LUXERA

Conference 2022

9 - 10 November

University of Luxembourg

Campus Belval-MSA

Conference Booklet

Welcome Address

Dear participants of the LuxERA 2022 conference,

Dear members of the Luxembourg Educational Research Association,

We are very happy to welcome you again in person at the LuxERA conference 2022. After two years of virtual events, meeting in person again is important to allow researchers to share their work with others, to gain feedback and to exchange interesting ideas. Although Covid is still omnipresent in our lives, the opportunity to (re)connect and exchange our thoughts and ideas throughout the conference is an exciting prospect.

This year the conference will in part overlap with the meeting of the CIDER-LERN (https://www.leibniz-bildung.de/en/about-cider/), especially during the lunch on Wednesday followed by a joint keynote. This overlap offers a great opportunity to connect with this network of post-doctoral educational researchers.

We are happy to welcome Rolf Becker to Luxembourg to deliver the opening keynote "Societal Change and Educational Trajectories of Women and Men Born between 1919 and 1986 in West Germany". Rolf Becker is a professor of sociology of education at the University of Bern and an expert on educational inequalities related to social origin and immigrant background.

We offer eight parallel sessions in which researchers present their projects and (first) results in a more or less traditional way. In addition, we have a session in which researchers present their ideas and projects in the form of interactive poster, requiring them to deliver a 2-3 minute pitch. I trust both formats will facilitate constructive discussions.

Our LuxERA General Assembly will take place on Wednesday late-afternoon. Before, we hope to be able to gather for a reception in-person at the University premises.

As this will be my first conference as president of the Luxembourg Educational Research Association, I would like to thank you for your engagement in our young association. It is not easy to follow in the footsteps of our founding president Andreas Hadjar, but I have a great team around me (Thank you to the LuxERA Board!) and it has been a pleasure to continue

working with the conference organizing team, including Joanne Colling, Jennifer Dusdal, and Christina Haas. We also thank the reviewers who evaluated all abstracts and the student assistants (Bahareh Behmardi Sharifabad, Franziska Leufgen, Cécile Pedersen and Mia Philippy) for their support during the conference.

LuxERA also owes thanks to the Institute of Education and Society and the Luxembourg Centre for Educational Testing, especially Sofie van Herzeele, Andrea Klein, Rashid Boualam and Thierry Heck for providing general organizational support.

I wish you an inspiring conference and especially look forward to meeting you all in person.

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Ineke M. Pit-ten Cate

LuxERA president

University of Luxembourg, October 2022

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Conference Schedule

Wednesday, 9 November 2022	
12h00	Registration MSA (Space 3rd floor côté Maison du Nombre)
13h00 – 14h00	LUNCH BREAK-LuxERA meets CIDER Space 3rd floor côté Maison du Nombre
14h00 – 15h00 **MSA 3.520**	**Keynote by Rolf Becker, University of Bern** Societal Change and Educational Trajectories of Women and Men Born between 1919 and 1986 in West Germany **Chaired by Andreas Hadjar**

Parallel Sessions I and II	
Session I **MSA 3.190**	**Education, Science and Research** **Chaired by Justin Powell**

15h15 – 16h15	*Educational Research in Luxembourg Mirrored in Scientific Publications*
	    Jennifer Dusdal
	Building School-University Partnerships to Support Primary Science Education in Luxembourg
	    Maiza Trigo, Ragnhild Barbu, Sara Wilmes, Kerstin te Heesen, & Christina Siry

Session II **MSA 3.200**	**Comparative Perspectives on Educational Inequality** **Chaired by Philipp Sonnleitner**
15h15 – 16h15	*Intersectional Inequalities along the Dimensions of SES, Gender, and Migration Background at Various Stages of European Countries' Education Systems* Irena Kogan, Irem Karacay, Aigul Alieva, Taylor Kroezen, Katri Kleemola, & Auli Toom

	School Segregation in Primary and Secondary Education in Luxembourg: Track Placement and Academic Achievement Ineke M. Pit-ten Cate, Andreas Hadjar, Aigul Alieva, Antoine Fischbach, Taylor Kroezen, Frederick de Moll, Martha Ottenbacher, & Juliette Torabian
16h15 – 18h00 **MSA 3.520**	Reception (MSA Space 3rd floor côté Maison du Nombre) & LuxERA General Assembly

Thursday, 11 November 2020

09h00	Registration & Coffee MSA Space 3rd floor côté Maison du Nombre

Interactive Poster Session

MSA, Space 3rd floor côté Maison du Nombre

Chaired by Jennifer Dusdal

10h00 – 11h00	*Shadow Education in Switzerland: Regional Variation in the use of Private Tutoring and the Role of Cantonal Education Systems*
	  Robin Benz
	
	What Primary Schools Are Doing Right: Educational Value-Added in Luxembourg
	  Valentin Emslander, Jessica Levy, & Antoine Fischbach
	
	Socio-cultural Factors and the Attendance of Early Childhood Education and Care (ECEC) in Luxembourg
	  Lena Maria Kaufmann, Antoine Fischbach, Martha Ottenbacher, & Caroline Hornung
	
	Gender Representations and Stereotypes in Textbooks in Luxembourgish Secondary Education
	  Sylvie Kerger, Enrica Pianaro, & Claire Schadeck
	
	Do your Magic, Harry Potter! About the Most Popular Fiction Books and their Impact on Students' Reading Performances
	  Charlotte Krämer, Yannick Rathmacher, & Camille Relativo
	
	Children's Multilingual Experiences and Linguistic Identities in Social Media
	  Mahdi Mowlaei Aghblagh

Parallel Sessions III and IV

Session III MSA 3.100	**Educational Inequality: Stakeholders' Perspectives** **Chaired by Justin Powell**
11h00 – 12h00	*Can Education Plans Compensate for Educational Inequalities? Actors' Divergent Perceptions of Education in German Early Childhood Education and Care* Sylvia Nienhaus *Adolescents' School-related Quality of Life in Relation to Disability* Anne Stöcker & Carmen Zurbriggen
Session IV MSA 3.120	**Literacy Learning in Luxembourg** **Chaired by TBC**
11h00 – 12h00	*A Conceptualization of Young Children's Engagement with Books – Preliminary Findings of a Qualitative Study in three Crèches in Luxembourg* Valérie Kemp *Digital Media as Language and Literacy Learning Spaces in Multilingual Families – survey results from Luxembourg* Potheni Vaiouli & Maria Obojska
12h00 – 13h00	LUNCH BREAK MSA Space 3rd floor côté Maison du Nombre

Parallel session V and VI

Session V MSA 3.100	**Diagnosing Learning Disorder in a Multilingual Context** **Chaired by Rachel Wollschläger**
13h00 – 14h00	*Development of a Test Battery to Diagnose Specific Learning Disorder in Reading in a Multilingual Education Context* Linda Romanovska, Sonja Ugen, & Ineke M. Pit-ten Cate

	Development of a Test Battery to Diagnose Specific Learning Disorder in Mathematics in a Multilingual Education Context
	Vera Hilger, Sonja Ugen, & Christine Schiltz
Session VI **MSA 3.230**	**Modeling Approaches**
	Chaired by Antoine Fischbach
13h00 – 14h00	*Validation and Psychometric Analysis of 35 Cognitive Item Models Spanning Grades 1 to 7 in the Mathematical Domain of Numbers & Operations*
	Michael A. Michels, Caroline Hornung, Sylvie Gamo, Michel Roeder, Mark Gierl, Pedro Cardoso-Leite, Antoine Fischbach, & Philipp Sonnleitner
	Using Automatic Item Generation in the Context of the Épreuves Standardisées – A Pilot Study on Effects of Altering Item Characteristics and Semantic Embeddings
	Michael Michels & Philipp Sonnleitner
14h00 – 14h30	TEA & COFFEE BREAK MSA Space 3rd floor côté Maison du Nombre

Parallel session VII and VIII

Session VII **MSA 3.230**	**Perspectives of Fairness and Reflective Practice**
	Chaired by Claudine Kirsch
14h30 – 15h30	*Fairness as Seen by Students: A Differentiated Look at Perceived Assessment Fairness by 7th and 9th Graders in Luxembourg*
	Philipp Sonnleitner & Rachel Wollschläger
	Teachers as Continuous Professional Learners: What do Teachers Understand as Professional Learning and Which Goals Drive Them?
	Martin Daumiller, Ruth Butler, & Markus Dresel

Session VIII MSA 3.100	Development of Screening and Assessment Tools Chaired by Ineke M. Pit-ten Cate
14h30 – 15h30	*Implementation of a Large-scale Functional Vision Screener in Early Childhood at a National Level* Sara Monteiro & Sonja Ugen *Towards a Fairer Assessment of Cognitive Abilities in Multilingual Children* Dzenita Kijamet & Sonja Ugen
15h30 – 16h00 **MSA 3.100**	Closing & Farewell by Ineke M. Pit-ten Cate

Societal Change and educational Trajectories of Women and Men Born between 1919 and 1986 in West Germany

Rolf Becker

The aim of this study is to unravel the impact of societal change in Germany on educational attainment and its social disparities for cohorts born between 1919 and 1986. Therefore, we analyse *whether* modernisation trends have modified access to and success in general, vocational and higher education for consecutive birth cohorts. In order to explain *how* these processes have had an effect on class differentials in educational attainment, we assume that the interplay of the changing occupational structure at the macro level and intergenerational status maintenance via investment in the education of offspring is – among other influences – the key mechanism for long-term educational expansion and for decreasing inequalities of opportunity in the educational system. The empirical bases of our investigation are clusters of time series for macro changes and retrospective individual data for 11 birth cohorts from the German Life History Study and the National Educational Panel Study for educational outcomes. We apply piecewise exponential event-history models to analyse the direct and indirect impacts of societal change on educational trajectories and social disparities in educational attainment. The results provide an understanding of historical variations in educational transitions and attainment associated with modernisation in the social, political, economic, and cultural spheres.

