References

- Adu-Ampong, E. A., & Adams, E. A. (2020). "But you are also Ghanaian, you should know": Negotiating the insider–outsider research positionality in the fieldwork encounter. *Qualitative Inquiry*, 26(6), 583–592. https://doi.org/10.1177/ 1077800419846532
- Akkerman, S., & Bakker, A. (2011). Boundary crossing and boundary objects. *Review of Educational Research*, 81(2), 132–169. https://doi.org/10.3102/0034654311404435
- Altay, M., Yalvaç, B., & Yeltekin, E. (2017). 8th grade student's skill of connecting mathematics to real life. *Journal of Education and Training Studies*, 5(10), 158–166. https://doi.org/10.11114/jets.v5i10.2614
- Anyon, J. (1980). Social class and the hidden curriculum of work. *Journal of Education*, 162(1), 67–92. https://doi.org/10.1177/002205748016200106
- Areljung, S., Leden, L., & Wiblom, J. (2021). Expanding the notion of 'ownership' in participatory research involving teachers and researchers. *International Journal of Research and Method in Education*, 44(5), 463–473. https://doi.org/10.1080/1743727X.2021.1892060
- Baker, D., & Street, B. (2004). Mathematics as social. For the Learning of Mathematics, 24(2), 19–21. https://www.jstor.org/stable/40248453
- Baker, D., Street, B., & Tomlin, A. (2003). Mathematics as social: Understanding relationships between home and school numeracy practices. For the Learning of Mathematics, 23(3), 11–15. https://www.jstor.org/stable/40248453
- Bakhtin, M. (1981). *The dialogic imagination: Four essays* (Vol. 1). University of Texas Press
- Bayeck, R. (2022, July). Positionality: The interplay of space, context and identity. *International Journal of Qualitative Methods*, 21, 1–9. https://doi.org/10.1177/16094069221114
- Berger, R. (2015). Now I see it, now I don't: researcher's position and reflexivity in qualitative research. *Qualitative Research*, 15(2), 219–234. https://doi.org/10.1177/1468794112468475
- Berger, L., Begun, A., & Otto-Salaj, L. (2009). Participant recruitment in intervention research: Scientific integrity and cost-effective strategies. *International Journal of Social Research Methodology*, 12(1), 79–92. https://doi.org/10.1080/136455 70701606077
- Berti, A. E., Bombi, A. S., & Duveen, G. T. (1988). *The child's construction of economics*. Editions de la Maison des Sciences de l'Homme.
- Bevan, B., Bell, P., Stevens, R., & Razfar, A. (Eds.). (2013). *LOST opportunities: Learning in out-of-school time*. Springer Netherlands.
- Biesta, G. (2009). Good education in an age of measurement: On the need to reconnect with the question of purpose in education. *Educational Assessment*,

- Evaluation and Accountability, 21(1), 33-46. https://doi.org/10.1007/S11092-008-9064-9
- BIS (Department for Business Innovation & Skills). (2012). *The 2011 skills for life survey: A survey of literacy, numeracy and ICT levels in England.* BIS Research Paper Number 81. Crown Copyright.
- Blix, S., & Wettergren, Å. (2015). The emotional labour of gaining and maintaining access to the field. *Qualitative Research*, 15(6), 688–704. https://doi.org/10.1177/1468794114561348
- Bogotch, I., Mirón, L., & Biesta, G. (2007). "Effective for what; effective for whom?" Two questions SESI should not ignore. In *International handbook of school effectiveness and improvement* (pp. 93–110). Springer.
- Bossio, D., Loch, B., Schier, M., & Mazzolini, A. (2014). A roadmap for forming successful interdisciplinary education research collaborations: A reflective approach. *Higher Education Research and Development*, 33(2), 198–211. https:// doi.org/10.1080/07294360.2013.832167
- Bourke, R., & Loveridge, J. (2014). Exploring informed consent and dissent through children's participation in educational research. *International Journal of Research and Method in Education*, 37(2), 151–165. https://doi.org/10.1080/17437 27X.2013.817551
- Bradbury, A. (2019). Datafied at four: The role of data in the 'schoolification' of early childhood education in England. *Learning, Media and Technology*, 44(1), 7–21. https://doi.org/10.1080/17439884.2018.1511577
- Bradley, J. L., & Conway, P. F. (2016). A dual step transfer model: Sport and non-sport extracurricular activities and the enhancement of academic achievement. *British Educational Research Journal*, 42(4), 703–728. https://doi.org/10.1002/berj.3232
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22, 723–742. https://doi.org/10.1037/0012-1649.22.6.723
- Brown, N. (2022). Scope and continuum of participatory research. *International Journal of Research and Method in Education*, 45(2), 200–211. https://doi.org/10.1080/1743727X.2021.1902980
- Brown, A. L., & Campione, J. C. (1996). Psychological learning theory and the design of innovative environments: On procedures, principles, and systems. In L. Schauble & R. Glaser (Eds.), *Innovations in learning: New environments for education* (pp. 289–325). Erlbaum.
