The Relationship of Inquiry – a framework for design and analysis of online coaching

Stefan Stenbom, Stefan Hrastinski & Martha Cleveland-Innes
KTH Royal Institute of Technology & Athabasca University


TRACK: Learning in a social context
PRESENTATION TYPE: Flipped conference

Summary

This presentation introduces the Relationship of Inquiry framework. It is a theoretical framework for design and analysis of online coaching, a one-to-one inquiry-based online learning activity. The video introduces the framework. During the seminar we will discuss this framework with data from an online coaching program called Math Coach.

Abstract

A common mode for communication using the internet is interaction one-to-one. These interactions can be facilitated using, for example video, audio and text communication. The value of one-to-one communication in an educational context has been examined in several studies (Contreras-Castillo et al, 2006; Hwang et al, 2011; Kopp et al, 2012; Nicholson, 2002; Segerstad and Ljungstrand, 2002). The learning activity where one-to-one communication is enabled for inquiry-based education is in this presentation defined as online coaching.

Online coaching is described as an inquiry-based learning activity where a person gets support on a specific subject from a more knowledgeable person using the internet. The theoretical foundation for online coaching is Vygotsky’s (1978) theory of the Zone of Proximal Development (ZPD).

Online coaching is also used for its opportunity to address Bloom’s 2 sigma
problem (Bloom, 1984). An implementation of online coaching is the Math Coach program. That program offers help with mathematics by online coaching. Coachees range from sixth to ninth year of compulsory school, and upper secondary school (aged 12–19). Coaches are enrolled from students at teacher training colleges.

The purpose of this presentation is to present the Relationship of Inquiry framework. It is a theoretical framework for design and analysis of online coaching. The Relationship of Inquiry is a modification of the Community of Inquiry (Garrison et al, 2000, 2001) to a one-to-one setting. The suggested Relationship of Inquiry framework consists four elements. These are cognitive presence, social presence, teaching presence and emotional presence. Two methods for analysis of online coaching have been identified. These are a standardized survey study and a transcript coding procedure. The survey is a modification of the 34 item survey by Arbaugh et al (2008) and Swan et al (2008). The transcript coding procedure is a modification of Garrison et al (2000). Previous publications developing the Relationship of Inquiry framework are Hrastinski and Stenbom (2013), Stenbom et al (2012) and Stenbom et al (2013).

This flipped conference presentation consists of an introductory video published before the conference and a face-to-face discussion during the conference. The video will introduce online coaching and the Relationship of Inquiry framework. In the face-to-face seminar the framework will be demonstrated using data from the Math Coach program. Participants will also be engaged in a discussion about the framework. After the presentation participants will be able to use the Relationship of Inquiry framework for design and analysis of one-to-one online learning activities.

References


instant messaging in online learning environments. Interactive Learning Environments 14(3):205–218


Hrastinski S, Stenbom S (2013) Student-student online coaching: Conceptualizing an emerging learning activity. The Internet and Higher Education 16(0):66–69


