

## **EARLI SIG 15 – Special Educational Needs**

### **Newsletter Volume 5 – December 2021**

---

#### **Table of Contents**

1 – SIG15 Meeting 2022 in Ghent.....	2
2 – PhD in the Spotlight .....	4
3 – New SIG15 publications.....	5
4 – Paper in the Picture.....	6
5 – Mapping SIG15 Network.....	10
6 – Current Research Projects.....	13
7 – NEW: SIG15 Brown Bag Seminars.....	14
8 – Conference Calendar .....	15
9 – New SIG15 Coordinators .....	17
10 – Other SIG 15 NEWS .....	19

## 1 – SIG15 Meeting 2022 in Ghent



The next [EARLI SIG15 conference](#) will be held in Ghent, Belgium, on September 22-23, 2022. The theme of the conference is “A village to teach a child. The influence of contextual factors on learning and development.” Indeed, the development of children is in the hands of many: the child itself, parents, teachers, and other professionals, and even policy makers. If we want to fully understand the learning and development of our children at school and support them when and where (most) needed, we need to pay attention to the influence of these contextual factors and their interrelationships. In this conference, we will therefore highlight the role of contextual factors.

### **Keynotes and invited symposia**

The keynotes carefully deepen the conference theme by focusing on the main contextual factors that (may) influence learning: parental involvement in learning, teacher-student and classroom interactions, and school and policy factors influencing academic learning and development. Keynotes will be followed by three focused invited symposia, in which different aspects of these contextual factors will be further discussed and applied to children with special educational needs.

To better understand the role of parents in children’s learning, Janet Goodall (Swansea University, UK) will hold the keynote presentation “Parental engagement in learning: What we know, what we misunderstand, and what we need to know”. This keynote will be followed by an invited symposium organized by Sara Nijs (KU Leuven).

The role of teacher-student and classroom interactions will be highlighted by the keynote presentation “Promoting executive function skills in young children through classroom interventions” by Megan McClelland (Oregon State University, USA). An invited symposium by Wendelien Vantieghem (Ghent University) will further deepen the role of this contextual factor.

Finally, Martin Valcke (Ghent University) will analyze the interactions between the micro-, meso- and macro-level of learning and instruction in his keynote presentation: “It takes a village to raise a child: recent theoretical developments pushing the importance of contextual factors in studying children’s development.” Here, Lucia Dehaene (KU Leuven) will organize a follow-up invited symposium on this topic.

### **Abstract submission**

We welcome poster, individual paper and symposium contributions related to the academic and/or socio-emotional functioning of children with special educational needs in their context. In addition, in order to enrich the network and international context of junior members, we encourage submissions demonstrating original, innovative tasks, methodological- or data-analytical approaches relevant to the broad domain of learning and development of children with special educational needs.

Abstract submission will be open from December 20, 2021, until March 15 2022. Notification of acceptance will be sent out by April 15. Please visit our website for more information on abstract guidelines and submission: <https://www.earli2022.ugent.be>.

### **Conference meeting and COVID-19 pandemic**

Although we hope for a full ‘face to face’ meeting, the COVID-19 sanitary situation may require us to decide otherwise (i.e., an online or hybrid format). This decision will be made well in time for registration and travel and accommodation arrangements, by the end of February 2022. We hope to welcome you all in Ghent next September!

The organizers of the EARLI SIG15 meeting,

Petra Warreyn (Ghent University) & Dieter Baeyens (KU Leuven)

## 2 – PhD in the Spotlight

### **Laura Fluyt** – Parenting and Special Education research unit of KU Leuven (Belgium)

Laura Fluyt started her PhD in October 2020 as an educational scientist with previous experience in child and educational support in Flanders, Belgium. She is a member of the Parenting and Special Education Research Unit at KU Leuven and she is performing research in the field of inclusive education. More specifically, she researches the decision-making process regarding reasonable adjustments in mainstream primary education for students with special educational needs. Laura just completed an exploratory study using a concept mapping methodology where she examined the perspectives of important stakeholders (teachers, parents, principals and professionals of the Pupil Guidance Center) about this decision-making process. Further on, Laura's interests lie in parents' and children's decision-making in inclusive education.



### **Jolien Delafontaine** – Parenting and Special Education research unit of KU Leuven (Belgium)

Jolien Delafontaine is a second-year PhD student at the Faculty of Psychology and Educational Sciences at KU Leuven. Jolien's PhD project focusses on effective teaching for students with special educational needs (SEN), in particular students with or at risk for a mild intellectual disability, a learning disability or autism spectrum disorder. Through conducting this research, Jolien aims to explore differences in effective teaching behaviours and practices for students with versus students without SEN. In addition, she investigates whether effective teaching for students with SEN differs according to the educational context, i.e., special or inclusive



classrooms. In her PhD, Jolien uses multi-method, multi-informant data collection methods such as an extensive systematic literature review, interviews with teachers, classrooms observations and student tests and questionnaires. As an ultimate research goal, Jolien hopes to contribute to the scientific knowledge base as well as to the educational practice by outlining and identifying what constitutes effective education for students with SEN.

