1. Enquiry focus

1.1 Bangor University (BU), Cardiff Metropolitan University (CMU) and the University of Wales Trinity Saint David (UWTSD) were commissioned by the Welsh Government in summer 2018 to oversee a series of professional enquiries with Professional Learning Pioneer Schools. Each university is responsible for working with its own affiliated AoLEs, as follows:

BU: Languages, Literacy and Communication; Science and Technology.
CMU: Expressive Arts; Health and Wellbeing.
UWTSD: Maths and Numeracy; Humanities.

1.2 Cycle 1 was launched on November 5, 2018, and ended on December 3, 2018. Each university took a slightly nuanced approach to agreeing an enquiry focus, proposed methodologies, and subsequent support. The findings of this Cycle were recorded in a summary report presented to the Welsh Government for consideration on December 20, 2018.

1.3 Cycle 2 was launched on January 7, 2019, and ended on April 1, 2019. Whilst cognisant of the findings arising from Cycle 1, this report will focus predominantly on the outcomes of Cycle 2.

1.4 Schools working with BU were invited to choose their own enquiry focus, based on their individual needs and context, from a list drafted by the Welsh Government. The agreed overarching themes selected included:

- Planning for a purpose-driven curriculum
- Pedagogy and how learning works
- Project-based learning
- Implications for leadership and management
1.5 Schools affiliated with CMU focused on the topic of ‘Curriculum making’ in Cycle 2 of the enquiry process. The enquiry was based on the premise that the new curriculum will represent a move away from top-down prescription, allowing schools a great deal of autonomy (subsidiarity) in developing a curriculum suited to their local context and needs.

1.6 UWTSD agreed with schools that the overarching enquiry themes, namely ‘Planning for a purpose-driven curriculum’ and ‘Pedagogy and how learning works’, would remain the same for Cycle 2 as they had in Cycle 1. This was determined on the basis that Cycle 2 would provide opportunity for schools to deepen their enquiries, and that deviating from agreed themes so early in the professional learning process could have a destabilizing effect.

2. Engagement strategy

2.1 There were three face-to-face engagement sessions held with schools and facilitated by universities relating to Cycle 2. The first took place on December 12, 2018, at the Elephant and Castle Hotel in Newtown, Powys. The second was held at the Liberty Stadium in Swansea, on February 19, 2019. The third and final session took place at St George’s Hotel in Llandudno, Conwy, on April 9, 2019.

2.2 Outside of these contact sessions, universities have engaged with schools using Microsoft Teams (conversation and file sharing), via email correspondence, telephone exchanges, and through the regional education consortia.

2.3 Universities have been in regular contact with the Welsh Government (video conference/ email/ telephone/ face-to-face meetings) regarding project management and other contractual responsibilities. In addition, each university has been in ongoing dialogue with colleagues from partner universities.

2.4 Pioneer Schools attached to two universities held discussions with senior leaders and middle leaders in their own schools and completed reports/forms, drafted by universities, which they returned for analysis via online sharing platforms. All universities encouraged collaboration with wider clusters of schools, as directed by the Welsh Government. CMU and its schools agreed that related activity would linked to three different types of cluster, namely: primary clusters, cross-phase clusters and secondary clusters.

2.5 Increasingly, universities have been in contact with both their immediate regional education consortium, and the consortia more generally. Conversations have included the appraising of broad progress of enquiries undertaken by Pioneer Schools and communicating expectations of involvement with the project as understood currently by commissioners and stakeholders.
3. Summary of professional learning implications (generic/AoLE specific)

3.1 It is a challenge to separate generic and AoLE-specific professional learning implications after just two enquiry cycles. There are, however, some early observations arising that are worthy of consideration.

3.2 A common observation relates to the lack of preparedness among schools and staff for both the new curriculum, and for engagement in this kind of action enquiry work. For example, it has been suggested that younger, newly-qualified teachers have been more likely to embrace these changes than older, more experienced teachers. It is becoming increasingly evident that adoption of the current reform agenda will require a change in mindset and culture.

