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Exchanging knowledge on knowledge exchange

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Evaluating academic engagement with UK legislatures

Exchanging knowledge on knowledge exchange

February 2020

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List of abbreviations

AM	Assembly Member (National Assembly for Wales)	**MSP**	Member of the Scottish Parliament
ARK	Access Research Knowledge	**NAW**	National Assembly for Wales
BAME	Black, Asian and Minority Ethnicity backgrounds	**NIA**	Northern Ireland Assembly
GIS	Geographic Information System	**POST**	Parliamentary Office of Science and Technology
HEI	Higher Education Institution	**RaISe**	Research and Information Service
IAA	Impact Acceleration Account	**REF**	Research Excellence Framework
IPRIN	Inter-Parliamentary Research and Information Network	**SP**	Scottish Parliament
KE	Knowledge Exchange	**SPAN**	Scottish Parliament Academia Network
KEU	Knowledge Exchange Unit (part of POST, UK Parliament)	**SPICe**	Scottish Parliament Information Centre
KEF	Knowledge Exchange Framework	**SPRE**	Scottish Policy Research Exchange
KESS	Knowledge Exchange Seminar Series	**UKP**	UK Parliament
MLA	Member of the Legislative Assembly (Northern Ireland Assembly)	**UKRI**	UK Research and Innovation
MP	Member of Parliament (UK Parliament)		

Throughout this report, we abbreviate knowledge exchange to 'KE'. We normally seek to refer to legislatures by their preferred names, i.e. the UK Parliament, the National Assembly for Wales, the Scottish Parliament, and the Northern Ireland Assembly. However, for brevity, we occasionally abbreviate to UKP, NAW, SP and NIA (respectively), usually in tables. Finally, we refer to 'Members', by which we mean elected representatives for the House of Commons and devolved legislatures, as well as members of the House of Lords. When we use the term 'officials', we refer to staff working for one of the four legislatures (unless stated otherwise).

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Professor Susan Hodgett, University of East Anglia and Sub Panel Chair of REF 2021 (Area Studies)

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Executive Summary

1. Project overview

This research emerged from consultation with the four UK legislatures: the Scottish Parliament, National Assembly for Wales, Northern Ireland Assembly and UK Parliament, in early 2019. In recent years, these legislatures have sought to increase and improve the work they do with universities and to encourage academics to increase and improve the contribution of their research to the work of legislatures. Through fora such as the Inter-Parliamentary Research and Information Network (IPRIN), they increasingly share experiences and best practice on the university-focused activities that they all undertake, and those that they individually develop and implement. Ultimately, such work aims to support evidence-informed scrutiny and law-making within each legislature, serving to maximise the public value of academic research findings in the UK.

Legislatures' aims resonate with those of UK universities, which face a combination of increasing pressure and incentives to demonstrate the contribution of publicly-funded research to improving society. Across the UK, the Research Excellence Framework, which is tied to considerable university funding allocations, has an explicit requirement for universities to demonstrate their impact on non-academic stakeholders and processes. Since 2019, the Knowledge Exchange Framework will also requires universities in England to report on how they exchange knowledge, including with policy audiences such as legislatures. As such, there is an incentive for universities to engage with KE. There is also an incentive for universities and research funders to understand the specific activities, and wider legislative context, which can best support KE with legislatures.

Against this backdrop, this Knowledge Exchange project was funded by the Economic and Social Research Council's Impact Acceleration Accounts at two universities, Birmingham and Edinburgh. It explores the challenges of defining KE, which are themselves connected to challenges of defining and measuring its effectiveness. It also identifies a range of KE activities between Higher Education Institutions (HEIs), researchers and universities, and legislatures, suggesting ways they might be measured and their effectiveness evaluated. It concludes that, given variations in practice and purpose of KE across the legislatures, a pragmatic approach to assessing effectiveness would focus on the activities, processes and commitments that underpin a healthy environment for KE, recognising that the specific components of this will be heavily affected by context and resource constraints.

2. Methodology

The project was undertaken by two academic researchers and a research assistant. We were supported by a Steering Group comprising: staff responsible for engaging with universities from across the UK's legislatures (four) and a representative of the Irish Parliament (Oireachtas) research service, which is developing collaborations with the four legislatures (all legislature staff are members of IPRIN and its Academic Engagement Group); a representative of Research England responsible primarily for KEF; two university KE/Impact officers; and a REF panel chair. The group co-developed the funding application, met virtually in June 2019, and again in Birmingham in October 2019 to discuss the draft report.

The research is based on interviews and documentary analysis. Between July and September 2019, we carried out 62 semi-structured interviews with participants across the four legislatures, both face-to-face and via phone/Skype. The key stakeholder groups were: Legislature officials who engage with academics; University KE/Impact professional services staff; Academic Fellows; and other Engaged Academics (e.g. attendees at training, or committee witnesses).

Alongside the interviews, we received documents from the four legislatures, which included (with variation across legislatures): strategies incorporating KE activities; evaluations of individual KE activities; synthesis reports on KE activities; externally commissioned evaluations; and data on engagement with social media and other online resources.

The data is summarised in this public report and in four shorter reports which are confidential to the individual legislatures.

3. Key Findings

3.1. The importance of context

Our research found significant variation in KE between the four UK legislatures, including how it is defined (see below). The time and resources devoted to undertaking and evaluating KE primarily reflect institutional size and history. The UK Parliament is the largest legislature, has a longer history of engaging with universities and research organisations, and has dedicated staff to promote, manage and evaluate KE activities. The Scottish Parliament and National Assembly for Wales are smaller, with a smaller proportion of staff time and less dedicated funding available for KE. The Northern Ireland Assembly has not been fully functioning for considerable time periods during the last two decades, including most recently between January 2017 and January 2020.[1] Nonetheless, data on activities previously undertaken were available. It is also notable that the Assembly is the only UK legislature which has never had an overarching KE or academic engagement strategy.

For the devolved legislatures, it is also important to recognise that, being (re-)established only 20 years ago, they place a strong emphasis on the need to educate academic researchers on the role of their institution, the differences between the devolved legislature and devolved government, and the powers and processes of legislatures. Furthermore, each legislature has specific institutional and historical legacies (such as Northern Ireland's unique post-conflict context) that mean initiatives have focused on education as much as knowledge exchange.

3.2. Definition and value of the term 'Knowledge Exchange'

It was clear early in the project that the term Knowledge Exchange is understood differently within and between legislature officials, university staff, and academic researchers. It is used primarily by the UK Parliament and university staff, with devolved legislatures preferring the term 'academic engagement'.

Many interviewees found it difficult to separate KE, as a process, from impact, as a set of outcomes arising from exchange. Our interviewees often characterised KE primarily as a pathway to 'impact' (often defined as making a difference to decision-making in a legislative context), and this shaped their suggestions for how KE activities might be measured and evaluated.

Despite conflation of terms, a broad theme emerging from our interviewees describes KE as primarily about flows of knowledge between academic researchers and legislatures. Within this, the role of legislature officials was characterised as being twofold: to develop and promote activities and pathways for exchange to occur; and to equip academics and university staff, and to a lesser extent legislature staff and Members, to undertake and benefit from KE. This may or may not lead to impact.

We therefore suggest the following definitions, used throughout our report:

- **Knowledge exchange** is a two-way process which brings together academic staff (including researchers, KE brokers and professional services staff), Members and officials to exchange their ideas and expertise for the benefit of legislative and research activities.
    - We believe that through a range of activities lots of things can be 'exchanged', including but not limited to: research findings, research questions, officials' assessments of a grant proposal, drafts of co-authored outputs, supporting letters for project funding applications, expertise on the functioning of legislatures, 'insider' knowledge of HEIs and/or legislatures, etc.
- **Academic engagement** is a process whereby legislatures seek to bring academic research into legislatures to improve law-making, scrutiny and representation, and seek to explain legislative processes to university-based audiences, including staff, academics and students.
- **Public engagement** is a process whereby legislatures seek to explain legislative processes to the wider public, and seek to facilitate meaningful engagement with legislatures by the public.

1. During the time when the Northern Ireland Assembly has not been fully functioning, Members of the Legislative Assembly worked in their constituency capacity (with one brief exception in October 2019). During the period when data was collected for this report, devolved governance was removed and decisions were made through direct rule from Westminster, until restoration of the Assembly in January 2020.

3.3. KE activities between Legislatures and Universities

Legislature staff wanted to increase KE with academic researchers, echoing observations from a UK Parliament report (Kenny et al., 2017) that academic research is less present in legislatures and less likely to 'cut through' than, for example, research from think tanks or civil society.

From the university side, the REF and KEF, particularly the former, were highlighted as key drivers for universities committing financial resources and staff time to KE. Again, this was often linked to an expectation that KE would lead to REF-defined impact, whether in support of a REF impact case study or as part of universities' wider commitments to using research for public and social good.

The interviews and documents revealed an extensive array of activities which can promote KE. The most common activities identified were: fellowships and internships with academic researchers (including research and taught students, as well as established academics); academic engagement with parliamentary committees; and seminars. See Appendix B for a full list of activities.

Across these activities our interviews revealed concerns from both legislature staff and academics about the diversity of academics participating. Questions arose on whether particular barriers may be dissuading under-represented groups, for example women, Black, Asian and Minority Ethnicity (BAME) academics, those with disabilities and those not within reasonable commuting distance from a legislature. We do not explore this in detail, due in part to limited data on characteristics of academics participating in formal KE activities. We nevertheless highlight where legislatures are seeking to address barriers to access and encourage them to collect data on which to evaluate their progress.

3.4 Defining successful KE

When asked to identify examples of successful KE, interviewee choices often highlighted:

- Timeliness;
- Relevance to the work of the legislature;
- Robustness and reliability of the research; and,
- Clarity in summarising complex and/or highly technical issues.

Academic research was highly valued when it allowed legislature staff to get up to speed on an issue quickly, and when it filled a capacity gap that staff could not address within their own time and resources.

Given the difficulties of drawing broader conclusions from across the range of very different examples of success cited in different legislative contexts, we decided to explore what common barriers to KE emerged from our interviews and extant studies, and consider whether and how legislatures' activities are tackling these. The barriers are discussed in Section 5 of the report and they comprise the following: research is not presented clearly, accessibly and appropriately for legislatures; research is not directly or obviously relevant to legislatures; credibility of the research is not easy to identify; academics lack knowledge about legislatures' roles, research needs and potential impact of research on their work; HEIs and legislatures fail to adequately and consistently recognise KE activities; and, limited resources are allocated for KE.

The assumption underpinning this approach is that increasing the amount of KE, particularly the number of academics involved, is desirable and that this will, in turn, lead to a greater chance of successful KE. Success here was defined by interviewees largely in terms of likelihood of achieving impact. Nevertheless, we believe our approach also supports a wider definition of successful KE, one that values not only the transfer of pre-packaged research, but also the exchange of knowledge on organisational culture and how knowledge is produced, travels and is consumed by different actors in a wider knowledge ecosystem (e.g. legislature staff, Members, universities, grant funders).

We find that, although legislatures cannot tackle these barriers alone, they can – and for the most part do – contribute to overcoming them. Through training, online resources, fellowships, seminars and structured engagements with university KE staff, they are supporting academics to produce knowledge tailored to influence the work of legislatures. Specifically, KE activities seek to ensure that:

- Research is clearly presented;
- The relevance to – and implications for – the work of legislatures in particular is made explicit; and,
- Researchers appropriately demonstrate their credibility, to minimise perceptions of risk.

Two of the barriers we highlight – inadequate recognition of KE activity and resource limitations – primarily require the attention and action of universities and funding bodies. Nevertheless, legislatures can play a positive role. On the first of these, we suggest that legislatures could do more to identify ways to track KE activities and processes of academic-legislative engagement. On the latter, legislatures do provide some limited funding to support academics to participate in KE. Nevertheless, the reliance on universities and UKRI to fund fellowships and internships, which were often cited as examples of successful KE by legislature officials, academics and university staff, is a risk to sustainable KE.

3.5. Measurement and evaluation of KE

We find that legislatures are collecting data on KE primarily for internal processes of monitoring and evaluation. These allow them to track changes in the number, role and characteristics of participants in, for example, seminars, training events and fellowship programmes. Evaluation forms also allow tracking of satisfaction with the activity from both academics and legislature staff.

The data collected is so different across the four legislatures that it was often not possible to make meaningful comparisons. Evaluating success of individual activities requires that their aims be clearly articulated and that data be collected on appropriate indicators. We make suggestions on potential indicators in Section 5, but caution that gathering such data is, in some cases, resource intensive for arguably little reward.

Comparing effectiveness of different KE activities, within and across legislatures, would require agreement on the overall aims of KE activities. This could be achieved through a statement of strategy and vision, for each legislature (and/or collectively), defining clear indicators against which the relative contribution of different activities could be measured. This is, again, likely to be resource intensive and, in the devolved legislatures, would overlap with strategies for academic engagement.

Discussions with university staff and academics about what might be usefully measured and counted to evidence KE ranged from number of academics attending POST training or giving evidence to committees, to the hours spent on a fellowship or the consultancy income derived from legislatures. With the exception of measuring consultancy income, which we believe provides perverse and damaging incentives that could undermine KE, all of these could be part of a useful picture of the health of the KE environment. In Section 6, we list potential indicators that help to identify an engaged legislature and an engaged university.

4. Key messages

Based on our findings, we make a series of recommendations, summarised briefly below. The rationale for each of these is explained in the full report. We recommend that:

1	**Legislatures develop a shared definition for 'knowledge exchange', and distinguish it clearly from academic engagement, public engagement, 'impact', and other related terms.**
2	**Legislatures draw on the findings of this report to inform collaborative discussions around engagement and activities with and for stakeholders such as Research England and research funders.**
3	**Legislatures experiment with ways to build awareness of university research cultures and environments through, for example, outward secondments, short periods shadowing KE professionals and roundtable discussions on agreed themes.**
4	**Legislatures keep an audit of their activities by parliamentary session, explaining how they contribute to their overall KE aims. These should be kept in the public domain.**
5	**Legislatures seek agreement on definitions of key terms to demystify processes for academic audiences.**
6	**Legislatures, in collaboration with HEIs, draft, develop and publicise a list of ways in which knowledge exchange can be clearly acknowledged to academic staff and researchers.**
7	**Legislatures, in collaboration with HEIs, develop clear messages for internal and external audiences about the benefits of KE activities.**
8	**Legislatures and HEIs increase their funding and resources available to fully and holistically embed KE activities across relevant business areas.**
9	**Legislatures adopt changes to their academic fellowship programmes to improve fit between academic and legislatures, including an interview stage and writing sample at recruitment stage, and seeking to engage Members more in the process (e.g. through identifying directed call topics, and/or taking part in induction) to improve buy-in.**
10	**Legislatures gather systematic data on KE activities in order to evaluate this more efficiently and allow for relevant inter-parliamentary comparison, including through standard exit interviews and end-of-fellowship forms, tracking indicators, standardised evaluation forms at events, and monitoring diversity and equality.**

To achieve these recommendations will require engagement between HEIs, legislatures and research funders.