### 3 – New SIG15 publications

Ashworth, M., Palikara, O., Burchell, E., Purser, P., Nikolla, D. & Van Herwegen, J. (2021). Online and face-to-face performance on two cognitive tasks in children with Williams syndrome. *Frontiers*. <https://doi.org/10.3389/fpsyg.2020.594465>

Baten, E., Vlaeminck, F., Mues, M., Valcke, M., Desoete, A., & Warreyn, P. (2021). The impact of school strategies and the home environment on home learning experiences during the COVID-19 pandemic in children with and without developmental disorders. *Journal of Autism and Developmental Disorders*. <https://doi.org/10.1007/s10803-021-05383-0>

Costa, H. M., Outhwaite, L., & Van Herwegen, J. (2021). Teachers' Perceptions, Practices, and Beliefs of Early Mathematics in Preschool. Preprint: <https://doi.org/10.31234/osf.io/rdx6c>

Garrote, A. & Moser Opitz, E. (2021). The social relationships of students with intellectual disabilities in inclusive classrooms. *Empirische Sonderpädagogik*, 3, 201-215. [https://www.psychologie-aktuell.com/fileadmin/Redaktion/Journale/esp-2021-3/ESP\\_3-2021\\_2.pdf](https://www.psychologie-aktuell.com/fileadmin/Redaktion/Journale/esp-2021-3/ESP_3-2021_2.pdf)

Gloor, N., Leuenberger, D. & Moser Opitz, E. (2021). Disentangling the Effects of SFON (Spontaneous Focusing on Numerosity) and Symbolic Number Skills on the Mathematical Achievement of First Graders. A Longitudinal Study. *Frontiers in Education*, 6:629201. <https://doi.org/10.3389/feduc.2021.629201>

Ranzato, E., Tolmie, A., & Van Herwegen, J. (2021). The Home Learning Environment of Primary School Children with Down Syndrome and Those with Williams Syndrome. *Brain Sciences*, 11(6), ARTN 733. [doi:10.3390/brainsci11060733](https://doi.org/10.3390/brainsci11060733)

Schnepel, S. & Aunio, P. (2021). A systematic review of mathematics interventions for primary school students with intellectual disabilities. *European Journal of Special Needs Education*, 1–16. <https://doi.org/10.1080/08856257.2021.1943268>

Schnepel, S., Garrote, A., Moser Opitz, E. (2021). Disentangling the relationship between mathematical achievement, social status, and social skills in inclusive classrooms. *Empirische Sonderpädagogik*, 13(2), 148-166. [https://www.psychologie-aktuell.com/fileadmin/Redaktion/Journale/esp-2021-2/ESP\\_2-2021\\_ebook\\_4.pdf](https://www.psychologie-aktuell.com/fileadmin/Redaktion/Journale/esp-2021-2/ESP_2-2021_ebook_4.pdf)

Sideropoulos, V., Dukes, D., Hanley, M., Palikara, O., Rhodes, S., Riby, D., ... Van Herwegen, J. (2021, February 3). The impact of COVID-19 on anxiety and wellbeing for families of individuals with Special Education Needs and Disabilities in the UK. <https://doi.org/10.31234/osf.io/gyhd9>

## 4 – Paper in the Picture

### **The impact of school strategies and the home environment on home learning experiences during the COVID-19 pandemic in children with and without developmental disorders.**

By Elke Baten, Fieke Vlaeminck, Marjolein Mués, Martin Valcke, Annemie Desoete and Petra Warreyn

At *Journal of Autism and Developmental Disorders* (2021). <https://doi.org/10.1007/s10803-021-05383-0>

EARLI in 2020, the coronavirus (COVID-19) pandemic (WHO, 2020) confronted the world with new and unknown challenges. For education, this meant that schools in many countries had to close on short notice (Haug et al., 2020) and make a switch to remote teaching. This may have been more difficult for children with Developmental Disorders (DD) since

---



functioning in an academic context may already be challenging for them in regular times (e.g., Baten & Desoete, 2018; Blank et al., 2019; Colizzi et al., 2020; Daley & Birchwood, 2010; De Weerdts et al., 2013; Titeca et al., 2015). Therefore, the focus of the current study was to examine the impact of remote learning in the context of the COVID-19 pandemic on children with DD (n = 779) as compared to their typically developing (TD) peers (n = 1443). Through a parental survey we collected data on the experiences of parents and their children concerning the first period for which the Flemish government decided to close all schools. The variables were integrated into the Opportunity-Propensity (O-P) Model (Byrnes, 2020; Byrnes & Miller, 2007; Wang et al., 2013) in order to adopt a holistic perspective.

MANCOVA results indicated more negative experiences for children with DD and their parents. In particular, the used teaching methods were rated as less effective if children had a DD, both in primary and secondary education and this difference between TD and DD was even more pronounced for secondary school children. Further, parents of children with DD were less satisfied with the schools' COVID-19 measures compared to other parents. The sudden switch to remote learning left teachers unprepared, possibly resulting in them being less able to adapt the learning material to the special educational needs of children with DD. Next, the daily learning time spent on schoolwork increased for all children during remote learning, compared to before. Although the learning time did not increase more for children with DD than for their TD peers, the actual time spent (in hours per day) was higher in DD compared to TD children, both before and during the pandemic.

