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## DEVELOPING AN EDUCATION EVIDENCE ECO-SYSTEM IN A SMALL COUNTRY: LESSONS FROM WALES

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### ABSTRACT

*This paper's **aim** is to explore the challenges of developing an education 'evidence ecosystem' for Wales.*

**Methodology.** *The analysis is derived from ongoing research and debates with key stakeholders in higher education and the Welsh Government and draws on policy research from other small countries.*

**Results.** *It might be argued that Wales provides the perfect environment for developing such an ecosystem because of its size, commitment to evidence-based policy, political consensus, collaborations between policy-makers, researchers and the education profession. That it has not yet been able to do so illustrates the constraints of wider political and historical circumstances which structure provision, particularly in small countries.*

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*The paper **concludes** by considering how some of these challenges might be addressed so that the potential can be realised.*

**KEYWORDS:** Evidence Ecosystem, Education Research, Wales.

## INTRODUCTION

It is widely acknowledged that there is something of a crisis in the legitimacy of educational research – and particularly the extent to which it informs policy and practice (e.g. Whitty, 2006; Gewirtz, & Cribb, 2020). Policy-makers argue that researchers are often more interested in critique and theory rather than providing ‘answers’. Teachers argue that research is neither accessible nor sufficiently attuned to addressing the challenges they face in the classroom.

And when teachers do encounter research, they often find it impenetrable. Researchers, themselves, on the other hand, express frustration that the research that they make available to policy-makers and teachers is often ignored. Policy-makers, it is claimed, just pick and choose the evidence that suits them, while teachers are too wrapped up in the immediacy of their day-to-day practice to take the time to consider the evidence properly and locate their practices within the wider picture. In short, it is clear that there is a serious research-policy-practice disconnect with educational research.

In the UK, there have been calls to address this disconnect through reframing the relationship between research, policy and practice as an ‘evidence ecosystem’. Drawing on parallels with industry, it is believed that such an approach might clarify the links between the generation, synthesis, distribution and application of appropriate research evidence (see, for instance, Shepherd, 2014). In this paper we look at some of the challenges of developing such an evidence ecosystem for education in Wales.

In so doing, we draw on many years’ experience of research capacity-building amongst the ‘generators’ of research, as well as ongoing interactions with the ‘users’ of research, especially policy-makers and practitioners, to try to resolve some of the challenges of ensuring this research is not only useful but used. While this paper is based on Wales, our experiences are likely to have wider relevance, particularly for small countries that are faced with internal constraints and external pressures.

This paper’s **aim** is to explore the challenges of developing an education ‘evidence ecosystem’ for Wales

## METHODOLOGY

The analysis is derived from ongoing research and debates with key stakeholders in higher education and the Welsh Government and draws on policy research from other small countries.

## RESULTS

### **Wales – the ideal context for the development of an education evidence ecosystem?**

It might be argued that Wales provides the perfect environment for developing an evidence ecosystem for education because of the Government’s commitment to the use of evidence in informing policy, a general consensus among political parties about the direction of education policy, a collaborative approach to working with researchers and the education profession, and its small size (there are only 1,480 schools in Wales, 183 of which are secondary schools for children aged 11-15).

Since democratic devolution in 1999, the Welsh Government has pledged to develop its own distinctive reform agenda on the basis of research evidence. Sometimes this evidence base has entailed the exploration, adaption and adoption of policies that have worked elsewhere. For example, the design of Wales' Foundation Phase programme for 3 to 8 year-olds is based upon programmes of Reggio Emilia in Italy, and equivalent early years curricula in New Zealand (Te Whāriki) and Scandinavia (see Maynard et al., 2013).

The Welsh Government has also sought to ensure that all its interventions are subject to sustained and robust evaluations, that are then placed in the public domain. This was explicitly outlined in a recent 'action plan' for the education sector in Wales, which included the enabling objective for "robust assessment, evaluation and accountability arrangements supporting a self-improving system." (Welsh Government, 2017, p. 23).

Although the political landscape of Wales is marked by similar kinds of debates and disagreements as can be found everywhere, there seems to be a remarkable degree of political consensus about the overall direction of education policy. Over the last few years, Wales has been developing a radical new curriculum which will replace traditional subject demarcations with integrated 'areas of learning and experience' (Welsh Government, 2020).