Schools have suggested that extensive professional learning will be required so that teachers and support staff have the appropriate knowledge to teach their respective AoLEs, and to undertake the planning and preparation required to make the new curriculum suited to the needs and context of individual schools. Related comments from schools included:

‘Interestingly… many Foundation Phase practitioners felt that they already employed an experiential approach across all areas of their teaching and learning. However whilst this is not in dispute, what shouldn’t be dismissed in light of the new curriculum per se is that staff need to reflect on their practice at a deep level, unpicking pedagogy further to ensure that they don’t just port what they’ve already done are currently doing to the new curriculum, without considering the need to change and learn.’

‘Need to build staff confidence and give them the opportunity to trial new ideas without fear of ‘failure’. Moving away from subject learning and planning much more creatively. Training is key to raising staff confidence in specific areas.’

‘We are going to have to upskill our staff in order to deliver this new curriculum and assist staff with the change in mindset to come away from “I’m an I.T teacher and that’s all I teach”.’

‘The knowledge and skills required sits outside what you are typically taught when qualifying to be a teacher. I think this will be outside some staff’s comfort zone, particularly when you think about relationships and sex education.’

3.3 UWTSD reported the need for schools engaging in action enquiry to consider carefully participation and matters relating to consent. This was implied in a number of reports. It was suggested that schools engaging regularly in action enquiry will require advice in operating systems that would enable this process to become much more straightforward, while still being ethically sound.

3.4 It was suggested that schools will require a deeper knowledge and understanding of existing research literature and, indeed, where and how to access it. There is a perception among some currently that academic, peer-reviewed research and associated articles are not sufficiently signposted for
teachers with an interest in a certain subject area/field. Having the time to engage meaningfully with reputable research is also a challenge.

3.5 It was noted on more than one occasion that good practice in primary schools may not be transferable to secondary schools, and vice versa. Among cited reasons for this was the difference in number of teaching staff, class sizes, resources, and available learning space. This will need to be considered and explored further as the professional learning of Wales’ education workforce develops.

3.6 Schools have identified a training need to ensure a shared, unified and established clear vision and understanding of the four purposes of the curriculum and the 12 pedagogical principles were considered by some to be central to the new Curriculum for Wales.

3.7 There was an overwhelming view from participants that staff involved in the action enquiry process had been enthused and engaged by the work. Similarly, all three universities reported schools’ growing confidence in the process of professional enquiry, albeit this confidence has taken time to nurture. The quality and standard of all stages of the research process appears to have improved by the majority of schools across all AoLEs.

4 Overview of emerging signature pedagogies

4.1 In general terms, there has been little to report regarding signature pedagogies associated with the AoLEs given the infancy of the action enquiry project. Documents emanating from curriculum development were, for the duration of Cycle 2, provided in draft form only and schools have not been given sufficient time – or a clear directive – to begin challenging existing pedagogical approaches.

4.2 However, there are a number of themes emerging from enquiries in Cycles 1 and 2 that will likely impact on pedagogical practice. Those relating specifically to Maths and Numeracy include:

- Staff in several schools found the language within the Maths and Numeracy curriculum difficult to understand, thus highlighting the need for exemplification and explanation of certain terms;
- A number of schools reported that support would be needed for schools to plan for progress between progression steps;
- Generally, schools seem to recognise that the new Maths and Numeracy curriculum can give more freedom to develop depth of understanding, but some were concerned that accountability measures, in their current form, would affect this;
- The Principles of Progression ‘Proficiencies’ have frequently been identified as areas requiring additional professional learning. A group of five schools attached to the Maths and Numeracy AoLE explored these as a focus of planning during Cycle 2, with interesting results. Other schools explored
strategies that could relate to particular proficiencies. Many schools suggested that these, with professional learning, could provide the basis for pedagogical development in Maths and Numeracy;

- Planning for the four purposes was explored by several schools, most of which adopted a largely thematic approach. One school group adopted a particular pupil-led experiential approach at the end of a term’s theme. Schools reported positively on learners experiences overall. Considerations such as departmental working, inclusivity, and management and logistics of cross-AoLE tasks presented for a secondary school. Considerations such as type of theme, and articulation of practitioner role as a facilitator in experiential tasks, were raised by primary schools. Wider issues such as assessment in such approaches were also highlighted.