SEM-results revealed the alignment between different teachers and autonomous motivation in children as the most important predictors of parent and child's experiences. Only in TD children, the use of more teacher-driven teaching methods such as live online lessons or recorded lessons additionally improved children's learning experiences and parental satisfaction. Less predictors were found to explain the learning experiences of children with DD, possibly because some of the predictors differed significantly between both groups, immediately affecting their predictive value. Indeed, subsequent analyses revealed that parents of children with DD (compared with TD) rated teachers as being less aligned and found themselves to spend more time supporting their children with schoolwork. In addition, children with DD were reported to reflect more COVID-19 related worries, to be less competent and less autonomously motivated to work for school.

---

Our findings confirm and expand other studies conducted in the COVID-19 context, also showing additional difficulties for DD children during the school-closures (Baschenis et al., 2021; Soriano-Ferrer et al., 2021; Zawadka et al., 2021). Continuing specific therapy or support for these children in times of school-closures may be necessary to avoid that they fall even further behind (Aishworiya & Kang, 2021).

Overall, we recommend teachers to align their classroom management practices and teaching approaches as much as possible (deadline, structure, communication channel, etc.) and to use sufficient teacher-driven methods (online lessons, recorded lessons, chatboxes, etc.), both in the general classroom practice and during remote learning. Finally, we advise both parents and teachers to foster children’s autonomous motivation by adopting an autonomy-supportive approach within the family and academic context and to ensure that children get adequate emotional support to turn to in times of need.

## References

- Aishworiya, R., & Kang, Y. Q. (2021). Including children with developmental disabilities in the equation during this COVID-19 pandemic. *Journal of Autism and Developmental Disorders*, 51(6), 2155–2158. <https://doi.org/10.1007/s10803-020-04670-6>
- Baschenis, I. M. C., Farinotti, L., Zavani, E., Grumi, S., Bernasconi, P., Rosso, E., Provenzi, L., Borgatti, R., Termine, C., & Chiappedi, M. (2021). Reading skills of children with dyslexia improved less than expected during the COVID-19 lockdown in Italy. *Children*, 8(7), 560. <https://doi.org/10.3390/children8070560>
- Baten, E., & Desoete, A. (2018). Mathematical (dis)abilities within the Opportunity-Propensity Model: The choice of math test matters. *Frontiers in Psychology*, 9, 667. <https://doi.org/10.3389/fpsyg.2018.00667>
- Blank, R., Barnett, A. L., Cairney, J., Green, D., Kirby, A., Polatajko, H., Rosenblum, S., Smits-Engelsman, B., Sugden, D., Wilson, P., & Vinçon, S. (2019). International clinical practice recommendations on the definition, diagnosis, assessment, intervention, and psychosocial aspects of developmental coordination disorder. *Developmental Medicine and Child Neurology*, 61(3), 242–285. <https://doi.org/10.1111/dmcn.14132>
- Byrnes, J. P. (2020). The potential utility of an opportunity-propensity framework for understanding individual and group differences in developmental outcomes: A retrospective progress report. *Developmental Review*, 56, 100911. <https://doi.org/10.1016/j.dr.2020.100911>
- Byrnes, J. P., & Miller, D. C. (2007). The relative importance of predictors of math and science achievement: An opportunity–propensity analysis. *Contemporary Educational Psychology*, 32(4), 599–629. <https://doi.org/10.1016/j.cedpsych.2006.09.002>
- Colizzi, M., Sironi, E., Antonini, F., Ciceri, M. L., Bovo, C., & Zoccante, L. (2020). Psychosocial and behavioral impact of COVID-19 in autism spectrum disorder: An online parent survey. *Brain Sciences*, 10(6). <https://doi.org/10.3390/brainsci10060341>
- Daley, D., & Birchwood, J. (2010). ADHD and academic performance: why does ADHD impact on academic performance and what can be done to support ADHD children in the classroom? *Child: Care, Health and Development*, 36(4), 455–464. <https://doi.org/10.1111/j.1365-2214.2009.01046.x>
-



- De Weerd, F., Desoete, A., & Roeyers, H. (2013). Working memory in children with reading disabilities and/or mathematical disabilities. *Journal of Learning Disabilities, 46*(5), 461–472. <https://doi.org/10.1177/0022219412455238>
- Haug, N., Geyrhofer, L., Londei, A., Dervic, E., Desvars-Larrive, A., Loreto, V., Pinior, B., Thurner, S., & Klimek, P. (2020). Ranking the effectiveness of worldwide COVID-19 government interventions. *Nature Human Behaviour 2020 4:12, 4*(12), 1303–1312. <https://doi.org/10.1038/s41562-020-01009-0>
- Soriano-Ferrer, M., Morte-Soriano, M. R., Begeny, J., & Piedra-Martínez, E. (2021). Psychoeducational challenges in Spanish children with dyslexia and their parents' stress during the COVID-19 pandemic. *Frontiers in Psychology, 12*, 2005. <https://doi.org/10.3389/FPSYG.2021.648000>
- Titeca, D., Roeyers, H., Loeys, T., Ceulemans, A., & Desoete, A. (2015). Mathematical abilities in elementary school children with Autism Spectrum Disorder. *Infant and Child Development, 24*(6), 606–623. <https://doi.org/10.1002/icd.1909>
- Wang, A. H., Shen, F., & Byrnes, J. P. (2013). Does the Opportunity–Propensity Framework predict the early mathematics skills of low-income pre-kindergarten children? *Contemporary Educational Psychology, 38*(3), 259–270. <https://doi.org/10.1016/j.cedpsych.2013.04.004>
- WHO. (2020). *Coronavirus disease (COVID-19): Situation Report-202*. [https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200809-covid-19-sitrep-202.pdf?sfvrsn=2c7459f6\\_2](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200809-covid-19-sitrep-202.pdf?sfvrsn=2c7459f6_2)
- Zawadka, J., Miękisz, A., Nowakowska, I., Plewko, J., Kochańska, M., & Haman, E. (2021). Remote learning among students with and without reading difficulties during the initial stages of the COVID-19 pandemic. *Education and Information Technologies 2021*, 1–22. <https://doi.org/10.1007/S10639-021-10559-3>