This proposed curriculum has received support from across the political spectrum – even from the more conservative factions. This general consensus is very different from the situation in England, where the nature of education policy is highly politicised with significant polarisation of opinion between progressive and conservative politicians.

This general consensus provides a more stable environment for the development, implementation and evaluation of policies. In Wales, education is not the 'political football' that is often claimed to be the case in England. Policies are evaluated not so much on their ideological underpinnings, but on their efficacy. Again, this would appear to be conducive to establishing a strong evidence ecosystem.

Additionally, and again unlike England, relationships between researchers, policy-makers and practitioners are underpinned by principles of collaboration rather than conflict and mistrust. The Welsh Government has traditionally sought to work with teachers. This is in stark contrast with England where relations are often characterised by mutual hostility. Michael Gove, for example, characterised teachers and researchers who criticised his reforms as 'the blob' during his time as Secretary of State for Education in England. Collaborative relationships are also a product of the size of Wales.

Wales is a small country with a population of just over three million. This means that key stakeholders know each other personally. In addition, it might be argued that effective oversight of the implementation and evaluation of policies is more manageable in smaller countries.

Despite these propitious circumstances, the evidence ecosystem in Wales remains seriously underdeveloped. Over the last two decades, and despite the explicit commitment to evidence-based policy on the part of the Welsh Government, the number of education researchers working in Wales has declined. Although national research assessment exercises are not the only way of measuring research capacity, they do provide an important indicator of the volume and quality of higher education research. In 2001, over 85

researchers working in the area of education in Welsh universities were 'returned' to the UK-wide research assessment exercise.

In 2014, only 21 researchers were returned, all from only one higher education institution. Despite ongoing efforts to increase research generation in the universities, a similar picture is likely to emerge from the 2020 exercise which is currently underway. In the next section, we explore some of the reasons why in terms of exogenous and endogenous factors.

### **Internal constraints and external pressures**

Many explanations of why there is such a disconnect between research, policy and practice in education have focused on the incompatibility of the different agendas, definitions of rigour and different timescales for the production of adequate evidence. While all of these explanations are valid, we also want to highlight some of the more contextual challenges of developing a robust evidence ecosystem.

For Wales, some of these challenges are endogenous and arise from its small size and cultural attributes. Having a small population, particularly when this is distributed over a relatively large geographic area, creates resource difficulties. Wales already receives less income than the other nations within the United Kingdom so that the per capita funding for pupils is lower, which leaves less money to invest in research and evaluation.

Additionally, as Bacchus (2008, p. 127) points out, small states in general find it difficult to achieve significant economies of scale and develop 'culturally relevant' curriculum materials. For Wales, this challenge is magnified by its bilingual status. Over one quarter of the schools in

Wales teach entirely through the medium of Welsh, with many others being largely bilingual. This means not only that all school curriculum resources need to be produced bilingually, but that provision needs to be made throughout the higher education sector for the training of teachers to work in Welsh medium schools, as well as providing opportunities for Welsh-speaking students to study at under- and post-graduate levels in the medium of Welsh.

Issues of scale create challenges in terms of human as well as financial resources. As Crossley and Holmes (2001, p. 403) point out, individuals matter much more in small states than in larger ones. Relations between individuals are 'particularistic' rather than 'universalistic' (Randma-Liiv, 2002) – based more on who you know rather than what you can do. Moreover, the impact of just a few individuals – whether for good or for bad – can have a much bigger system-wide effect than they would in larger countries.

Retaining effective personnel in key positions is therefore strategically very important but is often difficult if there are fewer opportunities for career-building. Paradoxically, as we have found in our own work, supporting the career development of education researchers may simply build capacity elsewhere. To cite Crossley and Holmes (2001, p. 403) again:

*Research training as a strategy for capacity building can, for example, increase the international mobility of such individuals and inadvertently contribute to the phenomenon of outward migration.*

In general, smaller countries are often unable to provide sufficient career opportunities, particularly for graduates. As Bacchus (2008, p. 132) argues:

*These 'blocked mobility' opportunities often prove frustrating and tend to encourage educated individuals to migrate to larger and economically more developed countries in search of better job prospects.*

When the larger and more prosperous country is right next door, as is the case with Wales and England, this migration is particularly problematic. Data from our own research, a representative longitudinal multi-cohort study, show that over one third of 14-15 year-olds believe they will need to leave Wales to get the job that they want. Similarly, just under half of all Wales-domiciled undergraduates study in universities outside Wales (Rees et al., 2015).