Those relating to Humanities include:

- Models for creating an interdisciplinary curriculum in Humanities, while maintaining the integrity of the disciplines. A reoccurring issue regarded the deployment of staff with subject-specific expertise to teach particular elements of a unit of work and the tensions inherent between various models;
- The importance of planning across phases, and deepening an understanding of the teaching of Humanities, especially between teachers of Key Stage 2 and Key Stage 3;
- The relationship between the four purposes and the Humanities ‘What Matters’ statements in planning the school-level curriculum;
- A number of schools commented that assessment of work had not yet been explored and this was something that they may explore in the academic year 2019-20. Anecdotally, it appears there remains a significant degree of uncertainty in the key changes between the current assessment system and that proposed for 2022;
- The accountability regime continues to be a concern for schools, both in terms of the freedom to innovate and trial new approaches in the short-term, and in terms of unintended negative consequences on the system beyond 2022.

Those relating to Science and Technology include:

- One Professional Learning Pioneer School acknowledged the importance of how to identify learning opportunities within Science and Technology that allows learners to become ‘Enterprising and Creative Contributors’. The school in question made the following recommendations:
  
  i. ‘Schools need to provide further opportunities for learners to be given roles in teams i.e. when carrying out group investigations or projects and take measured risks;
  
  ii. Additional training/digital equipment/resources to be provided to allow schools to use media to express ideas and emotions;
  
  iii. Schools need to be further supported to make links with companies/local businesses to promote the importance of learners giving of their energy and
skills so that other people will benefit and are ready to play a full part in life and work;

iv. Resources/support for schools to help generate ideas for activities that will provide opportunities for learners to give of their energy and skills so that other people will benefit and are ready to play a full part in life and work’.

5. Key recommendations

5.1 It is becoming clear that teaching staff will require new skills relating to research and/or an introduction to forms of action enquiry to support them in their understanding and delivery of the developing national curriculum. It is important to note the wide variability between schools in this respect, and there must be consideration given to the fact that schools will be starting from very different places. A considerable amount of time and energy has been invested in bringing all schools up to a level at which all can engage meaningfully in the action enquiry process. This challenge will be magnified as the process of professional enquiry is scaled-up, and we must be mindful of the mindset shift required to develop teachers as professional enquirers.

5.2 Opportunities for the education workforce to be upskilled in various aspects of action enquiry will need to be factored into future planning. As a first step, the Welsh Government may be minded to consider the crafting of accessible guides and materials to support teachers in engaging in action enquiry. There does not currently appear to be a reputable repository for this sort of activity available to schools in Wales.

5.3 A number of Professional Learning Pioneer Schools recommended that secondary schools should be encouraged to visit partner primary schools as appropriate to observe strategies used to gain insights of how to build pupil independence and resilience skills. This builds upon a more generic observation relating to the need for common cross-phase pedagogy, crafted by both primary and secondary colleagues.

5.4 Schools undertaking project-based learning enquiry have recommended the need for better synergies to exist between planning, outcomes and specialisms in schools, although they remained undecided as to whether this could be gradually scaled-up to higher years in education.

5.5 One Professional Learning Pioneer School conveyed specific issues relating to resourcing ‘AoLE-specific’ equipment, multiple factors relating to the assessments and parental reporting systems within the new curriculum for 2022, and types of teacher professional learning to be trialled/implemented and robustly evaluated; additionally, the overall mapping needed for secondary schools with timetabling issues that may be worthy of further consideration as the new curriculum develops.

5.6 At least one university reported that schools have welcomed the opportunity to engage in different forms of professional enquiry that best suit the needs of their own schools and contexts. This has meant that there has been a variation in approach to professional enquiry, although university staff have made clear
that differentiation is to be welcomed and professional engagement in the process of action enquiry is not to be underestimated.

5.7 UWTSD suggested that the first year of the project should be seen as a pilot year, during which schools have been introduced to the theory, concept and structure that underpins effective teacher-led professional enquiry. The university is satisfied that this initial work will develop the confidence and skill of practitioners in becoming professional enquirers, and thus prepare them for deeper, more meaningful close-to-practice research into 2019-20.