## 5 – Mapping SIG15 Network

By Kati Sormunen

University of Helsinki, Faculty of Educational Sciences, Finland

At the EARLI 2021 Conference, we got an idea to map our SIG15 community's research and specific research interests. Based on our members' conference presentations, we noticed that our SIG15 community is extensive and explores special needs education with a vast scope. We decided to take a quick look at SIG15 members' interest areas (keywords) and how we collaborate research-wise globally (co-authorship). We searched all members in Scopus and compiled their publications. We found 68 members and 1545 documents from the database altogether. As a tool for constructing and visualizing bibliometric networks, we decided to use [VOSviewer](#), an easy-to-use open-access software.

### What are our interest areas?

To determine SIG15's interest areas, we looked at the keywords that were used in the publications and we analysed how they occur together in different documents. The conceptual idea is that the concepts behind these words are likely closely related ([see more](#)). The analysis was based on 2900 keywords that appeared at least in 5 documents.

The top 6 keywords were:

1. dyslexia (n=55)
2. children (n=50)
3. working memory (n=46)
4. mathematics (n=43)
5. writing (n=40)
6. inclusion (n = 39) & autism spectrum disorder (n=39)

The network visualization (Fig. 1) depicts how richly our community researches the field of special educational needs. For example, the following areas of interest emerge from the data: language (in red), learning settings (green), teachers and implementation of inclusion (blue), autism and family (yellow), and specific disabilities (purple).

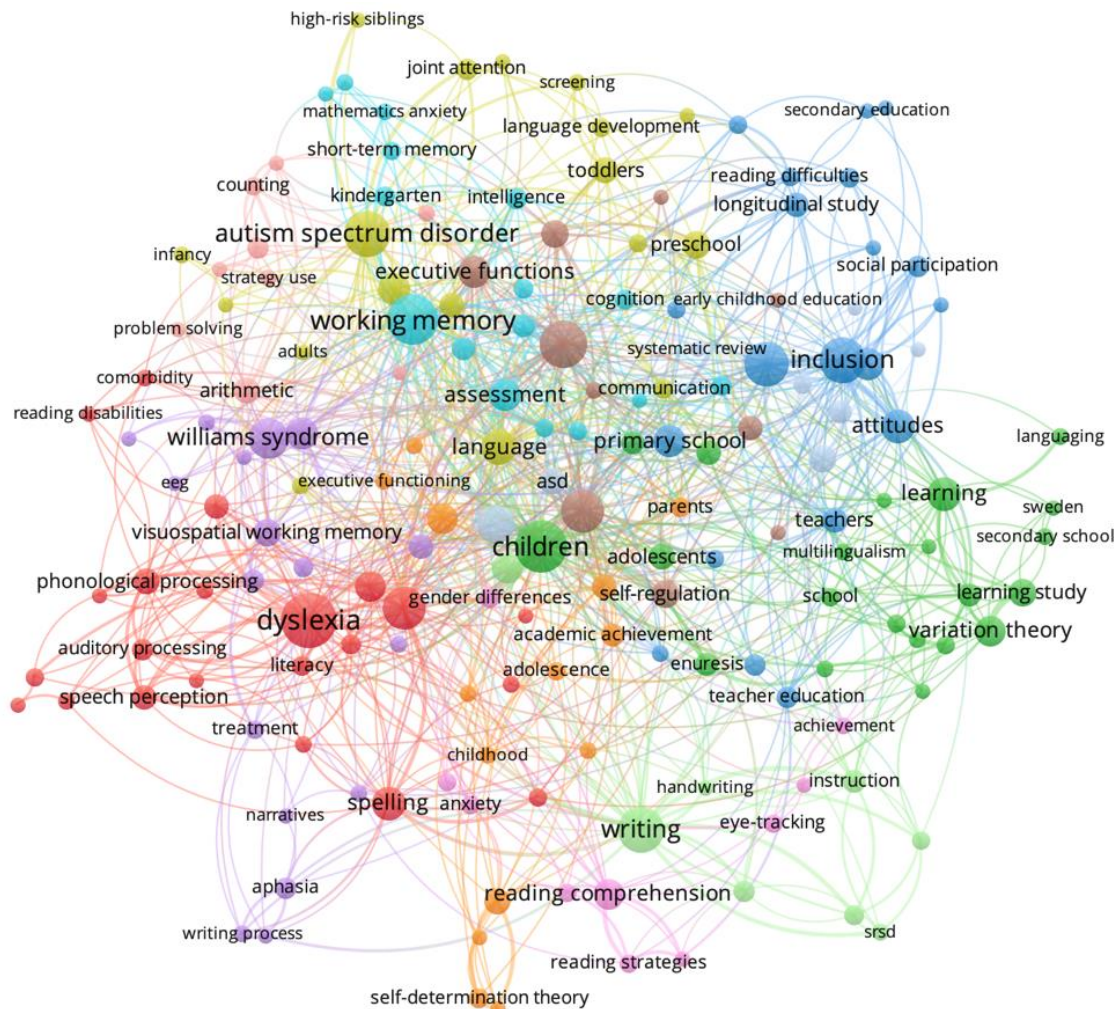


Fig.1 - SIG 15 areas of interest network visualization

### How do we collaborate?

In order to analyse SIG15's global collaboration, we visualized the data by looking at the different co-authorships. To get an overall picture, we decided to look at the number of co-authored publications at the country level. The analysis was based on 79 countries that appeared in 5 or more manuscripts of a country. Twenty-eight countries met the thresholds. The top 6 countries were