These patterns help explain why the qualification system in Wales is inextricably linked to the qualification system in England. Whilst there are now important differences in the qualifications school-leavers receive in these two countries both continue to award GCSEs and A Levels – recognisable qualifications that help young people enter the labour market and higher education in Wales and England.

As noted earlier, similar issues relate to the educational research capacity in Wales – the outward migration of researchers means that Wales not only loses important research capacity but in turn it then often has to look outside Wales for the expertise it requires. The retention of expertise and talent is, therefore, particularly salient for small nations such as Wales. This has important consequences on the ability of any administrative system (including education systems) to be innovative (Randma-Liiv, 2002).

The issue of external migration leads on to consideration of international pressures –

pressures that are felt particularly strongly by small nations. As Crossley and Holmes (2001, p. 402) argue in relation to small nations:

*Education systems in such contexts are particularly vulnerable to the influence of international agendas and to the transfer of external research paradigms, methodologies and priorities.*

Wales, like other small nations, suffers from the consequences of the growing 'governance by data' (Ozga, 2009) facing education systems around the world. Wales does not perform very well on some of the PISA performance criteria, and lags behind in international league tables. This can lead to considerable discourses of derision, particularly from Wales' closest and more dominant neighbour, England (Power, 2016).

While it is the case that Wales' does perform less well than England in some of these tests, differences in scale, resources and testing practices make straightforward comparisons between England and Wales misleading. In addition to the problem of comparing like with like, it is important to remember that, as Rees (2012) points out 'the bench-marks against which Welsh educational performance have been judged are external ones'.

There are considerable political tensions between Wales and England which arise from the historical dominance of Wales and, more recently, contrasting political leanings (see Power, 2016). While Wales' political climate might be characterised in terms of democratic socialism, that of England tends towards a neo-conservative and neoliberal agenda. It is not surprising therefore that right-wing politicians in England should seek to gain political mileage out of maligning the more left-wing Welsh Government.

England's Michael Gove, whom we have already mentioned because of his hostility towards the education 'establishment', is known to be a keen supporter of private education, traditional teaching methods and a narrowly academic curriculum. He could hardly be expected to warm to the Welsh preference for progressivism and a commitment to comprehensive schooling and a broad-based curriculum.

It has become clear that attainment data have been used by to influence not only what goes on in England but what goes on elsewhere. And this has consequences for Wales. As Rees and Taylor (2014, p. 3) argue, the narrative of Welsh underperformance that is fuelled by England has had major impacts not only on how Welsh schools are perceived inside and outside the country but also on the actual form of policy-making in Wales. Napoleon's remark that 'a country's foreign policy is dictated by its geography' may be increasingly applicable to a country's education policy.

## DISCUSSION

It is clear that developing an evidence ecosystem, especially in a small country, requires more than good intentions. In this next section, we outline some of the ways in which Wales is trying to realise its ambition and address some of the internal constraints and external pressures.

Great importance is placed by the Welsh Government on the need for universities, government agencies and the teaching profession to work together rather than use internal markets to address Wales' educational challenges. However, it is often unclear what 'working together' means in terms of the nature and location of research evidence generation. For example, in recent years, the Welsh Government has prioritised the development of a 'self-improving' educational system, with increasing

emphasis on the capacity of schools and teachers in particular.

Whilst such an approach may be designed to enhance the capabilities of school staff in engaging with evidence-informed practice, it could be argued that this arises simply because of the lack of strong expertise and capacity elsewhere in the education system. This also means that much of the research activity in such a system will be led by and undertaken by practitioners, with little or no training in robust research methodologies.

For the academic research community, it increasingly entails supporting school practitioners to undertake more locally-based and small-scale studies at the expense of broader longitudinal and comparative research. Such collaborations may jeopardise rather than strengthen what already is a weak research base (see Rees, & Power 2007; Power, 2023).