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Paper Abstracts

Session I: Education, Science, and Research

Educational Research in Luxembourg Mirrored in Scientific Publications

Jennifer Dusdal

In this talk, we will present our findings on the growth (e.g., number of publications, collaborations/co-authored papers, number of researchers) and diversity of educational research (e.g. disciplines and topics), in Luxembourg (Dusdal et al. 2021). Further, we will present insights into our follow-up research on international and interdisciplinary teams as drivers of science production in Luxembourg. The University of Luxembourg (UL) plays a central role in the expanding production of scientific knowledge in the country. Nevertheless, other organizations contribute to sustainable education and the generation of new knowledge.

Our empirical analysis is based on publications as a measure for contributions to the understanding of education, and as indicator of science production. We analyzed 854 publications (2016–2020) of researchers affiliated with (research) organizations in Luxembourg and their (inter)national co-authors. Publications from educational sciences, and social sciences and humanities (SSH) included articles, monographs, edited volumes, dissertations, and reports among others. Our main data source is the ORBI.lu database. Additionally, we collected relevant publications from other organizations of the education sector in Luxembourg. Methodologically, we apply a three-step process based on authors and keywords. Subsequently, we conducted a survey among all educational researchers (collection of CVs/publications) to fill gaps in the ORBI.lu database. This enables us to show the growth and diversity of science production at the (inter)national level of researchers in Luxembourg and their collaboration partners who contribute to the expansion of educational research.

Our bibliometric analysis expands Hadjar's study (2016), and shows that the UL provides excellent conditions for educational research with its growing multidisciplinary networks. UL remains the most important organizational form in the field of educational research, although other forms continue to undergo differentiation. The implementation of "Education" in UL's four-year plan and its anchoring as national research priority shows its national relevance. We recommend a stronger interlocking of educational research with other related disciplines, and the non-university organizations—one of LuxERA's main goals.

References

Dusdal, Jennifer, Powell, Justin J.W. & Thönnessen, Luisa C. (2021). Bildungsforschung in Luxemburg im Spiegel wissenschaftlicher Publikationen (integrale Fassung). Luxembourg Centre for Educational Testing (LUCET) & Service de la Recherche et de l'Innovation pédagogiques (SCRIPT). https://doi.org/10.48746/BB2021LU-DE-43B

Hadjar, Andreas. (2016). Erziehungswissenschaft(en) in Luxemburg – Eine feste Säule in der noch jungen luxemburgischen Hochschullandschaft. *Erziehungswissenschaft* 27(52), S. 41-53. urn:nbn:de:0111-pedocs-122244

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Building School-University Partnerships to Support Primary Science Education in Luxembourg

Maiza Trigo, Ragnhild Barbu, Sara Wilmes, Kerstin te Heesen, & Christina Siry

Luxembourg has a complex multilingual primary school context that creates both opportunities and challenges for learning, as schooling is impacted by the different languages of instruction (Andersen et al., 2015; Weth, 2015; Siry, 2017; Loureiro et al., 2019; Wilmes et al., 2018b). Grounded in the work of a team of five researchers and seven teachers collaborating at the SciTeach Center at the University of Luxembourg, we build a case study (Stake, 1995) of a school-university partnership (a research-practice partnership – e.g., Penuel et al., 2015; Guerrero & Reiss, 2020) that supports primary teacher professional development in science education. Combining two qualitative research approaches to inquiry, case study and ethnography (Creswell & Poth, 2018), for this presentation we narrow the research focus on the data from field notes and team discussion (prompted as focus groups), using critical ethnography (Carspecken, 1996) and video-based (Schnettler & Knoblauch, 2009) analytical approaches on how primary science professional development needs are addressed by the team's initiatives, revealing its dynamics towards taking agency while shifting roles on supporting inquiry-based primary science education as recommended by the European Commission (Rocard, 2007). Considering the theoretical frameworks of communities of practice (Wenger, 2005/1998), distributed leadership (Woods et al., 2004) and equity of voices (Tobin, 2007), the narratives unpack this multilayered data based on a *reflect-dialogue-act* structure of collaboration (Schön, 1987; Wilmes et al., 2018a) to reveal the relevance for developing long-term sustainable and transformative school-university partnerships.

References

Andersen, K., Siry, C., & Hengesch, G. (2015). Naturwissenschaftlicher Unterricht an der Luxemburger - École fondamentale. In *Bildungsbericht Luxemburg, Analysen Und Befunde 2015* (28–33). Ministère de l'Éducation nationale, de l'Enfance et de la Jeunesse and Université du Luxembourg.

Carspecken, P.F. (1996). *Critical ethnography in Educational Research. A Theoretical and Practical Guide*. Routledge.

Creswell, J., & Poth, C. (2018). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches* (4th Edition). Sage.

Guerrero, G. R., & Reiss, M. J. (2020). Science outside the classroom: exploring opportunities from interdisciplinarity and research–practice partnerships. *International Journal of Science Education, 42*(9), 1522–1543. http://doi.org/10.1080/09500693.2020.1767317

Loureiro, K. S., Hadjar, A., Scharf, J., & Grecu, A. (2019). Do students' language backgrounds explain achievement differences in the Luxembourgish education system? *Ethnicities, 19*(6), 1202–1228. http://doi.org/10.1177/1468796819840734

Penuel, W. R., Allen, A.-R., Coburn, C. E., & Farrell, C. (2015). Conceptualizing Research–Practice Partnerships as Joint Work at Boundaries. *Journal of Education for Students Placed at Risk, 20*(1-2), 182–197. http://doi.org/10.1080/10824669.2014.988334

Rocard, M. (Chair) (2007). *Science Education NOW: A Renewed Pedagogy for the Future of Europe*. Office for Official Publications of the European Communities.

Schnettler, B., & Knoblauch, H. (2009). Videoanalyse. In Kühl, S., Strodtholz, P., Taffertshofer, A. (eds.), *Handbuch Methoden der Organisationsforschung. Quantitative und Qualitative Methoden* (272–297). VS.

Schön, D. (1987). *Educating the reflective practitioner*. Jossey-Bass.

Siry, C. (2017). The science curriculum at the elementary level: What are the basics, and are we teaching them? In L. Bryan & K. Tobin (Eds.), *13 Questions: Reframing Education's Conversation: Science* (253–266). Peter Lang Publishing.

Stake, R. (1995). *The Art of Case Study Research*. Sage.

Tobin, K. (2007). Creating and Sustaining Productive Research Squads. In S. M. Ritchie (Ed.), *Research Collaboration: Relationships and Praxis* (43–58). Sense Publisher.

Wenger, E. (2005/1998). *Communities of practice: Learning, meaning, and identity* (13th printing). Cambridge University Press.

Weth, C. (2015) Mehrsprachigkeit in luxemburgischen Primarschulen. In *Bildungsbericht Luxemburg, Analysen und Befunde* (22–27). Ministère de l'Éducation nationale, de l'Enfance et de la Jeunesse and Université du Luxembourg.

Wilmes, S. E. D., Heesen, K. te, Siry, C., Kneip, N., & Heinericy, S. (2018a). The Role of Critical Reflexivity in the Professional Development of Professional Developers: a Co-Autoethnographic Exploration. *Educação, 7*(1), 13–24. https://doi.org/10.17564/2316-3828.2018v7n1p13–24

Wilmes, S.E.D., Siry, C., Fernández, R. G., & Gorges, A. M. (2018b). Reconstructing Science Education within the Language| Science Relationship: Reflections from Multilingual Contexts. In L. Bryan and K. Tobin (Eds.), *13 Questions: Reframing Education's Conversation: Science* (253–266). Peter Lang Publishing.

Woods P., Bennett N., Harvey J., & Wise C. (2004). Variables and dualities in distributed leadership: Findings from a systematic literature review. *Educational Management Administration and Leadership, 32*(4), 439–457. http://doi.org/10.1177/1741143204046497

Session II: Comparative Perspectives on Educational Inequality

Intersectional Inequalities along the Dimension of SES, Gender, and Migration Background at Various Stages of European Countries' Education Systems

Irena Kogan, Irem Karacay, Aigul Alieva, Taylor Kroezen, Katri Kleemola, & Auli Toom

Studies repeatedly show that patterns of gender inequality (Ahonen, 2021; Ayalon and Livneh, 2013), ethnic inequality (Dicks *et al,.* 2019; Dollmann 2017; Dronkers and Fleischmann, 2010; Riederer and Verwiebe, 2015; Verwiebe and Riederer, 2013; Volante *et al.,* 2018; van de Werfhorst and Heath 2019) and inequalities by SES (Passaretta and Skopek, 2020; Strand 2014) persist at various stages in education system and across multiple countries.

A relatively new line of research highlights the multidimensional nature or, in other words, intersectionality of educational inequalities, leading to intensification of educational (dis)advantages (Codiroli Mcmaster and Cook, 2019; Gross *et al.,* 2016). While the separate effects of SES, gender, and migration status on educational outcomes as well as their binary combinations are well-documented (Dronkers and Kornder, 2014, 2015; Gottburgsen and Gross, 2012; Zimmermann and Seiler, 2019), research on intersectional inequalities along all three dimensions together is rather scarce (Strand, 2014).

The proposed paper fills the gap in the hitherto research providing (a) a systematic assessment of intersectionalities between gender, SES and migration background, (b) along the education system (i.e., primary, secondary and tertiary levels) (c) in various educational outcomes (competences and school self-concept) and (d) across countries. All available waves of the PIRLS/TIMSS, PISA and EuroStudent data are utilized. Preliminary results indicate that the intersection of the aspects of inequality matters at various stages within the education system, but to various degrees. The intersectionality of gender and SES is most meaningful for the sense of beloning in school, whereas gender and SES matter for math competences, and gender, SES and migration background − for reading competences. The pronounced country differences are being currently explored in the two-step multilevel framework.