1. Belgium (n=357)
2. United Kingdom (n=290)
3. United States (n = 169) & Italy (n=169)

4. Germany (n=161)
5. Sweden (n=155)
6. Netherlands (n=144)

United Kingdom and Belgium presented co-authorships with almost all the 28 countries and were the most active countries in terms of co-authorship.

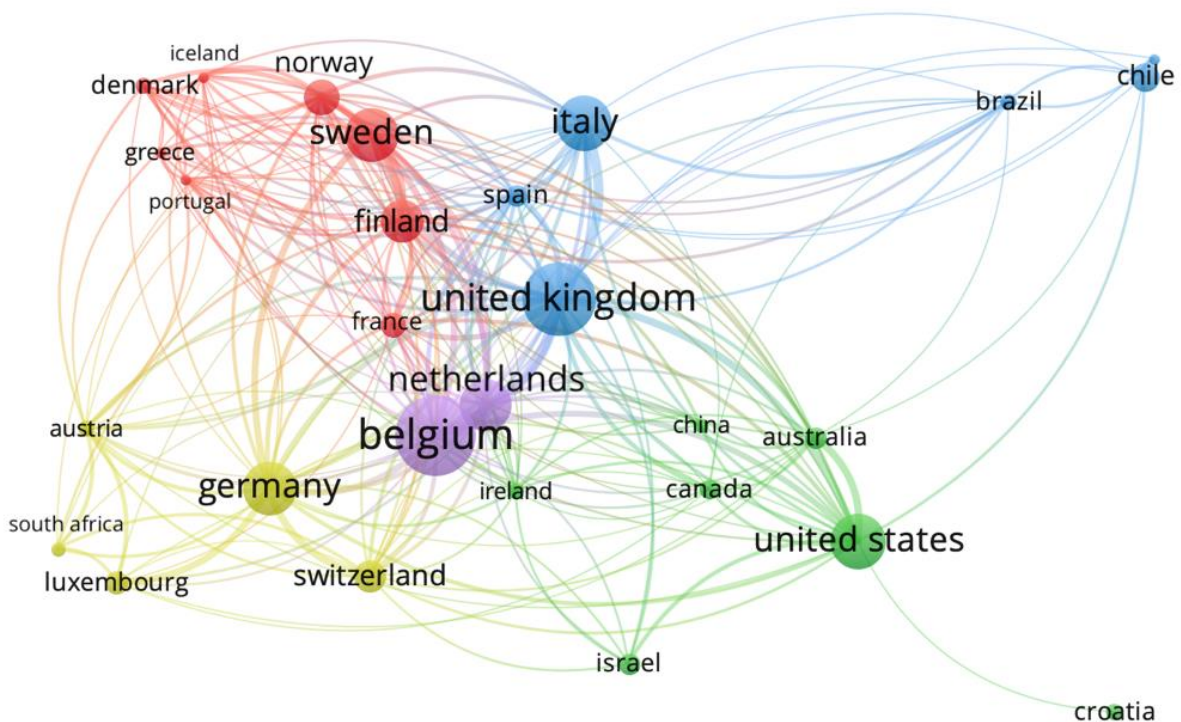


Fig.2 - SIG 15 co-authorship network visualization

The co-authorship network is divided into 5 clusters (Fig 2). The red cluster emphasizes co-authorships between European countries only and especially Nordic European countries. This Sweden-led co-authorship network is between Sweden, Denmark, Finland, France, Greece, Iceland, Norway, and Portugal. The other clusters are more global, and the most important countries, co-authorship-wise, are Belgium (violet), the United Kingdom (blue), Germany (yellow), and the United States (green).

### Next steps

This introductory bibliographic network analysis gives us an exciting oversight of our SIG15 community. If you are interested in taking a closer look and contributing to a more in-depth

analysis of the SIG15 network, please get in touch with Kati ([kati.sormunen@helsinki.fi](mailto:kati.sormunen@helsinki.fi)). We aim to provide a more detailed report in the following newsletter.

## 6 – Current Research Projects

### Teaching mathematics to students with Down syndrome

Erica Ranzato and Jo Van Herwegen

UCL, Institute of Education, London

Mathematical abilities are a particular area of difficulty for students with Down syndrome (DS) and this has an effect on their quality of life and their level of independence.

This project aims to reflect on the current teaching practices and to give a voice to teaching staff supporting students with DS in primary school settings. Also, by involving school staff in small group activities aimed at co-developing learning resources to support mathematical skills of the students they work with, this project aims to improve the level of confidence of school staff when teaching maths.