There have been attempts within Wales to shore up a high quality research infrastructure alongside the emphasis on practitioner-led research. For example, our multi-cohort study mentioned earlier has been designed to provide a data resource that can be utilised by any researcher interested in the educational and social experiences of young people in Wales. More recently the Welsh Government funded a research initiative that brought together a team of university academics to be mentored through the research process of studying the impact of curriculum reforms of the most disadvantaged young people in Wales.

Lastly, the WISERD Education Data Lab has just been established to generate high quality research-based evidence to help inform and challenge our understanding of educational processes and outcomes to support Wales' education system. However, initiatives such as these can only be as strong as the commitment to

resource them. Large-scale evaluations, such as the evaluation of the Foundation Phase cited above, never receive follow-up research funding.

Not only does that mean the expertise generated through such evaluations disappears (and in some cases leaves Wales) but it means that enactment of the findings from such important research is limited, with different people and agencies taking responsibility for delivering the findings of others. And despite the ability of researchers in small nations to attract and mobilise Government support for new and innovative research ideas, they are still constrained by the relatively short political and budgetary timescales that impede the development of strong evidence ecosystems in any country.

It is too early to say whether these various attempts to enhance the evidence ecosystem for the Welsh education system will bear fruit. But even if they do, the situation is likely to be vulnerable for many years to come for two main reasons. First, the education system in Wales is increasingly marginalised by the UK Government, which is at best indifferent and at worst hostile to Wales. The impact of the current COVID-19 pandemic on the education system in Wales provides a good illustration of this.

For example, the resource available to policy-makers in Wales to respond to this global crisis is still largely determined by the UK Government and how devolved governments are funded. So, the immediate availability of funding for initiatives in Wales that were designed to provide speedy remedy to COVID-19 were only be available if policy-makers in England decided to also undertake said initiative. Similarly, the wider context of education (e.g. its overarching aims, curriculum content, assessment and

qualification) that heavily frames the ability and opportunity for educational autonomy in Wales was very evident in the way that grades in Wales were awarded were largely determined by the way grades in England were awarded (irrespective of how sound or not those decisions were in England).

The second main reason that may stall any attempts to enhance the evidence ecosystem in Wales in the coming years is the great uncertainty that Brexit brings to politics, the economy and society. The wider structures of society, and the likely transformation of those structures due to Brexit, will dominate the ability to transform education systems, placing new pressures that the education system will be expected to address. Crucially, all without an underpinning evidence ecosystem to make robust and effective decisions.

## CONCLUSION

In this paper we have highlighted some of the contextual factors that exacerbate the research-policy-practice disconnect in education. Many explanations of why there is such a disconnect have focused on the incompatibility of the different agendas, definitions of rigour and different timescales for the production of adequate evidence. Without wishing to downplay these factors, it is also important to locate attempts to increase research capacity within the wider historical and geographical context.

The experience of Wales' attempts to build an evidence ecosystem for education reveal the importance of not only comparative explorations but relational analysis. In short, narratives of the successes and failures of policy and research in Wales need to be understood in relation to what is going on elsewhere – and particularly in England. While Wales, as a small country with limited resources,

does experience internal constraints in its attempt to build an evidence ecosystem for education, it is external pressures that are just as significant.

This poses a particular challenge, particularly for small nations or recently devolved administrations. Whilst there is a considerable desire for such countries, like Wales, to utilise its education system to support nation-building – e.g., bilingual education, a curriculum shaped by local needs – this is in direct tension with the wider educational context. A great deal of effort and resource can be spent on

developing bespoke educational policies, including a national evidence ecosystem – effort that is often stalled in the light of international political and economic imperatives.

Wales has yet to find a way forward in developing a strategy that will effectively target resources and capabilities in a way that better complements the wider context, that recognises the limits of its capacity, and that focusses more on what is effective and what will improve the quality of education.

