
Problem-solving in mathematics may produce emotional experiences integrated in learning (academic emotions) that can be utilized when practicing reflection, i.e. the deliberation of one’s own emotions. Reflection skills are developed on a long-term basis starting in primary education, and young pupils in particular need tools for reflection – the suitability of which has been poorly researched. This study examines 1) what kind of academic emotions 1st and 2nd graders reflect on problem-solving, mathematics and studying mathematics after problem-solving, and 2) how a tool called Reflection Landscape, especially developed for the practice of self-assessment skills, facilitates reflection processes. According to the results, a problem-solving task provided a natural situation for reflecting emotions. The pupils reflected their emotions in varied ways according to individual and age-related differences. The form of the questions influenced the pupils’ ability to reflect. The Reflection Landscape tool facilitated the description, content, and expression of emotional and meta-emotional reflections. The study shows that expressing emotions generated by problem-solving, mathematics and studying mathematics provides favourable opportunities for practicing reflection in primary education.

Descriptors: academic emotion, primary education, problem-solving, reflection, self-assessment


This article focuses on the experiences of multilingual students’ mother tongue instruction (MTI) teachers in their work communities. MTI teachers’ (N=47) experiences of belonging and connection with their work communities were studied under the framework of culturally and linguistically responsive education. The survey data was analyzed with qualitative content analysis utilizing Atlas.ti. There was great variation in the MTI teachers’ experiences of belonging and connection. Some reported a sense of being part of the work community, whereas others felt somewhat like outsiders. Even if the Finnish educational system recognizes and appreciates diversity on the discursive level, everyday life and interaction in the school communities do not seem to be as inclusive as the official documents indicate. Further research focusing on culturally and linguistically responsive perspectives is therefore needed to study the existence, visibility, and roles of the professional groups within school communities.

Descriptors: belongingness, culturally and linguistically responsive education, interaction, mother tongue teachers, multilingual students, school community

Physical education teachers and school nurses are key actors in promoting students’ physical functioning capacity and in utilizing the curriculum-based Move! fitness monitoring system. The purpose of this study is to investigate physical education teachers’ and school nurses’ experiences of multiprofessional co-operation while utilizing the Move! system to promote students’ functioning capacity. The study was conducted with a questionnaire separately for school nurses (N=192) and for physical education teachers (N=359). The comparison of the quantitative questions of the questionnaire utilized the t-test and one-way analysis of variance (ANOVA). The qualitative data was analyzed using a theory-based content analysis method. The results indicate that approximately half of the teachers and nurses who participated in the study had experiences of multiprofessional co-operation in planning the measurements, giving feedback and utilizing the results. In addition, there were multiple differences in how the co-operation had occurred between teachers and nurses. Mutual time and interaction were the key factors influencing the co-operation process. In the future, multi-professional co-operation should be given a greater role in teachers’ and nurses’ basic and continuing education programs in order to utilize the expertise of these professionals in promoting pupils’ physical functioning capacity in basic education.

Descriptors: basic education, co-operation, functional capacity, multiprofessional, physical education teacher, school nurse


Interactional partners do not always respond to the initiations of children on the autism spectrum. This study examines what kind of overlapping interactional projects a special needs assistant and a pupil on the autism spectrum had when the special needs assistant was unresponsive to the pupil's social initiations. The data consisted of video recorded interactions between three pupils on the autism spectrum and their individual special needs assistants. The data was analyzed using qualitative content analysis. The results show that there were overlapping projects in almost half of the interaction situations where the assistant was unresponsive to the pupil's initiations. These projects either hindered the assistant from responding or made unresponsiveness interactionally or pedagogically relevant. The results suggest that it is not adequate to examine unresponsiveness based on an individual’s actions alone, given the influence of the interactional partner's institutional role and pedagogical goals as well as the relationship between the projects.

Descriptors: asymmetric interaction, autism spectrum, overlapping projects, qualitative content analysis, social initiations, social skills, unresponsiveness


This article examines a conceptual turning point in the Finnish national core curriculum for comprehensive schooling. Legislative norms and principles of non-discrimination and individual rights are attaining increasingly central positions in educational policy discourse alongside and even past equality. A theory-guided qualitative content analysis of the 2004 and 2014 national core curricula, a 2014 National Agency for Education's memorandum and legislation distinguished different liberal political rationalities and three separate dimensions of justice. The analysis revealed a discourse of social justice that emphasizes recognition over redistribution in conjunction with legislation that enforces commitment to decentralized promotion of social justice, positioning
school communities and individuals as the primary ethical agents in promoting parity of participation and equal educational opportunities. There is a partial misalignment between the contemporary political rationality of social justice and the empirical realities of educational equality.

Descriptors: comprehensive school, educational policy, equality, equity, legislation, neoliberalism, non-discrimination, social justice


This study investigates how students’ accusations are managed in an adult education context aiming at dialogic interaction. Accusations were made in relation to the instructor of the group or to the ongoing studies. The data consisted of 20 hours of videotaped learning group interaction during a teacher training programme. Eight accusation episodes were selected and analysed by applying ethnomethodological conversation analysis. The results show that the instructor enabled the students to construct and present their accusations and provided four types of responses: 1) offering a new perspective, 2) giving an account, 3) confessing to the accused action and rectifying it and 4) solving the problem. Among these responses, offering a new perspective and solving the problem are not the typical responses to everyday accusations, but they may reflect professional and pedagogical treatment of accusations. Furthermore, these two types of responses allow room for dialogic interaction.

Descriptors: accusations, adult education, conversation analysis, dialogic interaction, instructor