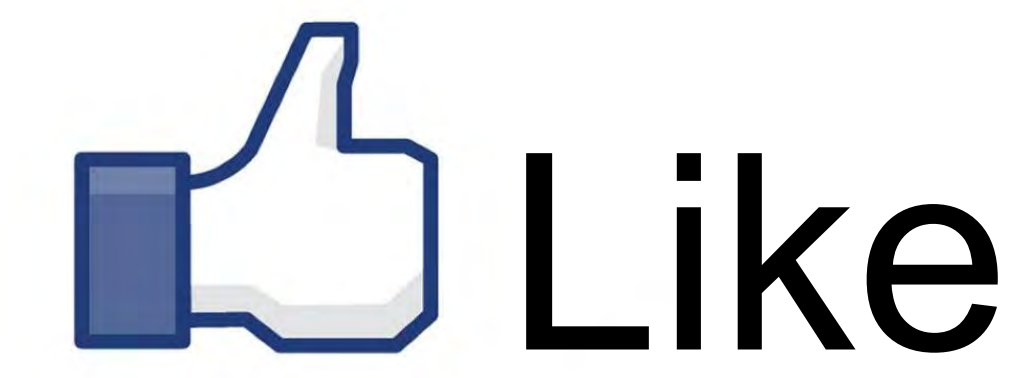
## the problem

- Threads are critical for learning practices to occur and they rely heavily on knowledge sharing and meaning making (Stahl & Hesse, 2009).
- Majority of online learning environments employ asynchronous threaded discussions; however, there is limited facility within the environment to distinguish between notes that are deserving of more attention.
- Challenge: to develop a facility that will allow students to separate the promising ideas in a threaded discussion in order to avoid sense of overload.

