EARLI SIG 15 – Special Educational Needs

Newsletter Volume 3 – December 2020

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1 – Summary SIG15 Meeting 2020

By Dr Petri Partanen

From the 10th to 12th of August, UCL Institute of Education hosted the EARLI SIG 15 Special Educational Needs Biennal Meeting 2020. The topic of the online conference was "Learning difficulties and inclusion: Challenges (and solutions) for the future".

The conference opened with the first keynote speech, delivered by professor Brahm Norwich on the topic of challenges and resolutions related to inclusion of children with SEN. One important aspect that professor Norwich pointed to was the differences in how inclusion is defined in different settings, countries and actors. Professor Norwich suggested that we maybe should talk less about what inclusion means, and put more effort into how we want to work with inclusion in practice.

The conference continued with a number of symposia, based on pre-recorded talks, single paper and poster presentations and I was positively surprised by the broad multidisciplinary audience, with participants from a broad field of educational, psychological and neuroscientific faculties.

One of many memorable presentations was given by professor Maria Chiara Passolunghi in her keynote on the topic of cognitive and emotional factors in mathematical learning difficulties. I was particularly intrigued by a study conducted by professor Passolunghi with colleagues, where children with maths anxiety were divided into two interventions groups – one group training strategies for dealing with maths anxiety, and the other group training maths strategies. Both groups improved in dealing with maths anxiety, however the group training maths strategies also improved in maths. In the discussion after the keynote, professor Passolunghi expanded on the important role of maths strategies as such, and also on the potential role of metacognitive strategies for children with mathematical learning difficulties.

Despite the digital format of the conference, it was a great experience to participate and get a feeling of the EARLI SIG 15 community, undoubtedly thanks to the organising committee. This was my first time as a new EARLI member and it struck me, as a researcher in school and educational psychology that the conference and the SIG 15 organisation really

fills a gap in the scientific community, offering a multidisciplinary meeting point for topics related to Special educational needs.

Petri Partanen, Ph.D, licensed psychologist at Department of Psychology and Social Work, Mid Sweden University, Östersund, Sweden, and visiting researcher at UCL Institute of Education, London, UK.

2 – EARLI SIG15 guidance for online inclusion

Some of the **members of the SIG have collaborat**ively put together a guidance paper that integrates key recommendations for providing best-practice to online learning for students with SEN.

This guidance has been written for teachers and educational professionals of mainly primary and secondary schools who work with students with some kind of special educational need and includes best-evidence practice from research-based evidence.

The document is divided in several sections. First, it describes the term "**online learning**" and provides an **overview of different online learning activities**. Then, it describes the **benefits of online learning** for students with SEN. The guidance also covers several of the **challenges** that appear when teaching moves from face-to-face to an online format. Throughout the document a description of the difficulties and solutions is provided in each section. This includes 1) how to ensure access to materials and lessons (**General accessibility difficulties and solutions**), 2) how to avoid reducing the quality of social participation during online learning (e.g., difficulties to ask for help) (**Improving social participation during online learning**), 3) how to manage difficulties with the learning content (e.g., does the use of videos benefit students' learning? Or does screening reading affect students' reading comprehension?) (**Content difficulties**), 4) how stepwise enquiry learning benefits students and how to make it work with students with SEN (**Stepwise enquiry learning needed**), 5) how to manage and minimize the impact of students' sensory and behavioural difficulties during online learning (e.g., attention limitations – noise reduction) (**Managing sensory and behavioural difficulties**). Finally, the document provides several useful remarks around three main topics: teacher attitudes', stereotypes and assessment (**Final notes on facilitating inclusion during online learning**), which altogheter contribute to create an inclusive learning enviorment.

The full document is available at the SIG15 web page (https://www.earli.org/node/38). We encourage you to broadly share the document with your contacts. So far, this guidance is available in English but SIG15 members are working on the translation to other languages (such as French, Greek, Swedish and Spanish). **In case you are interested in translating** the document to your native language please **contact** Jo Van Herwegen: j.vanherwegen@ucl.ac.uk. **Feel free to share this document widely to your contacts.**

3 – New SIG15 publications

Garrote, A., Felder, F., Krähenmann, H., Schnepel, S., & Sermier Dessemontet, R. (2020). Social Acceptance in Inclusive Classrooms: The Role of Teacher Attitudes Toward Inclusion and Classroom Management. Frontiers in Education, 5, https://doi.org/10.3389/feduc.2020.582873

Moser Opitz, E., Schnepel S., Krähenmann, H., Jandl, S. Felder, F. & Sermier Dessemontet, R. (2020). The impact of special education resources and the general and the special education teacher's competence on pupil mathematical achievement gain in inclusive classrooms. International Journal of Inclusive Education, https://doi.org/10.1080/13603116.2020.1821451