5.8 The stress schools place on the time and support that will be needed to develop curricula suited to their needs and context suggests that a major national change programme will need to begin from September 2019 if the curriculum is to be successfully implemented between 2022-2026.

5.9 Whilst the importance of this management process is fully recognised, there is an even stronger recognition that the successful implementation of the curriculum will ultimately depend on the professional learning provided for teachers and support staff. The scale and quality of the provision required cannot be underestimated.

5.10 The discrete role of key parts of the Welsh education system, particularly regional education consortia, local authorities and the higher education system, in supporting schools to undertake this change management and develop professional learning should be clarified and actioned.

5.11 Much greater clarity is needed in relation to the future of assessment, accountability and qualifications, if the right environment is to be created for the change management and professional learning developments required. These are key enablers and should not be delayed until later in the process.

5.12 National/regional and area co-ordination of the role that external agencies can play in supporting the local curriculum will be required to ensure that authentic learning and rich experiences for pupils are maximised.

5.13 There is huge potential around the new curriculum for strengthening family and community involvement with schools, but significant challenges need to be overcome if this is to be realised.

6. Issues/concerns

6.1 The impact of the existing high-stakes accountability system is a recurring theme and was raised as a significant issue. A number of schools reported the stifling effect of accountability mechanisms on creativity and innovation. Schools cited pressures relating to GCSE outcomes, Estyn and National School Categorisation as impacting on staff engagement in professional
enquiry, with school leaders mindful of the external factors driving practice in the classroom.

6.2 Similarly, some Professional Learning Pioneer Schools felt that the external assessment requirement at present is ambiguous, particularly relating to expectations at GCSE level.

6.3 Schools noted the importance of funding on the effectiveness and sustainability of professional enquiry, with teachers requiring the time and space to engage purposefully in related activities. There was some concern that without the injection of additional funding, to release school staff to develop as professional enquirers, schools would struggle to engage meaningfully in the practice of research. It was also reported that schools find it harder to engage at certain times of the year, e.g. during National Reading and Numeracy Tests and GCSE/A-level exams.

6.4 Some schools reported that they had benefitted from having been involved in the Camau work on curriculum development with representatives from UWTSD and the University of Glasgow. Their involvement as Curriculum Pioneers has ensured that staff in those schools have been more au fait with latest curriculum documents and have, therefore, found initial engagement with professional enquiry easier. Similarly, a number of schools reported the challenges associated with having not been involved in curriculum development prior to embarking on professional enquiry. These schools are seemingly some way behind Pioneer colleagues in terms of understanding and thus the different levels of engagement in curriculum reform debate must be taken into consideration. A general concern expressed and exemplified by Professional Learning Pioneer Schools is the need for all schools to be on board and fully informed about the new Curriculum for Wales.

6.5 Some schools reported issues when attempting to work across clusters. It was noted that effective collaboration was reliant upon the positive engagement of individual schools. Some Professional Learning Pioneers have found it difficult to engage in cluster activity because colleagues in other schools have not been in a position to participate. Factors impacting on involvement have included Estyn monitoring/inspection, commitment to regional education consortia, staff absence, and changes in personnel/school leadership. These factors have, in some cases, hampered dissemination of practice relating to professional enquiry and should be properly considered moving forward. Similarly, schools have noted the challenges associated with engaging ‘new’ partners, and the time and energy needed to understand each other’s settings. Building relationships and trust was considered vital to the successful development of this project.

6.6 The importance of strong leadership in navigating a way through forthcoming changes was raised by schools, which were mindful that the extent to which teachers are allowed to engage in this and related projects is heavily reliant upon school leadership and the ability of school leaders to provide opportunities for staff to participate in professional learning activity.
6.7 There remains a wide range of quality in schools’ analytical skills and report writing. Each university has expressed an interest in supporting development in this area in future engagement sessions.

7. Suggested focus for next enquiry cycle

7.1 For CMU and its schools, the third cycle of enquiry will focus on the professional learning implications for schools of the new curriculum in their two AoLEs. For the next stage of their development as professional enquirers, the pioneers will work in collaborative groups within their regions except for the four special schools who will develop an all-Wales collaborative. The collaborative groups are currently considering which enquiry methods they will adopt and the school clusters they will work with. CMU will be involved in quality assuring this process and providing support to the pioneer groups as they undertake their enquiries.