1. Introduction

This report explores how legislatures engage with higher education institutions (HEIs) and how HEIs engage with legislatures. The link between these institutions is important because legislatures seek to use academic research from HEIs as part of their work. This work includes supporting Members to represent the views of their constituents, scrutinising legislation as it passes through the legislatures, and holding policy-makers to account in the chamber or through committees. Our focus is on the UK's four legislatures: the UK Parliament, the National Assembly for Wales, the Scottish Parliament and the Northern Ireland Assembly.

1.1. Context

Each of the UK's legislatures has a unique institutional context and history, with academic engagement/knowledge exchange activities taking place in different ways, under different circumstances and for different periods of time. The UK Parliament has a significant amount of resources for these activities relative to the devolved legislatures, as well as a longer history of undertaking them. It has a number of organisations that support Members, principally the Parliamentary Office of Science and Technology, in which the Knowledge Exchange Unit (KE Unit) is situated, and the House of Commons and House of Lords libraries. They serve 650 MPs in the House of Commons and approximately 800 members of the House of Lords. In terms of scale and institutional context, there are underlying differences between the UK Parliament and devolved legislatures, with different implications for how they engage with universities (including positives and challenges), which must be taken into account in this project.

The devolved legislatures in Belfast, Cardiff and Edinburgh emerged out of debates in the mid- to late 1990s, which not only concerned the devolution of power and to bring more participatory forms of democracy into decision-making, but also to improve overall representation for the nations that make up the United Kingdom. In the Scottish Parliament, the founding principles included accountability, open participation, power sharing and equal opportunities. It is the second-largest legislature with 129 members, and supported by the Scottish Parliament Information Centre (SPICe). In the Northern Ireland Assembly, power-sharing between unionists and nationalists is central to implementing devolved governance and building peace following years of conflict. It is made up of 90 members, making it the third-largest. Since its establishment in 1998, the Assembly has not been fully functional on a number of occasions, the most recent of which dates between January 2017 to January 2020.[2] The Assembly is supported by the Research and Information Service (RaISe). Finally, while the National Assembly for Wales was narrowly established in 1999 with the support of 50.3% of Welsh voters following a referendum, by 2011, 63.5% of Welsh voters supported full law-making powers for the Assembly. It is made up of 60 members, making it the smallest legislature, and is also the only one of the four legislatures to have two official languages (Welsh and English). The Assembly is supported by Senedd Research.

The political and institutional histories that preceded devolution have created important legacies for the wider legislative arrangements, though engagement – with the public, wider stakeholders, and researchers – is crucial to all of them. Indeed, since devolution, trust in politics and political institutions by the UK public has continued to decline (Hansard Society, 2019). In response, devolved legislatures and the UK Parliament have sought to increase political education and outreach to engage more with the public. They have also sought to increase their engagement with academics as a specific group of stakeholders, seeing academic research as a way to increase the quality of legislatures' work in carrying out their representative, legislative and scrutiny functions. Simultaneously, changes in HE policy through, in particular, the expansion of the Research Excellence Framework in 2014 and creation of the Knowledge Exchange Framework in 2019 (for England only at present) have encouraged academic researchers to seek to engage with legislatures.

1.2. Aims of this report

This project emerged from consultation with the four UK legislatures. In scoping discussions, representatives from the legislatures articulated a desire to share experiences, to continue to learn from each other's knowledge exchange activities, and to explore the effectiveness of different modes of knowledge exchange with academic researchers and institutions.

Evaluations of specific KE activities have been undertaken at each legislature to a lesser or greater extent, in some cases for over a decade. The extent of evaluation undertaken broadly reflects the relative size of the legislatures. The UK Parliament was able to provide considerable documents and previous analyses. It has not only carried out knowledge exchange activities for a longer period than the other legislatures, but also has more resources at its disposal to do so, including external funding from the ESRC for the Social Sciences section. Meanwhile, the devolved legislatures have comparatively fewer resources available and work in the area has been seen by some as an 'add-on', but is now generally embedded in budgets, structures and job roles. This embedding has become more prevalent through the Brexit process. In addition, they have been running certain knowledge exchange activities for a shorter period of time. This means that there are fewer documents available on which to base an evaluation of effectiveness of these activities individually or as a whole.

This project drew on previous evaluations that have been shared with us, in order to drive forward and better understand the different knowledge exchange activities at the UK's four

2. During the time when the Northern Ireland Assembly has not been fully functioning, Members of the Legislative Assembly worked in their constituency capacity (with one brief exception in October 2019). During the period when data was collected for this report, devolved governance was removed and decisions were made through direct rule from Westminster, until restoration of the Assembly in January 2020.

legislatures. This was supplemented with primary data collected by two academic researchers, Dr Danielle Beswick (University of Birmingham) and Dr Marc Geddes (University of Edinburgh), supported by a research assistant (Dr Cleo Davies, University of Edinburgh), and funded by Economic and Social Research Council Impact Acceleration Accounts at both universities[3]. The project took place between June 2019 and February 2020. It had five main aims:

i. Synthesise existing evaluation data, taking a cross-legislature perspective;

ii. Conduct interviews with key legislature-based and external stakeholders to gather views on activity effectiveness;

iii. Identify and share examples of good practice;

iv. Make strategic recommendations based on consideration of existing activities' effectiveness; and,

v. Advise on the feasibility of developing metrics to capture and measure such activities and, if possible, what those metrics could be.

This report primarily focuses on providing an overarching account of what the legislatures are doing and how these activities are being, and could be, measured and their effectiveness evaluated.

1.3. Data collection

Our project is based on interviews and documentary analysis.

Documents

In the case of the UK Parliament, officials have conducted evaluations of outreach events and of parliamentary fellowships, collected survey data and feedback questionnaires from ad hoc events, and sought to evaluate the work of POST itself (which led to a 2017 landmark report – Kenny et al., 2017). As shown in the appendix, POST were able to share survey data on PhD fellows' experiences, evaluations from their academic fellowship programme, analytics from online data (e.g. website visit statistics and Twitter reach), data collated by the Social Science section for the ESRC through ResearchFish[4], evaluations from training workshops dating back to 2014 and various other feedback data on events and activities.

Overall, because the UK Parliament has more resources at its disposal, it was able to provide significantly more data than the other legislatures. Nevertheless, some documents were available and for the devolved legislatures we obtained the following:

- The Scottish Parliament provided a two-page document that sought to evaluate their parliamentary fellowship scheme during its pilot phase (unpublished internal document). We also received strategy documents from officials which put individual activities into broader context and provided insight on overall aims.
- The Northern Ireland Assembly's KE programme centres on its seminar series, which it evaluates on an annual basis through feedback questionnaires to participants in events. We were able to access evaluations covering 2012 to 2018.
- The National Assembly for Wales has conducted a formal evaluation of its fellowship programme and seminar series (unpublished internal document), and was also able to provide an academic engagement strategy document which gave some insight into the rationale for KE activities with universities.

We list the documents that we received in Appendix A.

Interviews

Between July and September 2019, we carried out 62 semi-structured interviews. These were spread fairly evenly across the four legislatures, as follows: National Assembly for Wales (14); UK Parliament (18); Scottish Parliament (17); and Northern Ireland Assembly (13). Within the overall pool of interviewees, we targeted key stakeholder groups involved in KE between academics and legislatures. The breakdown of interviewees across these categories can be found in Table 1.1.

3. Award numbers ES/T501839/1 (University of Birmingham) and ES/T50189X/1 (University of Edinburgh).
4. ResearchFish is an online platform that is used to collect data on research activities undertaken with UK research council funding and to log their impacts.

Table 1.1: Interviews

Category	No.
Legislature knowledge exchange staff (includes research, library, and committee staff)	**29**
University knowledge exchange staff (includes impact and policy engagement staff)	**8**
Academic Fellows (includes current and recently completed fellowship holders)	**8**
Engaged academics (includes those who attended seminars, training events)	**12**
Elected representatives	**2**
Others	**3**

We undertook interviews during visits to the legislatures and also via email and phone/Skype. We produced a consent form explaining the purpose of the interviews and the ways that the data would be used (see Appendix C). All of our interviewees gave consent to take part, either completing written forms or verbally agreeing during phone/Skype interviews. Most of the interviews were recorded and transcribed for analysis, which involved identifying key themes on which this report is based, and relating responses to key project aims. Alongside interviews, this report draws on documents provided by the legislatures which offered some insight into the KE activities they engaged in and how they have been evaluated. Finally, we also draw on advice and feedback from the Steering Group, which was made up of representatives from each legislature, HEIs, Research England, the Houses of the Oireachtas and a REF sub-panel chair.

There are some clear limitations to the project. First, the time period for data collection fell over the summer, which made it difficult to access some interviewees. In particular, only two elected representatives responded to our interview requests. As such, we are not able to draw conclusions as to Members' views of KE in this study. Second, given the short time frame and the focus of this project, we were also unable to identify and gather data from academics who had not engaged with legislatures. This means that we cannot make wider conclusions about how and why certain activities may reach some academics and not others. Third, our interviews focused on the structure, nature and organisation of activities, and on good practice examples. We did not seek to gain a systematic or generalisable account of the effectiveness of KE activities and especially not in comparison to each legislature. Fourth, there were considerable discrepancies in the volume and type of written documentation between the four legislatures. While this means that we cannot offer direct comparisons, the data does give us important insights into the priorities and ways of working for each legislature. So, there are some clear limitations about the conclusions that we can reach in this report. That said, this report does offer the first comparative account of KE activities across the UK.

1.4. Structure of this report

The purpose of this report is to consider KE activities that cut across all four legislatures, to identify areas where legislatures can share good practice and lessons from each other, and to advise on ways to evaluate KE activities in the future. Alongside this thematic report, we provide shorter, internal briefings for each legislature based on the data that we have received from them.

This report is structured into five further sections. In the next, second, section of this report, we summarise the key themes in defining KE. In the third section, we explore what KE looks like and what activities it includes. In the fourth section, we turn to the incentives and motivations for undertaking KE from both academic and legislative perspectives. In the fifth section we examine the barriers to successful KE, and how legislatures can track their achievements in tackling these. In the sixth and final section, we offer our conclusions and restate the recommendations that are given in the executive summary, above.

2. What is Knowledge Exchange?

In this section, we focus on identifying how our interviewees defined and interpreted the idea of 'knowledge exchange'. This section is important because different interpretations of KE affect priorities, behaviour and evaluation of KE. We argue that, while KE can be defined reasonably easily in the abstract, in practice there is no agreed definition between and perhaps even within legislatures. This was brought out in interviews as well as subsequent discussions with our Steering Group about sharing good practice. In particular, we focus on: (i) different definitions of KE; (ii) the differences between knowledge exchange and academic engagement; and, (iii) the flow of information between academics and legislatures.

2.1. Defining KE

Based on our interviews, we found that a common view emerged in which KE was characterised as a bilateral flow of both information and ideas. This could be one-off or sustained over time, formal or informal. The examples of KE we identified from across the interviews ranged from the simple transfer of pre-packaged information between partners via specific KE pathways, such as committees publishing calls for evidence or academics sending research findings to cross-party groups, to deeper learning about the context in which knowledge within each setting might inform how knowledge is produced in the other.

Many of our interviewees said that KE is, or at least should ideally be, a two-way process between legislatures and universities. Officials responsible for engagement with academics tended to present KE as something that was happening throughout parliamentary work, not only facilitated by encounters that officials brokered and activities they organised, but also taking place independently through personal connections between academics and individual officials from committees or research services (e.g. Interview, Official 19). For one official, KE was about building capacity of academics and legislatures to better understand one another (Interview, Official 11). It was about processes. Another emphasised the creation of structures and processes to permit two-way flows of information (Interview, Official 14). Similarly, a third interviewee described KE as an exchange of information and practice between two organisations (Interview, Official 15). Another characterised KE as a normative term, describing their function within this process as that of a two-way door between academics and Parliament, taking out information requirements from Parliament and also bringing in academics who can address them, for example acting by as committee witnesses or report reviewers (Interview, Official 17).

In the abstract, therefore, all interviewees referred to KE in a process-based way. Many of our interviewees, across all four groups, spontaneously connected KE with 'impact'. For example, one interviewee suggested that 'impact is when Members do or don't do something as a result of KE; ultimate impact is about getting better outcomes for society' (Interview, Official 11). Another suggested that KE is a path, whereby 'you've got to do knowledge exchange if you want to stand a chance of having impact' (Interview, Official 12). However, some of our interviewees went on to use the two terms interchangeably, which suggests that it is difficult to disentangle processes from desired outcomes. Indeed, one interviewee said that the two ideas are 'inseparable' (Interview, Engaged Academic 1). This has implications for how we understand the purpose of KE and how success of KE might be understood and evaluated (which we explore in detail in later sections).

2.2 Exchange and engagement

The UK Parliament has a Knowledge Exchange Unit, which exists to 'facilitate and strengthen' the exchange of information and expertise between researchers and the UK Parliament. Indeed, one interviewee noted that 'KE is what Sarah [Foxen, one of the KE Unit managers] does' (Interview, Official 13). Another UK Parliament official emphasised that KE not only enhances academic understanding of legislatures, but also offers insights for officials into the academic environment: 'we work with academics to get an insight into the timelines, processes and barriers they face' (Interview, Official 15).

For the devolved legislatures (where the Knowledge Exchange Framework is not currently being introduced), 'knowledge exchange' was not a frequently-used term. For example, the Scottish Parliament and National Assembly for Wales both have 'academic engagement' strategies. In the Northern Ireland Assembly, before political developments overtook the legislature, the lack of an academic engagement plan was identified during discussion on the Assembly's existing Public Engagement Strategy. A Scottish Parliament official explained that this is a deliberate strategy; 'academic engagement' is more familiar for Members and officials (Interview, Official 22), and this explains the preference for this term. Furthermore, some see academic engagement as part of wider public engagement strategies, of which engagements with HEIs is only one part. This is, at least in part, a consequence of limited resources available for these activities at the devolved legislatures compared to the UK Parliament. In the UK Parliament, there are enough resources to support different types of initiative; in devolved legislatures, there is less funding available to create separate strategies to engage with academics, businesses, and other key stakeholder groups.