Scharnhorst, U. and Kammermann, M. (2020), "Who is included in VET, who not?", *Education + Training*, Vol. 62 No. 6, pp. 645-658. https://doi.org/10.1108/ET-11-2019-0248

Wullschleger, A., Garrote, A., Schnepel, S., Jaquiéry, L. & Moser Opitz, E. (2020). Effects of teacher feedback behavior on social acceptance in inclusive elementary classrooms. Exploring social referencing process in a natural setting. Contemporary Educational Psychology, 60. https://doi.org/10.1016/j.cedpsych.2020.101841

Nenniger, G. & Müller, C. (early view). Are autistic behaviors influenced by peers? First insights from observations made by teachers. European Journal of Special Needs Education. https://doi.org/10.1080/08856257.2020.1783799

Hofmann, V. & Müller, C. (early view). Peer influence on aggression at school: How vulnerable are higher-risk adolescents? Journal of Emotional and Behavioral Disorders. https://doi.org/10.1177/1063426620917225

Amstad, M. & Müller, C. (2020). Which student problem behaviors are sources of teacher stress in special needs schools for individuals with intellectual disabilities? Frontiers in Education, 4:159, 1-11. doi: 10.3389/feduc.2019.00159

4- Paper in the Picture

The impact of special education resources and the general and the special education teacher competence on pupil mathematical achievement gain in inclusive classrooms

By Prof. Elisabeth Moser Opitz

Inclusive education is a tenet of educational policy in many countries. There has not been much investigation, however, of the impact of teacher related variables (e.g. special education resources, attitudes towards inclusion of the teachers, teacher competence) on factors such as the social participation, motivation and achievement levels of pupils in inclusive classrooms. The fact that pupils with special educational needs (SEN) and sometimes, their classmates, are taught by both a general education teacher (GET) and a special education teacher (SET) in inclusive classrooms makes it difficult to parse the impact of teacher related variables on pupils in inclusive settings. These professionals have had different training and professional experiences and therefore, have different competences, attitudes and responsibilities, and they also spend a variable amount of time with each pupil. Therefore, these distinct professional profiles have to be considered when investigating teacher related variables in inclusive classrooms. Our longitudinal study collected, for the first time, data on the impact of variables related to the GET and the SET on the mathematical achievement gain of students with intellectual disabilities (ID) and their peers in 34 inclusive classrooms in Grades 1, 2 and 3 in Switzerland. For the GET and the SET we assessed the following four variables, which were identified from the literature as being of potential importance:

GET: Attitudes towards inclusion (questionnaire) and classroom management (rating of a videotaped mathematics lesson)

SET: Professional mathematical knowledge (questionnaire) and SET resource (number of hours/per week the SET is present).

The study aimed to answer the following question:

To what extent do SET resource, the professional mathematical knowledge of the SET, the GET's attitude towards inclusive instruction, and the classroom management skills of the GET have an impact on the mathematical achievement gain of pupils with and without ID?

The analyses had to be carried out separately for the pupils with ID (n = 42) and their peers (n = 525) due to their different cognitive profiles and the use of different math tests. While some of the results were in line with our expectations, others were surprising.

In the sample of pupils with ID, the mathematical achievement at t2 was, as expected, predicted by the mathematical knowledge of the pupils at t1. None of the teacher variables had a significant impact on mathematical achievement gain. The significance threshold for the variable SET resource was narrowly missed. However, the Beta coefficient of SET resource was negative. The more SET resource, the lower the mathematical achievement gain. We interpret this tendency as an artefact of the funding model for pupils with ID in Switzerland: the more severe the intellectual disability, the more hours of support are available. In addition, the more severe an intellectual disability, the lower the mathematical achievement, and the slower the mathematical development.

Multilevel analyses were conducted on the data from the sample of pupils without ID. Contrary to predictions based on the results of previous research on regular classrooms, the

classroom management skills of the GET had no impact on pupils' mathematical achievement gain. One explanation for this result is the regular presence of two teachers, which was a common setting in 29 classrooms. This setting may prevent disruptive behavior, and make it easier to implement consistent rules and provide more learning time. (Classroom management did have an impact on social acceptance, an interesting result that is presented in a separate paper).

In the sample of pupils without ID, the average mathematical achievement of the class was a significant predictor of a pupil's individual mathematical achievement gain. Somewhat surprisingly, SET resource was a significant predictor of the achievement gain of pupils without ID: The more hours a SET was present in the classroom, the higher were the achievement gains. This might be explained by the involvement of the SET in the planning and teaching of activities for the whole class. In 29 out of 34 classes, the SET was often present in the classroom.

In both samples, pupils with and without ID, GET attitudes towards inclusion had no impact on mathematical achievement gain.