7.2 UWTSD has encouraged schools to delve deeper into their chosen area of enquiry during Cycle 3, which will therefore encompass the same agreed overarching themes (Planning for a purpose-driven curriculum, and Pedagogy and how learning works), albeit schools are being required to submit detailed action plans outlining activity for the duration of the cycle.

7.3 For BU and its schools, the third cycle of enquiry will focus on the professional learning implications for schools of the new curriculum in their two AoLEs. BU will await further directive from Welsh Government on details for Cycle 3 enquiries, which possibly include post-consultation reviews and feedback from Wales-wide consultation on the new curriculum.
Appendix 1: Schools participating in Welsh Government Professional Learning Enquiries Research Project (by partner university)

**Bangor University**

Codecae Comprehensive School  
Ysgol Gyfun Gwŷr  
Y Pant Comprehensive School  
Ysgol Gyfun Bro Morgannwg  
Porthcawl Comprehensive School  
Ysgol Pen Coch Specialist Primary School  
Ysgol Bryn Elian  
Gilwern Primary School  
Ysgol Gymraeg Castell Nedd  
Maesteg Comprehensive School  
Rhydypenau Primary School  
Oldcastle Primary School  
Ysgol Dyffryn Ogwen  
Ysgol Bro Tryweryn  
Gilwern Primary School  
Glan Usk Primary School  
Ysgol O. M. Edwards

**Cardiff Metropolitan University**

Ty Gwyn Special School  
Cardinal Newman School, Pontypridd  
Herbert Thompson Primary School  
Ysgol Cynwyd Sant  
Cadoxton Primary School  
Ysgol Gwynedd  
St Christopher’s Special School  
Ysgol Manod  
Ysgol Gyfun Cwm Rhymni  
St Julian’s Primary School, Newport  
Ysgol Gynradd Aberteifi  
Ysgol Gymraeg Aberystwyth  
Cwmtawe Community School  
Crickhowell High School  
Christchurch Primary School  
Tai Centre Special School  
Stanwell Comprehensive School  
Treorchy Comprehensive School  
Rhws Primary School  
Cardiff High School  
Flint High School  
Dwr-y-Felin Comprehensive School  
King Henry VIII School, Abergavenny
Pembroke Dock Community School
The John Frost School
Pontarddulais Primary School
Blaenavon Heritage Primary School
Ystrad Mynach Primary School
St Gwladys Primary School
Risca Primary School
Heronbridge Special School

University of Wales Trinity Saint David

Barry Island Primary School
Craig yr Hesg Primary School
Cowbridge Comprehensive School
George Street Primary School
Llangattock Church in Wales School
Rhiw Syr Dafydd Primary School
Llanishen Fach Primary School
Penmaes Special School
Ysgol Eirias
Bryngwen Comprehensive School
Langstone Primary School
Millbrook Primary School
Ysgol Gyfun Cwm Rhymni
Ysgol Landrillo yn Rhos
Romilly Primary School
Ysgol Uwchradd Aberteifi
Caldicot School
Cluster Ysgolion Uwchradd Meirionnydd
Eveswell Primary School
Priory Church in Wales School
St Joseph’s RC High School
Tredgar Comprehensive School
Ysgol Bro Pedr
Ysgol Casnewydd
Ysgol Glan Gele
Ysgol y Preseli
Ysgol y Strade
Appendix 2: University staff leading on Welsh Government Professional Learning Enquiries Research Project (by partner university)

Bangor University

Professor J. Carl Hughes
Professor Enlli Môn Thomas
Dr Bryn Jones
Gwilym Siôn ap Gruffudd

Cardiff Metropolitan University

Professor David Egan
Dr David Aldous
Dr Anna Bryant
Dr Lowri Edwards
Bethan Gordon
Professor Gareth Loudon
Gemma Mitchell

University of Wales Trinity Saint David

Gareth Evans
David Stacey
Rachel Wallis