This suggests a rather complex picture of the relationship between the terms 'knowledge exchange', 'academic engagement' and 'public engagement'. Interviewees' emphasis on different terms has clear repercussions. For example, the term 'academic engagement' by legislatures indicates an outward-facing role and where the key benefits of activities are in bringing expertise into the legislature in the right format and at the right time. Meanwhile, knowledge exchange emphasises a greater two-way flow of

information, whereby HEIs benefit from engaging with legislatures (e.g. written support for grant proposals, feedback on drafts of academic outputs or training/capacity-building for academics).

This therefore raises some questions about what types of activity are included and excluded when using the different terms. Specific activities are discussed further in Section 3.

2.3. Information flows between legislatures and universities

Perspectives on 'academic engagement' and 'knowledge exchange' led to different interpretations about the volume and direction of travel for knowledge between academics and universities. In the case of fellowships (both PhD students and academic), some interviewees suggested that KE was in both directions whereby, in return for research expertise, legislature research services gave academics the opportunity to be in front of Members and officials to try and influence them (e.g. Interview, Official 6; Interview, Official 25). Others, however, felt that the relationship with academics was too extractive, suggesting that 'in reality it's one way, we take stuff [knowledge] from them [academics]' (Interview, Official 3). Similarly, another official said that the bulk of knowledge flows from universities to legislatures: 'it's not equal in both directions … what we're doing is mainly bringing knowledge into Parliament' (Interview, Official 12).

Academics shared the view that knowledge primarily flows one way. One told us that, 'in my experience it is not exchange, it is transfer … legislatures only think about how academics can help them achieve their strategies' (Interview, Engaged Academic 1). She suggested that the Knowledge Exchange Framework (KEF) may help shift the culture within universities around engagement with legislatures, and that this could benefit academics by valuing the process of exchange in its own right, separately to consideration of whether it created tangible impacts. However, academics did not always characterise the one-way flow of knowledge in negative terms. One fellow felt strongly that KE was an accurate description of his experience: 'I bring my expertise to the table, and I learn a lot about British legislatures as a result, including the information they are interested in and how best to present it' (Interview, Academic Fellow 7).

One academic expressed the view that KE should be bi-directional, but raised the question: what comes back to academic researchers and universities? She felt this should include input into the research questions that legislatures are asking, shaping not only the questions asked but also the way they are asked, and of whom (Interview, Academic Fellow 4). In the UK context, this echoes a House of Commons Liaison Committee report, which has suggested that select committees should publish 'Areas of Interest' in order to 'improve how they access, commission and use research evidence' (House of Commons Liaison Committee, 2019, para 26). Other interviewees have expressed a desire for officials in legislatures to better understand the constraints of academics. For example, one interviewee noted that 'KE suggests it is two-way, but legislatures don't understand academic funding and support' (Interview, Academic Fellow 1).

2.4. Conclusions and recommendations

Based on our review of documents produced by the four legislatures and the interview data, we identify two key conclusions and recommendations.

First, **we conclude that there is no single, clear definition of 'knowledge exchange' that is currently being used by legislatures and universities.** As a result, it is sometimes not clear what activities by academics and by officials should be included or excluded. There is also an overlap with the term 'academic engagement', though we note that the two terms emphasise slightly different things. So, for the purposes of this report, we use the following definitions in a legislative context:

- **Knowledge exchange** is a two-way process which brings together academic staff (including researchers, KE brokers and professional services staff), Members and officials to exchange their ideas and expertise for the benefit of legislative and research activities.
    - We believe that through a range of activities lots of things can be 'exchanged', including but not limited to: research findings, research questions, officials' assessments of a grant proposal, drafts of co-authored outputs, supporting letters for project funding applications, expertise on the functioning of legislatures, 'insider' knowledge of HEIs and/or legislatures.
- **Academic engagement** is a process whereby legislatures seek to bring academic research into legislatures to improve law-making, scrutiny and representation, and seek to explain legislative processes to university-based audiences, including staff, academics and students.
- **Public engagement** is a process whereby legislatures seek to explain legislative processes to the wider public, and seek to facilitate meaningful engagement with legislatures by the public.

These definitions emphasise slightly different processes between universities, legislatures and the wider public, and demonstrate the close linkage between the three processes.

In distinguishing between three processes, we recommend that the UK's four legislatures also develop shared definitions, particularly of knowledge exchange and academic engagement, but also the relationship of those concepts to public engagement and to notions such as 'impact'. Our definitions above offer a starting point. Connected to this, in order to embed KE in legislatures and promote sustainable KE, these activities should be included in relevant corporate governance documents and budgets in their own right.

Second, and despite the complexities around the terminology, **there is a shared view that legislatures and universities can and do work together to create opportunities, channels and processes for academics, officials and Members to interact.** These are often considered necessary if academic research is to effectively inform the work of legislatures. Interaction builds trust and personal connections, which underpin many of the examples of KE that our interviewees offered as examples of success (see Section 5). Additionally, though some interviewees felt strongly that KE should be valued in its own right, regardless of demonstrable impacts, others focused more on concrete outputs as indicators of successful KE. Reflecting this latter view, there is a strong call for legislature-university links to focus on how academics can better produce and package research findings for the benefit of legislatures. Comparatively, less attention is focused on how officials might better understand the environment, constraints and incentives which govern academics in their home (university) environments. **Recognising the extensive opportunities legislatures have developed for academics to learn about research use and work culture within legislatures, we recommend that legislatures experiment with ways to build their awareness of university research cultures and environments through, for example, outward secondments and short periods shadowing KE professionals or supporting information events for officials to deepen their understanding of academic research culture and environments.**

3. What does knowledge exchange look like?

In the previous section, we have established that legislatures define and use the term KE to different degrees and in different ways. This has led to a similar set of diverse KE activities, along with variation in resources and structure. Activities are sometimes structured and on-demand or may be characterised by one-off arrangements between HEIs and intermediaries. We provide a summary of this activity in a table in Appendix B. In this section, we summarise this table through four themes of activity: fellowships and internships, research events, outreach activities and networking, and commissioned/invited expertise. In all cases, legislatures have supported different types of activities over time and at different scales. This section arises out of our analysis of documentation, interviews and consultation with our Steering Group. We acknowledge that legislatures may structure these activities differently and/or include or exclude different activities within these categories.

3.1. Fellowships and internships

All legislatures offer some kind of fellowship or internship, though there are considerable differences between them. The UK Parliament arguably has the most extensive programme of this kind, through both its own fellowship scheme (e.g. POST Academic Fellowship scheme) and collaborations with other organisations (e.g. Wellcome Trust). The Scottish Parliament and National Assembly for Wales similarly host their own academic fellowship schemes, and also collaborate with universities to host collaborative schemes. These schemes are aimed at academic researchers who hold a PhD and are employed by a UK university.

In addition to schemes led by legislatures, there is also a UK Research and Innovation (UKRI) Internship scheme that allows PhD students to be placed at one of the four legislatures. It is a national and competitive scheme open to scholarship-funded PhD students. Some legislatures have participated in this scheme for a long time (e.g. since 2006 for the National Assembly for Wales and at least as long for the UK Parliament), others have only recently begun to participate (e.g. 2018-19 for the Northern Ireland Assembly).

We note that legislatures use different terms for similar activities. For example, all legislatures have what they variously describe as ‘fellowships’, ‘internships’, or ‘studentships’. For the purposes of this report, we refer to ‘academic fellowships’ (for post-PhD academics), ‘PhD fellowships’ (for PhD students; except in the case of UKRI Policy Internships, which have a specific label), and ‘student fellowships’ (for non-PhD students). From an academic employability perspective, the term ‘fellowship’ is likely to be viewed more positively than ‘internship’, and this is something on which legislatures could canvas current and former PhD interns/fellows. In any case, we suggest that legislatures may wish to standardise terms where possible.

3.2. Research events

While fellowships and internships offer the most visible, structured and sustained engagement between academic researchers and legislatures, Appendix B demonstrates a variety of further activity through events hosted by, or organised in conjunction with, legislatures. The Northern Ireland Assembly offers a Knowledge Exchange Seminar Series (KESS), though this has been suspended in recent years owing to Northern Ireland’s political situation, as mentioned previously. The annual series is not only a form of KE between academics and the Assembly, but also offers public engagement given the public nature of KESS. It formally partners the Assembly with local universities, providing a unique forum in which academics, the Assembly – in particular its statutory committee system – the wider public sector and the public engage in knowledge exchange. The KESS model is enshrined in a signed Memorandum of Understanding between the Assembly and local university partners (for a detailed overview of KESS, see Shortall et al., 2019). A similar series was piloted by the National Assembly for Wales, successfully attracting public participants and eliciting positive feedback, but it was not renewed (Interview, Official 1); meanwhile, the Scottish Parliament has introduced a range of SPICe seminars as well as Brexit breakfast seminars. The UK Parliament has a series, too, but these are on-demand. The differences between the legislatures derive in part from availability and allocation of resources. The National Assembly for Wales has limited resources and the seminar series was judged to have had limited impact on its target audience, Assembly Members and their staff, despite the involvement of some Members in chairing seminars. The Scottish Parliament, meanwhile, has invested more heavily in these events. The Northern Ireland Assembly has formally linked KE to committee work through the KESS model, e.g. the relevant committee chair makes the opening remarks for the seminar in her or his committee capacity, which includes linking the academics’ presentations to the committee business/portfolio.

In addition to structured research sessions over time, all legislatures offer on-demand or one-off events, with the UK Parliament offering the most extensive range of seminars and events for diverse audiences within the legislature. For Appendix B, we differentiate between (i) structured events, e.g. KESS, which are organised as an annual series of events in advance on topics relevant to devolved governance in Northern Ireland, as decided by the KESS panel (consisting of Assembly and university partner representation) following an open bid for academic submissions; and (ii) on-demand events that meet the knowledge needs of different audiences as they arise. In addition to seminars, all legislatures undertake different forms of briefing for Members (and/or their staff) and officials for different parliamentary work, often in private but also in public.

3.3. Outreach activities and networking

We use the term 'outreach' to identify activities that seek to give information about legislatures to academic audiences and provide the opportunity for academic audiences to engage with legislatures. All legislatures do this to some degree. In the case of the UK Parliament, POST's KE Unit offers a series of regional training workshops to which other legislatures contribute if the event is held in a nation with a devolved institution. These sessions are a good example of cross-legislature collaboration and include information about legislatures, how and why to engage, how to identify legislatures' interests, and tips for communication. Devolved legislatures, meanwhile, also hold their own sessions, though these are more often likely to be in response to university requests. In the case of KESS, all participating researchers are expected to attend a training event prior to their seminar presentation. Similarly, some legislatures offer training for Members (and/or their staff) and officials in order to better engage with academic research (e.g. UK Parliament and Northern Ireland Assembly). This is predominantly on-demand, though the UK Parliament is currently developing a qualification on effective scrutiny, including components on using research, and has worked with City University, London, on a postgraduate certificate in Advising MPs on Parliamentary Procedure. As most of these sorts of training activities are internal in nature, we do not include them here as a form of KE.

Aside from training, legislatures offer different levels of involvement with university life:

- Teaching: aside from the aforementioned accredited course at City, the UK Parliament delivers a Parliamentary Studies course in conjunction with 25 HEIs, which is arguably the highest profile form of university-legislative engagement. The Northern Ireland Assembly also offered an MA in Legislative Studies and Practice with Queen's University Belfast, though this is currently suspended due to the political situation.
- Academic events: all legislatures give officials the opportunity to attend academic conferences and workshops with limited funding available. This will often depend on the legislature's business at any given time and the urgency with which an official's presence is required at their legislature.
- Academic projects and networks: officials may sit on steering groups or boards for HEIs and research projects, though this is largely ad hoc with no central records held at any legislature. Examples of this include the Access Research Knowledge (ARK) hub in Northern Ireland or the Scottish Policy Research Exchange (SPRE) in Scotland.

Other networks also exist. In the case of Scotland, SPICe coordinates a formal network of KE professionals with Scottish universities as part of a Scottish Parliament Academia Network (SPAN) and Ask Academia. The former includes a six-monthly meeting between officials and KE professionals to identify key areas of interest, while Ask Academia is a mailing list that distributes research/information requests (see Section 3.4 below). POST's KE Unit, in the UK Parliament, also holds a database on knowledge mobilisers. Finally, the KESS at the Northern Ireland Assembly brings representatives from universities and the legislature together at the KESS Panel. Otherwise there is no formally created infrastructure at legislatures to coordinate KE professionals, though we note that social media, particularly via the Twitter accounts of research services and others such as committees, also play a role in disseminating research/engagement opportunities.

3.4. Commissioned/invited expertise

Through research services, staff from across the four legislatures identify committee advisers and approach academics to provide evidence to committees in their respective legislatures. This activity is pervasive, and might include spontaneous phone calls for advice from academics, formal emailed invitations, and connections fostered as a result of seminar attendance, among others. This type of activity is difficult to capture, but we have sought to identify it using a number of activities in Appendix B. We do not seek to comprehensively evaluate the depth or breadth of such activity, as we recognise that such contacts are often not formally recorded anywhere and they involve a much wider range of staff than we have been able to access for this research.

In addition to largely individual and/or ad hoc activities, the Scottish Parliament introduced a SPICe Research Brexit Framework Agreement in 2017, which now includes a pool of around 30 academics. At short notice, they may be asked to provide short research papers, peer review of SPICe analysis or blog posts. In an example of learning across legislatures, this was also adopted by the National Assembly for Wales through a Brexit Academic Framework Agreement in 2018. These agreements allow work to be commissioned at short notice for which a fixed daily rate is paid. While the Northern Ireland Assembly has Memoranda of Understanding with universities, these are limited to KESS, and the UK Parliament does not currently have an equivalent in place.

3.5. Conclusions and recommendations

Appendix B identifies a significant range of activities between all four legislatures, some of which have developed independently from one another while others are the result of sharing good practice. **The range of activities at each legislature demonstrates a clear commitment by the Northern Ireland Assembly, Scottish Parliament, National Assembly for Wales and UK Parliament to knowledge exchange with academics, irrespective of the differences between the programmes offered, events that take place or resources at their disposal.**

Our focus has been on structured and formal activities, i.e. those that may be easily identified. Alongside such activities come pivotal informal relationships that may exist between individual officials and researchers, which we do not capture here. It would be very difficult to identify, capture and track such informal relationships by any organisation.