References

Ahonen, A.K., 2021. Finland: Success Through Equity—The Trajectories in PISA Performance. In: N. Crato, ed. Improving a Country's Education. Cham: Springer International Publishing, 121–136.

Ayalon, H. and Livneh, I., 2013. Educational standardization and gender differences in mathematics achievement: A comparative study. Social Science Research, 42 (2), 432–445.

Codiroli Mcmaster, N. and Cook, R., 2019. The contribution of intersectionality to quantitative research into educational inequalities. Review of Education, 7 (2), 271–292.

Dicks, A., Dronkers, J., and Levels, M., 2019. Cross-Nationally Comparative Research on Racial and Ethnic Skill Disparities: Questions, Findings, and Pitfalls. The Palgrave Handbook of Race and Ethnic Inequalities in Education.

Dollmann, J., 2017. Positive choices for all? SES- and gender-specific premia of immigrants at educational transitions. Research in Social Stratification and Mobility, 49, 20–31.

Dronkers, J. and Fleischmann, F., 2010. The Educational Attainment of Second Generation Immigrants from Different Countries of Origin in the EU Member-States. In: J. Dronkers, ed. Quality and Inequality of Education: Cross-National Perspectives. Dordrecht: Springer Netherlands, 163–204.

Dronkers, J. and Kornder, N., 2014. Do migrant girls perform better than migrant boys? Deviant gender differences between the reading scores of 15-year-old children of migrants compared to native pupils. Educational Research and Evaluation, 20 (1), 44–66.

Dronkers, J. and Kornder, N., 2015. Can gender differences in educational performance of 15-year-old migrant pupils be explained by societal gender equality in origin and destination countries? Compare: A Journal of Comparative and International Education, 45 (4), 610–634.

Gottburgsen, A. and Gross, C., 2012. Welchen Beitrag leistet „Intersektionalität“ zur Klärung von Kompetenzunterschieden bei Jugendlichen? In: R. Becker and H. Solga, eds. Soziologische Bildungsforschung. Wiesbaden: Springer Fachmedien Wiesbaden, 86–110.

Gross, C., Gottburgsen, A., and Phoenix, A., 2016. Education systems and intersectionality. In: A. Hadjar and C. Gross, eds. Education Systems and Inequalities. Policy Press, 51–72.

Passaretta, G. and Skopek, J., 2020. Does schooling decrease social inequality in early achievement? SocArXiv, preprint.

Riederer, B. and Verwiebe, R., 2015. Changes in the Educational Achievement of Immigrant Youth in Western Societies: The Contextual Effects of National (Educational) Policies. European Sociological Review, 31 (5), 628–642.

Strand, S., 2014. School effects and ethnic, gender and socio-economic gaps in educational achievement at age 11. Oxford Review of Education, 40 (2), 223–245.

Verwiebe, R. and Riederer, B., 2013. Die Lesekompetenzen von Jugendlichen mit Migrationshintergrund in westlichen Gesellschaften / The Reading Literacy of Immigrant Youth in Western Societies: Eine Mehrebenenanalyse auf Basis der PISA-Studie von 2000 bis 2009 / A Multilevel Analysis Based on PISA 2000 to 2009. Zeitschrift für Soziologie, 42 (3), 201–221.

Volante, L., Klinger, D., and Bilgili, O., eds., 2018. Immigrant Student Achievement and Education Policy. Cham: Springer International Publishing.

van de Werfhorst, H.G. and Heath, A., 2019. Selectivity of Migration and the Educational Disadvantages of Second-Generation Immigrants in Ten Host Societies. European Journal of Population, 35 (2), 347–378.

Zimmermann, B. and Seiler, S., 2019. The Relationship between Educational Pathways and Occupational Outcomes at the Intersection of Gender and Social Origin. Social Inclusion, 7 (3), 79–94.

School Segregation in Primary and Secondary Education in Luxembourg: Track Placement and Academic Achievement

Ineke M. Pit-ten Cate, Andreas Hadjar, Aigul Alieva, Antoine Fischbach, Taylor Kroezen, Frederick de Moll, Martha Ottenbacher, & Juliette Torabian

Known as a highly stratified education system with early tracking (similar to Dutch, German, Austrian, and German-speaking Swiss systems), Luxembourg features additional properties that add to its complexity in the educational realm (Backes & Hadjar, 2017). It is a simultaneously multilingual system that also has the largest share of students born outside of Luxembourg or parents born abroad. While most migrants come from within Europe, they frequently come from either a particularly high or low socio-economic background. It has been scientifically established that the educational inequalities in Luxembourg are driven mostly by social origin and immigration/language background. Gender is another critical dimension of disadvantage; for example, boys are less motivated to obtain higher education than girls (Hadjar, Scharf, & Hascher, 2021). In addition, gender often intersects with other factors such as immigrant background in shaping disadvantages. However, evidence shows that – beyond individual background characteristics – schools' social composition also perpetuates inequalities in student achievement (Martins & Veiga, 2010).

Therefore, we focus on the role of school-level segregation on student's academic outcomes over time using data of a longitudinal cohort from the School Monitoring Programme (Éprueve Standardisée (ÉpStan)) with 5097 students in Grade 3 observed in 2013 and later in Grade 9 observed in 2019 (regular pathways) and 2020 and 2021 (irregular pathways, i.e., class repetitions). School segregation is an aggregate measure of the proportion of students who belong to low socio-economic background and the proportion of students born abroad and/or do not speak instruction language at home.

Our contribution aims to provide insights into the following questions:

1. Does school-level segregation in primary education (G3) predict student's track placement in secondary education?
2. Does school-level segregation in primary education (G3) predict student's math and German achievement in secondary education (G9)?

3. How strongly are achievement outcomes in G9 correlated with within- and between-track segregation in G9?

The findings will serve as a complementary base for tailored policy making with respect to the long-term impact of school composition for teaching and learning, especially within a tracked school system.

References

Becker, S., & Hadjar, A. (2017). Educational trajectories through secondary education in Luxembourg: How does permeability affect educational inequalities? *Schweizerische Zeitschrift Für Bildungswissenschaften*, *39*(3), 437–460. https://doi.org/10.25656/01:16659

Hadjar, A., Scharf, J., & Hascher, T. (2021). Who aspires to higher education? Axes of inequality, values of education and higher education aspirations in secondary schools in Luxembourg and the Swiss Canton of Bern. *European Journal of Education*, *56*(1), 9–26. https://doi.org/10.1111/ejed.12435

Martins, L., & Veiga, P. (2010). Do inequalities in parents' education play an important role in PISA students' mathematics achievement test score disparities? *Economics of Education Review*, *29*(6), 1016–1033. https://doi.org/10.1016/j.econedurev.2010.05.001

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Can Education Plans Compensate for Educational Inequalities? Actors' Divergent Perceptions of Education in German Early Childhood Education and Care

Sylvia Nienhaus

Education is relevant not only at school, but already in kindergarten. Among other aspects this development can be seen in the introduction of education plans, which are supposed to enable targeted promotion of school-relevant competencies (for Germany: Jugend- & Kultusministerkonferenz, 2004). Whether and to what extent the implementation of education plans in German early childhood education and care (ECEC) compensates for educational inequalities is the central question of my research project.

Oriented on the model of qualitative multilevel analysis (Hummrich & Kramer, 2018), I conducted interviews with ECEC provider representatives, parents, and educators, and participated in parent-educator meetings in the German federal states of Lower Saxony and Schleswig-Holstein, taken as examples. I analyze the data collected in this way in a content-analytical reconstructive way (Kuckartz & Rädiker, 2020) and relate them to each other with regard to (non-)fit relations of actor-specific perceptions of education.

Initial findings from interviews with ECEC provider representatives show that they do not only act professionally, but also based on prejudice. If the aspect of prejudice is considered in more detail, it becomes apparent that a wide variety of determinants of social inequality (Solga, Berger & Powell, 2009) is invoked when it comes to implementing education plans, pointing to problems in the reduction of educational inequalities. In fact, how educational inequalities can be compensated in ECEC remains unclear, except that reference is made to compensatory support (Nienhaus, 2021a & 2021b; Meyer, 2017).

In my paper, I would like to reconstruct ECEC actors' divergent perceptions of education. Assuming that a focus on education can also lead to the creation or overemphasis of educational inequalities, I would like to conclude my paper with a critical discussion of the question of whether the implementation of education plans in ECEC to compensate for educational inequalities can be meaningful at all.

References

Jugend- & Kultusministerkonferenz (2004). Gemeinsamer Rahmen der Länder für die frühe Bildung in Kindertageseinrichtungen (Beschluss der Jugendministerkonferenz vom 13./14.05.2004/Beschluss der Kultusministerkonferenz vom 03./04.06.2004). https://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2004/2004_06_03-Fruehe-Bildung-Kindertageseinrichtungen.pdf

Hummrich, M. & Kramer, R.-T. (2018). „Qualitative Mehrebenenanalyse＂ als triangulierendes Verfahren‐zur Methodologie von Mehrebenendesigns in der qualitativen Sozialforschung. In J. Ecarius & I. Miethe (Hrsg.), Methodentriangulation in der qualitativen Bildungsforschung. 2., überarbeitete Auflage (S. 123-147). Opladen, Berlin & Farmington Hills: Barbara Budrich.

Kuckartz, U. & Rädiker, S. (2020). Fokussierte Interviewanalyse mit MAXQDA. Schritt für Schritt. Wiesbaden: Springer VS.

