

Measuring and supporting students' social participation: Innovating the field with behavioral data

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E-CIR scope

In the present decade, inclusive education has gained significant attention, both in the general public and in the scientific community. While academic achievements of students in inclusive learning settings are promising, social participation of students with special educational needs (SEN) - inside and outside of the classroom - has become a more problematic issue. Finding ways to support students' social participation is, therefore, a core challenge for inclusive education.

Current research on social participation is mainly based on self-report measures about a person's quantity of friends or about the overall quality of an individual's interactions with significant others. Both of these measures result in easily communicable but highly aggregated and subjective data which give only little information about the actual social contacts among students with and without SEN. Therefore, basic behavioral data of social interactions such as face-to-face contacts, tracking data, and log files are needed to gain a deeper understanding of the mechanisms underlying social participation.

Our E-CIR aims at closing this research gap by focusing on the development of innovative technologies that allow to precisely measure the length, duration and quality of social contacts in every day's school live. This, in turn, will lay ground for empirically testing assumptions articulated in social participation theories, such as the contact hypotheses, and for developing means to foster social participation.

The goal of our E-CIR is to answer three main questions:

- 1. Under which circumstances do different behavior-based measures of students' social participation lead to reliable and valid empirical data?
- 2. To what extent can these measurement instruments assess both social structure and social participation processes in inclusive settings?
- 3. To what extent can behavior-based technologies measure the effects of classroom-based interventions aimed at fostering social participation of students?

All together, the E-CIR will not only lead to a better understanding of antecedents and consequences of social participation in heterogeneous learning groups but will also lead to concrete practical outcomes.

E-CIR Members

Dr. Nadine Spörer is full professor in the field of educational psychology and the vice dean of the Faculty of Human Sciences at the University of Potsdam, Germany. Her main research interests deal with self- and co-regulated learning in the context of fostering reading comprehension and with antecedents and consequences of inclusive learning. Nadine Spörer and



her research group are internationally well known from disentangling reading intervention effects by classroom-based experimental studies. With regard to inclusive learning, she conducts longitudinal classroom studies and examines the interplay of instructional methods and social inclusion of students with and without special educational needs. She has extensive teaching and research experience and received several grants from the German Science Foundation and other national bodies. Relevant to the planned E-CIR is her research on instructional processes in inclusive learning settings in which the impact of teacher-student interactions and student-student interactions on academic achievement and social inclusion of primary school students are analyzed. She has published numerous peer-reviewed papers, chapters, and conference proceedings in the area of educational sciences and serves on the editorial board of the German Journal of Educational Psychology. She supervises various PhD projects related to the current proposal.

Dr. Alexander Minnaert is full professor in Special Needs Education and Clinical Educational Sciences at the University of Groningen, The Netherlands. Besides, he is university teacher in the post-graduate program of School Psychology in Amsterdam. His fields of research are motivational, emotional, social, neurological, and (meta)cognitive aspects in development and learning, need supportive teaching, inclusive education, school counseling and research methodology. He was awarded with more than K € 3.000 of research grants in open competitions and contract funding (e.g., NWO, PROO, province funding, fellowships in Asia and Africa, Nuts-Ohra and Kentalis). In the majority of the awarded grants he was the PI, in others he was co-applicant with colleagues of various research institutions. His international recognition is self-evident, not only because of publishing more than 100 international articles or books with high citation index, but also as a member of EARLI and ICM and activities as EARLI SIG coordinator and congress organizer, and as chair of the Academy of Finland (division Education) from 2014 till 2016.

Dr. Carmen Zurbriggen is full professor in Special Education at the University of Bielefeld, Germany. Her main research area is inclusive education with a focus on social participation of students with and without special educational needs as well as classroom composition effects on social-emotional outcomes. Relevant for the E-CIR is in particular her research expertise in the application of innovative survey methodologies such as intensive longitudinal methods, whose objective is to capture people's experience and behavior in their real-life context. On the basis of intensive longitudinal data, which are obtained by means of wireless technology, complex interactions between persons and (teaching) situations as well as the dynamics of processes over time can be investigated (e.g. by using dynamic multilevel modeling). Carmen Zurbriggen is a guest editor, inter alia, of the special issue "Assessing behavior difficulties in students" of the European Journal of Psychological Assessment, and also serves as reviewer for several renowned journals (e.g. Journal for Educational Research Online, School Effectiveness and School Improvement) and international conferences (e.g. EARLI, ECER, SRCD). She is author of numerous scientific publications and conference papers. At the EARLI conference 2017, she was the organizer of the SIG15 invited symposium.

