Digital Emotion Detectives Game as a learning environment – Peer interaction during game playing sessions

*Sari Lipponen¹, Merja Koivula¹, Kerttu Huttunen², Marja-Leena Laakso¹, Leena Turja¹

¹University of Jyväskylä, Finland ²University of Oulu, Finland

Digital learning environments are increasingly used with young children and they are found to be accessible, motivating, low cost and effective intervention tools in supporting children’s learning. In research literature and public debate an increasing concern exists about young children’s social-emotional difficulties, and the interest towards the potential of computer-based games in supporting social-emotional learning has therefore increased.

This presentation discusses pair play interaction during playing of the Emotion Detectives Game (ED) in kindergarten. The ED game is a freeware designed to develop children’s social and emotional competence. The aim of this study is to explore this digital game as a learning environment. The research questions are: 1) What are the interactional play features that characterize the play sessions?, 2) What kind of pair play types can be identified based on these interactional play features?, and 3) How do the interaction features and pair play types change during the play period?

The participants of this study, 30 children aged 5 to 6 years, played the ED game in kindergarten for eight weeks: alone at least for one hour a week and with a peer for 15 minutes a week. During the 8-week-period, pair play of 16 children was video-recorded and three gameplay sessions of each pair were explored in detail with content analysis.

According to the results, interactional play features characterizing the pair play varied depending on e.g., children’s involvement in playing, relationship with each other, game play skills and cooperation. Based on these interactional features, three different pair play types were identified: conflictious, ambivalent and collaborative play. These results and the change occurring in the interaction features and pair play types as a function of the playing period will be discussed in detail.

The results of this study deepen our understanding on the features of children’s pair play and also extend our knowledge about suitability of the ED game as a learning tool.

Keywords: social-emotional learning, peer interaction, digital learning environment