During the first phase of the project teaching staff supporting students with DS will be asked to complete an online survey on their experience on supporting number skills of students with Down syndrome. Then, participants will be asked to take part in 3 online workshops. During Session 1, participants will share their experiences and their views about the learning profiles of the students they are working with, their personal experience in teaching maths and the tools they usually use. In Session 2, participants will co-produce learning resources and activities and will co-develop tailored learning targets to support the maths skills of the students they are working with. In Session 3, participants will be asked to discuss their experience on using the co-created resources. All the co-produced resources will be made available for free to the public through the project's partners.

This project is funded by the UCL Train and Engage funding program for postgraduate research students.



## 7 – NEW: SIG15 Brown Bag Seminars

In 2020, we started a series of meetings to exchange ideas and hear more about SIG15 members. Presentations take place online, on the last Tuesday of each month. Updates about upcoming presentations and links to the Zoom meeting will be sent through the SIG15 members' email list.

You can subscribe to the seminars and check out the dates and the schedule

here: <https://www.earli.org/node/38>

Brown bag seminars are open to all. If anyone outside the SIG15 is interested in joining these talks, they are welcome.

Tuesday, **January 25** – Jannis Bosch (University of Postdam, Germany) at 13h UK time / 14h CE(S)T / 15h EE(S)T.

Tuesday, **February 22** – Chiara Pecini (University of Florence, Italy) at 13h UK time / 14h CE(S)T / 15h EE(S)T.

Tuesday, **March 29** – Evdokia Pittas (University of Nicosia, Cyprus) at 13h UK time / 14h CE(S)T / 15h EE(S)T

Tuesday, **April 26** - Debra McKeown (Texas A&M University, USA) time to be confirmed

Tuesday, **May 31** - Kati Sormunen (University of Helsinki, Finland) at 13h UK time / 14h CE(S)T / 15h EE(S)T

Tuesday, **June 28** - Ricardo Rosas (CEDEti-UC, Chile) at 13h UK time / 14h CE(S)T / 15h EE(S)T



## 8 – Conference Calendar

Conference	Date	Location	Homepage
2022 Online Down Syndrome Research Forum	March 10-11, 2022 Call for abstracts is open until January 14, 2022	ONLINE	<a href="https://www.down-syndrome.org/en-gb/research/forum/2022">https://www.down-syndrome.org/en-gb/research/forum/2022</a>
Social Inclusion of Students with Disabilities in General Education	June 9-10, 2022 Call for abstracts is open until January 24, 2022.	Zurich	<a href="https://www.socialinclusion22.uzh.ch/en/overview.html">https://www.socialinclusion22.uzh.ch/en/overview.html</a>
Neurodevelopmental Disorders Annual Seminar	June 23, 2022 Call for abstracts will open February 2022	Edinburgh	<a href="http://www.neurodevelopmentaldisorders-seminarseries.co.uk/">http://www.neurodevelopmentaldisorders-seminarseries.co.uk/</a>
JURE 2022 Conference	July 18-22, 2022 Call for abstracts is open until January, 20, 2022  <b>Please, find the invitation below.</b>	Porto	<a href="https://earli.org/JURE2022">https://earli.org/JURE2022</a>
EARLI SIG15 Conference 2022	September 22-23, 2022 Call for abstracts will open soon.	Ghent	<a href="https://www.earli2022.ugent.be/">https://www.earli2022.ugent.be/</a>

### Invitation for symposium contribution JURE 2022

Our SIG15 JURE coordinators Nadina and Erica are organizing a SIG15 symposium **“Moving to digital schools: Can online learning support academic skills of students with learning difficulties?”** as part of the [JURE 2022 Conference](#) that will be held in Porto on 18th - 22nd of July 2022.

Please find below a brief overview of the symposium.

## **Moving to digital schools: Can online learning support academic skills of students with learning difficulties?**

The aim of the symposium is to investigate:

- Challenges and best practices when supporting literacy, maths, and writing skills through online tools in populations with special educational needs and disabilities (SEND). What differentiations are needed in the classroom?
- Differences between face-to-face and online methodologies and teaching strategies to support academic skills in SEND populations. What online tools have been developed to improve academic abilities of these students? What works?

Both completed and work in progress projects including intervention studies and experimental studies comparing different groups and different learning methodologies are welcome.

If you are a JURE member or know a junior researcher who would like to take part to the symposium, please submit an abstract of 100 - 250 words and a summary of 600 - 1000 words, detailing aims and methodology, findings, and theoretical and educational relevance for the research.

Please email your submission to Nadina Gomez Merino ([nadina.gomez@uv.es](mailto:nadina.gomez@uv.es)) and Erica Ranzato ([e.ranzato@ucl.ac.uk](mailto:e.ranzato@ucl.ac.uk)) **by Monday 14<sup>th</sup> February 2022.**

Please bear in mind that each presentation will need a dedicated presenter with an active EARLI account and that non-current members will be asked to become members, if they are accepted.

Please feel free to contact us if you have any questions and to share this post with anyone you know might be interested in taking part to the symposium.

## 9 – New SIG15 Coordinators

We are happy to announce that Kati Sormunen and Erika Ranzato have joined the team as SIG coordinator and as JURE coordinator.