In undertaking this audit of activities, we collated material from a wide range of documents and online sources and also benefitted from feedback from officials, who identified further activities that were not easy to identify or find details on. We believe that this may be because legislatures do not consistently keep track of knowledge exchange, partly owing to resource constraints. **We recommend that legislatures produce an overview of their activities annually or on a sessional basis, explaining how they contribute to overall KE aims. We believe these should be made public to demonstrate legislatures' commitment to principles of openness and transparency.**

Finally, we note that some legislatures are conducting similar, if not the same, activities with different names. In some cases, this may be unavoidable. However, it can lead to confusion for academics as well as for officials and prove a barrier to sharing experience across legislatures. **We recommend that legislatures share not only good practice – as they already do – but also that they seek agreement for terms if possible.** Earlier, we noted the example of fellowships, but this could also include committee adviser roles, which in some legislatures have the title 'special advisers', whereas in others this would be considered too close to the term which is for government advisers.

4. Why knowledge exchange? Incentives, motivations and benefits

Knowledge exchange is a voluntary activity for both universities, as research institutions, and legislatures, as political institutions. Nonetheless, knowledge exchange is an increasingly important part of the landscape for universities given HE policy incentives around the Research Excellence Framework (and KEF in England), which places significant emphasis on non-academic impact, as well as for legislatures seeking to better support Members. There are also strong normative expectations that political decisions are informed by 'evidence' and that universities have civic duties to contribute to this given their reliance on public funds. To examine the importance of KE, this section directly explores the insights from interviewees into why they engage in KE. To do so, we focus on the perceived potential benefits of interaction and exchange.

4.1. What is the added value of KE for legislatures?

At a broad level, academic research is sought in order to ensure that the legislature can carry out its duties effectively by drawing on 'good evidence-based information' that is 'robust' (Interview, Official 19). Good academic engagement is often described as allowing 'unbiased' research to enter a legislature (Interview, Official 17), with interviewees suggesting that academic research is based on 'rigorous ethically tested methodology' that is 'scientifically robust' (Interview, Official 7). This reputation is very important to universities because, as one university official explained, 'their ultimate USP [unique selling point] is about the quality of their research' (Interview, University/KE Professional 7). They are 'curiosity-driven', meaning that they do not consistently seek to lobby for a particular policy or position in the way that other organisations producing research, such as think tanks, might. The qualities associated with academic research make it 'safe' (Interview, Official 27), because it has cleared ethical review, often also academic peer review, and is considered robust. Even if there are drawbacks and barriers to success (see Section 5), these are the potential benefits.

When we questioned officials about the added value of knowledge exchange with academics, one overarching theme which emerges regularly for legislatures is about capacity building. One official explains that academic research 'strengthens the work that we do' (Interview, Official 11). Academic research is important for enhancing skills and knowledge of officials, especially given that most legislatures have comparatively far fewer resources than their executive counterparts in government and the civil service. Indeed, it was also noted by the devolved legislatures that they have limited resources in comparison with the UK Parliament. For example, an official from the National Assembly for Wales said that, 'I don't have the same level of expertise as an academic completely working in that area' and so a fellow could 'help expand the committee's understanding [and] depth of knowledge that I'm not able to give' (Interview, Official 25). In the Northern Ireland Assembly, an official similarly explained that KE activities help to build capacity among parliamentary staff, including across RaISe and committees (Interview, Official 18). It has been particularly important in the Scottish Parliament, where one senior official explained that the rapid expansion of devolved powers since 2014 in conjunction with the current policy salience of Brexit and immigration left a gap of knowledge for officials. Academic fellows were able to help resolve this issue, and in a cost-effective manner (Interview, Official 28; Interview, Academic Fellow 7). Staff at the National Assembly for Wales spoke in similar terms about the Brexit Framework, which has allowed them to quickly access expertise on issues where staff do not have prior experience or an established network of academic contacts (Interview, Official 1).

Capacity-building, understood as a way to increase the legislatures' abilities to carry out their tasks in representation, law-making and scrutiny, manifests itself in different ways. First, it might give access to knowledge to officials and to Members (e.g. Interview, Member 1; Interview, Member 2). Presentations, submissions of evidence, and seminars are particularly useful in this regard. Second, and closely related, academics not only offer access to their specific technical knowledge but also access to the wider literature and key debates. As one official explained, academics 'know the range of sources and range of studies that are out there', which can be difficult for officials to access and to synthesise quickly. So, academics can 'help you shortcut that and say what the latest bit of research is or what are the key things you need to be worrying about' (Interview, Official 13). As such, one academic fellow or committee adviser can act as a conduit for officials to access a much wider community of scholars and research (Interview, Official 5). Third, academic research can help staff with 'horizon scanning' (Interview, Official 23). This is because academics can look 'a bit further to the future [providing] a bit broader thinking or a bit more blue sky thinking' that isn't always possible for officials who are preoccupied with short-term information needs (Interview, Official 5). This is particularly useful for committee work, as committee staff are 'always looking ahead', asking 'what could we do over the next 12 months?' (Interview, Official 23). Fourth, some officials noted that academic research allows them to make points more forcefully in briefing papers. Officials are bound by neutrality principles, which academic researchers are not. So, academics are free to take strong positions on issues which officials are subsequently able to include in briefing papers or other documents, but could not otherwise do so on the basis of their own knowledge alone (Interview, Official 10; Interview, Official 27).

Some of the officials we interviewed expressed the view that the benefits we identified for legislatures are also equally important for academics, for at least two reasons. First, much academic research, in one official's view, 'never really sees the light of day', which the legislature can correct by giving academics the opportunities to 'show parliamentarians what they're doing' (Interview, Official 25). In other words, legislatures are giving academics the opportunity to feed into policy processes. This reflects the perspective of a National Assembly for Wales official,

that the fellowships in particular give academics a rare opportunity to be face-to-face with Members and try to influence them directly (Interview, Official 6). Second, KE with legislatures gives academics more knowledge about policy processes and entry points for engagement. As one official put it, KE demystifies 'the competences of devolved government and how the institutional arrangements work vis-à-vis with the central government' (Interview, Official 18). For our Steering Group members and some interviewees from the devolved administrations this was considered crucial, and was a way that KE connected with public engagement and even potentially civic education, including on the difference between government and parliament in a devolved context (Interview, Member 1). Another official explained that being inside Parliament allows academics to see 'how we work to build up more than just one contact' (Interview, Official 13), i.e. academics can see how officials engage with research and researchers. It can also help academics to understand what knowledge gaps exist from a legislature's perspective and to shape their research questions and approaches. Do academics themselves see it this way? To answer this, we turn to the incentives and motivations behind academic involvement with legislatures which emerged from our interviews.

4.2. Why do academics engage with legislatures?

An underlying assumption within universities is that academic research is conducted in order to, ultimately, make the world a better place (Interview, University/KE Professional 1). Our interviews did not contradict this view, which generally underpinned many academics' involvement with legislatures (e.g. Interview, Engaged Academic 5; Interview, Engaged Academic 1). For some, it was about broadly being able to place their research in the public domain; for others, there were aspirations to achieve specific policy goals (e.g. Interview, Engaged Academic 6). Academics' involvement in legislatures, however, goes beyond an interest in achieving policy change or at least suggests different views about how this might be achieved. Based on our interviews, we suggest that there are at least five further reasons why academics get involved with policy-makers, generally, and legislatures, specifically (summarised in Table 4.1).

A second reason why academics may engage with legislatures is the possibility of access to Members and officials, as well as the wider groups of affected and interested parties that a legislature can convene to discuss a policy challenge. This is slightly distinct from involvement for policy impact in the sense that KE allows for a more general interaction with those involved in policy processes. For example, one official from the Northern Ireland Assembly explained that their seminar series gave academics access not only to officials, but also others that academics might otherwise struggle to meet, including government officials, stakeholder and community groups, and officials from public bodies (Interview, Official 18). One knowledge broker put this more prosaically: 'they [parliamentary officials] move amongst ministers, they move amongst government, understanding what they really think and what they're really concerned [about] is an excellent, you know, telephone to God almost' (Interview, Engaged Professional 1). That said, others explained that this is only partially successful given the difficulties around securing Members' attendance and engagement in KE activities (e.g. Interview, Official 2; Interview, Academic Fellow 7; see Section 6). Nonetheless, this benefit was also noted by some academics. One POST fellow acknowledged this: 'it allowed me to engage with so many different groups of people that I never would have encountered before', and went on to give examples from government, civil service and civil society for her research assignment (Interview, Academic Fellow 4). A UKRI Policy Intern also explained that she built 'contacts' as a result of her internship that she could use in future careers (Interview, Engaged Academic 11). Importantly, the emphasis is often on policy impact through engagement with Members. Involvement with officials is also seen as important, but noted less often by academics.

Table 4.1: Reasons for academic engagement

Reason	Summary
Policy change	To contribute to policy debate and, ideally, to use their research to improve policy and/or legislation
Access to policy-makers	To access policy-makers that may include Members of a legislature and their staff, parliamentary officials, as well as civil servants and government officials
Learning about policy	To learn about the processes of policy-making and specifically the role of the legislature within those processes
Professional development	To expand the academic's skillset, including writing for different audiences or presentation skills (for example)
Professional advancement	To increase the chances of promotion within their institution or to increase the career profile of the academic more generally

For many interviewees, involvement with legislatures was considered important in order to help expand their knowledge of policy-making processes. This brings us to the third benefit of KE for academics. Multiple interviewees told us that they learnt about the functioning of legislatures, including one who described her fellowship as 'really worthwhile in terms of really understanding the legislative procedures'…further observing that '[the opportunity to] discuss that a lot with someone in-house was really helpful' (Interview, Academic Fellow 9). Another academic, who attended a POST training event, explained that they were intrigued by the possibility of getting their research into policy, but ultimately decided that the training had left them wary of getting involved. They saw KE with committees in particular as highly political, and worried about being associated strongly with one particular area of research or policy position early in their career (Interview, Engaged Academic 3). This last example is instructive of the complexities around KE: though the interviewee learnt much about avenues for engagement during her training, she subsequently decided not to pursue KE any further at this stage in her career.

Other interviewees noted that KE facilitated officials' understanding of academic timelines, pressures and processes. For example, one UKRI Policy Intern explained:

> Having me in the room … I feel like I was able to have more informal conversations about … what it was like coming into their environment from the side of the, from the experiences of someone that experiences life in academia … and kind of, you know, discuss more at length and more informally, how it feels like for an academic (Interview, Engaged Academic 9).

These benefits were also acknowledged by parliamentary staff, though not very often (Interview, Official 21; Interview, Official 22). There are opportunities for this to happen not only through fellowships, but activities that allow officials to go to academic environments, including attendance at conferences and/or membership of steering groups (see Section 3).

Learning about the policy process often went along with another – the fourth – key motivation for academics, and that was to expand their skillset, as these two interviewees suggest:

> I wanted to improve my skills in interviewing people, and also to improve my writing style to try and make it more succinct and successful for like a policy audience (Interview, Academic Fellow 3).

> It's taught me so much in terms of writing for different audiences … really having to go beyond what you think as an academic around what a report looks like or how you should present information and what needs to be included and all of that is really interesting … having to be really, really neutral in terms of what language you use and how you present information (Interview, Academic Fellow 2).

For the latter interviewee, she was 'excited' to have had a fellowship and thought it was 'prestigious'. This also bridges us to the fifth and final factor: the career implications of involvement.

For some interviewees, undertaking a fellowship was part of professional development, to make them more effective researchers, whether inside or outside academia (e.g. Interview, Engaged Academic 12). One UKRI Policy Intern, for example, undertook an internship because she was not sure if she wanted to follow an academic path and so this opportunity allowed her to see a different perspective and career option (Interview, Engaged Academic 11). However, while academics generally thought about their experiences positively, some remained unconvinced that the work they put into KE was sufficiently recognised or rewarded at their university (Interview, Engaged Academic 4).

Finally, the sixth reason for involvement was for structural incentives placed on academics through HE policy, specifically the Research Excellence Framework and through grant applications. For example, one PhD student replied, when asked if their university values policy engagement: 'they value REF' (Interview, Engaged Academic 3). Though this wasn't raised in interviews, we also note that grant applications normally include proposals from researchers on how they seek to make an impact for their research. Importantly, both for REF and for grant applications, the emphasis is placed on 'impact' rather than knowledge exchange. So, a final incentive for involvement is not because academics want to do so, but because they feel obliged to do so for UKRI-defined 'impact'. From the perspective of legislatures, one senior official from the Scottish Parliament noted that REF had created incentives to introduce a wider academic engagement strategy, in order for them to capitalise on such links for the benefit of the legislature (Interview, Official 28). These sentiments were shared by other legislatures (Interview, Official 12; Interview, Official 1), who explained that they saw this as mutually beneficial for legislatures and academics.

4.3. Conclusions and key learning points

This section of the report has focused on the perceived potential benefits of knowledge exchange between legislatures and academics.

We find that there are many incentives and motivations, both instrumental (i.e. to achieve specific outcomes for the university or legislature) and idealistic (i.e. to make the world a better place). **We conclude that KE is mutually beneficial: there is a clear overlap between academics that want to learn how their research might be used and informed by legislatures, and legislatures who recognise the benefits of providing insight into and access to their processes for academics to contribute.** To supplement this, there needs to be clear commitment from universities to recognise the value of knowledge exchange activities in their own right through, for example, recognising KE activities in workload allocations of academic staff and/or in promotions criteria. However, the existence of policy incentives – i.e. REF and KEF – means that knowledge exchange is currently geared mainly around benefitting legislatures rather than universities and academics. While this is consistent with the views of our interviewees that research is a public good, for some academics, for example those wary of public engagement and those on precarious contracts, the additional work required to engage effectively in KE will need to be recognised and incentivised. **We therefore recommend that legislatures draft, develop and publicise a list of ways in which knowledge exchange that benefits legislatures can be clearly acknowledged to academic staff and researchers.**

KE activities allow academics and legislatures to pursue these goals in different ways, with some focusing on specific outputs or entry points into legislature activities and others seeking to provide insight into broader working culture differences. For example, a POST training event supports academics to recognise and explore how to get their research into Parliament, and how to write for a scrutiny-focused audience, while a KESS seminar or SPICe breakfast seminar delivers pre-packaged research and allows for networking opportunities. The specific aims of KE activities need to be carefully considered because, at times, expectations might not be met. As noted previously, the National Assembly for Wales' seminar series was discontinued because the potential benefits were not realised; elsewhere, e.g. Northern Ireland Assembly and Scottish Parliament, similar activities have continued because they were seen as successful – even though they were structured in a similar way. **When designing KE activities, we recommend that legislatures are clear internally and externally about the benefits, both to themselves and to academics, including through setting clear yardsticks of success. This allows legislatures to be held to account (externally), would make it easier to evaluate success (internally), and give guidance to academics about what they can expect to achieve from their involvement.** For example, legislatures may wish to explain the importance of officials in legislative and scrutiny work, rather than academics focusing attention predominantly on Members only. Legislatures may also seek to define more clearly what 'exchange' they can offer in return for academic research findings to manage expectations, including for specific projects where different contributions can be agreed.