- Brownlie, J. (2019). Out of the ordinary: Research participants' experience of sharing the 'insignificant'. *International Journal of Social Research Methodology*, 22(3), 257–269. https://doi-org.bris.idm.oclc.org/10.1080/13645579.2018.1535880
- Carraher, T. N., Carraher, D. W., & Schliemann, A. D. (1985). Mathematics in the streets and in schools. *British Journal of Developmental Psychology*, *3*(1), 21–29. https://doi.org/10.1111/j.2044-835X.1985.tb00951.x
- Chanfreau, J., Tanner, E., Callanan, M., Laing, K., Skipp, A., & Todd, L. (2016). *Out of school activities during primary school and KS2 attainment*. Centre for Longitudinal Studies Working Paper Series. UCL Institute of Education. https://eprints.ncl.ac.uk/file_store/production/218418/42354AD4-8363-48F0-BFA1-1358B69AA7A0.pdf

- Chavkin, N. F. (Ed.). (1993). Families and schools in a pluralistic society. State University of New York Press.
- Civil, M. (2002). Chapter 4: Everyday mathematics, mathematicians' mathematics, and school mathematics: Can we bring them together? *Journal for Research in Mathematics Education*, 40–62. Monograph, 2002, Vol. 11, Everyday and Academic Mathematics in the Classroom.
- Clark, J., & Laing, K. (2022). Case study 5 Research co-production with young women through an out-of-school residential trip. In J. Rose, T. Jay, J. Goodall, L. Mazzoli Smith, & L. Todd (Eds.), *Repositioning Out-of-School Learning: Methodological challenges and possibilities for researching learning beyond school* (pp. 61–71). Emerald Publishing Limited.
- Clark, J., Laing, K., Leat, D., Lofthouse, R., Thomas, U., Tiplady, L., & Woolner, P. (2017). Transformation in interdisciplinary research methodology: The importance of shared experiences in landscapes of practice. *International Journal of Research and Method in Education*, 40(3), 243–256. https://doi.org/10.1080/1743727X.2017.1281902
- Coles, A., & Scott, H. (2015). Planning for the unexpected in the mathematics classroom: Teacher and student change. *Research in Mathematics Education*, 17(2), 121–138. https://doi.org/10.1080/14794802.2015.1047787
- Collins, C., & Cooper, J. (2014). Emotional intelligence and the qualitative researcher. *International Journal of Qualitative Methods*, 13(1), 88–103. https://doi.org/10.1177/160940691401300134
- Cook, D. T. (2001). Exchange value as pedagogy in children's leisure: Moral panics in children's culture at century's end. *Leisure Sciences: An Interdisciplinary Journal*, 23(2), 81–98. https://doi.org/10.1080/014904001300181684
- Coolican, H. (2018). Research methods and statistics in psychology (7th ed.). Routledge.
- Costas Batlle, I., Mazoli Smith, L., & Cheung Judge, R. (2022). Theme 7 Slow down: Relationship building and slow research in settings for non-formal learning. In J. Rose, T. Jay, J. Goodall, L. Mazzoli Smith, & L. Todd (Eds.), *Repositioning Out-of-School Learning: Methodological challenges and possibilities for researching learning beyond school* (pp. 169–175). Emerald Publishing Limited.
- Crozier, G. (1999). Is it a Case of 'We know when we're not wanted?' The parents' perspective on parent–teacher roles and relationships. *Educational Research*, 41(3), 315–328. https://doi.org/10.1080/0013188990410306
- Crozier, G. (2001). Excluded parents: The deracialisation of parental involvement. *Race, Ethnicity and Education*, 4(4), 329–341. https://doi.org/10.1080/136133 20120096643
- Crozier, G., & Davies, J. (2007). Hard to reach parents or hard to reach schools? A discussion of home-school relations, with particular reference to Bangladeshi and Pakistani parents. *British Educational Research Journal*, 33(3), 295–313. https://doi.org/10.1080/01411920701243578
- Crozier, G., Reay, D., James, D., Jamieson, F., Beedell, P., Hollingworth, S., & Williams, K. (2008). White middle-class parents, identities, educational choice and the urban comprehensive school: Dilemmas, ambivalence and moral ambiguity. *British Journal of Sociology of Education*, 29(3), 261–272. https://doi.org/10.1080/01425690801966295

- Dalby, D., & Noyes, A. (2022). Mathematics curriculum waves within vocational education. Oxford Review of Education, 48(2), 166–183. https://doi.org/10.1080/ 03054985.2021.1940913
- De Abreu, G., & Cline, T. (2005). Parents' representations of their children's mathematics learning in multiethnic primary schools. *British Educational Research Journal*, 31(6), 697–722. https://doi.org/10.1080/01411920500314869
- DePalma, R. (2010). Socially just research for social justice: Negotiating consent and safety in a participatory action research project. *International Journal of Research and Method in Education*, 33(3), 215–227. https://doi.org/10.1080/1743727X.2010.511713
- Department for Business, Innovation and Skills. (2011). Skills for life survey: Headline findings. BIS.
- Department for Children, Schools, and Families (DCSF). (2008). The impact of parental involvement on children's education. DCSF Publications.
- Department for Education. (2013). Mathematics programmes of study: Key stages 1 and 2. National curriculum in England. Crown Copyright.
- Department for Education. (2014a). National curriculum in England: Mathematics programmes of study. DfE.