Meyer, S. (2017). Das ewige Dilemma mit der Differenz. Eine Dokumentenanalyse zu Thematisierungen sozialer Differenz in den Bildungsplänen der Länder für die Kindertagesbetreuung. In U. Stenger, D. Edelmann, D. Nolte & M. Schulz (Hrsg.), Diversität in der Pädagogik der frühen Kindheit. Im Spannungsfeld zwischen Konstruktion und Normativität. (S. 149-167). Weinheim: Beltz Juventa.

Nienhaus, Sylvia (2021a): Bildungspläne, sozial-emotionale Entwicklung und soziale Ungleichheit in früher Kindheit. Orientierungen von TrägervertreterInnen. In: Blättel-Mink, Birgit (Hrsg.), Gesellschaft unter Spannung. Verhandlungen des 40. Kongresses der Deutschen Gesellschaft für Soziologie 2020. https://publikationen.soziologie.de/index.php/kongressband_2020/article/view/1413

Nienhaus, Sylvia (2021b): Focusing interrelations of education plans and social inequality in early childhood: the example of children＇s social-emotional skills. In: Neimann, Theresa; Felix, Jonathan J.; Shliakhovchuk, Elena & Hindman, Lynne L. (Hrsg.): Policy and practice challenges for equality in education. IGI Global.

Solga, H., Berger, P. A., & Powell, J. J. (2009). Soziale Ungleichheit‐Kein Schnee von gestern! Eine Einführung. In H. Solga, P. A. Berger, & J. J. Powell (Hrsg.), Soziale Ungleichheit. Klassische Texte zur Sozialstrukturanalyse. (S. 11-45). Frankfurt am Main: Campus.

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Adolescents' School-related Quality of Life in Relation to Disability

Anne Stöcker & Carmen Zurbriggen

Disability poses a challenge to youth development and well-being. Among else, disability often constitutes a relational hierarchy that can strongly influence the individual perspective and life course (Powell & Pfahl, 2016). Its operationalization remains an empirical question. On another note, parental assessments may substantially differ from their children's judgement of their subjective well-being in school (Schwab et al., 2020). Therefore, more emphasis should be placed on the children's perspective to adequately measure indicators of their own life.

The agreement between adolescents' and parents' assessment of well-being in school has been examined based on the German nationally representative KiGGS study (Hölling et al., 2012). The school-related quality of life was assessed with the four-item sub-dimension of health-related quality of life (KINDL questionnaire, Ravens-Sieberer et al., 2007). On scale-level, parents significantly overestimated their children's school-related quality of life (Ellert et al., 2011). The aim of our study is to analyze the agreement between adolescents and their parents in more detail. Additionally, we differentiate for three operationalizations of disability: (1) federally recognized disability, (2) a narrower and a (3) broader operationalization of disability based on the 'Children with Special Health Care Needs Screener' (CSHCN, Bethell et al., 2002).

As the KINDL was answered from adolescents from 11-17 years, our KiGGS subsample consists of 6371 complete pairs of parents and adolescents (Mage=14.3 years, female 49.2 %). To investigate their agreement on school-related quality of life, we applied a multitrait-multimethod model. For adolescents without any disability and those with a disability in the broad sense (3), parents overestimate all four items. In the case of (1) federal disability, only fun at school is overestimated by the parents. For the (2) narrow understanding, the good management of school tasks is underestimated by parents. The results will be presented and discussed in consequences for research and practice.

References

Bethell, C. D., Read, D., Stein, R. E., Blumberg, S. J., Wells, N., & Newacheck, P. W. (2002). Identifying Children With Special Health Care Needs: Development and Evaluation of a Short Screening Instrument. Ambulatory Pediatrics, 2(1), 38–48. https://doi.org/10.1367/1539-4409(2002)002<0038:ICWSHC>2.0.CO;2

Ellert, U., Ravens-Sieberer, U., Erhart, M. & Kurth, B.-M. (2011). Determinants of agreement between self-reported and parent-assessed quality of life for children in Germany-results of the German Health Interview and Examination Survey for Children and Adolescents (KiGGS). *Health and quality of life outcomes*, *9*, 102. https://doi.org/10.1186/1477-7525-9-102

Hölling, H., Schlack, R., Kamtsiuris, P., Butschalowsky, H., Schlaud, M. & Kurth, B. M. (2012). Die KiGGS-Studie. Bundesweit repräsentative Längs- und Querschnittstudie zur Gesundheit von Kindern und Jugendlichen im Rahmen des Gesundheitsmonitorings am Robert Koch-Institut [The KiGGS study. Nationwide representative longitudinal and cross-sectional study on the health of children and adolescents within the framework of health monitoring at the Robert Koch Institute]. *Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz*, *55*(6-7), 836-842. https://doi.org/10.1007/s00103-012-1486-3

Pfahl, L. & Powell, J. J. W. (2016). „Ich hoffe sehr, sehr stark, dass meine Kinder mal eine normale Schule besuchen können.": Pädagogische Klassifikationen und ihre Folgen für die (Selbst-)Positionierung von Schüler/innen. *Zeitschrift für Pädagogik, 62* Beiheft 62, 58-74.

Ravens-Sieberer, U., Ellert, U. & Erhart, M. (2007). Gesundheitsbezogene Lebensqualität von Kindern und Jugendlichen in Deutschland. Eine Normstichprobe für Deutschland aus dem Kinder- und Jugendgesundheitssurvey (KIGGS) [Health-related quality of life of children and adolescents in Germany. Norm data from the German Health Interview and Examination Survey (KiGGS)]. *Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz*, *50*(5-6), 810-818. https://doi.org/10.1007/s00103-007-0244-4

Schwab, S., Zurbriggen, C. L. A. & Venetz, M. (2020). Agreement among student, parent and teacher ratings of school inclusion: A multitrait-multimethod analysis. *Journal of school psychology*, 82, 1–16. https://doi.org/10.1016/j.jsp.2020.07.003

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Session IV: Literacy Learning in Luxembourg

A Conceptualization of Young Children's Engagement with Books – Preliminary Findings of a Qualitative Study in Three Crèches in Luxembourg

Valerie Kemp

It has been repeatedly shown that the Luxembourgish educational system is reproducing educational inequalities for children with different language backgrounds (LUCET & SCRIPT, 2021). One way to counteract this, is to support young children's language and literacy development (Bialystok, 2018). Considering this, the Ministry of Education introduced a programme of multilingual education in Early Childhood Education, which requires educators, among others, to engage children in regular literacy activities in different languages (MENJE & SNJ, 2017). Engagement with books and stories is a crucial element of early literacy and has proven to contribute to children's language and literacy development (Deunk et al., 2022). While many studies focus on the cognitive aspects, the sociocultural perspective understands literacy as social practice and highlights the importance of participation and social interactions for children's learning (Kelly, 2010). From this perspective, only little is known about young children's early engagement with books. My PhD study fills this research gap.

This paper explores the ways in which young children independently engage with the content of books. Between October 2020 and June 2021, I conducted fieldwork in three day-care settings in Luxembourg and documented the early literacy practices of nine focus children (between two and four years old) using video observations, fieldnotes and thick descriptions. For this paper, I have analysed 87 video observations (four and a half hours) of children using books independently, and I have focused on approximately two hours of videos to conceptualise children's engagement with the content of books. My thematic analysis shows that children's different ways of engaging with the content of books can be situated on a graph, that combines the dimensions of children's language use and their literacy sense-making. This conceptualization can help researchers and practitioners to better understand the relationship between language and literacy and therefore to better support children's development.

References

Bialystok, E. (2018). Bilingual education for young children: Review of the effects and consequences. *International journal of bilingual education and bilingualism*, *21*(6), 666–679.

Deunk, M. I., Gosen, M. N., Hiddink, F., & Berenst, J. (2022). Literacy. In A. Church & A. Bateman (Eds.), *Talking with Children - A Handbook on Interaction in Early Childhood Education*: Cambridge University Press.

Kelly, C. (2010). Literacy as a social and cultural activity in homes and schools In *Hidden Worlds*. Stoke an Trent: Trentham Books.

LUCET & SCRIPT. (2021). *Nationaler Bildungsbericht*. Luxembourg.

MENJE, & SNJ. (2017). Cadre de référence national sur l'éducation non formelle des enfants et des jeunes. Luxembourg.

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Digital Media as Language and Literacy Learning Spaces in Multilingual Families – Survey Results from Luxembourg

Potheni Vaiouli & Maria Obojska

Recent sociolinguistic research suggests that transnational families offer their members unique safe spaces for language and literacy learning. With the growing availability and accessibility of digital technologies, many of these families draw on digital media for communication practices and language learning endeavors, including support for school based learning, a safe space for adults to practice societal languages, and an important space for home language socialization (King-O'Rianin,2015;Palviainen2020). Yet, as of today, there is little systematic knowledge on how digital media are used by transnational families to facilitate language and literacy learning. Focusing on the context of multilingual Luxembourg, this presentation addresses this knowledge gap reporting on preliminary results of a new research project conducted among transnational families.

In this contribution, we focus primarily on the results of a survey conducted among 209 parents from transnational multilingual families in Luxembourg. The questionnaire sought information on digital media use among parents and their children, the tools and activities they engage in, and parental views towards the use of digital media as a tool for language learning. The project follows a mixed-method design in which the survey data is triangulated with the results of a focus group conducted with 4 parents and with preliminary data from ethnographically-inspired case studies with 5 transnational families. Qualitative data sources include interviews, mediagram, and video recordings. Preliminary results suggest that both parents and their children draw on digital media in their learning endeavors although the type of practices they engage in, the frequency of the activities, the preferred tools and languages learnt differ between the generations. These findings, although preliminary, add to a growing body of research on digital media in multilingual families and highlight the potential of building on family's knowledge and experience to enhance a culture of collaborative language and literacy learning.