5. Successful KE: indicators and barriers

We have so far established the complexities around how to define and interpret the notion of knowledge exchange (Section 2), the ways in which legislatures seek to promote it (Section 3), and why it is perceived as useful (Section 4). This then raises the question: how is it possible to understand if KE activities have been successful? Our interviewees suggested a range of specific examples when we asked them to identify a successful exchange of knowledge between legislature and academics. These revealed a variety of ways in which success was defined and a range of potential reasons for success. Four examples, one from each legislature, are listed in Table 5.1 to give a sense of the range of activities.

Table 5.1: Examples of success

Leg.	Activity	Suggested indicators of success	Mechanisms for exchange
NIA	KESS	• Attendance • Growth from informal activity to regular series underpinned by MoU • Positive feedback from attendees including Members • Presenters have gone on to other KE activities (oral evidence and advisor roles on Committees)	• Combines open and closed elements: presentations are filmed, public briefing paper is produced, private Q&A follows presentation. • Buy in from Universities • Sustained commitment from legislature staff
SP	Ask Academia	• Might include sourcing of advisors, expertise and fellows via this contact network. Not clear if data is available to compare success of this conduit with that of others	• Single contact point for disseminating range of engagement opportunities to all Universities in Scotland and some beyond • Relatively small number of HEIs
NAW	Part time employment of GIS specialist	• Use of this resource by multiple staff and teams (for committees, members, Senedd Research more widely) • Feedback from Members and staff • Renewal of contract	• Skill useful across multiple teams • Skill repurposes existing data • Not cost effective to train all staff in GIS mapping
UKP	Training sessions for academics	• Subsequent engagement with the advertised routes (APPGs, Members, Committees, POST) • Improved knowledge of pathways for KE	• Increases knowledge of pathways for KE across HEI's and disciplines • Opportunity to practice framing and pitching research builds confidence • Cross University groups and small fee encourage attendance and enhance prestige • Training away from home institution facilitates networking and minimises distractions

Given the close link between KE and impact, some of our interviewees suggested that KE can be evaluated by the impact of academic research on legislative activities. In other words, KE is judged on the extent to which it leads to legislative or policy change. In our view, this is too close to 'impact', particularly as defined in the REF. In line with the sentiment expressed by many of our interviewees, we want to distinguish clearly between 'KE' and 'impact'. In our view, successful KE can be judged on the health of the knowledge exchange environment itself; or, the effectiveness of the processes rather than on the outcomes. To do this, we suggest looking at the barriers and facilitators in exchanging knowledge between legislatures and HEIs.

Barriers and facilitators have been discussed widely in previous academic studies (e.g. Oliver and Cairney, 2019; Oliver and Boaz, 2019; Cairney and Kwiatkowski, 2017; Oliver et al., 2014) and policy reports (e.g. Kenny et al., 2017; Walker et al., 2019; UK Parliament, 2017). In this section of the report, we focus on the success of KE by: (i) identifying the main barriers for improving the quantity and quality of KE through a synthesis of existing literature and our interviews, (ii) summarising the ways in which current core KE activities address those barriers, and (iii) suggesting possible indicators on how to track KE activities. At the end of this section, we summarise the challenges for evaluating KE, but also indicate what a healthy KE environment looks like for legislatures and HEIs.

Our interviews revealed a range of views on what successful KE might look like and how the success of KE activities could, and should, be evaluated. There was broad agreement that success – both for legislatures and universities – included the quantity of academic-legislature interactions and the quality of engagement between them. The former is relatively straightforward to measure and progress over time can be tracked, though there are gaps and limitations; meanwhile, the latter is often more nuanced and therefore requires more unpacking as well as more resources to do so. Over the course of this project – through documentary analysis and through primary data collection – we identify the following barriers:

1. Research is not presented in clear, accessible and appropriate ways for legislatures;
2. Research is not directly or obviously relevant to the work of the legislature;
3. Credibility of the research is not easy to verify;
4. Lack of knowledge about the role of legislatures, their research needs, and expectations about potential research impact;
5. Inadequate and uncertain recognition of KE activities by both HEIs and legislatures; and,
6. Limited resources (in terms of time and in terms of funding) allocated for KE.

We focus on these six barriers as they were mentioned most frequently in our research. They require action from both HEIs and legislatures, to varying degrees. We examine each in turn.

5.1. Research is not presented clearly

Our interviews revealed that presenting research effectively remains a key challenge for academics, echoing long-standing studies having shown this to be the case (e.g. Cairney and Kwiatkowski, 2017), and despite training workshops by various policy and KE organisations. For officials, academic research is often opaque, and a problem that persists in KE activities. For example, the differences in writing style places considerable demands on staff time to edit and re-write reports, briefings, blog posts and research notes. This can be a significant challenge if the official also has additional responsibilities, such as managing committee inquiries, Member enquiries or other tasks (Interview, Official 25). One official suggested that, in some cases, given the time taken to review a fellow's work, 'we could have done it ourselves' (Interview, Official 5). Other interviewees highlighted occasional difficulties of negotiating changes to written outputs, with some academics reluctant to respond to feedback or to change their style or tone in order to align with legislature requirements for political neutrality.

Through our study, we noted that there are two approaches that have alleviated these problems. First, interviewees suggested that longer term fellows, and those co-located with host teams, benefitted from more consistent opportunities to discuss framing, style and content throughout the writing process. This iterative production process strengthened the collaborative dimension of the eventual output. Those with less frequent contact reported feeling more like 'a consultant or freelancer' (Interview, Academic Fellow 8). So, location for a fellow is important. Second, officials suggested that a writing test or sample in future fellow recruitment processes could help to identify more engaged – and hence better prepared – academics. Including this would signal that there are particular expectations around writing style for academics co-producing outputs with legislatures (Interview, Official 12; Interview, Official 10). It would also give officials a sense of how much support, and of what kind, an academic might need in order to write effectively for the audience (Interview, Official 12; Interview, Official 10).

How do legislatures overcome this barrier?

As indicated in Section 3, legislatures provide training and support for fellows and UKRI Policy Interns as part of their induction and through pairing academic researchers with officials. In the case of the National Assembly for Wales, it has set up an editorial group for staff to pool resources, rather than relying solely on individual pairing. In the Scottish Parliament, all fellows meet for shared inductions. Informally, officials across the Welsh, Scottish and UK legislatures also shared experiences of managing academic researchers (and across all four legislatures in the case of UKRI Policy Interns). Finally, legislatures also bring their expertise to those outside through, for example, officials commenting on grant proposals, sitting on steering groups and advisory boards for academic projects, and supporting sector-wide exercises such as REF and KEF.

What indicators demonstrate a healthy KE environment?

A healthy KE environment would be one in which academic researchers are able to write accessibly and, consequently,

officials would be spending less time editing and rewriting research outputs. This is difficult to measure quantitatively given the different types of research output and investment in resources required to track such data. Therefore, we identify four possible sets of indicators that would suggest this barrier is being addressed:

1. An exit interview and/or questionnaire with fellows and staff to gather both qualitative data on what worked well in the recruitment, induction and training of academic researchers on these schemes;
2. Tracking the numbers of officials that sit on academic project steering groups/advisory boards, where they have the opportunity to suggest framing of project documents to enhance their relevance for legislatures;
3. Tracking the number of attendees on training sessions where writing skills are discussed (which can be done by either legislatures or HEIs or both); and,
4. Counting views and downloads of online guidance on presenting research for legislatures.

These measures would offer a mixture of counting engagement as well as identifying the quality of engagements where possible. In counting these suggested statistics, there is no guarantee that research subsequently presented to legislatures will be clear, accessible and appropriate for legislatures. However, the interaction with this guidance at least signals an awareness that particular ways of writing and communicating are needed if academic research is, as Kenny et al. put it, to 'cut through' (2017: 12).

5.2. Research is not directly relevant

Interviewees across all categories told us that, for KE to be successful, academics need to be able to articulate the relevance of their research or their expert opinion, something which echoes a number of studies (e.g. Oliver and Cairney, 2019; Kenny et al., 2017). Officials suggested that overcoming this barrier is particularly important given that universities have a civic responsibility to ensure that publicly-funded institutions which carry out publicly-funded research then go on to shape public debates (Interview, University/KE Professional 7; Interview, University/KE Professional 1; Interview, University/KE Professional 8). Officials suggested that academics need to do more to adequately consider the positions of political institutions. One KE professional stated: 'academics need to consider what legislatures should do from where they are, not from where they would like them to be' (Interview, University/KE Professional 7). Academics also buried their policy relevance and were often unlikely to offer recommendations or policy solutions (Interview, University/KE Professional 2). As one official put it: 'academics need to realise the work needs to be policy relevant. We are looking for evidence-based policy, not just an evidence base' (Interview, Official 8).

During interviews with university staff, the importance of luck, timing and persistence were recurring themes (Interview, University/KE Professional 1; Interview, University/KE Professional 2; Interview University/KE Professional 8). Giving the example of micro-plastics, a UK official noted that the research team whose work influenced the Environmental Audit Committee's recommendations on this issue, subsequently taken up by government, had been pitching this issue to the UK Parliament for over a decade before it was taken up in earnest (Interview, Official 17). Echoing the observation about academics needing to have a public profile and be proactive in engaging with legislatures, a university staff member told us 'it works when academics put themselves out there continuously in different formats', offering evidence, contacting MPs and so on (Interview, University/KE Professional 2). This reiterates wider research findings on barriers to policy engagement (e.g. Oliver and Cairney, 2019).

How do legislatures overcome this barrier?

Academic fellowships offered by legislatures offer a combination of directed (specific themes/projects) and open (any topic) calls. This model promotes buy-in from host sections, allowing them to advertise their research requirements and gain outside expertise to advance their work. Meanwhile, the Northern Ireland Assembly structures its seminar programme through a formal partnership between legislatures and local universities, allowing both sides to bring together key issues to ensure topics are timely and clearly relevant. Nevertheless, interviewees also stated that it was important to maintain space for academic researchers to pitch topics that were 'under the radar' (Interview, Official 15; Interview, Official 25). Legislatures also continually state the importance of timeliness and of making policy relevance clear in their training workshops and online guidance.

What indicators demonstrate a healthy KE environment?

Measuring 'timeliness' is difficult, so we identify:

1. For academic fellowships, feedback could be collected from hosts on how the legislature's work has been enhanced by the fellow, considering this holistically and not just in terms of counting specific outputs. Comparing this between open and directed calls may reveal differences in expectations/satisfaction. This could also be collected by universities to gain insights into benefits for research and HEIs.
2. For research seminars, feedback questionnaires at the event and six months later should include questions about how valuable the research has been and how much of it has been/will be used, and/or for what purposes.
3. Tracking the number of attendees on training sessions where identifying relevance and policy implications of academic research are discussed.
4. Counting views and downloads of online guidance on how to articulate policy relevance of research.

We note that these are perception-based measures, and therefore offer no guarantees between perceived and realised uses of academic research.

5.3. Credibility

For Caroline Kenny et al. (2017: 12), the credibility of research was ranked as the most important factor in determining if a piece of research was used or not, though the authors also noted that the method for determining credibility was unclear. Based on our research, we suggest that there are at least three ways to think about credibility:

1. Credibility is about the authority and formal accreditation of a researcher through, for example, their institutional affiliation. So, verifying the expertise of academics requires them, at a basic level, to have updated institutional webpages, links to accessible research outputs and, depending on the nature of the interaction, testimonials or references from non-academic stakeholders.
2. Recommendations from trusted sources are important; i.e. network-building. In one case, an academic explained how a meeting with POST officials at a conference led to a private seminar invitation and subsequently an invitation to give evidence to a select committee (Interview, Engaged Academic 1). This was possible because officials confirmed the credibility and value of the researcher to others and thereby reduced the perceived risk of working with someone new. Other interviewees made similar observations, citing examples where committees appointed researchers as advisers or invited them to private briefings with Members after other interactions (Interview, University/KE Professional 2; Interview, University/KE Professional 8; Interview, Engaged Academic 4).
3. Trust is key for successful engagement between researchers and officials. Officials told us that academics needed to be open and candid, willing to provide off-the-record briefings at, for example, breakfast sessions (Interview, Official 11).

We note that some of these themes emerging in our interviews on legislatures specifically also echo literature on academic engagement with policy more widely (e.g. Geddes et al., 2018; Lomas and Brown, 2009).

Finally, credibility is also strongly entangled with issues relating to diversity. Reliance by officials on 'usual suspects' suggests that making new connections is sometimes considered risky and time consuming. The perception of risk partly reflects the issues of balance of political perspectives and researcher identities, which officials need to consider if they are to present researchers and their work to Members. This is perhaps particularly acute in the case of Northern Ireland, where the post-conflict context requires careful consideration to ensuring that no one political standpoint is given priority over another (see Shortall et al., 2019). However, the relationship between 'low risk' and credibility was also raised in other interviews with officials and academic researchers (Interview, Official 6; Interview, Academic Fellow 7; Interview, Engaged Academic 1). In a political environment where expertise is often needed at short notice, officials can inadvertently privilege those they already know. This tendency can reinforce the perceived – and actual – prevalence of particular voices and perspectives in the work of legislatures (e.g. see Beswick and Elstub, 2019; Geddes, 2018; Childs, 2016). In other words, 'credible' sources of expertise are too easily related to established sources of expertise, unintentionally eliding perspectives of more diverse scholarship (e.g. early-career academics, people of colour, and women).

How do legislatures overcome this barrier?

The importance of academics' credibility is highlighted in training delivered by legislatures. The onus of addressing this barrier, however, lies primarily with academics and with universities who can, for example, provide advice on building social media profiles, media training and public engagement initiatives. That said, legislatures have also taken steps to diversify their evidence base through monitoring the gender balance of witnesses to committees in the UK and Scottish parliaments (e.g. Liaison Committee, 2018, 2019; Bochel and Berthier, 2019). POST ran an event in 2019 offering tailored training for women researchers, and intends to expand this to train researchers with disabilities and those from BAME backgrounds. KE activities with academics therefore also provide an opportunity to bring a more diverse range of individuals and experiences into legislatures, supporting them to demonstrate their credibility and encouraging officials to reach beyond 'usual suspects'. Designing strategies for this requires collection of data on characteristics of those taking part, to identify gaps and track progress. Legislatures, universities and funders should consider whether collecting disaggregated data on, for example, gender, disability, ethnicity, geography and social background across their KE activities could inform more targeted support for under-represented groups. This would be in line with legislatures' and universities' commitments to widening participation.

What indicators demonstrate a healthy KE environment?

