

Welcome to the PGCE Programme's research bulletin. If you / your setting are undertaking any research/inquiries we would welcome the opportunity to share this with the Partnership. If you wish to know more about any of the items included in these bulletins please contact Alison Glover (alison.glover@open.ac.uk).

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Reducing stereotypical views of scientists

'The impact of the intervention was more significant for males, with significant changes maintained after one year.'

This study used a case-control approach, it tracked 118 young people aged 7 to 11 in a North East of England school. Words associated with scientists were collected before and after (directly, one month, one year) the intervention. Before the intervention (describing five science role-models), children held many of the common stereotypes associated with scientists. Shortly afterwards, and one year later, the use of common stereotypes had fallen significantly for all children, with particular improvements in counter-stereotypical word usage for males. It also found that stereotypical images of scientists as highly intelligent were more difficult to counteract and that many of the positive changes in this view seen in the short term (weeks and months) diminished in the long term (one year later). Therefore, with minimal expense, negative stereotypes of scientists can be reduced without bringing scientists into the classroom. Some of the observed changes persisted in the longer-term, suggesting a lasting alteration in children's perceptions of scientists following the intervention.

Shimwell, J., DeWitt, J., Davenport, C., Padwick, A., Sanderson, J. and Strachan, R. (2023) Scientist of the week: evaluating effects of a teacher-led STEM intervention to reduce stereotypical views of scientists in young children, *Research in Science & Technological Education*, 41(2), pp. 423-443, [doi:10.1080/02635143.2021.1941840](https://doi.org/10.1080/02635143.2021.1941840).



Pupils' perceptions of cynefin (belonging)

'Hearing the waves on the beach in Wales makes me feel like I am supposed to be here.'

'Cynefin' ('the place where we feel we belong') is core to developing children's understanding of place and identity. While cynefin has long been considered in a wider cultural and heritage context in Wales, it is not yet clearly understood in education, and is rarely explored from the pupil perspective. Data gathered from focus groups in four primary schools in Wales (n = 67 children, aged 7–10), used photo elicitation to scaffold the conversation. The pupils were encouraged to take, or find a maximum of four digital images of anything that had meaning to them (the images did not include people). Themes of people, place, activity, and emotions/feelings emerged, which interconnected in multiple, non-linear, and unique ways, indicating the importance of nuance in primary-level curricula design.

Chapman, A., Ellis, R., Beauchamp, G., Sheriff, L., Stacey, D., Waters-Davies, J., Lewis, A., Jones, C., Griffiths, M., Chapman, S., Wallis, R., Sheen, E., Crick, T., Lewis, H., French, G. and Atherton, S. (2023) 'My picture is not in Wales': pupils' perceptions of cynefin (Belonging) in primary school curriculum development in Wales, *Education 3-13*, 51(8), pp. 1214-1228, doi: 10.1080/03004279.2023.2229861.



A dance programme and literacy and numeracy

'I learnt how to do a hip hop slide ... my measurement of my slide was 173 cm.'

This study evaluated the changes in literacy and numeracy levels on children in four New Zealand schools. Children (8–9 years) were assigned to a dance group (n=101) or control group (n=86). Each dance group participated in a six-week (three hrs/week), curriculum-integrated dance programme. Mathematics and reading aptitude were evaluated - baseline and post-intervention - using standardised questionnaires. Participants shared perceptions of the programme through journal reflections and focus groups. Positive impact on reading for children with special needs and those of Asian descent was reported. Children's reflections suggest that the programme may have deepened children's understanding of mathematics and enhanced English vocabulary and comprehension.

Sharma, G., Nikolai, J., Duncan, S. and Stewart, T. (2023) Impact of a Curriculum-integrated Dance Program on Literacy and Numeracy: A Mixed Methods Study on Primary School Children, *Journal of Dance Education*, 23(1), pp. 18-30, doi: 10.1080/15290824.2020.1864379.



Assessing well-being in the Early Years

'Well-being is more difficult ... you have to really think about it, it isn't straightforward, and it's a really difficult area to do well.'

Child well-being is regarded as an important part of early childhood education but little is known about the meaning of well-being and how it is operationalised in a curriculum context. The case study involves two schools - six focus groups and fourteen interviews with practitioners. Practitioners are uncertain about how to assess child well-being and therefore draw upon what they do in other subject areas and use criterion-referenced assessment. Practitioners also report various difficulties in assessing well-being which suggests that placing well-being in curriculum policy is problematic. Findings indicate that well-being is understood as an abstract concept where practitioners attempt to transform it into a concrete form in order to assess it. Questions linking to rationale, concept, enactment and assessment need to be discussed when considering well-being as a subject area.

Lewis, A. (2023) Understanding how practitioners in Wales assess well-being in the early years curriculum, *Education 3-13*, 51(5), pp. 780-792, doi: 10.1080/03004279.2021.2011943.



Open University ITE Partnership research activities

Ysgol Nantgwyn and The Open University are currently exploring the development of a framework/toolkit to support personal target setting for early career teachers. Seven teachers are engaged as participant-researchers reflecting on practice and examining aspects such as building positive relationships, monitoring progress and improving consistency in routines. Funding has been provided by Central South Consortia to support this work. The Open University Praxis fund is also supporting a study that is looking at the development of professional conversations. Practice Tutors will contribute in focus group discussion, with a few mentors and student teachers also participating in a recorded practice review meeting and interview. Findings from both these studies will be available later in the year.

An Open University project



Using Wales as a case study - the 'Changemakers' research project explores improving young adults' understanding of making political and social change. The project is funded by The Open University's '[Open Societal Challenges](#)' programme.

Click [here](#) to find out more and watch [this video](#) about Changemakers.