- Department of Education. (2014b). [U.S.] Department of Education releases new parent and community engagement framework [blog post]. https://blog.ed.gov/2014/04/department-of-education-releases-new-parent-and-community-engagement-framework/
- Department for Education (DfE). (2010). The importance of teaching: Schools white paper. Author.
- Desforges, C., & Abouchaar, A. (2003). The impact of parental involvement, parental support and family education on pupil achievement and adjustment: A review of literature. DfES Publications.
- Design-Based Research Collective. (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher*, 32(1), 5–8. https://doi.org/10.3102/0013189X03200100
- Dhillon, J., & Thomas, N. (2019). Ethics of engagement and insider-outsider perspectives: Issues and dilemmas in cross-cultural interpretation. *International Journal of Research and Method in Education*, 42(4), 442–453. https://doi.org/10.1080/1743727X.2018.1533939
- Edwards, A. (2011). Building common knowledge at the boundaries between professional practices: Relational agency and relational expertise in systems of distributed expertise. *International Journal of Educational Research*, 50, 33–39. https://doi.org/10.1016/j.ijer.2011.04.007
- Edwards, R., & Fowler, Z. (2007). Unsettling boundaries in making a space for research. *British Educational Research Journal*, 33(1), 107–123. https://doi.org/10.1080/011920601104565
- Edwards, A., & Mackenzie, L. (2005). Steps towards participation: The social support of learning trajectories. *International Journal of Lifelong Learning*, 24(4), 287–302. https://doi.org/10.1080/02601370500169178
- Elliott, L., & Bachman, H. (2018). SES disparities in early math abilities: The contributions of parents' math cognitions, practices to support math, and math talk. *Developmental Review*, 49, 1–15. https://doi.org/10.1016/j.dr.2018.08.001
- Engeström, Y. (1987). Learning by expanding. Orienta-Konsultit.

- Epstein, J. L. (1983). Longitudinal effects of family-school-person interactions on student outcomes. *Research in Sociology of Education and Socialization*, 4, 101–127.
- Epstein, J. L. (1991). Effects on student achievement of teachers' practices of parent involvement. In S. B. Silvern (Ed.), Advances in reading/language research: Vol. 5. Literacy through family, community, and school interaction (pp. 261–276). JAI Press.
- Fan, W., & Williams, C. M. (2009). The effects of parental involvement on students' academic self-efficacy, engagement and intrinsic motivation. *Educational Psychology*, 30(1), 53–74. https://doi.org/10.1080/01443410903353302
- Fan, H., Xu, J., Cai, Z., He, J., & Fan, X. (2017). Homework and students' achievement in math and science: A 30-year meta-analysis, 1986–2015. Educational Research Review, 20, 35–54. https://doi.org/10.1016/j.edurev.2016.11.003
- Feiler, A. (2009). Engaging 'Hard to Reach' Parents: Teacher-parent collaboration to promote children's learning. Wiley.
- Felton-Koestler, M. (2017). Mathematics education as sociopolitical: Prospective teachers' views of the What, Who, and How. *Journal of Mathematics Teacher Education*, 20, 49–74. https://doi.org/10.1007/s10857-015-9315-x
- Fisher, K., McCulloch, A. & Gershuny, J. (1999). *British fathers and children: A report for Channel 4 "Dispatches"*, *Technical report*. Institute for Social and Economic Research.
- Fitzmaurice, H., Flynn, M., & Hanafin, J. (2021). Parental involvement in homework: A qualitative Bourdieusian study of class, privilege, and social reproduction. *International Studies in Sociology of Education*, 30(4), 440–461. https://doi.org/10.1080/09620214.2020.1789490
- Flewitt, R., Jones, P., Potter, J., Domingo, M., Collins, P., Munday, E., & Stenning, K. (2018). 'I enjoyed it because ... you could do whatever you wanted and be creative': Three principles for participatory research and pedagogy. *International Journal of Research and Method in Education*, 41(4), 372–386. https://doi.org/10.1080/1743727X.2017.1405928
- Flouri, E., & Buchanan, A. (2004). Early father's and mother's involvement and child's later educational outcomes. *British Journal of Educational Psychology*, 74, 141–153. https://doi.org/10.1348/000709904773839806
- Floyd, A., & Arthur, L. (2012). Researching from within: External and internal ethical engagement. *International Journal of Research and Method in Education*, *35*(2), 171–180. https://doi.org/10.1080/1743727X.201.670481
- Frankenstein, M. (2009). Developing a critical mathematical numeracy through *real* real-life word problems. In L. Verschaffel, B. Greer, W. Van Dooran, & S. Mukhopadhyay (Eds.), *Words and Worlds: Modeling verbal descriptions of situations* (pp. 111–130). Sense Publishers.