References

King-O'Riain, R. C. (2015) Emotional streaming and transconnectivity: Skype and emotion practices in transnational families in Ireland.*GlobalNetworks*15.2:256—273. https://doi:10.1111/glob.12072

Palviainen, Å. (2020). Video calls as a nexus of practice in multilingual translocal families. *Zeitschrift Für Interkulturellen Fremdsprachenunterricht*,*25*(1).

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Development of a Test Battery to Diagnose Specific Learning Disorder in Reading in a Multilingual Education Context

Linda Romanovska, Sonja Ugen, Ineke M. Pit-ten Cate

Providing timely and adequate support to children experiencing difficulties in reading and writing is key to minimize the impact on children's academic achievements, social and emotional well-being, particularly for children with specific learning disorders. However, the diagnostic process is especially challenging in Luxembourg's multilingual educational system with changing instruction languages (Luxembourgish, German, French) and multilingual population. The chosen language of the diagnostic tool is usually identical to the main language of instruction at school, which at time of diagnosis (typically grade 3) is German. This may especially affect the diagnosis of children who do not speak German or Luxembourgish at home as data from the Luxembourgish national school monitoring program reveals significant differences in German reading comprehension in grade 3 depending on the language spoken at home (Hoffmann et al., 2018; Martini et al., 2021). Furthermore, the diagnostic tools currently employed in Luxembourg are developed in countries with primarily one language of instruction, challenging the validity of the diagnostic process in a multilingual population (Ugen et al., 2021).

The aim of the current project is to develop a diagnostic tool adapted to the Luxembourgish educational curriculum, that takes children's potential proficiency differences in the test language into account in the instructions, tasks and resulting norms. This way, over-diagnosis of reading and writing disorders in children who do not speak the main language(s) of instruction at home and underdiagnosis of children who do, can be avoided. The developed test battery assesses children's performance in key domains relevant for reading and writing comprising phonological skills, (non)word and text reading (fluency and accuracy), reading comprehension, writing, and vocabulary. We will present the pre-test results of 9 sub-tests completed by 214 children, providing the first insights into the test development and validation process.

References

Hoffmann, D., Hornung, C., Gamo, S., Esch, P., Keller, U., & Fischbach, A. (2018). Schulische Kompetenzen von Erstklässlern und ihre Entwicklung nach zwei Jahren. In T. Lentz, I. Baumann, & A. Küpper (Eds.), *Nationaler Bildungsbericht* (pp. 84–96). University of Luxembourg & SCRIPT.

Martini, S., Schiltz, C., Fischbach, A., & Ugen, S. (2021). Identifying Math and Reading Difficulties of multilingual children: Effects of different cut-offs and reference group. In M. Herzog, A. Fritz-Stratmann, & E. Gürsoy (Eds.), *Diversity Dimensions in Mathematics and Language Learning* (pp. 200–228). De Gruyter Mouton.

Ugen, S., Schiltz, C., Fischbach, A., & Pit-ten Cate, I. M. (2021). Einleitung: Lernstörungen im multilingualen Kontext – Eine Herausforderung. In Ugen, S., Schiltz, C., Fischbach, A., & Pit-ten Cate, I. M. (Eds.), Lernstörungen im multilingualen Kontext. Diagnose und Hilfestellungen (pp3-7). Luxembourg: Melusina Press.

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Development of a Test Battery to Diagnose Specific Learning Disorder in Mathematics in a Multilingual Education Context

Vera Hilger, Sonja Ugen, & Christine Schiltz

When suspecting a disorder in specific scholastic skills, e.g., in mathematics, individual weaknesses and strengths are identified in an extensive diagnostic process to provide adequate support. Given that most diagnostic instruments use a specific language to give instructions and present tasks, proficiency in the test language is likely to influence the student's test performance during diagnosis of specific learning disorders (Ugen et al., 2021). This becomes even more important in a culturally and linguistically diverse setting such as in Luxembourg. For specific learning disorders, it is recommended to test children in the main teaching language, which is German in Luxembourgish public schools. However, the majority of the enrolled pupils speak different languages at home and results of the national school monitoring program *ÉpStan* show marked differences in school performance between children with different language backgrounds (Hoffmann et al., 2018; Martini et al., 2021). Moreover, existing test batteries used in a diagnostic context mostly do not consider linguistic heterogeneity, and the fact that children have highly varying test language proficiency may result in over- or under-identification of learning disorders, which, in turn, may prevent children from receiving adequate support.

Therefore, we developed a new test battery specifically in the area of mathematics for children in grade 3, which is tailored to the multilingual education context in Luxembourg. Based on diagnostic guidelines and neurocognitive models of number processing, we identified two main domains: basic numerical and basic arithmetic skills, which are represented in 17 subtests with a total of 188 items. Additionally, two subtests measuring more general precursory skills were included. The instructions aimed to keep the language load low, and the test content was adapted to the national curriculum. The theoretical framework of the new test battery, as well as preliminary results of the first data collection will be presented (N = 211).

References

Hoffmann, D., Hornung, C., Gamo, S., Esch, P., Keller, U., & Fischbach A. (2018). Schulische Kompetenzen von Erstklässlern und ihre Entwicklung nach zwei Jahren. In T. Lentz, I. Baumann & A. Küpper (Hrsg.). *Nationaler Bildungsbericht 2018* (S. 84-96). Universität Luxemburg & SCRIPT.

Martini, S., Schiltz, C., Fischbach, A., & Ugen, S. (2021). Identifying Math and Reading Difficulties of multilingual children: Effects of different cut-offs and reference group. In M. Herzog, A. Fritz-Stratmann, E. Gürsoy, E. (eds.), *Diversity Dimensions in Mathematics and Language Learning*. De Gruyter Mouton.

Ugen, S., Schiltz, C., Fischbach, A., & Pit-ten Cate, I. M. (2021). Einleitung: Lernstörungen im multilingualen Kontext – Eine Herausforderung. In S. Ugen, C. Schiltz, A. Fischbach, & I. M. Pit-ten Cate (Eds.), *Lernstörungen im multilingualen Kontext. Diagnose und Hilfestellungen* (pp. 3–7). Melusina Press.

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Validation and Psychometric Analysis of 35 Cognitive Item Models Spanning Grades 1 to 7 in the Mathematical Domain of Numbers & Operations

Michael A. Michels, Caroline Hornung, Sylvie Gamo, Michel Roeder, Mark Gierl, Pedro Cardoso-Leite, Antoine Fischbach, & Philipp Sonnleitner

Today's educational field has a tremendous hunger for valid and psychometrically sound items to reliably track and model students' learning processes. Educational large-scale assessments, formative classroom assessment, and lately, digital learning platforms require a constant stream of high-quality, and unbiased items. However, traditional development of test items ties up a significant amount of time from subject matter experts, pedagogues and psychometricians and might not be suited anymore to nowadays demands. Salvation is sought in automatic item generation (AIG) which provides the possibility of generating multiple items within a short period of time based on the development of cognitively sound item templates by using algorithms (Gierl & Haladyna, 2013; Gierl et al., 2015).

The present study psychometrically analyses 35 cognitive item models that were developed by a team of national subject matter experts and psychometricians and then used for algorithmically producing items for the mathematical domain of numbers & shapes for Grades 1, 3, 5, and 7 of the Luxembourgish school system. Each item model was administered in 6 experimentally varied versions to investigate the impact of a) the context the mathematical problem was presented in, and b) problem characteristics which cognitive psychology identified to influence the problem solving process. Based on samples from Grade 1 (n = 5963), Grade 3 (n = 5527), Grade 5 (n = 5291), and Grade 7 (n = 3018) collected within the annual Épreuves standardisées, this design allows for evaluating whether psychometric characteristics of produced items per model are a) stable, b) can be predicted by problem characteristics, and c) are unbiased towards subgroups of students (known to be disadvantaged in the Luxembourgish school system).

After item calibration using the 1-PL model, each cognitive model was analyzed in-depth by descriptive comparisons of resulting IRT parameters, and the estimation of manipulated problem characteristics' impact on item difficulty by using the linear logistic test model

(LLTM, Fischer, 1972). Results are truly promising and show negligible effects of different problem contexts on item difficulty and reasonably stable effects of altered problem characteristics. Thus, the majority of developed cognitive models could be used to generate a huge number of items (> 10.000.000) for the domain of numbers & operations with known psychometric properties without the need for expensive field-trials. We end with discussing lessons learned from item difficulty prediction per model and highlighting differences between the Grades.

References:

Fischer, G. H. (1973). The linear logistic test model as an instrument in educational research. Acta Psychologica, 36, 359-374.

Gierl, M. J., & Haladyna, T. M. (Eds.). (2013). Automatic item generation: Theory and practice. New York, NY: Routledge.

Gierl, M. J., Lai, H., Hogan, J., & Matovinovic, D. (2015). A Method for Generating Educational Test Items That Are Aligned to the Common Core State Standards. Journal of Applied Testing Technology, 16(1), 1–18.

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Using Diagnostic Classification Models to Map First Graders' Cognitive Development Pathways in the Luxembourgish School Monitoring Programme: Pilot Study in the Domain of Numbers & Operations

Pamela Inostroza Fernández, Caroline Hornung, Michael A. Michels, & Philipp Sonnleitner

Educational large-scale assessments aim to evaluate school systems' effectiveness by typically looking at aggregated levels of students' performance. The developed assessment tools or tests are not intended or optimized to be used for diagnostic purposes on an individual level. In most cases, the underlying theoretical framework is based on national curricula and therefore too blurry for diagnostic test construction, and test length is too short to draw reliable inferences on individual level. This lack of individual information is often unsatisfying, especially for participating students and teachers who invest a considerable amount of time and effort, not to speak about the tremendous organizational work needed to realize such assessments. The question remains, if the evaluation could not be used in an optimized way to offer more differentiated information on students' specific skills.