**Kati Sormunen** – University of Helsinki, Faculty of Educational Sciences (Finland)

Kati works as a university lecturer (Early Childhood Education) and researcher. Her earlier experience includes professional teacher tenures in pre-school as well as in primary and secondary education. During her tenures, she has co-designed and implemented inclusive practices, such as team teaching and differentiation at the grassroots level. She has developed pedagogical approaches to computational thinking and coding skills in multi-disciplinary co-operation with actors from school, university and company in Innokas Network ([www.innokas.fi/en](http://www.innokas.fi/en)).



Kati's expertise lies in innovative and experimental research settings where data is collected and analyzed with mixed methods that ground traditional and digital approaches in contemporary social science and humanities contexts. In research, she focuses on learning for the future, especially from students with diverse abilities perspective. Currently, she co-developes in large-scale projects a model of future-oriented invention pedagogy and social network methodologies that support the school's development work towards full inclusion. In this collaboration with researchers, teachers and students, she uses innovative research methods such as mixed-methods social network analysis and quantitative ethnography. She has published scientific articles in peer-reviewed publications and research textbooks.

Kati's professional interests lie in the broad landscape of 21st century learning, especially with inclusive pedagogies and digitally supported learning and methodological issues of learning future-oriented knowledge and skills. She believes that overcoming societal

---

challenges in the future is possible when competent individuals join their knowledge in a collaborative effort for change. Future society and humanity are developed through education in an intensive collaboration with all actors, from students to researchers and a broader community.

You can contact Kati at [kati.sormunen@helsinki.fi](mailto:kati.sormunen@helsinki.fi) | Twitter: @kylmaoja | Web: <https://researchportal.helsinki.fi/en/persons/kati-sormunen>

### **Erica Ranzato** – UCL, Institute of Education, London (UK)

**Erica** is based in London and is a third-year PhD student at the Institute of Education, UCL. Her research focuses on cognitive and environmental factors that influence number skills and mathematical development of children with Down syndrome, Williams syndrome and Autism Spectrum Disorders. Before her PhD, she was involved in several research projects on mathematical cognition investigating the influence of domain general abilities on number development in Williams syndrome and Down syndrome and evaluating educational programmes to support pre-schoolers' number foundations in the typical population.



She is passionate about promoting research-based practice and developing effective educational programme to foster inclusion in the classroom and to support educational outcomes and independence of children and adults with developmental disorders. In the last five years, she has collaborated with charities, schools and families to support number skills and mathematical development of students with Down syndrome.

You can contact Erica at [e.ranzato@ucl.ac.uk](mailto:e.ranzato@ucl.ac.uk) | Twitter: @ericaranzato | Web: <https://iris.ucl.ac.uk/iris/browse/profile?upi=ERANZ49>

## 10 – 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

- contribute to the SIG15 newsletters
- access to the Brown Bag seminars of talks held at various universities across the SIG15 network
- being part of SIG15 symposium
- contribute to special issues in scientific journals published by EARLI
- be part of the [@EARLISIG15](#) community
- be part of the active JURE community and expand your networks
- share collaborations and funding opportunities

### SIG 15 Newsletter

Thank you to those who have contributed to this newsletter. We will release at least 2 newsletters a year. The next one would be in June, 2022. If you have any content, you would like to contribute please email [kati.sormunen@helsinki.fi](mailto:kati.sormunen@helsinki.fi).

### 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](#).**

## Call for Papers: Special Issue Open Access Book

**Title:** DI around the World – Exploring Differentiation Instructional Practice in General School Education

**Guest Editors:** Dr. Verena Letzel (University of Trier), Junior-Prof. Dr. Marcela Pozas (Professional School of Education, Humboldt-University of Berlin)

**Publisher:** Waxmann

**Important information:** this will be an open access book publication funded by the University Library and the Special Funds for Inclusion of the Professional School of Education from the Humboldt-Universität zu Berlin.

### Scope and significance of the proposed theme

With the increasingly diverse student population in schools, the establishment of inclusive classrooms has become a top international policy priority (UNESCO, 2020). Worldwide, inclusive education is a highly important topic of policy debate that “emphasize[s] the concepts of efficiency, effectiveness, equity, and inclusion as a means of ensuring quality education for all” (Watkins, 2017, p. 1). With this background, the concept of inclusive education has shifted from the inclusion of students with disabilities, to the provision of equal opportunities in education celebrating the diversity of all learners (Schwab, 2020; Watkins, 2017). To achieve this aim, schools must become “more responsive to children with a diverse range of abilities, cultures, gender, religions, and other situations and issues that present in the classroom” (Loreman, 2017, p. 2). Differentiated instruction (DI) is considered as vehicle to achieve inclusive education (Loreman, 2017; Tomlinson, 2017; UNESCO, 2017) that aims to meet students’ individual learning needs by maximizing learning opportunities (Gheysens et al., 2020). DI is defined as the intentional, systematically planned and reflected practices that enable teachers to meet the needs of all learners in heterogeneous classrooms (Graham et al., 2021; Letzel et al., 2020). Scientific literature has recognized DI as an important teaching quality domain (Maulana et al., 2020) and core element of effective teaching that seeks to ensure equity as well as educational justice (Lindner & Schwab, 2020; OECD, 2012; Valiandes & Neophytou, 2018). The implementation of DI is by no means just a normative recommendation, but an important criterion of high-quality teaching and professionalization (Klieme, 2018). Additionally, DI has been included within prominent teaching quality model conceptualizations and studies regarding the domains of teaching quality (Bell et al., 2019; Hattie, 2009; Praetorius et al., 2018; Van de Grift, 2014).