- Furnham, A. (2001). Parental attitudes to pocket money/allowances for children. *Journal of Economic Psychology*, 22(3), 397–422. https://doi.org/10.1016/S0167-4870(01)00040-X
- Garg, R., Kauppi, C., Lewko, J., & Urajnik, D. (2002). A structural model of educational aspirations. *Journal of Career Development*, 29, 87–108. https:// doi.org/10.1023/A:1019964119690
- Gauthier, A. H., Smeeding, T. M., & Furstenberg, F. F. (2004). Are parents investing less time in children? Trends in selected industrialized countries. *Population and*

- Development Review, 30(4), 647–672. https://doi.org/10.1111/j.1728-4457. 2004.00036.x
- Ginsburg, A., & Smith, M. (2016). *Do randomised controlled trials meet the gold standard?* American Enterprise Institute. http://www.aei.org/wp-content/uploads/2016/03/Dorandomized-controlled-trials-meet-the-gold-standard.pdf
- Goff, W. (2020). Gatekeeper engagement and the importance of phronesis-praxis in school-based research. *New Zealand Journal of Educational Studies*, *55*, 321–335. https://doi.org/10.1007/s40841-020-00177-x
- Goldman, S., & Booker, A. (2009). Making math a definition of the situation: Families as sites for mathematical practices. *Anthropology & Education Quarterly*, 40(4), 369–387. https://doi.org/10.1111/j.1548-1492.2009.01057.x
- González, N., Moll, L. C., & Amanti, C. (Eds.). (2005). Funds of knowledge: Theorizing practices in households, communities, and classrooms. Lawrence Erlbaum Associates Publishers.
- González, N., Moll, L. C., & Amanti, C. (Eds.). (2006). Funds of knowledge: Theorizing practices in households, communities, and classrooms. Routledge.
- Goodall, J. (2017). Narrowing the achievement gap: Parental engagement with children's learning. Routledge.
- Goodall, J. (2022). Concluding thoughts. In J. Rose, T. Jay, J. Goodall, L. Mazzoli Smith, & L. Todd (Eds.), *Repositioning Out-of-School Learning: Methodological challenges and possibilities for researching learning beyond school* (pp. 177–184). Emerald Publishing Limited.
- Goodall, J., & Montgomery, C. (2014). Parental involvement to parental engagement: A continuum. *Educational Review*, 66(4), 399–410. https://doi.org/10.1080/00131911.2013.781576
- Goodall, J., & Vorhaus, J. (2011). Review of best practice in parental engagement. Department of Education.
- Gorard, S., & Huat See, B. (2013). Do parental involvement interventions increase attainment? A review of the evidence. Nuffield Foundation. https://www.nuffieldfoundation.org/sites/default/files/files/Do_parental_involvement_interventions_increase_attainment1.pdf
- Greeno, J. G. (1997). On claims that answer the wrong questions. *Educational Researcher*, 26(1), 5–17. https://doi.org/10.3102/0013189X026001005
- Greer, B., & Mukhopadhyay, S. (2003). What is mathematics education for? *Mathematics Educator*, 13(2), 2–6.
- Gristy, C. (2015). Engaging with and moving on from participatory research: A personal reflection. *International Journal of Research and Method in Education*, 38(4), 371–387. https://doi.org/10.1080/1743727X.2014.940306
- Guberman, S. R. (2004). A comparative study of children's out-of-school activities and arithmetical achievements. *Journal for Research in Mathematics Education*, 35(2), 117–150. https://doi.org/10.2307/30034934
- Guillemin, M., Barnard, E., Allen, A., Stewart, P., Walker, H., Rosenthal, D., & Gillam, L. (2018). Do research participants trust researchers or their institution? Journal of Empirical Research on Human Research Ethics: An International Journal, 13(3), 285–294. https://doi.org/10.1177/1556264618763
- Gunderson, E. A., Ramirez, G., Levine, S. C., & Beilock, S. L. (2012). The role of parents and teachers in the development of gender-related math attitudes. *Sex Roles*, 66(3), 153–166. https://doi.org/10.1007/s11199-011-9996-2

- Gutstein, E. (2006). Reading and writing the world with mathematics: Toward a pedagogy for social justice. Routledge.
- Haines Lyon, C. (2022). Case study 8 Destabilising methodologies: Working towards democratic parent engagement. In J. Rose, T. Jay, J. Goodall, L. Mazzoli Smith, & L. Todd (Eds.), Repositioning Out-of-School Learning: Methodological challenges and possibilities for researching learning beyond school (pp. 97–107). Emerald Publishing Limited.