The present study explores the potential of Diagnostic Classification Models (DCM) in this regard, since they offer crucial information for policy makers, educators, and students themselves. Instead of a ranking of, e.g., an overall mathematics ability, student mastery profiles of subskills are identified in DCM, providing a rich base for further targeted interventions and instruction (Rupp, Templin & Henson, 2010; von Davier, M., & Lee, Y. S., 2019). A prerequisite for applying such models is well-developed, and cognitively described items that map the assessed ability on a fine-grained level. In the present study, we drew on 104 items that were developed on base of detailed cognitive item models for basic Grade 1 competencies, such as counting, as well as decomposition and addition with low numbers and high numbers (Fuson, 1988, Fritz & Ricken, 2008, Krajewski & Schneider, 2009). Those items were spread over a main test plus 6 different test booklets and administered to a total of 5963 first graders within the Luxembourgish national school monitoring Épreuves standardisées.

Results of this pilot study are highly promising, giving information about different student's behaviors patterns: The final DCM was able to distinguish between different developmental stages in the domain of numbers & operations, on group, as well as on individual level.

Whereas roughly 14% of students didn't master any of the assessed competencies, 34% of students mastered all of them including addition with high numbers. The remaining 52% achieved different stages of competency development, 8% of students are classified only mastering counting, 15% of students also can master addition with low numbers, meanwhile 20% of students additionally can master decomposition, all these patterns reflect developmental models of children's counting and concept of numbers (Fritz & Ricken, 2008; see also Braeuning et al, 2021). Information that could potentially be used to substantially enhance large-scale assessment feedback and to offer further guidance for teachers on what to focus when teaching. To conclude, the present results make a convincing case that using fine-grained cognitive models for item development and applying DCMs that are able to statistically capture these nuances in student response behavior might be worth the (substantially) increased effort.

References

Braeuning, D. et al (2021)., Long-term relevance and interrelation of symbolic and non-symbolic abilities in mathematical-numerical development: Evidence from large-scale assessment data. Cognitive Development, 58, https://doi.org/10.1016/j.cogdev.2021.101008.

Fritz, A., & Ricken, G. (2008). Rechenschwäche. utb GmbH.

Fuson, K. C. (1988). Children's counting and concepts of number. Springer-Verlag Publishing.

Rupp, A. A., Templin, J. L., & Henson, R. A. (2010). Diagnostic measurement: Theory, methods, and applications. New York, NY: Guildford Press.

Von Davier, M., & Lee, Y. S. (2019). Handbook of diagnostic classification models. Cham: Springer International Publishing.

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Fairness as Seen by Students: A Differentiated Look at Perceived Assessment Fairness by 7th and 9th Graders in Luxembourg

Philipp Sonnleitner & Rachel Wollschläger

Assessment is probably the central factor in every educational biography: On the one hand, through direct consequences for school career decisions, on the other hand, through repercussions on each student's self-concept in the respective subject, for one's own work behavior and the perception of institutional fairness in general. A crucial factor is the subjective, perceived fairness of assessment, which has been shown to influence students' satisfaction, motivation, and attitudes toward learning (Chory-Assad, 2002; Wendorf & Alexander, 2005).

The current study examines how Luxembourgish students experience fairness of assessment on the basis of representative samples of the 7iéme (N > 700 students) and 9iéme/ 5iéme (N > 2200, 35% of the total cohort) and gives a first insight into the connection with school interest and self-concept. Special attention is given to the heterogeneity of the Luxembourgish student population: the extent to which language background, socioeconomic status, and gender are related to these perceptions of fairness will be analyzed. Data was collected as part of the nationwide Épreuves standardisées in fall 2021 using the Fairness Barometer (Sonnleitner & Kovacs, 2020) - a standardized instrument to measure informational and procedural fairness in student assessment.

The analyses are theoretically based on Classroom Justice Theory and educational psychology (Chory-Assad and Paulsel, 2004; Chory, 2007; Duplaga & Astani, 2010) and utilize latent variable models (SEM) to study the complex interplay between perceived assessment practices and students' school-related motivational factors.

The insights offered by this study are internationally unique in their scope and provide a first glimpse on fairness perceptions of groups of Luxembourgish students in known disadvantaged situations. Results aim to sensitize especially active teachers and educators to the central importance of assessment in schools and offer some concrete advice how to improve it.

References:

Chory, R. M. (2007). Enhancing student perceptions of fairness: the relationship between instructor credibility and classroom justice. Commun. Educ. 56, 89–105. https://doi.org/10.1080/03634520600994300

Chory-Assad, R. M., and Paulsel, M. L. (2004). Classroom justice: student aggression and resistance as reactions to perceived unfairness. Commun. Educ. 53, 253–273. https://doi.org/10.1080/0363452042000265189

Chory-Assad, R. M. (2002). Classroom justice: perceptions of fairness as a predictor of student motivation, learning, and aggression. Commun. Q. 50, 58–77. https://doi.org/10.1080/01463370209385646

Duplaga, E. A., and Astani, M. (2010). An exploratory study of student perceptions of which classroom policies are fairest. Decision Sci. J. Innov. Educ. 8, 9–33. https://doi.org/10.1111/j.1540-4609.2009.00241.x

Sonnleitner, P., & Kovacs, C. (2020, February). Differences between students' and teachers' fairness perceptions: Exploring the potential of a self-administered questionnaire to improve teachers' assessment practices. In Frontiers in Education (Vol. 5, p. 17). Frontiers Media SA.

Wendorf, C. A., and Alexander, S. (2005). The influence of individual- and class-level fairness-related perceptions on student satisfaction. Contemp. Educ. Psychol. 30, 190–206. https://doi.org/10.1016/j.cedpsych.2004.07.003

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Teachers as Continuous Professional Learners: What do Teachers Understand as Professional Learning and Which Goals Drive Them?

Martin Daumiller, Ruth Butler, & Markus Dresel

Teachers' professional learning is crucial for continuous competence development and dealing with changing teaching and surrounding parameters. Early buildup and upkeeping of professional learning are therefore essential for successful teaching (Patton et al., 2015)—but require persistent motivation (Shulman & Shulman, 2009). While teachers are often aware and reminded of the importance of professional learning, their understanding, valuation, and use of such learning opportunities varies greatly (Cordingley et al., 2015). Accordingly, we sought to (1) better comprehend what teachers understand by professional learning and which learning opportunities they consider to this end, and (2) identify their goals to engage in them. We conducted half-structured interviews with 24 German school teachers (16 women, 8 men; teaching experience: $M = 15$, $SD = 10.6$, years) in 2020. The interviews lasted $M = 35$ ($SD = 11$) minutes. Two trained research assistants coded the answers using grounded theory and a category system (inter-rater-reliability: $\kappa = .74$). The results showed that most defined professional learning similarly, in terms of improving own professional competencies. To this end, they mentioned various learning opportunities focused on themselves (e.g., trying out different approaches, reflections), learning with/through others (e.g., professional development courses, exchange with colleagues), and media (e.g., internet, books). In particular, the teachers frequently associated professional learning with formal learning, but, upon further inquiry, also knew about and used much informal learning. We subsequently assessed their personal goals for engaging in such learning opportunities. Mastery-based goals represented an important foundation for teachers' professional learning activities, and different types of goals could be distinguished: teachers pursued learning and task goals with approach and avoidance facets that stemmed from different reasons (wanting to pursue the goal vs. feeling obliged to). This sheds lights on the different motivations underlying differences in teachers' engagement in professional learning. These findings serve to ultimately better understand and support teachers' learning, and, through that, enable better student learning (DiPaola & Hoy, 2014).

References

Cordingley, P., Higgins, S., Greany, T., Buckler, N., Coles-Jordan, D., Crisp, B., ... & Coe, R. (2015). *Developing great teaching: Lessons from the international reviews into effective professional development*. Project report. Teacher Development Trust, London.

DiPaola, M., Hoy, W. K. (2014). *Improving instruction through supervision, evaluation, and professional development*. Information Age.

Patton, K., Parker, M., & Tannehill, D. (2015). Helping teachers help themselves: Professional development that makes a difference. *NASSP Bulletin*, 99(1), 26–42. https://doi.org/10.1177/0192636515576040

Shulman, L. S., & Shulman, J. H. (2009). How and what teachers learn: A shifting perspective. *Journal of Education*, *189*(1-2), 1–8. https://doi.org/10.1177/0022057409189001-202

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Implementation of a Large-scale Functional Vision Screener in Early Childhood at a National Level

Sara Monteiro, Géraldine Hipp, Pascale Esch, & Sonja Ugen

Functional vision refers to the way in which an individual uses visual skills and abilities to perform everyday tasks. Limitations on the functional use of vision can interfere with school achievements if left undetected. Early detection is thus key to offer appropriate aids to avoid a negative impact on learning processes. To screen for functional vision impairments at a national level, we developed a set of items measuring visual skills that can be administered in a classroom setting to be included in the yearly school monitoring tests 'ÉpStan' in grade 1. Children identified as being at risk will be followed by the *Centre pour le Développement des compétences relatives à la Vue* (CDV, MENJE). Based on a theoretical model of visual perceptual processing (Humphreys and Riddoch, 1987), we developed 35 items that were pretested. The same first graders (n = 1034) were administered group tests with the newly developed items and existing standardized individual tests (by CDV clinicians). Based on the clinical outcome of the CDV, the items which best predicted functional vision impairments were selected to be implemented in the Luxembourgish school monitoring in grade 1, together with a validated short parent questionnaire (Gorrie et al., 2019). This talk will focus on the development of the screener and on the characteristics of the children with functional vision impairments.