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### CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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### REFERENCES

- Bacchus, M. K. (2008). The Education Challenges Facing Small Nation States in the Increasingly Competitive Global Economy of the Twenty-First Century. *Comparative Education*, 44(2), 127-145. <https://doi.org/10.1080/03050060802040953>
- Crossley, M., & Holmes, K. (2001). Challenges for Educational Research: International Development, Partnerships and Capacity Building in Small States. *Oxford Review of Education*, 27(3), 395-409. <http://dx.doi.org/10.1080/03054980125250>
- Gewirtz, S., & Cribb, A. (2020). What works? Academic integrity and the research-policy relationship. *British Journal of Sociology of Education*, 41(6), 794-806.
- Maynard, T., Taylor, C. M., Waldron, S., Rhys, M., Smith, R., Power, S., & Clement, J. (2013). *Evaluating the Foundation Phase: Policy Logic Model and Programme Theory* (No. 37). Welsh Government Social Research. <https://orca.cardiff.ac.uk/id/eprint/88812/1/130318-evaluating-foundation-phase-policy-logic-model-programme-theory-en.pdf>
- Ozga, J. (2009). Governing Education Through Data in England: From Regulation to Self-Evaluation. *Journal of Education Policy*, 24(2), 149-162. <https://doi.org/10.1080/02680930902733121>
- Power, S. (2016). The Politics of Education and the Misrecognition of Wales. *Oxford Review of Education*, 42(3), 285-298. <https://doi.org/10.1080/03054985.2016.1184871>
- Power, S. (2023) *The Precarious Future of Education Research in Wales*. *Research Intelligence*. Spring.
- Randma-Liiv, T. (2002). Small States and Bureaucracy: Challenges for Public Administration. *Trames*, 6(4), 374-389.

- Rees, G. & Taylor, C. (2014). *Is There a 'Crisis' in Welsh Education? A Review of the Evidence*. London: Honourable Society of Cymmrodorion.
- Rees, G. (2012). PISA and the Politics of Welsh Education (WISERD Policy Briefing PBS/007). <https://wiserd.ac.uk/wp-content/uploads/Policy-Review-PISA-and-the-Politics-of-Welsh-Education.pdf>
- Rees, G., & Power, S. (2007). Educational Research and the Restructuring of the State: The Impacts of Parliamentary Devolution in Wales. *European Educational Research Journal*, 6(1), 87-100. <https://doi.org/10.2304/eerj.2007.6.1.87>
- Rees, G., Taylor, C., Davies, O., Drinkwater, S., Evans, C., & Wright, C. (2015). *Access to Higher Education in Wales: A Report to the Higher Education Funding Council for Wales*. Cardiff: WISERD.
- Shepherd, J. (2014). *How to Achieve More Effective Services: The Evidence Ecosystem*. Cardiff: What Works Network, Cardiff University.
- Welsh Government (2020, January 28) *The Curriculum for Wales*. <https://hwb.gov.wales/curriculum-for-wales/introduction>
- Whitty, G. (2006). Education(al) Research and Education Policy Making: is Conflict Inevitable?. *British Educational Research Journal*, 32(2), 159-176. <https://doi.org/10.1080/01411920600568919>

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**АНОТАЦІЯ / ABSTRACT** [in Ukrainian]:**РОЗВИТОК ЕКОСИСТЕМИ ОСВІТНІХ ДОКАЗІВ У МАЛІЙ КРАЇНІ:  
УРОКИ З УЕЛЬСУ**

**Метою** статті є дослідження проблеми розвитку освітньої «екосистеми доказів» для Уельсу.

**Методологія.** Аналіз ґрунтується на поточних дослідженнях і дебатах із ключовими зацікавленими сторонами (стейкхолдерами) у галузі вищої освіти та урядом Уельсу, а також спирається на політичні дослідження інших малих країн.

**Результати.** Стверджується, що Уельс забезпечує ідеальне середовище для розвитку такої екосистеми через свій розмір, прихильності до принципів доказовості, політичний консенсус, співпрацю між політиками, дослідниками та освітянами. Те, що подібна екосистема ще не була реалізована, ілюструє обмеження ширших політичних та історичних обставин, які їх структурують, особливо в малих країнах.

**Висновки.** Розвідка завершується оглядом того, як можна вирішити деякі із зазначених проблем, щоб можна було реалізувати потенціал.

**КЛЮЧОВІ СЛОВА:** екосистема доказів, освітні дослідження, Уельс.

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