- Harris, A., & Goodall, J. (2008). Do parents know they matter? Engaging all parents in learning. *Educational Research*, 50(3), 277–289. https://doi.org/10.1080/00131880802309424
- Hayward, G., & Fernandez, R. (2004). From core skills to key skills: Fast forward or back to the future? *Oxford Review of Education*, 30(1), 117–145. https://doi.org/10.1080/0305498042000190087
- Hedges, H. (2010). Blurring the boundaries: Connecting research, practice and professional learning. *Cambridge Journal of Education*, 40(3), 299–314. https://doi.org/10.1080/0305764X.2010.502884
- Heffner, A., & Antaramian, S. (2016). The role of life satisfaction in predicting student engagement and achievement. *Journal of Happiness Studies*, 17, 1681–1701. https://doi.org/10.1007/s10902-015-9665-1
- Hoover-Dempsey, K. V., Walker, J. M. T., Sandler, H. M., Whetsel, D., Green, C. L., Wilkins, A. S., & Closson, K. (2005). Why do parents become involved? Research findings and implications. *The Elementary School Journal*, 106(2), 105–130. https://doi.org/10.1086/499194
- Hornby, G., & Blackwell, I. (2018). Barriers to parental involvement in education: An update. *Educational Review*, 70(1), 109–119. https://doi.org/10.1080/00131911. 2018.1388612
- Hornby, G., & Lafaele, R. (2011). Barriers to parental involvement in education: An explanatory model. *Educational Review*, 63(1), 37–52. https://doi.org/10.1080/00131911.2010.488049
- Ho Sui-Chu, El., & Williams, J. D. (1996). Effects of parental involvement on 8th grade achievement. *Sociology of Education*, 69(2), 126–141. https://doi.org/10.2307/2112802
- Huat See, B., & Gorard, S. (2015). Does intervening to enhance parental involvement in education lead to better academic results for children? An extended review. *Journal of Children's Services*, 10(3), 252–264. https://doi.org/10.1108/JCS-02-2015-0008
- Hughes, R. (1998). Why do people agree to participate in social research? The case of drug injectors. *International Journal of Social Research Methodology*, 1(4), 315–324. https://doi.org/10.1080/13645579.1998.10846883
- Hughes, M., & Greenhough, P. (2011). Knowledge exchange activities for home-school communication. In K. Safford, M. Stacey, & R. Hancock (Eds.), Small-scale research in primary schools: A reader for learning and professional development. Routledge. https://doi.org/10.4324/9781315881225
- Hughes, M., & Pollard, A. (2006). Home–school knowledge exchange in context. *Educational Review*, 58(4), 385–395. https://doi.org/10.1080/00131910600971784
- Israel, B., Schulz, A., Parker, E., Becker, A., Allen, A., Guzman, J., & Lichtenstein, R. (2017). Critical issues in developing and following CBPR Principles. In N. Wallerstein, B. Duran, J. Oetzel, & M. Minkler (Eds.), Community-based

- participatory research for health: Advancing social and health equity (3rd ed., pp. 31–43). Wiley.
- Jay, T., & Laing, K. (2022). Theme 1 Negotiating the researcher role in out-of-school learning research. In J. Rose, T. Jay, J. Goodall, L. Mazzoli Smith, & L. Todd (Eds.), Repositioning Out-of-School Learning: Methodological challenges and possibilities for researching learning beyond school (pp. 123–129). Emerald Publishing Limited.
- Jay, T., & Rose, J. (2022). Case study 3 Researching the unknown: Developing an understanding of children's informal mathematical activity. In J. Rose, T. Jay, J. Goodall, L. Mazzoli Smith, & L. Todd (Eds.,) Repositioning out-of-school learning: Methodological challenges and possibilities for researching learning beyond school (pp. 39–48). Emerald Publishers.
- Jay, T., Rose, J., & Simmons, B. (2017). Finding 'mathematics': Parents questioning school-centred approaches to involvement in children's mathematics learning. *School Community Journal*, 27(1), 201–230. https://www.schoolcommunity network.org/SCJ.aspx
- Jay, T., Rose, J., & Simmons, B. (2018). Why is parental involvement in children's mathematics learning hard? Parental perspectives on their role supporting children's learning. Sage Open, 1–13. https://doi.org/10.1177/2158244018775466
- Jeynes, W. (2012). A meta-analysis of the efficacy of different types of parental involvement programs for urban students. *Urban Education*, 47(4), 706–742. https://doi.org/10.1177/0042085912445643
- Jones, L., & Allebone, B. (1999). Researching 'hard-to-reach' groups: The crucial role of the research associate. *International Journal of Inclusive Education*, 3(4), 353–362. https://doi.org/10.1080/136031199284986
- Keil, F. (1986). Conceptual domains and the acquisition of metaphor. *Cognitive Development*, 1(1), 73–96. https://doi.org/10.1016/S0885-2014(86)80024-7
- Keiner, E. (2019). 'Rigour', 'discipline' and the 'systematic': The cultural construction of educational research identities? *European Educational Research Journal*, 18(5), 527–545. https://doi.org/10.1177/1474904118824935
- Kuckzera, M., Field, S., & Windisch, H. C. (2016). *Building skills for all: A review of England*. OECD.
- Leiser, D., & Beth Halachmi, R. (2006). Children's understanding of market forces. *Journal of Economic Psychology*, 27(1), 6–19. https://doi.org/10.1016/j.joep.2005. 06.008
- Levine, S. C., Suriyakham, L. W., Rowe, M. L., Huttenlocher, J., & Gunderson, E. A. (2010). What counts in the development of young children's number knowledge? *Developmental Psychology*, 46(5), 1309–1319. https://doi.org/10.1037/a0019671
- Lewis, R. (2009). Recruiting parents and children into a research project: A qualitative exploration of families' decision-making processes. *International Journal of Social Research Methodology*, 12(5), 405–419. https://doi.org/10.1080/1364557 0802289104
- Lutz, A., & Jayaram, L. (2015). Getting the homework done: Social class and parents' relationship to homework. *International Journal of Education and Social Science*, 2(6), 73–84.