References:

Gorrie, F., Goodall, K., Rush, R., & Ravenscroft, J. (2019). Towards population screening for Cerebral Visual Impairment: Validity of the Five Questions and the CVI Questionnaire. *PLOS ONE*, *14*(3), e0214290. https://doi.org/10.1371/journal.pone.0214290

Humphreys, G. W., & Riddoch, M. (1987). Visual object processing: A cognitive neuropsychological approach. Hove: Lawrence Erlbaum Associates, Inc.

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Towards a Fairer Assessment of Cognitive Abilities in Multilingual Children

Dzenita Kijamet & Sonja Ugen

For several decades, standardized test batteries have been developed to assess cognitive abilities. In the framework of a (differential) diagnostic process of multicultural and multilingual children with special educational needs, professionals still face real challenges when it comes to selecting language fair measures. Many of the existing nonverbal tests of cognitive abilities load heavily on a specific culture or language and are thus not standardized for multilingual settings such as in Luxembourg. Therefore, we aim to develop a theoretically based fair test of cognitive abilities. Based on the Catell-Horn-Carroll (CHC) model of cognitive abilities (McGrew, 1997; Schneider & McGrew, 2018), we identified three broad abilities: fluid intelligence, visual processing, and short-term memory that can be measured with a minimal language and cultural load (Flanagan et al., 2013). Specifically, we developed 12 subtests (4 per ability) each including between 15 and 26 items and 12 animated language-free instructional videos. The newly developed materials were pretested as a pen-and-paper group test across the 15 school regions in Luxembourg resulting in a sample of 211 third-graders. We will present analyses on test fairness of the subtests in relation to the cultural and language background of the children as well as the statistical model to confirm the factorial structure of the test.

References

Flanagan, D. P., Ortiz, S. O., & Alfonso, V. C. (2013). *Essentials of cross-battery assessment* (Vol. 84). John Wiley & Sons.

McGrew, K. S. (1997). Analysis of the major intelligence batteries according to a proposed comprehensive Gf-Gc framework. In D. P. Flanagan, J. L. Genshaft, & P. L. Harrison (Eds.). *Contemporary intellectual assessment* (pp. 151–179). New York: Guildford Press.

Schneider, W. J., & McGrew, K. S. (2018). The Cattell–Horn–Carroll theory of intelligence. In D. P. Flanagan, & E. M. McDonough (Eds.). *Contemporary intellectual assessment* (pp. 73–163). (4thed.). New York, NY: Guilford Press.

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Shadow Education in Switzerland: Regional Variation in the Use of Private Tutoring and the Role of Cantonal Education Systems

Robin Benz

Students may take part in a plethora of structured learning activities outside the formal education system. This so-called 'shadow education' has seen a rapid expansion worldwide, making it one of the most evident trends in 21st-century education. The use of paid private tutoring, particularly, has received significant attention in both country-specific and comparative research. Several studies shed light on potential links between education system features and the prevalence of private tutoring but neglect regional disparities within a country.

This study seeks to address this gap in research by examining the determinants of paid private tutoring use across the 26 federally organised cantons of Switzerland. Drawing on data from Switzerland's large-scale assessment study ÜGK/COFO/VeCoF and employing a rational choice perspective, the present study analyses engagement in paid private tutoring at the end of primary school and the end of lower secondary school.

The data reveal marked differences between cantons in the prevalence of private tutoring, suggesting that the country may not necessarily be the appropriate level of aggregation when studying shadow education. Results from multilevel modelling show that these differences partly stem from institutional features of the cantonal education systems. While the existence of high-stakes entry exams for baccalaureate schools is related to a higher demand for private tutoring among students at the end of primary school, higher competition for baccalaureate school places increases the chance of investing in paid private tutoring among compulsory school leavers. Early tracking is associated with lower rates of paid private tutoring in both phases.

While the study succeeds in replicating previous findings from international comparative studies, it urges consideration of regional contexts when studying shadow education.

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What Primary Schools Are Doing Right: Educational Value-Added in Luxembourg

Valentin Emslander, Jessica Levy, & Antoine Fischbach

In such a diverse context as Luxembourg, educational inequalities can arise from the language spoken at home, a migration background, or a family's socioeconomic status. This diversity leads to different preconditions for learning math and languages (e.g. the language of instruction) in school and thus shapes the school careers of students (Hadjar & Backes, 2021). The aim of the project *Systematic Identification of High Value-Added in Educational Contexts* (SIVA) was to answer the questions (1) what highly effective schools are doing "right" and (2) what other schools can learn from them in alleviating inequalities. In collaboration with the *Observatoire National de la Qualité Scolaire*, we qualitatively and quantitatively investigated the differences of schools with stable high value-added (VA) scores to those with stable medium or low VA scores from multiple perspectives. VA is a statistical regression method usually used to estimate school effectiveness considering diverse student backgrounds and preconditions.

First, we identified 16 schools with stable high, medium, or low VA scores over two cohorts. Second, we collected data on, among others, their pedagogical strategies, student backgrounds, and school climate through questionnaires and classroom observations. Third, we matched our data to results from the Luxembourg School Monitoring Programme *ÉpStan* (LUCET, 2021). We selected the variables based on learning models focusing on aspects such as school organization or classroom management (e.g., Hattie, 2008; Helmke et al., 2008; Klieme et al., 2001). We further investigated specificities about the Luxembourgish school system, which are not represented in international school learning models (e.g., the two-year learning cycles, the multilingual school setting, or the diverse student population).

We will discuss the SIVA-project, its goals, and its data collection leading to data from observations in 49 classrooms and questionnaires of over 500 second graders, their parents, their teachers, as well as school presidents and regional directors.

References

Hadjar, A., & Backes, S. (2021). *Bildungsungleichheiten am Übergang in die Sekundarschule in Luxemburg*. https://doi.org/10.48746/BB2021LU-DE-21A

Hattie, J. (2008). *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement* (0 ed.). Routledge. https://doi.org/10.4324/9780203887332

Helmke, A., Rindermann, H., & Schrader, F.-W. (2008). Wirkfaktoren akademischer Leistungen in Schule und Hochschule. In M. Schneider & M. Hasselhorn (Eds.), *Handbuch der pädagogischen Psychologie* (Vol. 10, pp. 145–155). Hogrefe.

Klieme, E., Schümer, G., & Knoll, S. (2001). Mathematikunterricht in der Sekundarstufe I: "Aufgabenkultur" und Unterrichtsgestaltung. *TIMSS - Impulse für Schule und Unterricht*, 43–57.

LUCET. (2021). *Épreuves Standardisées (ÉpStan)*. https://epstan.lu

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Socio-cultural Factors and the Attendance of Early Childhood Education and Care (ECEC) in Luxembourg

Lena Maria Kaufmann, Antoine Fischbach, Martha Ottenbacher, & Caroline Hornung

For decades, researchers have been raising awareness of the issue of educational inequalities in the multilingual Luxemburgish school system. Especially children from families with a migration background or a lower socio-economic status show large deficits in their language and mathematics competences in comparison to their peers. The same applies to children who do not speak Luxemburgish or German as their first language (Hornung et al., 2021; Sonnleitner et al., 2021). One way to reduce such educational inequalities might be an early and extensive participation in early childhood education and care (ECEC). Indeed, participation in ECEC was found to be positively connected to language and cognitive development in other countries, especially for children from disadvantaged families (Bennett, 2012). However, these children attend ECEC less often (Vandenbroeck & Lazzari, 2014). There are indications that lower parental costs might go hand in hand with a greater attendance of ECEC in general (for a Luxembourgish study, see Bousselin, 2019) and in particular by disadvantaged families (Busse & Gathmann, 2020). The aim of this study is to spotlight the attendance of ECEC in Luxembourg during the implementation of the ECEC reform after 2017 which increased free ECEC hours for all families from 3 to 20 hours a week. We draw on a large dataset of about 35.000 children from the Luxemburg school monitoring programme (Épreuves Standardisées, ÉpStan) from 2015 to 2021 and investigate which children attend any kind of regulated ECEC service (public, private or family daycare) in which intensity, taking socio-economic and cultural family factors into account. The findings might help to understand in which contexts ECEC attendance should be further encouraged. Implications for future policy decisions are discussed with the goal of further promoting equal educational opportunities for all children.

References

Bennett, J. (2012). *ECEC for children from disadvantaged backgrounds: Findings from a European literature review and two case studies.* (European Commission, Hrsg.). https://op.europa.eu/en/publication-detail/-/publication/cd04bada-ef6c-4026-b2bb-62819dc6fcf9

Bousselin, A. (2019). Expanding Access to Universal Childcare: Effects on Childcare Arrangements and Maternal Employment. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.3538300

Busse, A., & Gathmann, C. (2020). Free daycare policies, family choices and child development. *Journal of Economic Behavior & Organization*, *179*, 240–260. https://doi.org/10.1016/j.jebo.2020.08.015

Hornung, C., Wollschläger, R., Keller, U., Esch, P., Muller, C., & Fischbach, A. (2021). Neue längsschnittliche Befunde aus dem nationalen Bildungsmonitoring ÉpStan in der 1. Und 3. Klasse: Negativer Trend in der Kompetenzentwicklung und kein Erfolg bei Klassenwiederholungen. In LUCET & SCRIPT (Hrsg.), *Nationaler Bildungsbericht Luxemburg 2021* (S. 44–55). Luxembourg Centre for Educational Testing (LUCET) & Service de Coordination de la Recherche et de l'Innovation pédagogiques et technologiques (SCRIPT).