In the paper we highlight the many further questions raised by the results of this study. We would welcome a discussion of these questions in the SIG-15 community so that further studies that help to disentangle the relationship of teacher related variables and pupil outcomes in inclusive classrooms can be designed.

To contact Prof. Elisabeth Moser: elisabeth.moseropitz@uzh.ch

Reference:

Moser Opitz, E., Schnepel S., Krähenmann, H., Jandl, S. Felder, F. & Sermier Dessemontet, R. (2020). The impact of special education resources and the general and the special education teacher's competence on pupil mathematical achievement gain in inclusive

classrooms. International Journal of Inclusive Education,

https://doi.org/10.1080/13603116.2020.1821451

5 – NEW: SIG15 Monthly presentations

We have decided to start a series of meetings to exchange ideas and hear more about SIG15 members. Presentations will take place online, on the last week of each month. Updates about upcoming presentations and links to the Zoom meeting will be sent through the SIG15 members' email list.
You can check out the dates and the schedule here: https://www.earli.org/node/38

We welcome presentations from researchers at any stage of their career. As this can be a great opportunity to receive feedback from other senior and junior members, we encourage junior researchers to take part in these interactive talks.
You can participate either by giving a presentation or moderate a discussion based on a recent paper.

1. By giving a presentation: Contributions about experiments, research methods, as well as tutorials about any topic related to special education, are very welcome. Presentations about projects seeking to establish inter-lab collaborations will be adequate as well.

2. By moderating a discussion about a paper: Presenters will choose the paper they want to discuss. The reference of the paper will be sent to the rest of the members so they can read it before the seminar. The presenter will prepare questions that will serve as a point of departure for discussion between participants.

If anyone outside the SIG15 is interested in joining these talks, they will be welcome. Non-SIG15 members will have a free trial for three seminars. Once the trial finishes they would need to subscribe as a SIG15 member if they want to join in the presentations.

Presentations will start in January 2021. If anyone is interested in participating in these meetings please, contact Jannis Bossch..

6 – Conference Calendar

Conference	Date	Location	**Homepage**
American Educational Research Association (AERA)	April 9-12, 2021 Registration will open in December 2020.	Online	https://www.aera.net/Events-Meetings/Annual-Meeting
IASSIDD 2021	July 6-8, 2021	Hybrid: Amsterdam/ online	https://www.iassidd2021.com/
ISEC 2021	August 3-5, 2021	London, UK	https://www.ucl.ac.uk/inclusive-supportive-education-conference/
EARLI conference	Dates to be confirmed		

7 – New JURA SIG15 coordinator

We are happy to announce that Nadina Gómez Merino will join the team as JURE coordinator.

Nadina Gómez-Merino is a PhD student (expected defense by 2020) at the Reading Research Unit and the Department of Developmental and Educational Psychology at the University of Valencia (Spain). Her research area is focused on exploring the literacy and linguistic development of children with learning difficulties. In particular, she uses eye tracking to investigate how reading differs from typically developing students to children with hearing loss in real time. She has also collaborated in other projects about language and reading with other special populations (i.e., students with Down Syndrome and autism).

"I am glad to take over this task and I will do my best to keep our SIG as an active research community with Pirjo, Jo and Jannis. As a JURE coordinator I will collaborate with the senior coordinators into the organization of the SIG activities. I also expect to meet new people and stablish new lines of collaboration. Indeed, we are already planning to organize events where SIG15 members can share their research interests and thoughts. I plan to take actions in order to increase visibility of the SIG 15 for junior and senior researcher through social media (e.g., Twitter). So, please feel free to contact me if you have any suggestions or something you want to show or share with our SIG members!"

If you have any questions or suggestions you can email Nadina here: nadina.gomez@uv.as | Twitter: @gomezMerino_N | Web: https://go.uv.es/gomena

8- Other SIG 15 NEWS

SIG15 Membership

We would like to ensure that SIG15 includes a healthy number of academics within the field of special, educational needs and inclusion and is represented by members from across all European countries, as such we would like to encourage you to invite your colleagues, collaborators and students to join us. There are a number of planned activities and benefits to joining SIG15, including the newsletters, access to podcasts of talks held at various universities across the SIG15 network, online discussions, share interesting papers, share collaborations and funding opportunities and much

SIG 15 Newsletter

Thank you to those who have contributed to the newsletter. We hope to release at least 2 newsletter a year (one in spring and one in autumn). The next one would be in JUNE 2020. If you have any content, you would like to contribute please email mailto:j.vanherwegen@ucl.ac.uk.

SIG 15 Twitter

Our twitter account is now active and this would allow you to quickly spread news or make announcements to other SIG15 members. **If you are on Twitter please follow us @EARLISIG15.**