- Ma, X. (2001). Participation in advanced mathematics: Do expectation and influence of students, peers, teachers, and parents matter? *Contemporary Educational Psychology*, 26(1), 132–146. https://doi.org/10.1006/ceps.2000.1050

- Mader, C., Scott, G., & Razak, D. A. (2013). Effective change management, governance and policy for sustainability transformation in higher education. *Sustainability Accounting, Management and Policy Journal*, 4(3), 264–284. https://doi.org/10.1108/SAMPJ-09-2013-0037
- Maloney, E. A., Ramirez, G., Gunderson, E. A., Levine, S. C., & Beilock, S. L. (2015). Intergenerational effects of parents' math anxiety on children's math achievement and anxiety. *Psychological Science*, 26(9), 1480–1488. https://doi.org/10.1177/0956797615592630
- Mapp, K. L., & Kuttner, P. J. (2013). *Partners in education: A dual capacity-building framework for family-school partnerships*. SEDL. http://www2.ed.gov/documents/family-community/partners-education.pdf
- Mau, W. C. (1997). Parental influences on the high school students' academic achievement: A comparison of Asian immigrants, Asian Americans, and White Americans. *Psychology in the Schools*, 34(3), 267–277. https://doi.org/10.1002/(SICI)1520-6807(199707)34:3%3C267::AID-PITS9%3E3.0.CO;2-L
- McCowan, T. (2018). Five perils of the impact agenda in higher education. *London Review of Education*, 16(2), 279–295. https://doi.org/10.18546/LRE.16.2.08
- McGarry, O. (2016). Repositioning the research encounter: Exploring power dynamics and positionality in youth research. *International Journal of Social Research Methodology*, 19(3), 339–354. https://doi.org/10.1080/13645579. 2015.1011821
- McMullen, R., & de Abreu, G. (2011). Mothers' experiences of their children's school mathematics at home: The impact of being a mother-teacher. *Research in Mathematics Education*, 13(1), 59–74. https://doi.org/10.1080/14794802. 2011.550727
- McNamara, A., Akiva, T., & Delale-O'Connor, L. (2020). Opportunity gaps in out-of-school learning: How structural and process features of programs relate to race and socioeconomic status. *Applied Developmental Science*, *24*(4), 360–375. https://doi.org/10.1080/10888691.2018.1513794
- McNeal, R. (2001). Differential effects of parental involvement on cognitive and behavioral outcomes by socioeconomic status. *The Journal of Socio-Economics*, 30(2), 171–179. https://doi.org/10.1016/S1053-5357(00)00100-1
- Mearns, T., Coyle, D., & de Graaff, R. (2014). Aspirations and assumptions: A researcher's account of pupil involvement in school-based research. *International Journal of Research and Method in Education*, 37(4), 442–457. https://doi.org/10.1080/1743727X.2014.952440
- Melhuish, E., Phan, M., Sylva, K., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2008). Effects of the home learning environment and preschool center experience upon literacy and numeracy development in early primary school. *Journal of Social Issues*, 64(1), 95–114. https://doi.org/10.1111/j.1540-4560.2008.00550.x
- Metzger, S. R., Sonnenschein, S., & Galindo, C. (2019). Elementary-age children's conceptions about mathematics utility and their home-based mathematics engagement. *The Journal of Educational Research*, 112(4), 431–446. https://doi.org/10.1080/00220671.2018.1547961
- Milligan, L. (2016). Insider-outsider-inbetweener? Researcher positioning, participative methods and cross-cultural educational research. *Compare: A Journal of Comparative and International Education*, 46(2), 235–250. https://doi.org/10.1080/03057925.2014.928510

- Mills, J. (2012). Key statistics about Bristol from the 2011 census. Bristol City Council. https://www.bristol.gov.uk/documents/20182/34008/2011%20Census%20Key%20Statistics%20about%20Bristol%20LA%20areaUpdate.pdf. Accessed on June 22, 2018.
- Mills, J. (2015). Deprivation in Bristol 2015: The mapping of deprivation within Bristol local authority area. Bristol City Council. https://www.bristol.gov.uk/documents/20182/32951/Deprivation+in+Bristol+2015/429b2004-eeff-44c5-8044-9e7dcd002faf. Accessed on June 22, 2018.
- Moll, L., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice*, *31*(2), 132–141. https://doi.org/10.1080/00405849209543534
- Moss, P. (2008). What future for the relationship between early childhood education and care and compulsory schooling? *Research in Comparative and International Education*, 3(3), 224–234. https://doi.org/10.2304/rcie.2008.3.3.224
- Moss, P. (2013). Early childhood and compulsory education: Reconceptualising the relationship. Routledge.
- Mullis, I. V., Martin, M. O., Foy, P., & Arora, A. (2012). TIMSS 2011 international results in mathematics. International Association for the Evaluation of Educational Achievement.
- Nairn, K., Showden, C., Sligo, J., Matthews, K., & Kidman, J. (2020). Consent requires a relationship: Rethinking group consent and its timing in ethnographic research. *International Journal of Social Research Methodology*, 23(6), 719–731. https://doi.org/10.1080/13645579.2020.1760562
- National Institute of Adult Continuing Education. (2011). *Numeracy counts: NIACE committee of inquiry on adult numeracy learning (final report)*. NIACE.
- Netolicky, D., & Barnes, N. (2018). Method as a journey: A narrative dialogic partnership illuminating decision-making in qualitative educational research. *International Journal of Research and Method in Education*, 41(5), 500–513. https://doi.org/10.1080/1743727X.2017.1295938
- Nukaga, M. (2008). The underlife of kids' school lunchtime. *Journal of Contemporary Ethnography*, 37(3), 342.