Dr. Christian Huber is full professor in Special Education (emotional behavioral disorders) at the University of Wuppertal (Germany) and the vice dean of his faculty. From 2004 to 2010, he gathered expansive practical experience as a school psychologist, which influenced many of his research projects to this day. In 2010 he was assigned to a junior professorship at the University of Cologne, Germany. In 2013 he took a position as full professor in Inclusive Education at the University of Potsdam, Germany. His main research interests are the promotion of social inclusion of students with special educational needs, the implementation and evaluation of the response-to-intervention paradigm and behavioral assessment through direct behavior rating. Relevant



for the E-CIR in special is his research project on the promotion of social acceptance by optimized intergroup contacts which was launched in October 2017. Moreover, the E-CIR should benefit from his extensive experience in the development of new digital technologies for behavioral assessment. Christian Huber was awarded with numerous research grants in open competitions and is member of the editorial board of two national peer reviewed journals.

Dr. Christoph Stadtfeld is assistant professor of Social Networks at ETH Zürich, Switzerland. He holds a PhD from Karlsruhe Institute of Technology and has been a postdoctoral researcher at the University of Groningen and the Social Network Analysis Research Center in Lugano and a Marie Curie fellow at the MIT Media Lab.

His research focuses on the development and application of theories and methods for social network dynamics. His research group studies network dynamics in different domains such as educational networks, political networks, friendship networks, and organizational networks. He is the principal investigator of an SNF funded project that studies how integration in social networks explains well-being, motivation and academic success of first-year university students. His research was published in leading sociological and methodological journals such as Social Networks, Social Forces, Sociological Methodology, and Sociological Methods and Research.

Dr. Julia Eberle is a senior research scientist in the Educational Psychology Research Group at the Ruhr-Universität Bochum, Germany. She received her PhD from the Doctoral Training Program Learning Sciences at the University of Munich. During and after her doctoral studies, she worked as a research scientist at the University of Munich, both at the Chair of Education and Educational Psychology and at the Chair for Biology Education. She has published and reviewed articles and conference papers in and for national and international journals (e.g. in and for Frontline Learning Research) and conferences (e.g. in and for EARLI). Her research focusses on sociobehavioral and emotional aspects of learning, collaboration and research career development. She is interested in collaborative and community-based learning and instruction in technology-enhanced spaces and virtual-physical-hybrid learning settings. She will contribute her profound knowledge and experience in measuring and analyzing socio-behavioral data to the E-CIR, in particular regarding the use of RFID-technology and social network analysis.

Dr. Anke de Boer is assistant professor at the University of Groningen, department of special needs education and youth care in The Netherlands. Her research focuses on inclusive education, with particular interest on the influence of education (factors on macro, exo, meso and micro level) on the social participation of students with special educational needs. She is principal investigator of several (PhD) projects, and has published about her studies in both national and international journals. She is involved with the national evaluation of the Dutch law regarding inclusive education (so-called: Passend Onderwijs). The topic of the E-CIR is closely connected to current projects of De Boer, and extends knowledge about the effect of contact between students with and without special educational needs. She is also member of the editorial board of an international and national peer reviewed journal.

Dr. Katja Petry is associate professor in Special Needs Education and Parenting at the KULeuven, Belgium. Her fields of research are attitudes toward people with disabilities as well as inclusive education with a special interest in social participation, teacher competencies and collaboration between teachers. She is Pl of several fundamental research projects on inclusive education (e.g., FWO, IWT, BOF) and supervises various PhD projects related to the current proposal. Relevant to the E-CIR is her longitudinal research project on the social networks of students with special educational needs. She published numerous peer-reviewed scientific papers and is convenor of



the network on inclusive education of ECER. Finally, she was one of the organizers of the EARLI SIG15 conference in Leuven in 2016.

Thorsten Henke is a researcher and PhD student in the team of Nadine Spörer. His research is situated in the field of social inclusion with a focus on friendship networks of students with special educational needs. Thorsten Henke contributed peer-reviewed articles, book chapters, and conference presentations to the current research on social inclusion of students with special educational needs. He is an active developer of statistical software and R-Packages related to social network analysis. In 2017, Thorsten Henke was a visiting researcher at the Cluster "Statistical methods for the analysis of social network data" at the University of Groningen. Relevant to the planned E-CIR is both his research on instructional processes in inclusive learning settings and his statistical expertise.

Annual Report:

- ⇒ Report 2021