

National Network for Excellence in Mathematics

Practitioner Researcher Recruitment Pack

Further to the recruitment in July 2017, the National Network for Excellence in Mathematics is pleased to invite additional applications for the role of Practitioner Researcher, from candidates working in state-funded Primary and Secondary schools and colleges in South Central and South East Wales.

About the NNEM

The National Network for Excellence in Mathematics has been established in response to the recommendations made in the Welsh Government Mathematics Task and Finish Group report¹. The aims of the network are to develop, oversee and steer a phased implementation of agreed delivery plans, as part of a national approach to practitioner professional learning, to support the development of effective practice in mathematics pedagogy across Wales for learners aged 3 to 18.

The NNEM Board is keen to recruit enthusiastic and reflective individuals from all phases of mathematics education to join us as practitioner researchers as we begin this journey.

We are seeking to appoint a range of candidates who:

- are excellent and innovative classroom practitioners with a passion for teaching mathematics;
- have high expectations of themselves and their learners and can develop and implement approaches that lead to high quality learning in the classroom;
- are committed to a culture of continuous improvement and raising standards;
- are able to communicate, share and promote effective practice from within their own classroom and beyond;
- demonstrate the ability and willingness to work with teachers in other schools and institutions to improve teaching and learning in mathematics.

What is a practitioner researcher?

The role of practitioner researcher will be undertaken by teachers currently working in Foundation Phase and/or key stages 2, 3 and 4. In addition, we are keen to recruit post-16 providers from school or further education settings.

As a practitioner researcher within NNEM you will necessarily be interested in action-based research with a focus on developing aspects of mathematics pedagogy. Funding will be provided to release you for the equivalent of one day per week to carry out high quality first-hand research. This time will be used to plan, develop and trial new approaches, initially in your own classroom. You will collect data from a range of evidence bases to support your own professional learning and evaluations and you will evidence the impact of changes made and measures taken through a range of observations, including outcomes of assessment information, where relevant. Your work will involve sharing your findings with other researchers in the project, as well as the wider teacher community. You will be encouraged to collaborate with other teachers interested in developing practice in similar areas of

¹ <http://gov.wales/topics/educationandskills/publications/wagreviews/maths-task-and-finish-group-report/?lang=en>

study, and to use this opportunity to trial ideas and secure evidence to show that these approaches can be transferred effectively to other classrooms.

The overall aim is to trial, capture, evaluate and share first-hand evidence of positive impact in the classroom which will be beneficial to your school as well as other teachers seeking to raise standards in mathematics throughout Wales.

How will it work in practice?

You will be conducting research mostly in your school or college and in your own classroom, although it is anticipated that you may involve your colleagues and their students in your research project. Practitioner researchers will also need to spend some time away from school for attending NNEM events such as; a briefing session, research planning event and a writing-up event. The details of these events will be agreed with the whole group of the participants once the recruitment is complete.

Plenty of help will be available from NNEM at all stages of the research projects. All research practitioners will be working with the National Research Coordinator for Practitioner Research who will help to decide on the topic, guide through the existing research, help to plan and execute your project and, finally, to write the results. The Research Coordinator and NNEM will also help in providing opportunities for effective dissemination of the research findings. Practitioner researchers will be encouraged to liaise with other researchers in mathematics teaching in Wales and beyond. Help will also be available if teachers would wish to publish their results in mathematics teacher journals.

It is envisaged that practitioner researchers will spend an equivalent of approximately one day every fortnight working on the project. Funding to compensate for the loss of your school time will be provided to your school/college directly. The places are limited and only 12 practitioner researcher places are available across Wales in 2017/18.

How will this benefit me and my school?

For you, as a teacher, this is an excellent professional development opportunity. It will give you the chance to shape the future of mathematics education in Wales. You will be able to network and work in partnership with teachers, leaders and other key stakeholders in schools and settings within your local authority and consortium but also more widely across Wales. You will be well supported by the National Coordinator for Practitioner Researchers and receive training in action-research from higher education partners linked to the NNEM. For those that are interested, there is also an opportunity to work towards an accredited qualification.

By being at the forefront of NNEM developments, your school will benefit from being involved from the outset. For example, your role will allow you to visit other schools to seek out and research existing good practice that can be further developed in your own school. You will work in partnership with teachers in other schools so that they can trial your approaches in their classrooms to widen your evidence base. Your own research has the potential to develop sector-leading practice that could impact on national policy.

The Teacher Researcher post is a one-year contract in the first instance, but there is scope for the role to continue and develop beyond this. This may involve further research and the opportunity to coach and mentor future teacher researchers.

How do I apply?