- Oates, T. (2011). Could do better: Using international comparisons to refine the National Curriculum in England. *Curriculum Journal*, 22(2), 121–150. https://doi.org/10.1080/09585176.2011.578908
- Ofsted. (2017). Bold beginnings: The Reception curriculum in a sample of good and outstanding primary schools. Crown Copyright.
- Oikonomidoy, E., & Wiest, L. (2017). Navigating cross-boundary connections in educational research. *International Journal of Research and Method in Education*, 40(1), 53–65. https://doi.org/10.1080/1743727X.2015.1036851
- Osterman, T., & Bråting, K. (2019). Dewey and mathematical practice: Revisiting the distinction between procedural and conceptual knowledge. *Journal of Curriculum Studies*, *51*(4), 457–470. https://doi.org/10.1080/00220272.2019.1594388
- Otto, A., Schots, P. A. M., Westerman, J. A. J., & Webley, P. (2006). Children's use of saving strategies: An experimental approach. *Journal of Economic Psychology*, 27(1), 57–72. https://doi.org/10.1016/j.joep.2005.06.013
- Parker, A., & Tritter, J. (2006). Focus group method and methodology: Current practice and recent debate. *International Journal of Research and Method in Education*, 29(1), 23–37. https://doi.org/10.1080/01406720500537304

- Patall, E. A., Cooper, H., & Robinson, J. C. (2008). Parent involvement in homework: A research synthesis. *Review of Educational Research*, 78(4), 1039–1101. https://doi.org/10.3102/0034654308325185
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, 37(2), 91–105. https://doi.org/10.1207/S15326985EP3702_4
- Peters, M., Seeds, K., Goldstein, A., & Coleman, N. (2008). Parental involvement in children's education 2007 (Research Report DCSF-RR034). Department for Children, Schools and Families.
- Pilcher, K., Martin, W., & Williams, V. (2016). Issues of collaboration, representation, meaning and emotions: Utilising participant-led visual diaries to capture the everyday lives of people in mid to later life. *International Journal of Social Research Methodology*, 19(6), 677–692. https://doi.org/10.1080/13645579. 2017.1287875
- Pole, C., Mien, P., & Bolton, A. (1999). Realising children's agency in research: Partners and participants? *International Journal of Social Research Methodology*, 2(1), 39–54. https://doi.org/10.1080/1364557995177
- Popovic, G., & Lederman, J. (2015). Implications of informal education experiences for mathematics teachers' ability to make connections beyond formal classroom. School Science & Mathematics, 115(3), 129–140. https://doi.org/10.1111/ssm.12114
- Ratto, A., Anthony, B., Pugliese, C., Mendez, R., Safer-Lichtenstein, J., Dudley, K., Kahn, N., Kenworthy, L., Biel, M., Martucci, J., & Anthony, L. (2017). Lessons learned: Engaging culturally diverse families in neurodevelopmental disorders intervention research. *Autism*, 21(5), 622–634. https://doi.org/10.1177/1362361 316650394
- Redding, S., Langdon, J., Meyer, J., & Sheley, P. (2004). *The effects of comprehensive parent engagement on student learning outcomes*. Harvard Family Research Project. https://archive.globalfrp.org/publications-resources/browse-our-publications/the-effects-of-comprehensive-parent-engagement-on-student-learning-outcomes
- Rönkä, A., Sevõn, E., Malinen, K., & Salonen, E. (2014). An examination of nonresponse in a study on daily family life: I do not have time to participate, but I can tell you something about our life. *International Journal of Social Research Methodology*, 17(3), 197–214. https://doi.org/10.1080/13645579.2012.729401
- Rose, J. (2011). Dilemmas of interprofessional collaboration: Can they be resolved? Children & Society, 25(2), 151–163. https://doi.org/10.1111/j.1099-0860.2009. 00268.x
- Rose, J., & Jay, T. (2022). Case study 7 Reflections on position: Relational agency in researching 'everyday maths'. In J. Rose, T. Jay, J. Goodall, L. Mazzoli Smith, & L. Todd (Eds.), Repositioning Out-of-School Learning: Methodological challenges and possibilities for researching learning beyond school (pp. 85–96): Emerald Publishing Limited.
- Rose, J., Jay, T., Goodall, J., Mazzoli-Smith, L., & Todd, L. (2022). Repositioning out-of-school learning: Methodological challenges and possibilities for researching learning beyond school. Emerald Publishing Limited.
- Rose, J., & Todd, L. (2022). Theme 2 Building relationships, building structure: Working together in research on out-of-school learning. In J. Rose, T. Jay, J. Goodall, L. Mazzoli Smith, & L. Todd (Eds.), *Repositioning Out-of-School*

- Learning: Methodological challenges and possibilities for researching learning beyond school (pp. 131–139). Emerald Publishing Limited.