As noted by Kenny et al. (2017), credibility is very difficult to evaluate and is defined in different ways. We identify two areas where the work of legislatures to widen their pool of academics might be measurable:

1. Legislatures can gather diversity and equality data, which would indicate the range of voices engaging in KE with legislatures. This could be collected on gender, disability, ethnicity, geography and social background across KE activities (e.g. at the end of fellowship application forms, in seminar evaluation questionnaires, etc.).
2. Collect data on number of training sessions and publish data on the geographical breakdown of where those sessions are held, and in collaboration with which institutions. We also suggest that the attendance of these events could be monitored in order to identify whether particular demographic groups might be under-represented.
3. Attendance monitoring of training events where practical advice is given on how to build public profile and establish your credibility as a researcher.

Some legislatures already undertake some of this data capture.

5.4. Lack of knowledge about legislatures and mismatched expectations

There are clear and persistent gaps of information about how legislatures work, including the most obvious case of differentiating between legislatures and executives. For example, one of our interviewees with considerable experience of working with legislatures regularly conflated them with governments (Interview, Engaged Academic 6). Officials raised this problem for a variety of academics working with legislatures, including fellows. Officials suggested that, in each new wave of fellows, there were some with a limited understanding of the work of their legislature which made it difficult to manage expectations about potential for research to have influence. A UK official suggested that interviews in the recruitment of fellows might address this issue (Interview Official 12), while some legislatures already try to alleviate this through their induction activities.

Lack of knowledge creates a clear gap in expectations for researchers between perceived potential impact and realities. Some fellows, for example, were frustrated by what they considered to be limited direct contact with Members, seeing this as a barrier to achieve impact on policy and legislation through research. This includes academics that have some prior knowledge of the legislature (Interview, Academic Fellow 8; Interview, Academic Fellow 7; Interview, Engaged Academic 5). As one fellow put it, they simply 'expected to work more with MPs' (Interview, Academic Fellow 7). This also reflects the fact that academics arguably do not recognise officials as important actors within legislatures in their own right, seeing them instead primarily as a conduit (or barrier) to engaging with Members. To overcome this, interviewees suggested: (i) managing expectations through an interview stage for fellows and via induction (Interview, Official 12; Interview, Official 1; Interview, Official 10); and, (ii) bringing Members into processes of recruitment and/or induction to ensure buy-in from them (Interview, Official 6). The latter is challenging given limited Member time. Nevertheless, where they had been more aware of the work of fellows from the start, involved in selecting successful candidates and meeting them at multiple points during a fellowship, officials and academic researchers alike felt they were more receptive to the research and more inclined to sustain the relationship beyond the initial KE activity (Interview, Official 6; Interview, Official 5; Interview, Academic Fellow 8; Interview, Academic Fellow 7).

Clear expectations about KE activities is an important factor for legislatures too. For example, the National Assembly for Wales had a pilot seminar series, which had attracted strong positive feedback but was not pursued due to low attendance of Members and the high investment of staff time (Interview, Official 1). By contrast, low attendance of Members was not a problem in KESS or SPICe seminars because those seminars served a diversity of purposes. As noted on p.12, some legislatures have sought to involve Members directly in running these seminars, or invite a broader audience to ensure that seminars are multi-purpose (e.g. civic education, participatory, networking for stakeholders, attendance by Members' staff and attendance by officials), or use seminars to inform other business of the legislatures.

How do legislatures overcome this barrier?

All KE activities involve some form of learning. There are explicit learning opportunities through training workshops, induction for fellows, training workshops in advance of seminars (e.g. in the case of KESS), giving UKRI Policy Interns awareness of different sections of legislatures, and co-location of fellows with officials (Interview, Academic Fellow 2; Interview, Academic Fellow 7). A UK official suggested that these issues could be more directly addressed in the recruitment of fellows, using interviews to assess whether prospective fellows had a good understanding of the legislature and routes for KE and impact (Interview, Official 12). In the National Assembly for Wales and the UK Parliament, staff have sought to raise academic fellows' knowledge on these issues through briefings by colleagues from other parts of the legislature during induction, while the Northern Ireland Assembly provided a similar programme – though over two weeks rather than a single day – for their PhD policy interns.

What indicators demonstrate a healthy KE environment?

The main barrier discussed here is about understanding of roles:

1. One way to indicate the level of learning would be before/after questionnaires that included factual questions about the legislature. For example, the UK Parliamentary Studies module includes a four-page questionnaire that all students must complete before and after the course, in order to evaluate to what extent students complete the course with an improved understanding of legislatures.
2. Additionally, and more simply, legislatures/universities could monitor attendance numbers at outreach/training events. In relation to the previous sub-section, it would be useful to monitor the identities of attendees if possible (e.g. if certain types of academics are more/less likely to attend) to identify reach.
3. Counting views and downloads of online training material covering the issues in 5.3. above.

5.5. Inadequate recognition of KE activity

A considerable barrier to taking part in KE activity, from the perspective of researchers, is that the incentives for doing so, when faced with competing time pressures, are unclear and varied between and even within universities. This was raised in numerous interviews, and comes in three different guises. First, the majority of researchers in interviews did not know how to adequately demonstrate their engagement. One POST fellow mentioned that they had kept copies of emails, records of meetings and examples of where they had been quoted (interview, Academic Fellow 7). Another told us that they didn't know where to start collecting evidence of engagement, let alone of the difference it might have made (Interview, Engaged Academic 11). That said, most universities do have clear data collection processes through research information management systems (RIMS), such as Pure by Elsevier. These services can 'bring it all together' (Interview, University/KE Professional 8). However, the extent to which academics actually use these services varies significantly. University staff suggested that legislatures did not

always appreciate the need for this evidence and that academics were also sometimes reluctant to ask for it, with the latter point echoed by officials (Interview, Official 7; Interview, Official 15).

A second way this barrier manifests itself is through a lack of clear articulation of how academic research has made a difference in legislative activities. One interviewee, for example, noted – in the case of the Scottish Parliament – that officials were not good at closing the 'feedback loop', and therefore it was unclear to KE professionals if the research submitted by their colleagues had actually been used (Interview, University/KE Professional 4). More generally, others noted the variability of officials' willingness or availability to provide testimonials and letters of support (Interview, Official 14; Interview, Official 16). Academics and university staff recognise that relying on personal testimonials is not ideal, particularly when seeking to evidence impact, but they recognise that KE can be hard to capture and a supporting letter is a relatively straightforward way to at least prove engagement. University staff felt that because legislatures did not have standard procedures for this, for universities, KE can feel like a significant investment for comparatively little in return (Interview, University/KE Professional 7; Interview, University/KE Professional 1).

A third manifestation of this barrier is from the other side: universities. As we noted in Section 4, universities themselves vary in recognising KE activities in, for example, professional development and promotions. There was a clear message from academics that we interviewed, particularly those early in their careers, that the value placed on KE by institutions influences their decision-making on whether to engage. As such, the HE sector will need to address how KE is acknowledged in university career progression and promotion processes (e.g. adding KE criteria, as some already do). This is also recognised as an enabling factor for KE in Principle 6, 'recognition and rewards', of the Concordat for Advancement of Knowledge Exchange in Higher Education in England (2019). By helping academics to use KE with legislatures to support a case for promotion, officials may help to encourage wider academic engagement by showing progression is possible, creating academic champions for engagement who can work alongside those based within legislatures.

Further to these three forms of this barrier, we should also note that some academic researchers did not want public recognition, particularly those working on issues which have high public profiles and/or polarised views, such as Brexit or abortion. As Cairney and Oliver (2019) discuss in their review of advice given to academics seeking to influence policy, academics may not be well-equipped or prepared to deal with public responses to their research. For at least one early-career academic the prospect of a public profile dissuaded them from engaging, despite the direct relevance of their research to a committee inquiry (Interview, Engaged Academic 3). It must also be recognised here that this issue is highly gendered: women researchers with a public profile face a higher likelihood of abuse, particularly on social media, than their male counterparts (e.g. Veletsianos et al., 2018). While this is a wider societal issue that neither universities nor legislatures can tackle in isolation, it is a barrier to engagement which must be acknowledged.

How do legislatures overcome this barrier?

For the most part, legislatures do acknowledge and credit academic research in their work where possible. The form of acknowledgement should also be discussed with individual researchers, as a one-size-fits-all approach may not be appropriate. Some may prefer a private letter attesting to their input rather than a public mention in a report. In some cases, legislatures also collect data on academic contributions for their own purposes (e.g. the POST ResearchFish submission, or evaluation of the academic fellowships). Legislature staff co-author outputs such as reports, research briefings and library paper with academics, and also cite academics/academic research in committee reports. At the National Assembly for Wales, this is built in from the start, whereby academic fellows produce a co-authored public research briefing with Senedd Research staff. Meanwhile, KESS seminar presenters publish policy briefings, PowerPoint Presentations and video clips on the Northern Ireland Assembly website. At the UK Parliament, PhD Interns publish a POSTnote written alongside staff (with contributors and reviewers also listed on the POST website); at all four legislatures, UKRI Policy Interns generally contribute to, and publish, written work. Academic research, either directly or via an output produced by the legislature, can also be cited by Members in debates recorded in Hansard.

What indicators demonstrate a healthy KE environment?

Indicators that recognise KE activities are difficult to capture because: first, most academics and legislatures are measuring slightly different things, without agreed outcomes; second, academics and legislatures are capturing activities in different ways, including word-of-mouth feedback, meeting notes, questionnaires, or formal evaluation processes; third, the data academics might need to demonstrate their engagement – such as internal briefings or emails – may be subject to confidentiality agreements; fourth, it takes time to collect and write testimonials, so time might not be available to capture KE activities; and fifth, there are different views about how to capture data. Alongside these issues, there is currently no agreement about the potential importance of different kinds of interaction. For example, recent research in the UK Parliament has suggested that oral evidence is considered more influential by committee members and staff than written evidence (Beswick and Elstub, 2019; Geddes, 2018), but both are cited in reports and could be included as part of attempts to capture successful KE. This also makes our recommendations elsewhere about agreeing outcomes and terminology important (see previous sections). We would suggest that indicators for a healthy KE environment could include standardised acknowledgement practices, ideally practices that are shared among all legislatures. This could look similar to the collaborative briefing produced by the four legislatures on REF impact (UK Parliament, 2018), though we would suggest that while indicators of KE and of impact may overlap, they are not interchangeable.

5.6. Limited resources

KE requires resources, both from academic institutions and legislatures. At minimum, researchers need funding to pay for travel to/from legislatures and, depending on the nature of KE, they may require buy-outs to make time for KE from other academic responsibilities (e.g. teaching and administration). In our discussion with fellows, funding primarily came from universities via Impact Acceleration Accounts (IAA). These are limited to only a proportion of often research-intensive universities (e.g. there are 26 ESRC IAAs at research organisations), which skews the potential pool of applicants. This is particularly pronounced in Northern Ireland, where only one university receives IAA funding from the ESRC. Furthermore, there was significant variability between universities giving resources for fellowships, with some securing 1-2 days per week, for periods stretching from three months to – in one case – almost two years (Interview, Academic Fellow 7; Interview, Academic Fellow 2; Interview, Academic Fellow 8; Interview, Academic Fellow 5). The availability of these options will vary across institutions and universities will not consider all academics equally worth this investment, for example those whose contracts make them ineligible for REF. In the Scottish Parliament and National Assembly for Wales, top-up funding is available for some academics in addition to or instead of university funding.

The possibility of being embedded, even part-time, within a legislature was a key attraction of academic fellowships for some of our interviewees. Spending time in legislatures regularly and working closely with officials, feeling like 'part of the team' was highly valued (Interview, Engaged Academic 9; Interview, Academic Fellow 7; Interview, Academic Fellow 2). It is worth noting here that working in a team environment is often a rare experience in academia, particularly for those in social sciences, arts and humanities. However, we do not suggest that this extensive and embedded form of KE should be privileged. An over-emphasis on co-location would create a barrier to participation for some academics, particularly those who do not live within reasonable commuting distance of a legislature, and those whose ability to travel may be limited by health conditions, family commitments and other caring responsibilities. A more diverse range of academics can benefit from the flexibility offered in fellowships, visiting their host only a handful of times with communication taking place via Skype/other remote means.

Resources are also an issue for officials. In the Northern Ireland Assembly, KESS was able to expand with limited resources but cannot expand any further despite very positive evaluations of KESS – not only because of the political situation (until January 2020), but also because of the lack of resources (Interview, Official 18). In the Scottish Parliament, meanwhile, there is clear allocation for KE activities, but these are often placed alongside other responsibilities, which means that KE can be squeezed out and pushed to the margins or unreasonably increase the workload of some staff (Interview, Official 21; Interview, Official 22). In the UK Parliament, there are more resources allocated specifically to KE, which explains why it has been able to offer a wider suite of activities compared to other legislatures. Over the course of our study, we noted that successful KE initiatives across all four legislatures depended heavily on key individuals within those legislatures, with dedicated time to support the range of activities and who were passionate about doing so. These individuals, including those that requested this research, act as points of continuity, provide institutional memory, and are champions when presenting the exchange activities to staff and Members within legislatures.

How do legislatures overcome this barrier?

At the moment, legislatures have a variety of staff supporting KE activities, some as a core task and others as a smaller part of their day to day jobs (for example committee and library staff). In the UK Parliament, there is a devoted KE Unit. In the devolved legislatures, staff currently support KE as part of other roles in research services. In the words of one official, they 'wear multiple hats' (SG meeting, 17 October 2019).

For fellowships, the Scottish Parliament and National Assembly for Wales have also offered some financial support for academic fellows who were unable to secure funding from their universities, which reduces this potential barrier. Similarly, while POST charge a nominal fee of £40 for places on their regional training courses, this is waived for those who are unable to raise the funds from their HEI.

What indicators demonstrate a healthy KE environment?

We identify that resources allocated to KE, either in terms of staff, number of FTE (full time equivalent) staff, and/or budget allocated to it could be collected – by universities and by legislatures. This indication of quantity does not give an insight into the efficiency of how those resources are used, and it would require significant time and effort to collate this data. It would nevertheless provide a useful picture of the wider context in which activities take place. Recording the number of fellows receiving partial or full funding from legislatures, or fee waivers in the case of POST training, would also provide an indication of the extent to which this barrier is being addressed by legislatures. Additionally, organisations such as the Universities Policy Engagement Network (UPEN) could identify and disseminate examples of good practice to enable effective engagement at universities to supplement quantitative measures.