Sonnleitner, P., Krämer, C., Gamo, S., Reichert, M., Keller, U., & Fischbach, A. (2021). Neue längsschnittliche Befunde aus dem nationalen Bildungsmonitoring ÉpStan in der 3. und 9. Klasse: Schlechtere Ergebnisse und wirkungslose Klassenwiederholungen. In LUCET & SCRIPT (Hrsg.), *Nationaler Bildungsbericht Luxemburg 2021* (S. 109–115). Luxembourg Centre for Educational Testing (LUCET) & Service de Coordination de la Recherche et de l'Innovation pédagogiques et technologiques (SCRIPT). https://doi.org/10.48746/BB2021LU-DE-24A

Vandenbroeck, M., & Lazzari, A. (2014). Accessibility of early childhood education and care: A state of affairs. *European Early Childhood Education Research Journal*, *22*(3), 327–335. https://doi.org/10.1080/1350293X.2014.912895

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Gender and Diversity Representations in Textbooks in Luxembourgish Secondary Education.

Sylvie Kerger, Enrica Pianaro, & Claire Schadeck

Teaching materials, and particularly textbooks, play an essential role in the socialisation of children through the communication of values. As „textbooks are not a reflection of reality, but an arrangement of the representation of a society that they legitimise" (Brugeilles & Cromer, 2008, p.42), we argue that they contribute to challenging, perpetuating, or increasing gender inequalities.

With this publication we plan to present the results of our second study in which we analyse 59 textbooks that are most used in the first three years of **secondary school** in Luxembourg.

The aim of this research is to show the prevalence and the persistence of gender stereotypes in visual and written representations through (1) the counting of female, male and non-binary characters, and authors, (2) the description of professional, leisure and domestic activities classified as "feminine" and "masculine", (3) the use of gender inclusive language, and (4) the intersectional in/visibility with race, disability, and sexual orientation.

The results of our first study on Luxemburgish primary school textbooks, already published, indicate an androcentric view (Kerger & Brasseur, 2021). In every textbook, we counted more male than female characters in the texts and the illustrations. Men are much more often represented in professional activities, while women are more likely to perform domestic activities. The celebrities represented are more often men than women. Furthermore, textbooks give an ethnocentric perspective on the representation of non-white characters and those with disabilities. Thus, the 'othering' of non-white characters suggests that they belong to a foreign country or culture, instead of being an integral part of Luxemburgish society. A similar approach applies to the representation of people with disabilities, as they are almost exclusively portrayed when disability as a subject is being discussed. Based on homogeneous views and stereotypes, these representations do not transmit the realities of societal complexities. Furthermore, they contribute to the marginalization and discrimination of non-white people and people with disabilities. Based on these findings, our second study aims to detect whether the textbooks, convey a diverse and inclusive view of society.

References

Brugeilles, C., & Cromer, S. (2008). *Comment promouvoir l'égalité entre les sexes par les manuels scolaires. Guide méthodologique à l'attention des acteurs et actrices de la chaîne du manuel scolaire*. UNESCO. https://www.centre-hubertine-auclert.fr/outil/comment-promouvoir-l-egalite-entreles-sexes-par-les-manuels-scolaires-guide-methodologique-a

Kerger, S., & Brasseur, L. (2021). *Les représentations du genre dans les manuels scolaires. Une étude à l'école fondamentale luxembourgeoise*. Université du Luxembourg. https://mega.public.lu/fr/publications/publications-ministere/2021/Les-representations-du-genre-dans-les-manuels-scolaires.html

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Do your Magic, Harry Potter!About the Most Popular Fiction Books and their Impact on Students' Reading Performances

Charlotte Krämer, Yannick Rathmacher & Camille Relativo

Previous surveys on the reading habits of Luxembourgish secondary school students (conducted within the framework of the national school monitoring programme *Épreuves Standardisées* (ÉpStan) in 2016 and 2019) revealed better reading comprehension results in French and German for those students who frequently read printed narrative texts in their leisure time.

However, these studies only focused on different reading modes and text types. They did not investigate which digital and/or printed books students actually read for pleasure, nor which text features determine the positive impact narrative texts have on their reading performances: Is it, for example, the language quality, the richness and complexity of content, or simply the length of the texts?

Therefore, we conducted an explorative follow-up survey within the framework of ÉpStan 2020 and asked secondary school students (Grade 7: n=3094; Grade 9: n=5970) to indicate up to three book titles – printed and e-books respectively – they had read in their leisure time.

Despite the omnipresence of digital media, preliminary findings show that both age groups prefer paper-based reading activities when reading longer texts (or books) for pleasure. Nevertheless, the most popular text types and book titles are the same for printed books and e-books: Among them, we find the novel series "Harry Potter", the rather comic-like book series "Gregs Tagebuch", and the mangas from the "Naruto" / "Boruto" series. The linkage between students' leisure time reading activities and their ÉpStan reading performances will be drawn once raw data entries are completely normalised, and a linguistic text analysis of extracts from the most popular book titles will be conducted in order to reveal some of the text features that foster reading comprehension skills.

References (selected)

Delgado, P., Vargas, C., Ackerman, R., Salmerón, L. (2018). Don't throw away your printed books: A meta-analysis on the effects of reading media on reading comprehension. *Educational research review, 25,* 23-38.

Jerrim, J., Moss, G. (2019) The link between fiction and teenagers' reading skills: International evidence from the OECD PISA study. *British Educational Research Journal, 45,* 181-200.

Reichert, M., & Krämer, C. (2021). Lesen und Lesekompetenz in einer digitalisierten Welt. In LUCET, SCRIPT (Eds.), *Nationaler Bildungsbericht Luxemburg 2021* (pp. 104-108). University of Luxembourg. http://hdl.handle.net/10993/48942

Reichert, M., & Krämer, C., Wollschläger, R., Rivas, S., Ugen, S. (2018). Lesegewohnheiten und bilingual Lesekompetenzen – Zum Zusammenhang zwischen den Deutsch- und Französisch-Lesekompetenzen von Neuntklässlerinnen und Neuntklässlern und ihren außerschulischen Lesegewohnheiten in Luxemburg. In LUCET, SCRIPT (Eds.), *Nationaler Bildungsbericht Luxemburg 2018* (pp. 172-188). University of Luxembourg. http://hdl.handle.net/10993/38039

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Children's Multilingual Experiences and Linguistic Identities in Social Media

Mahdi Mowlaei Aghblagh

With the advance of technology and the spread of digital media, a significant part of language practices and social interactions now take place through digital media. The affordances of digital media allow for the use of linguistic and semiotic resources in the form of multiple modalities for translocal communication and participation in various communities without being bound by any overt language policies and other barriers (Blommeart, 2019; Palvainen, 2020). Major approaches used to study language and identity practices in social media including discourse-centered online ethnography (Androutsopoulos, 2010), visualization of multilingual experiences in the form of medigrams (Lexander & Androutsopoulos, 2021) and digital small story transposition (Georgakopoulou, 2017) are discussed. This poster aims to review the conceptualizations and theoretical underpinnings of research on online multilingual experiences and linguistic identity construction in social media platforms. The poster also reviews the empirical research and methods used to study online multilingualism in the literature. The paper concludes by introducing the future research directions and areas that require further enquiry as well as the MOSAIC project. The role of digital media in transnational children and adolescents' multilingual experiences and linguistic identity construction will be elaborated and directions for further exploration of this issue in the multilingual context of Luxembourg is discussed. Finally, FNR-funded MOSAIC project is introduced. The aim of this project is to study minority-background children's multilingual experiences and linguistic identities at the nexus of home, school, and social media and the role of language policies and children's agency in shaping these experiences and identities. Applying a qualitative design, this study will use interviews, observations, and collaborative visualizations of multilingual experiences and practices in the form of mediagrams to study transnational children's multilingual experiences and identities.

References

Androutsopoulos, J. (2010). Localising the global on the participatory web. In: N. Coupland (Ed.), Handbook of Language and Globalization (pp. 203-231). Oxford: Blackwell.

Blommaert, J. (2019). Formatting online actions:# justsaying on Twitter. *International Journal of Multilingualism*, *16*(2), 112-126.

Lexander, K. V. & Androutsopoulos, J. (2021). Working with mediagrams: A methodology for collaborative research on mediational repertoires in multilingual families. Journal of Multilingual and Multicultural Development, 42(1), 1-18.

Georgakopoulou, A. (2019). Sharing the moment as small stories: The interplay between practices and affordances in the social media curation of lives. In A. De Fina & S. Perrino (Eds.) (2019). *Storytelling in the digital world* (pp. 105–128). John Benjamins.

Palvinian, A. (2020). Future prospects and visions for family language policy research. In A. C.Schalley, & S. A. Eisenchlas(Eds.), Handbook of Home Language Maintenance and Development (pp. 257-273). Berlin: De Gruyter Mouton.

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Schedule overview

Wednesday, 9 November 2022	
12h00	Registration
13h00 – 14h00	LUNCH - LuxERA meets CIDER
14h00 – 15h00	KEYNOTE Rolf Becker
15h15 – 16h15	Parallel Sessions I & II Session I: Education, Science and Research Session II: Comparative Perspectives on Educational Inequality
16h15 – 18h00	Reception and LuxERA General Assembly
Thursday, 10 November 2022	
09:30	Registration and Coffee
10h00 – 11h00	Interactive Poster Session
11h00 – 12h00	Parallel Sessions III & IV Session III: Educational Inequality: Stakeholders' Perspectives Session IV: Literacy Learning in Luxembourg
12h00 – 13h00	LUNCH
13h00 – 14h00	Parallel Sessions V & VI Session V: Diagnosing Learning Disorder in Multilingual Contexts Session VI: Modelling Approaches
14h00 – 14h30	COFFEE /TEA
14h30 – 15h30	Parallel Sessions VII & VIII Session VII: Perceptions of Fairness & Reflective Practice Session VIII: Development of Screening and Assessment Tools
15h30 – 16h00	Closing and Farewell