- Rossi, P., Freeman, H., & Lipsey, M. (1999). Evaluation: A systematic approach. Sage. Sayer, L. C., Bianchi, S. M., & Robinson, J. P. (2004). Are parents investing less in children? Trends in mothers' and fathers' time with children. American Journal of Sociology, 110(1), 1–43. https://doi.org/10.1086/386270
- Schlebe, L., Chanmugam, A., Moses, T., Saltzburg, S., Rankin Williams, L., & Letendre, J. (2015). Youth participation in qualitative research: Challenges and possibilities. *Qualitative Social Work*, *14*(4), 504–521. https://doi.org/10.1177/1473325014556792
- Skwarchuk, S. L., Sowinski, C., & LeFevre, J. A. (2014). Formal and informal home learning activities in relation to children's early numeracy and literacy skills: The development of a home numeracy model. *Journal of Experimental Child Psychology*, 121, 63–84. https://doi.org/10.1016/j.jecp.2013.11.006
- Stacey, K. (2015). The international assessment of mathematical literacy: PISA 2012 framework and items. In *Selected regular lectures from the 12th International Congress on Mathematical Education* (pp. 771–790): Springer.
- Stanley, G. (2006). Seven principles for change management. Sustainable Leadership in Education, 1–10.
- Star, J. (2005). Reconceptualising procedural knowledge. *Journal for Research in Mathematics Education*, 36(5), 404–411. https://doi.org/10.2307/30034943
- Stevens, R. (2013). What counts too much and too little as math. In B. Bevan, P. Bell, R. Stevens, & A. Razfar (Eds.), *Lost opportunities: Learning in out-of-school time* (pp. 65–83). Springer.
- Sung, N. S., Crowley, W. F., Jr., Genel, M., et al. (2003). Central challenges facing the national clinical research enterprise. *JAMA*, 289(10), 1278–1287. https://doi.org/10.1001/jama.289.10.1278
- Susperreguy, M. I., & Davis-Kean, P. E. (2016). Maternal math talk in the home and math skills in preschool children. *Early Education and Development*, 27(6), 841–857. https://doi.org/10.1080/10409289.2016.1148480
- Taylor, E. V. (2009). The purchasing practice of low-income students: The relationship to mathematical development. *The Journal of the Learning Sciences*, 18(3), 370–415. https://doi.org/10.1080/10508400903013462
- Thomson, R., & Holland, J. (2003). Hindsight, foresight and insight: The challenges of longitudinal qualitative research. *International Journal of Social Research Methodology*, 6(3), 233–244. https://doi.org/10.1080/1364557032000091833
- Tracy, S. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, 16, 837–851. https://doi.org/10.1177/1077800410383121
- Turner, E., Varley Gutiérrez, M., Simic-Muller, K., & Díez-Palomar, J. (2009). "Everything is math in the whole world": Integrating critical and community knowledge in authentic mathematical investigations with elementary latina/o students. *Mathematical Thinking and Learning*, 11(3), 136–157. https://doi.org/10.1080/10986060903013382
- Webley, P. (1996). Playing the market: The autonomous economic world of children. In P. K. Lunt & A. Furnham (Eds.), *Economic socialization. The economic beliefs* and behaviours of young people (pp. 149–161). Edward Elgar Publishing Limited.

- Webley, P., & Lea, S. E. (1993). Towards a more realistic psychology of economic socialization. *Journal of Economic Psychology*, 14(3), 461–472. https://doi.org/10.1016/0167-4870(93)90027-I
- Wenger, E. (1998). Communities of practice: Learning, meaning, and identity. Cambridge University Press.
- Williams, J., & Choudry, S. (2016). Mathematics capital in the educational field: Bourdieu and beyond. *Research in Mathematics Education*, 18(1), 3–21. https://doi.org/10.1080/14794802.2016.1141113
- Williams, P. (2008). Independent Review of Mathematics Teaching in Early Years Settings and Primary Education. Department for Children, Schools and Families.
- Wilson, S. (2020). 'Hard to reach' parents but not hard to research: A critical reflection of gatekeeper positionality using a community-based methodology. *International Journal of Research and Method in Education*, 44(5), 461–477. https://doi.org/10.1080/1743727X.2019.1626819
- Wilson, E., Kenny, A., & Dickson-Swift, V. (2018). Ethical challenges of community based participatory research: Exploring researchers' experience. *International Journal of Social Research Methodology*, 21(1), 7–24. https://doi.org/10.1080/13645579.2017.1296714
- Winter, J., Salway, L., Yee, W. C., & Hughes, M. (2004). Linking home and school mathematics: The home school knowledge exchange project. *Research in Mathematics Education*, 6(1), 59–75. https://doi.org/10.1080/14794800008520130
- Woolf, S. H. (2008). The meaning of translational research and why it matters. *JAMA*, 299(2), 211–213. https://doi.org/10.1001/jama.2007.26
- Woolf, S. H., Purnell, J. Q., Simon, S. M., Zimmerman, E. B., Camberos, G. J., Haley, A., & Fields, R. P. (2015). Translating evidence into population health improvement: Strategies and barriers. *Annual Review of Public Health*, *36*, 463–482. https://doi.org/10.1146/annurev-publhealth-082214-110901
- Xolocotzin, U., & Jay, T. (2020). Children's perspectives on their economic activity Diversity, motivations and parental awareness. *Children & Society*, *34*(5), 424–442. https://doi.org/10.1111/chso.12377