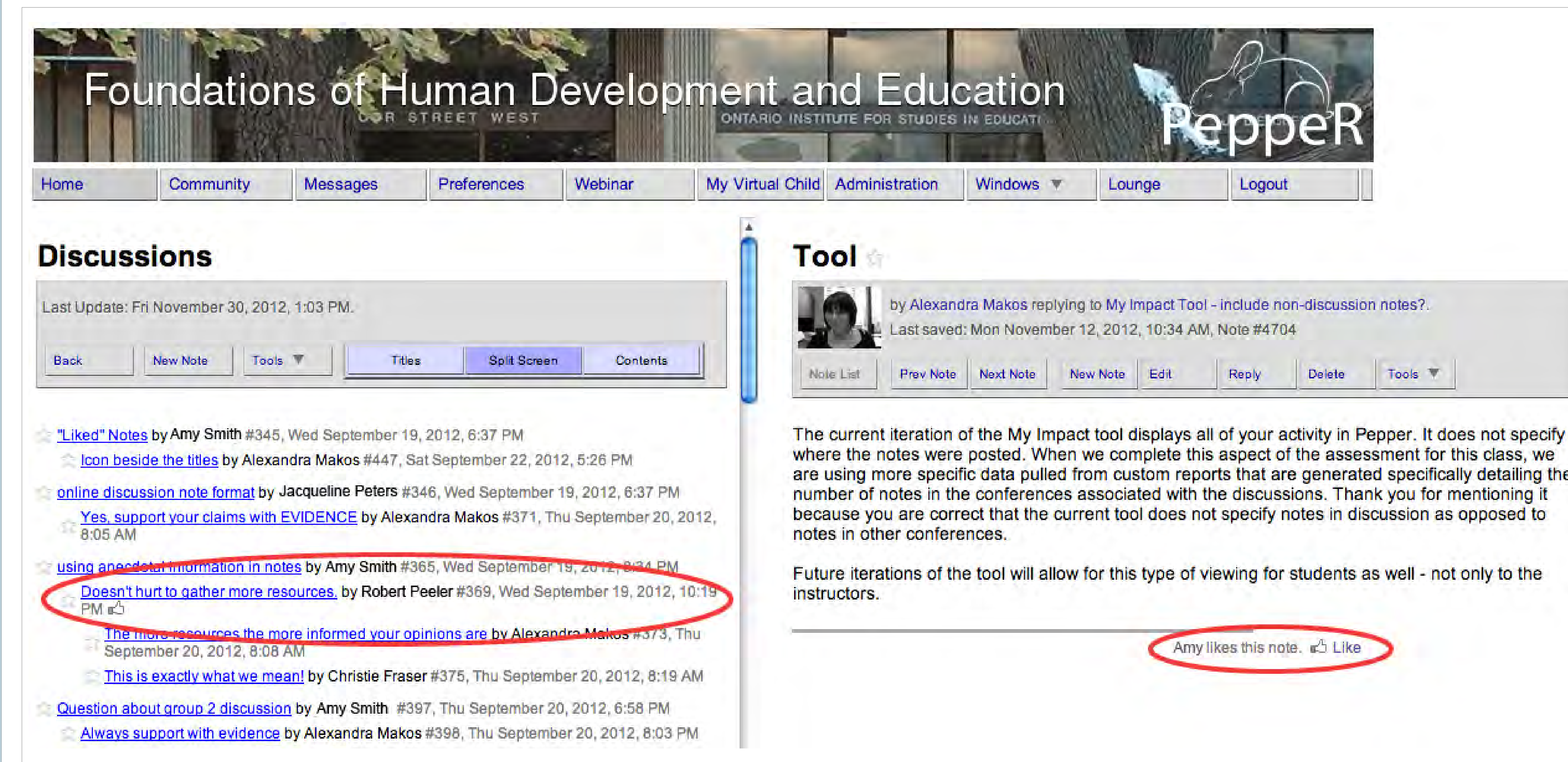
## methodology

- First Design Research iteration: Identify how the Like button is used by students in the online environment.
- Questionnaire developed to understand why and how students use the Like button, and if the facility supports their learning.
- Data Source Participants: online survey sent to graduate level educational psychology students in fully online courses; voluntary participation (n=31).

## Pepper’s “Like” Button



**Figure 1.** The “Like” button as it appears in Pepper.



**Figure 2.** Screen shot of a graduate level Pepper community [emphasis added to identify “likes”].

Left: example of a “liked” note in a threaded discussion.

Right: example of a note that has been “liked”.

## the environment

- “Pepper” is a collaborative online learning environment developed at the Ontario Institute for Studies in Education (OISE), University of Toronto.
- Learners working together in a community of inquiry (CoI) where the dynamic interactions between social presence, cognitive presence, and teaching presence impacts the learning that takes place (Garrison et al., 2000).
- Facilities within the environment support knowledge building:
  - Defined as the advancement of knowledge by a community of learners through the process of testing and improving ideas (Bereiter & Scardamalia, 2003; Scardamalia & Bereiter, 2003).
  - Courses structured to enhance the process of advancing knowledge building – focus on discussions.

## online survey findings

- Student use of the button is categorized into three situations:
  1. When someone has similar thoughts or feelings that students identify with;
  2. When someone offers a new or interesting perspective;
  3. When someone provides a deep analysis of the subject matter.
- The button may provide opportunities for triggering and integration practices which promote cognitive presence.
- Suggests that button impacts learning in two ways:
  1. People engage more with notes that have received more likes and thus “liking” serves as a filter for the community to focus on problems and depth of understanding; and,
  2. Helps with creating collective knowledge by providing a means for students to help regulate the learning process
- Students that have received “likes” overwhelming responded that it made them feel that their discussion contributions were valued by their peers indicating that the facility helps generate a sense of belonging to a community.

## future work: second design iteration

- Problem: How to bring clarity to the use of the Like button within the knowledge building process
- Possible designs include:
  - Renaming the button
  - Encouraging course instructors to define the functionality
  - Add additional buttons as scaffolds to capture the different ways the current button is used

## additional information



Full Paper



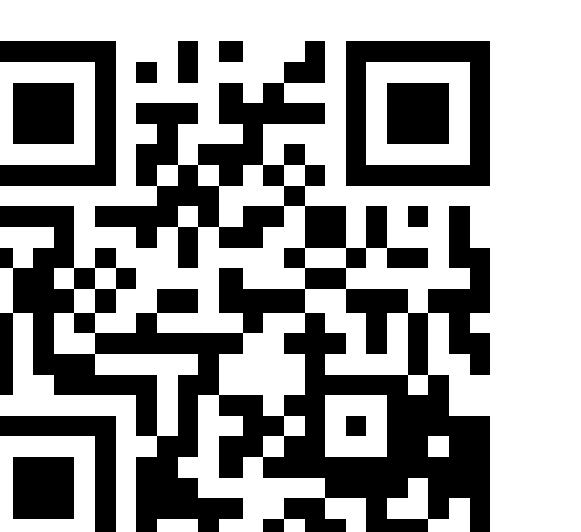
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