Although research into DI is substantially increasing, a recent scoping review (Graham et al., 2021) and a bibliometric analysis (Sun & Xiao, 2021) on DI research has identified important shortcomings: 1) a gap on research concerning DI in general school education, 2) a lack of focus on the planning, employing and evaluating of concrete DI practices, 3) their effects on students’ achievement and non-achievement outcomes, 4) influence of context factors (i.e. school track, teacher characteristics, school resources), and 5) an underrepresented international research output.

We welcome empirical and theoretical papers stemming from all countries around the world and addressing the aforementioned limitations in the current DI research. Lastly, research during the COVID-19 pandemic indicated that DI in the digital context was seldom



implemented (Letzel et al., 2020). Thus, papers focusing on a post pandemic digital approach to the practice of DI are strongly invited.

### **Intended Readership**

The readership will be broad. These might be specialists in the field of elementary education, primary education, secondary education, special education, and higher education. Further, researchers in education in general, as well as researchers in the field of teacher training, specialists in digital media and digital learning processes and teachers as well as politicians will also be considered as potential readership. Additionally, the articles should provide insights into DI research to all educational stakeholders and public.

### **Timeline and Manuscript Submission Process**

Submission deadline for abstracts: **January 31st, 2022**

Abstracts should contain maximum 300 words providing information on research question(s), methodology as well as description of data analysis process. The abstracts can be sent directly to Dr. Verena Letzel [letzel@uni-trier.de](mailto:letzel@uni-trier.de)

- **February 11th, 2022:** Invitations for full manuscript submission will be sent to authors
- **May 15th, 2020:** Full manuscript submission deadline
- **June-August 2022:** Reviewers' feedback will be sent to authors & Revised manuscripts due from authors
- **August 15th, 2022:** Feedback of revised manuscripts returned to authors
- **September 30th, 2022:** Final revisions must be received; editorial decisions
- Full manuscripts will be published in (to be agreed with Publisher)

General inquiries can be addressed to the Guest Editors:

- Dr. Verena Letzel [letzel@uni-trier.de](mailto:letzel@uni-trier.de)
- Junior-Prof. Dr. Marcela Pozas [marcela.pozas.quajardo@hu-berlin.de](mailto:marcela.pozas.quajardo@hu-berlin.de)

### **References**

- Aishworiya, R., & Kang, Y. Q. (2021). Including children with developmental disabilities in the equation during this COVID-19 pandemic. *Journal of Autism and Developmental Disorders*, 51(6), 2155–2158. <https://doi.org/10.1007/s10803-020-04670-6>
- Bell, C. A., Dobbelaer, M. J., Klette, K. & Visscher, A. (2019). Qualities of classroom observation systems. *School Effectiveness and School Improvement*, 30(1), 3–29. <https://doi.org/10.1080/09243453.2018.1539014>
- Gheysens, E., Coubergs, C., Griful-Freixenet, J., Engels, N. & Struyven, K. (2020). Differentiated instruction: the diversity of teachers' philosophy and praxis to adapt teaching to students' interests, readiness and learning profiles. *International Journal of Inclusive Education*, 1–18. <https://doi.org/10.1080/13603116.2020.1812739>

- Graham, L. J., De Bruin, K., Lassig, C., and Spandagou, I. (2021). A Scoping Review of 20 Years of Research on Differentiation: Investigating Conceptualisation, Characteristics, and Methods Used. *Review of Education*, 9(1), 161–198. <https://doi.org/10.1002/rev3.3238>.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Klieme, E. (2018). Teaching quality: Core content implemented through evidence-based methods with structure, support and challenge.
- Letzel, V., Pozas, M., and Schneider, C. (2020). Energetic students, stressed parents, and nervous teachers: A comprehensive exploration of inclusive homeschooling during the COVID-19 crisis. *Open Education Studies*, (2), p. 159-170. <https://doi.org/10.1515/edu-2020-0122>
- Letzel, V., Schneider, C., and Pozas, M. (2020). Binnendifferenzierende Herangehensweisen zum Umgang mit Heterogenität im Unterricht der Sekundarstufe I: Vorschlag einer Taxonomie zur Systematisierung [Differentiated instruction as a means to handle in-classroom student heterogeneity in secondary education: proposal of a taxonomy]. *Empirische Pädagogik*, 34(4), 331-349.
- Lindner, K.-H., and S. Schwab. 2020. "Differentiation and Individualisation in Inclusive Education: A Systematic Review and Narrative Synthesis." *International Journal of Inclusive Education*. <https://doi.org/10.1080/13603116.2020.1813450>.
- Loreman, T. (2017). *Pedagogy for Inclusive Education*. Oxford Research Encyclopedia of Education.
- Maulana, R., Smale-Jacobse, A., Helms-Lorenz, M., Chun, S. & Lee, O. (2020). Measuring differentiated instruction in the Netherlands and South Korea: Factor structure equivalence, correlates, and complexity level. *European Journal of Psychology of Education*, 35(4), 881–909. <https://doi.org/10.1007/s10212-019-00446-4>
- OECD. (2012). *Equality and Quality in Education: Supporting Disadvantaged Students and Schools*. OECD Publishing. <https://doi.org/10.1787/9789264130852-en>

