

Building Parental Capital in Supporting Early Literacy and Numeracy Learning

Mellony Graven
Rhodes University
m.graven@ru.ac.za

Robyn Jorgensen
University of Canberra
Robyn.jorgensen@canberra.edu.au

This communication explores the parental learning outcomes of an early numeracy focused intervention with parents, caregivers and learners from disadvantaged communities in South Africa. The Family Maths Storytime Project (FMSP) aimed to build the early literacy in numeracy skills of young children up to 8 years of age. The learners have limited resources in the home, so a comprehensive range of materials were developed (i.e., number story books and linked resources). The storylines and pictures in the books were designed to serve as a stimulus for: counting, subitising, counting on, skip counting, number facts, recognising and predicting patterns, number word recognition and numeral recognition.

Three workshops were conducted with parents and caregivers of Grade R (reception year pre-Grade 1) learners from two different schools in Makhanda in the Eastern Cape in South Africa. Almost all learners spoke isiXhosa or Afrikaans in their homes while the language of instruction in school was English. Resources were provided in English and in the language spoken at home. The workshops aimed to scaffold parent and caregiver learning on how to support their children's early numeracy learning. The first author demonstrated dialogic reading (Doyle & Bramwell, 2006) of number stories with learners, engaging them in retelling the stories and playing mathematical games with cards, dice and finger puppets of the story characters.

Data was gathered in the form of end of programme interviews with 20 parents and caregivers. Interviews were transcribed and all utterances were coded using Nvivo. Most of the interview data focused on children's learning in terms of new practices and dispositions in the homes and new learner numeracy and literacy knowledge. However, when answering questions about their children's learning and use of the FMSP resources, parents provided a range of comments relating to reflections on *their own* changing practices and dispositions in the home. In addition, the interview question: "What do you think you have learned by participating in this project, in terms of helping your child with reading or with numbers?" prompted rich data that exceeded our expectations. Thus, within our coding we had a category of responses of parent self-reflections which included utterances (*n*) about: engaging children in new ways and practices (*n* = 34); learning about numeracy and literacy learning (*n* = 55) and stated benefits of participating in the FMSP (*n*=16) (Graven and Jorgensen, 2023).

In this communication we share the findings from our analysis of the carer self-reflection data with the aim of understanding how the FMSP may have built parental capital in supporting early numeracy and literacy learning. We draw on the work of Bourdieu (1977) to theorise the parental capital building enterprise that was an unexpected outcome of the study.

References

- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge University Press.
- Doyle, B., & Bramwell, W. (2006). Promoting emergent literacy and social-emotional learning through dialogic reading. *The Reading Teacher*, 59(6), 554–564.
- Graven, M., & Jorgensen, R. (2023). Early numeracy opportunities through number stories with marginalised families. *ZDM—Mathematics Education*, 1–15.

(2024). In J. Višňovská, E. Ross, & S. Getenet (Eds.), *Surfing the waves of mathematics education. Proceedings of the 46th annual conference of the Mathematics Education Research Group of Australasia* (pp. 580). Gold Coast: MERGA.