If you are interested in this exciting opportunity and would like to be considered for this role, you are invited to apply in writing making specific reference to the following:

- Training, experience, personal development
 - Relevant qualifications and teaching experience including examples of successful developments in your own practice that have led to improved standards in mathematics.
 - Information relating to CPD you have accessed or delivered and the impact of this both in your own practice and that of other teachers.
 - Summary of action research carried out to date (mathematics or otherwise) and what you have learnt from the process which will influence the way you approach this work (NB Please note it is not essential that you have done action research before).
- Outline of particular areas you are keen to explore through your research. Please note, however, that the specific focus will be confirmed at a later point to ensure breadth and balance across all those taking part.
- Indication of changes you hope to achieve through your activities. What will you do? How will you know if this is effective? How will pupil success be measured?

Headteacher agreement

Please note that it is essential to obtain the approval and permission of your headteacher / employer prior to applying for this post (Please indicate that this has been secured in your letter)

Funding for this project, in terms of cover costs, will be paid directly to the school/college, and the headteacher / faculty lead are encouraged to attend the initial meeting for those appointed to this role during the summer term. This will provide an opportunity for leaders to clarify engagement expectations and funding arrangements.

Submission and interviews

Please submit your letter of application (a maximum of two sides of A4) to dean.cory@swansea.ac.uk

Closing date: 12 noon on Tuesday 12th September 2017

The anticipated timeframe for the ongoing process is:

Shortlisting and Interviews: Weeks commencing 11th and 18th September 2017

Briefings, induction and preparation: 27th September 2017

Commencement of research: 27th September 2017

Should you wish to discuss this position further, please contact dean.cory@swansea.ac.uk

Overview of the role: Practitioner Researcher

The NNEM is a new network and, as such, these roles have scope to grow. Any developments would be discussed and agreed with successful candidates. Currently, it is intended that the principal activities will be as follows:

1. Plan, carry out and evaluate an action research project which aims to improve standards in mathematics through focussing on a specific aspect of mathematics teaching and learning or subject leadership.
2. Agree a focus for research with the NNEM and meet with the National Coordinator for Practitioner Researchers throughout the year to discuss progress.
3. Meet agreed milestones throughout the duration of the project
4. Assess impact on standards and evidence this through use of data.
5. Work collaboratively with teachers in other schools and settings to gather evidence with regards to the project. This will include encouraging them to trial methods to gain evidence that practice can be transferable and successful.
6. Share the outcomes of the action research project. All projects will be written up as a national case studies that can be shared with mathematics educators across Wales. You will be expected to contribute all information relevant to your case study.
7. Attend national and regional CPD sessions to develop and work collaboratively with other practitioner researchers.
8. Attend national and regional meetings with NNEM colleagues, as required.

Person specification

	Essential	Desirable
Qualifications	<ul style="list-style-type: none"> • Qualified Teacher Status • A degree or equivalent qualification 	<ul style="list-style-type: none"> • Research diploma or post-graduate qualification relating to mathematics education
Experience	<ul style="list-style-type: none"> • At least 3 year's teaching mathematics experience in primary and/or secondary phase or tertiary colleges. • Proven record of raising of standards in their own classroom. • Experience in planning for the systematic development of numeracy skills, including reasoning and problem-solving in mathematics. • Experience in formative and summative assessment and using performance data effectively to inform and measure pupil progress. • Evidence of ongoing professional learning relating to teaching and mathematics / numeracy. 	<ul style="list-style-type: none"> • Experience of carrying out classroom based action-research. • Experience of working with teachers in other schools or phases. • Experience of coaching and mentoring. • Experience of leading subject or whole school initiatives to improve teaching and learning.
Knowledge	<ul style="list-style-type: none"> • Strong mathematics subject knowledge in primary and/or secondary phases. • Good understanding of national priorities in education in Wales. • Good knowledge of current mathematics curriculum and assessment criteria 	<ul style="list-style-type: none"> • Knowledge of current national and international research into mathematics education
Skills	<ul style="list-style-type: none"> • Strong classroom teacher with a passion for improving teaching and learning in mathematics • Reflective and responsive • Good interpersonal skills – ability to support other practitioners and share practice effectively. • Strong organisational and time-management skills. • Ability to work flexibly and meet agreed deadlines. • Ability to work independently as well as in a team. • Ability to communicate effectively in speech and writing • Ability to make effective use of data to inform and evaluate activities. 	<ul style="list-style-type: none"> • Able to identify own personal learning needs.
Other	<ul style="list-style-type: none"> • Access to own transport in order to travel to meetings and other schools (within and beyond own local authority) • Current DBS record 	