5.7. Challenges in evaluating KE

As shown in previous sections, capturing KE brings with it a number of challenges, especially if legislatures wish to evaluate this quantitatively or with limited resources. Knowledge exchange is, ultimately, about the 'flow' of information (Interview, Official 14), and it is difficult to see how this can be quantified consistently and systematically across different kinds of activities. Indeed, given that KE is often about the relationships established between academics and officials, it is difficult to see how 'relationships' can be captured. In some circumstances, this may not be desirable for either party: 'people are very reluctant to expose their relationships because … that maybe an interaction that shouldn't have occurred … or it's breaching a Chatham House agreement'

(Interview, Official 18). Other interviewees also noted similar difficulties. For example, a phone conversation between a researcher and official could lead to substantive changes to the direction of a committee inquiry, but how can something like this be evidenced unless, as one interviewee suggested, you count the contact points, such as the number of emails being sent (Interview, Official 12). Even this would not help in evidencing a 'negative' outcome, where – for example – a line of inquiry or questioning is dropped before it takes place on the advice of an academic researcher (Interview, Official 6; Interview, University/KE Professional 1).

That is not to say that gathering data is impossible. Interviewees noted the possibilities of counting, for example: the numbers of people or affiliations of those who give written or oral evidence to committees; the number of times academics are cited in reports; committee adviser posts held; numbers of people involved in fellowships; and the length of engagements. However, almost all potential metrics have drawbacks and raise questions about the resource required and value of collecting such data. We identify three examples here:

1. Quantifying evidence to committees and/or consultations: Encouraging more evidence submissions by academics was largely welcomed by officials, reflecting Kenny et al.'s observation (2017) that academic research is under-represented compared to that provided by think tanks and civil society. However, as anyone can submit evidence, multiple times if they wish, and most are published regardless of value to the inquiry, this is a crude measure. Such a metric could easily be gamed through, for example, universities simply sending a higher number of submissions, even if their quality is not very high or the submissions are not closely related to the inquiry. If committees were to offer feedback or scoring of the value of submissions this may allow a more robust consideration of quality, but would have significant implications for committee staff workloads. Universities could also collect data on conversion rates, comparing submissions to citations or invitations to give oral evidence. Again, this would place demands on staff time.
2. Attendance at events: Counting attendees is possible, but tells us little about who attends, how valuable their contributions are, and how diverse or representative the audience might be in relation to the target group. One interviewee gave an example where 'it's not necessarily getting 150 people [to attend], it might actually be getting 10 people but getting the right 10 people so, yes, it's about who's in the room', not how many (Interview, Official 20). Another interviewee warned against creating incentives simply to get 'bums on seats' (Interview, Official 14).
3. Tracking consultancies/consultancy fees: A range of interviewees pointed out that some academics do not charge for their engagement while others do (e.g. Interview, Engaged Academic 4), while another noted that this could lead to a rise of universities charging for all their academic engagement with legislatures (e.g. Interview, University/KE Professional 7). This transactional approach would be detrimental to the research budgets of legislatures, potentially reducing their engagement with academics or encouraging re-use of 'usual suspects', at the expense of taking a perceived risk on those who might bring new perspectives.

There are clearly some key challenges around capturing data on merely the exchange of knowledge. If the focus would additionally or alternatively be on impact of KE, then this would raise a set of different questions, e.g. how to measure 'impact' and whether/how far this would overlap with measuring KE (Interview, Official 17). One official put this succinctly: 'it's very hard to think of anything which isn't a huge administrative burden for not necessarily capturing a lot of data. Hmm, and it's also very hard to think of what the meaningful data is that you're capturing' (Interview, Official 14). Nevertheless, from the above we can begin to see how legislatures are designing their activities in order to overcome barriers and also what data can be collected, which might demonstrate creation of a positive environment for KE to develop.

5.8. Conclusions and recommendations

This section opened with the suggestion that successful KE environments and activities are those that seek to address key barriers and attend to key facilitators in the uptake of research, rather than linking the success of KE to impact. Many of the barriers and facilitators that we draw on come from our interviews as well as from the wider literature – which has repeatedly demonstrated these problems. We have also indicated a range of possible indicators to measure the health of KE environments. We have sought to summarise some of the key barriers and ways that universities and legislatures can overcome them in Table 5.2. In this final concluding section, we identify four conclusions and recommendations that cut across this section's themes.

First, a number of interviewees from across legislatures and HEIs identified that successful KE could be indicated by a growth in numbers of academic researchers engaging with legislatures. All KE activities identified in Section 3 support further KE. In order to track this, the indicators set out above could be used to evaluate changes over time, including the numbers of researchers applying for fellowships, attendance records, and numbers of evidence submissions to committees from academics. This would require legislatures to collect data on who submits evidence, broken down by category to reveal – and track – the proportion submitted by academic researchers.

Second, in line with previous sections, we reiterate the complexities around KE and that legislatures have moved significantly to bring more academic research into their work. This has addressed some of the barriers in this section. Individuals working in KE at legislatures and universities are often committed to increasing interactions between academic institutions and legislatures. While this is the case, **we recommend that – if KE is to become fully embedded in legislatures' working cultures – legislatures must dedicate a greater proportion of their resources on KE through, for example, greater funding but also by ensuring that officials' job specifications include protected time to promote KE.** Legislatures can do this through explicit commitments in corporate governance documents and through budgetary allocations.

Table 5.2: Drivers for successful KE

Reason	From universities:	From legislatures:
Contact	A willingness (by academics as well as their institution) for face-to-face contact and going to legislatures rather than expecting them to come to universities	Making space available for face-to-face contact and co-location of academics with officials
Skills	A willingness to develop new skills to tailor their research to new audiences, and for universities to provide the resources and time to do so	Offering relevant training workshops to academics in order to allow them to develop skills to engage effectively, e.g. writing workshops or feedback
Stakeholders	Academics' abilities to draw on or link their research to other groups to provide wider legitimacy/credibility to arguments	Offering clear explanations around what sorts of information will help legislatures to make use of academic research
Trust	Offering clear explanations around what sorts of information will help legislatures to make use of academic research	Officials need to be willing to invest time into building relationships with academics in order to gain trust.
Network-building	Building effective working relationships and having wide networks (with institutional support) were important and valued by officials	Offering opportunities to allow academics to engage with officials and Members, e.g. through structured or on-demand events
Timing	Academics need to be in the right place at the right time, especially with respect to the policy cycle and agendas	Identifying and publicising opportunities for academics to get involved with legislatures, either through framework agreements, mailing lists, or social media; and legislatures' being aware of the time constraints/cycles in which academics operate
Understanding each other's working environments	Understanding the policy environment and context to ensure academics were pragmatic with proposals	Offering relevant training workshops to academics in order to allow them to develop skills to engage effectively, e.g. explanations of policy context, advice on grant proposals, etc.
Key individuals, resources and information	Academics need to be given resources from their university to pursue KE activities, e.g. internal or external KE grants; and need to have institutional support to carry those out (e.g. policy impact units)	Legislatures need to invest resources into KE; many academics noted that key individuals in legislatures helped to support them on their journeys

Second, in line with previous sections, we reiterate the complexities around KE and that legislatures have moved significantly to bring more academic research into their work. This has addressed some of the barriers in this section. Individuals working in KE at legislatures and universities are often committed to increasing interactions between academic institutions and legislatures. While this is the case, **we recommend that – if KE is to become fully embedded in legislatures' working cultures – legislatures must dedicate a greater proportion of their resources on KE through, for example, greater funding but also by ensuring that officials' job specifications include protected time to promote KE.** Legislatures can do this through explicit commitments in corporate governance documents and through budgetary allocations.

Third, to demonstrate the importance of KE, we recommend that it is recognised more systematically by legislatures and by universities. As noted elsewhere, we recommend that KE is explicitly recognised and valued in university promotions panels and professional development. This is in line with the proposals presented in the KE Concordat (Universities UK and GuildHE, 2019). **In the case of legislatures, we recommend that they standardise their practices of acknowledging academic research where possible. The options for doing so could be included in a briefing paper along the lines of that produced by the legislatures on research impact (UK Parliament, 2018). It could also be included in training materials and guides on publications for research services and committees.** This will help to clarify what academic researchers can expect and, by reducing uncertainty, will also create an added incentive for academic involvement with KE activities.

Fourth, it is clear that a number of mechanisms exist to support and evaluate KE activities and that these could be strengthened. In particular, we recommend:

Exit interviews with fellows, who jointly complete an end-of-fellowship form with their hosts to capture key data, such as number of briefing papers written (or contributed towards), number of events organised, time spent on legislature-related tasks. This will allow legislatures to identify how much and how effectively fellows engage with the institution.

New indicators may be helpful to track KE activities which are currently 'under the radar', including number of officials who are members of steering groups of academic projects; the numbers of academic researchers applying for fellowships; and, the attendance rates at events, whether seminars or training.

Evaluation forms at events, and again via a follow-up email/ telephone survey six months later. For researchers, the aim of these is to ask if researchers have used opportunities disseminated by legislatures; for officials, the aim of these is to ask whether and how the event has influenced their work, for example through engagement with the research presented or following up on the contacts made.

Monitoring diversity and equality data to get a better picture of the academic 'usual suspects' engaging with legislatures. This can be done at various events via short standard surveys. We suggest that legislatures standardise as much of this information as possible to allow for meaningful comparison between the four legislatures, and therefore benchmarking and sharing good practice.

We stress that quantitative measures have limitations (e.g. may overlook some activity, do not indicate the quality, only quantity, of engagement). We also acknowledge that legislatures have different priorities and that some legislatures already collect some of this information, which partly informed our report.

6. Conclusions and recommendations

One senior official noted explicitly that there is a 'natural partnership' between universities and legislatures (Interview, Official 28). This has also been demonstrated in this report, in which we highlighted various mutual benefits of KE. However, we also noted that there are a number of ways in which legislatures and HEIs could improve their KE activities. In each section of our report, we identified key conclusions and recommendations. We re-state those below, but first we suggest that there are specific characteristics which would signal that a legislature, or a university, is actively promoting and investing in knowledge exchange. These are presented below:

An engaged legislature:

has a clear KE strategy; actively engages with universities and professional associations to disseminate opportunities for engagement; shares expertise on KE with other legislatures; has dedicated staff time allocated to pursuing and improving KE activities; curates a range of activities to engage academic researchers at different career stages, from different institutions, and from different backgrounds; provides appropriate recognition of academic participation in KE activities; and, monitors characteristics of those participating in KE activities.

An engaged university:

permits and supports fellowships with legislatures; has staff who are committee advisers; allocates dedicated staff time within workload models or other arrangements to facilitate KE; has staff who submit evidence to legislatures and participate in committee hearings; recognises and supports KE in its own right, not solely as a way to achieve impact; has dedicated internal funding opportunities for KE; hosts inward secondments and supports outward secondments; appoints officials from legislatures to steering groups and/or advisory boards; co-authors publications with legislature staff; recognises KE in workload models and in criteria for promotion; and, submits funding bids which include legislative staff as partners.

These provide an initial checklist for those wishing to identify whether a given legislature or university is creating an environment in which KE can be nurtured. Nevertheless, although recommendations for universities did emerge from our interviews, this was not the primary focus of the study. As such, we present below the specific recommendations for legislatures, which we believe will support their work to enhance and improve KE activities in order to improve legislation.

To conclude our report, we re-state our major conclusions and recommendations as set out in each section of the report:

- There is no single, clear definition of 'knowledge exchange' that is currently being used by legislatures and universities. **We recommend** that the UK's four legislatures develop a shared definition of KE, particularly distinguishing between knowledge exchange and academic engagement, but also consider the relationship between KE and public engagement, and between KE and 'impact'. Our definitions, given on p.11, offer a starting point. This would allow help to compare legislatures' activities and would demystify processes to academic audiences (though we acknowledge that there are historic and institution-specific reasons for certain terms).
- This project has shown that legislatures have significant experience of KE to share with each other and with universities and funders. **We recommend** that legislatures draw on the findings of this report to inform collaborative discussions around engagement and activities with and for stakeholders such as Research England and research funders. This would contribute towards highlighting KE opportunities, as well as strategies for overcoming some of the barriers identified in our report and suggest how KE might be evidenced by legislatures and universities.
- There is a shared view that legislatures and universities can work together to create opportunities, channels and processes for academics, officials and Members to interact. However, the predominant emphasis in these activities is usually on understanding and demystifying the roles of legislatures. **We recommend** that legislatures experiment with ways to build awareness of university research cultures and environments through, for example, outward secondments and short periods shadowing KE professionals or supporting information events for officials about academic research environments. This would help ensure that KE activities can be co-designed to reduce burden on officials (e.g. in running seminar series, supporting academics to apply for fellowships), and also help to align the format and timing of fellowships in ways which minimise barriers to participation for academics in general and for particular groups (e.g. early-career academics).
- The range of activities at each legislature demonstrates a clear commitment by the Northern Ireland Assembly, Scottish Parliament, National Assembly for Wales and UK Parliament to knowledge exchange with academics, irrespective of the differences between the programmes offered, events that take place or resources at their disposal. **We recommend** that legislatures keep an audit of their activities by parliamentary session, explaining how they contribute to overall KE aims. We believe these should be kept in the public domain in line with legislatures' commitments to principles of openness and transparency. Additionally, **we recommend** that legislatures share not only good practice – as they have begun to do – but also that they seek agreement on definitions of key terms if possible. This would demystify processes for academic audiences, who would otherwise have to learn unique terminologies for each legislature (e.g. PhD internship/PhD

fellowship; committee advisor/special advisor). In increasing academic understanding of legislative processes, this would support engagement. It would also allow for more simple comparison between legislatures to aid in evaluating knowledge exchange activities.

- For academic fellowships in particular, we believe that some relatively small changes to the recruitment process could improve fit between recruited candidates and the legislatures. As such, **we recommend** including an interview stage and writing sample requirement at recruitment stage. Furthermore, we believe that seeking to engage Members more in the process (e.g. through identifying directed call topics, and/or taking part in induction) could help to improve buy in from Members and help manage the expectations of academics around contact with Members.
- We conclude that the benefits of KE are far-reaching if activities are designed effectively. They are also mutually beneficial: there is a clear overlap between academics that want to learn how their research might be used, and legislatures who want to give access to their processes for academics to contribute. **We recommend** that legislatures draft, agree and publicise a list of ways in which engagement with academics that benefits legislatures can be clearly acknowledged to academic staff and researchers, in line with recommendations made by the UK's four legislatures 2018 briefing note on impact.
- When designing KE activities, we recommend that legislatures are clear internally and externally about the benefits, both to themselves and to academics, including through setting clear yardsticks of success. This allows legislatures to be held to account (externally), would make it easier to evaluate success (internally), and could manage expectations of academics and universities about what they can expect to achieve from their involvement.
- Individuals working in KE at legislatures and universities are crucial to increasing interactions between academic institutions and legislatures. **We recommend** that – if KE is to become fully embedded in legislatures' working cultures – legislatures must dedicate a greater proportion of their resources to KE through, for example, greater funding but also by ensuring that officials' job specifications include protected time to promote KE. This will allow legislatures to coherently develop KE activities, clarify responsibilities and roles within legislatures for KE, and allow legislatures to develop strategic perspectives on how to engage with academics at a time when universities are increasingly seeking to engage with policy practitioners, including legislatures. Bringing in dedicated resources will overcome a key barrier for legislatures: being stretched.
- To gather systematic data, **we recommend:**
  - Exit interviews with fellows, who jointly complete an end-of-fellowship form with hosts to capture key data, such as number of briefing papers written (or contributed towards), number of events organised, number of days spent on certain tasks, etc. This will allow legislatures to compare how fellows engage with the institution. Standardising parts of the form would also help future cross-legislature comparisons.
  - Indicators may be helpful to track certain KE activities, including number of officials who are members of steering groups of academic projects or research groups; the numbers of academic researchers applying for fellowships; and, the attendance rates at events, whether seminars or training.
  - Evaluation forms at events, and again via a follow-up email/ telephone survey six months later. For researchers, the aim of these is to ask if researchers have used opportunities disseminated by legislatures; for officials, the aim of these is to ask if they have made use of research presented to them.
  - Monitoring diversity and equality data to get a better picture of the 'usual suspects' at legislatures and the success of efforts to tackle gaps. This can be done at events through questionnaires and by collecting demographic information on all fellowship applicants and those offered fellowships.

This data will allow for evidence-based tracking and evaluation of KE activities at each legislature in terms of attendance and diversity; qualitative evaluation of whether and how different kinds of KE activities are overcoming barriers in academic-legislature engagement; and, if done across all four legislatures using shared questions/forms, future inter-parliamentary comparisons, benchmarking and dialogue to learn from each other. Such data will allow for easier auditing and reporting, and make future evaluations of legislatures' KE activities more efficient.

Legislatures across the UK have been able to do a lot with limited resources to build knowledge exchange with universities. In this report, we have sought to show what they have achieved. In doing so, we have also shown possible ways for legislatures to improve their activities for the further benefit of effectively carrying out their core functions of representing constituents, passing legislation and holding governments to account.

Appendix A: List of documents and data on KE received from legislatures

National Assembly of Wales

1. Review of Academic Engagement programme from March 2018, which included an evaluation of the academic fellowship scheme and seminar series, both of which were conducted through interviews with key participants.
2. Academic Engagement Plan, 2017-21

Northern Ireland Assembly

1. KESS feedback questionnaires – raw data and analysis, covering 2012-17
2. KESS Memorandum of Understanding between NIA and universities

Scottish Parliament

1. Informal evaluation of pilot fellowship programme, based on word of mouth
2. Academic Engagement Project, Overarching Documentation (Aug 2016)
3. Academic Engagement Strategy 2019-20

UK Parliament

1. Evaluation of Academic Fellowships (including raw data and analysis) from November 2018, as well as survey data from PhD fellows
2. Immediate and six-month-on survey data and qualitative feedback from training sessions, both formal and informal covering 2016-19 period
3. Online data analytics, including website traffic and Twitter data (covering 2018-19)
4. Published and unpublished evaluations of UK Parliament and POST outreach activities, by academics and officials, including from events and training workshops
5. Board papers from POST (2017-19) covering activities of fellows and suggested impact of POSTnotes; additionally, internal evaluations of POST
6. Data on ResearchFish
7. Data on location and frequency of outreach events, as well as the gender of fellows and universities involved in the programme
8. Internal briefing prepared for Research England on UK Parliament activities

Cross-legislature

1. Internal briefing prepared for Research England on UK Parliament activities
2. REF briefing document written by all four legislatures

Appendix B: KE activities by legislatures

KE activity	Northern Ireland Assembly	National Assembly for Wales	Scottish Parliament	UK Parliament
Host academic (post-PhD) fellowships	No	Yes: open and directed calls; organised by Research Service; funded by IAAs/ ESRC with limited top-up funding available; hosted by Senedd Research	Yes: organised by SPICe; funded by a mixture of universities, IAAs and ESRC; hosted by SPICe	Yes: POST Academic Fellowship scheme, funded by combination of IAAs and universities, and hosted across Parliament (e.g. POST, committees, libraries, education and engagement, restoration and renewal)
Host collaborative fellowships	No	No	No	Yes: Learned societies and charities, including British Ecological Society, Institute of Food Science and Technology, Royal Society of Chemistry, SSCP and SCENARIO DTP fellowship, Wellcome Trust Humanities and Social Science Programme
Host PhD fellowships (UKRI Policy Internships, funded by UKRI)	Yes: hosted by RaISe	Yes: hosted by Senedd Research	Yes: hosted by SPICe	Yes. Organised by POST but seconded to libraries and committees in both Houses, as well as being based in POST; also, PSA-Parliament PhD Internship
Host other ad hoc fellowships (both PhD and post-PhD)	Yes: Fulbright Scholars	Collaborative PhD on Brexit with University (starts in 2019); also, Wales ESRC DTP 3-month PhD placement on Assembly Reform work (funded by the Assembly)	Yes: currently hosting action research PhD on Sustainable Development (University of Stirling), embedded in SPICe	No, but other forms of collaboration between academic partners and Parliament (e.g. for project funding, Restoration & Renewal, etc.)
Up-to-date online knowledge hub for academics and KE staff	Yes: https://kess.org.uk ; **http://www.niassembly.gov.uk/assembly-business/research-and-information-service-raise/northern-ireland-assembly-research-register/**	Yes: **https://www.assembly.wales/en/bus-home/research/academic-engagement/Pages/default.aspx**	Yes: **https://www.parliament.scot/parliamentarybusiness/100471.aspx**	Yes: **https://www.parliament.uk/get-involved/research-impact-at-the-uk-parliament/**
Coordinate formal KE networks	Yes: KESS Memorandum of Understanding, including KESS Panel)	No	Yes: Scottish Parliament Academia Network (SPAN) and Ask Academia (KE mailing list)	No
Establish and support framework agreements	No	Yes: Brexit Framework	Yes: SPICe Research Framework Agreement	No
Identify advisers (committees)	Yes: RaISe and committee staff	Yes: Senedd Research and clerks	Yes: no formal/shared database between SPICe and committees	Yes: POST and committee staff
Identify/approach academics to provide committee evidence (oral/ written)	Yes: RaISe and committee staff	Yes: Senedd Research and clerks	Yes: SPICe and committee staff	Yes: POST and committee staff
Seek input into/review of briefing papers	Yes: RaISe	Yes: Senedd Research	Yes: SPICe	Yes: all POST products are internally and externally peer-reviewed; may feed into library briefings
Train academics and KE staff to engage with legislatures	Yes: academic engagement workshops, as part of KESS and by invitation from universities outside Northern Ireland; contributions to POST training	No formal programme; some ad hoc invitations for Senedd Research staff; contributions to POST training	Yes: through SPAN and ad hoc sessions with HEIs; contributions to POST training when in Scotland	Yes: formal training programme (delivered by POST's KEU) and ad hoc sessions (delivered by combination of officials); see: https://www.parliament.uk/academic-training

Appendix B: KE activities by legislatures (continued)

KE activity	Northern Ireland Assembly	National Assembly for Wales	Scottish Parliament	UK Parliament
Attend conferences/workshops	Yes: ad hoc; staff have access to limited funding, time permitting	Yes: ad hoc; staff have access to limited funding, time permitting	Yes: ad hoc; staff have access to limited funding, time permitting	Yes: ad hoc; committee staff, libraries and POST have access to limited funding, time permitting
Train members, their staff and legislative staff to engage with academics	Yes: ad hoc, on the job training provided by RaISe	No	No	Yes: historically ad hoc, organised by POST in conjunction with other sections; training programmes in development for officials, MPs and MPs' staff
Provide legislative staff as members of steering groups/ boards/research institutes	Yes: RaISe (e.g. KESS Panel, Access Research Knowledge Advisory (ARK), ESRC Understanding Society Governing Board, local universities' REF Impact Case Study Panels and Academic Prize Panels; no central records	Yes: Research Service staff; ad hoc, no central records	Yes: ad hoc, no central records (e.g. staff member on Scottish Policy Research Exchange (SPRE); SUII)	Yes: ad hoc, no central records
Contributions to university teaching/courses	Yes: Legislative Studies and Practice MA at QUB (currently suspended); invited contributions to courses at local universities	Occasional invited contributions only	Yes: invited contributions to courses only	Yes: organise Parliamentary Studies module across 25 HEIs; invited contributions to courses
Organise regular/structured seminar series	Yes: KESS	No	Yes: Brexit breakfast seminars; SPICe seminar series; joint seminar series with Scotland's Futures Forum	No
Organise one-off seminars/events	Yes: RaISe	Yes: Senedd Research	Yes: SPICe and Scotland Futures Forum	Yes: POST, committee staff and libraries; public and private
Organise private briefings for members	Yes: RaISe and committee staff	Yes: Senedd Research and clerks	Yes: SPICe and committee staff	Yes: POST and committee staff
Invite blogs, single or co-authored	Yes; blogs from UKRI PhD Interns as part of their placements	Yes: Senedd Research	Yes: SPICe via Framework Agreement; blogs from interns and fellows published as part of their placement	Yes: HC Library (**https://commonslibrary.parliament.uk**), authored only by staff
Contribute towards blogs and academic publications (e.g. peer-reviewed journals)	Yes	Yes	Yes	Yes
Outward secondments	No	Yes	Yes	Yes

Appendix C: Project consent form and information sheet

PARTICIPANT RESEARCH CONSENT FORM

DR DANIELLE BESWICK, UNIVERSITY OF BIRMINGHAM

DR MARC GEDDES, UNIVERSITY OF EDINBURGH

Project title: Evaluating academic engagement with UK legislatures: Exchanging knowledge on knowledge exchange

Researchers: Dr Danielle Beswick (University of Birmingham) and Dr Marc Geddes (University of Edinburgh)

- I have read the Participant Information Sheet and the nature and purpose of the research project has been explained to me. I understand and agree to take part.
- I understand the purpose of the research project and my involvement in it.
- I understand that I may ask for the interview not to be recorded, or for the interview recording to be stopped at any time during the interview.
- I understand that I may withdraw from the research project by 31 August 2019 and that doing so will not affect my status now or in the future.
- I understand that the information gained during the study may be published, and that I will be identified only in the way I have agreed to below.
- I understand that primary data (interview notes, audio recording and transcripts) will be securely stored by the lead researchers (Danielle Beswick and Marc Geddes) for the duration of the project (scheduled for completion December 2019), and destroyed fifteen years after the last access request.

Please indicate below the way in which you would like to be identified in any publications arising from the research:

_____

Signed: _____ (Research Participant)

Print Name: _____ **Date:** _____

Research Project Contact details:

Dr Danielle Beswick: **d.beswick@bham.ac.uk**

Dr Marc Geddes: **marc.geddes@ed.ac.uk**

References

- Beswick, D., and Elstub, S. (2019) Between diversity, representation and 'best evidence': rethinking select committee evidence-gathering practices. Parliamentary Affairs, 72(4): 945-964.
- Bochel, H. and Berthier, A. (2018) Committee witnesses: gender and representation. SPICe Briefing, SB 18-16. Edinburgh: Scottish Parliament.
- Childs, S. (2016) The Good Parliament. Bristol: Bristol University.
- Cairney, P., and Kwiatowski, R. (2017) How to communicate effectively with policymakers: combine insights from psychology and policy studies. Palgrave Communications, 3(37): 1-8.
- Geddes, M. (2018) Committee Hearings of the UK Parliament: Who gives Evidence and does this Matter? Parliamentary Affairs, 71(2): 283-304.
- Geddes, M., Dommett, K. and Prosser, B. (2018) A recipe for impact? Exploring knowledge requirements in the UK Parliament and beyond. Evidence and Policy, 14(2): 259-276.
- Hansard Society. (2019) Audit of Political Engagement 16. London: Hansard Society.
- House of Commons Liaison Committee. (2018) Witness gender diversity, second report of session 2017-19, HC 1033.
- House of Commons Liaison Committee. (2019) The effectiveness and influence of the select committee system, fourth report of session 2017-19, HC 1860.
- Kenny, C., Rose, DC., Hobbs, A., Tyler, C., and Blackstock, J. (2017) The role of research in the UK Parliament: Volume 1. Parliamentary Office of Science and Technology.
- Lomas, J. and Brown, A. (2009) Research and advice giving: A functional view of evidence-informed policy advice in a Canadian Ministry of Health. Milbank Quarterly 87, pp.903-26.
- Oliver, K., and Boaz, A. (2019) Transforming evidence for policy and practice: Creating space for new conversations. Palgrave Communications, 5(60): 1-10.
- Oliver, K., and Cairney, P. (2019) The dos and don'ts of influencing policy: A systematic review of advice to scientists. Palgrave Communications, 5(21): 1-11.
- Oliver, K., et al. (2014) A systematic review of barriers to and facilitators of the use of evidence by policymakers. BMC Health Services Research, 14(2): 1-12.
- Shortall, S., Regan, E., and Dewhirst, C. (2019) Knowledge Exchange Seminar Series: An Effective partnership to increase the public value of academic research findings, in Lindgreen, A. et al., (eds) Public Value: Deepening, enriching, and broadening the theory and practice. Routledge.
- UK Parliament. (2017) 'Academics' perceptions of barriers to engaging with Parliament', UK Parliament website. Available online at: https://www.parliament.uk/get-involved/research-impact-at-the-uk-parliament/why-engage-with-parliament/supporting-researchers-to-engage/. Accessed 20 December 2019.
- UK Parliament. (2018) Research Impact and Legislatures, available online at: **https://www.parliament.uk/documents/Research%20Impact%20in%20Legislatures_FINAL%202.pdf** Accessed 13 November 2019.
- Universities UK and GuildHE (2019) Concordat for Advancement of Knowledge Exchange in Higher Education in England: A Universities UK/GuildHE consultation with the HE sector' available online at **https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/knowledge-exchange-concordat-consultation.aspx** Accessed 13 November 2019.
- Veletsianos, G., Houlden, S., Hodson, J., and Gosse, C. (2018) Women scholars' experiences with online harassment and abuse: Self-protection, resistance, acceptance, and self-blame. New Media and Society, 20(12): 4689-4708
- Walker, L., Pike, L., Chambers, C., Lawrence, N., Wood, M. and Durrant, H. (2019) Understanding and Navigating the Landscape of Evidence-based Policy: Recommendations for improving academic-policy engagement. Bath and Bristol: University of Bath Institute for Policy Research and PolicyBristol.

Design

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