**KEF Consultation January 2019: Imperial College London Response**

**1. Introduction**

**Tick here to continue to consultation.**

[Tick - Yes]

**2. Respondent details**

**Please indicate who you are primarily responding on behalf of.**

English Higher Education Institution

**3. Contact details [HEI]**

**Please provide the name of your organisation/ If you would be happy to be contacted in the event of any follow-up questions, please provide a contact name and email address.**

Imperial College London/ Andrew Peat – a.peat@imperial.ac.uk

**4. KEF purpose**

**Do you consider that the KEF as outlined will fulfil its stated purposes? Please provide a commentary in relation to your scores above. (400-word limit).**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Strongly disagree | Disagree | Somewhat disagree | Somewhat agree | Agree | Strongly agree | No opinion |
| To provide universities with new tools to understand, benchmark and improve their performance |  |  | Yes |  |  |  |  |
| To provide businesses and other users with more information on universities |  |  | Yes |  |  |  |  |
| To provide greater public visibility and accountability |  |  | Yes |  |  |  |  |

The College believes that the KEF will not completely fulfil its stated purpose in the three areas stated above. In order to provide institutions ‘with more tools to understand themselves’ more information would be required than currently exists, but the KEF outlined is largely based on HE-BCI metrics which are already available. The College believes that narrative statements in each aspect of the KEF would be more useful, but these have been reduced in number in order to reduce the burden, (whilst making the KEF an annual exercise). The College considers that a KEF which included more narrative elements, but which took place more often, would provide greater added value over and above the existing HE-BCI.

Many of the metrics presented are normalised by research income. The College believes that with the use of clustering to ensure institutions of a similar size, structure and KE potential are grouped together, the case for normalisation diminishes. Feedback from business suggests that normalisation adds little value to their choice of collaborators and that they especially value “large research universities with a broad span of excellence ... because partnerships can evolve over time to engage new research disciplines and combinations of discipline without the cost and risk of building new relationships with new university partners”. They want to know the scale of activity within an institution in order to gauge if a potential partner has the capacity to take on certain types of new KE activity. Given that business has been identified as one of the main audiences of the KEF, we would suggest at least some of the data to be presented as absolute values.

**5. Aims and overall approach of the Knowledge Exchange Framework (KEF)**

**The KEF consultation document describes the overall approach as being an annual, institutional level, largely metrics driven exercise, although noting that narrative will have an important role. More background may be found in the report summarising the recommendations of the technical advisory group. Do you consider this overall approach to be appropriate? Please provide a commentary in relation to your scores above. (400-word limit)**

Strongly disagree

Disagree

Somewhat disagree

Somewhat agree

Agree

Strongly agree

No opinion

If the KEF is informed by data that is already being collected annually via HE-BCI, there would be no objection to this being an annual exercise. However, the College considers that narrative statements are an important part of the exercise that have the potential to add value over and above the metrics, and that serious consideration should be given to making the KEF less frequent in order to enable a greater focus on the narrative elements without increasing overall burden.

**6. Clustering**

**The English higher education sector is very diverse. We therefore propose to create clusters of knowledge exchange peer groups. The proposed clusters and clustering approach is detailed in the KEF consultation document. Please use the following questions to provide your feedback on our proposals.**

**Please indicate your degree of support for the following aspects of our clustering approach. Please provide commentary on any aspect of your scores above. If relevant, please incorporate suggestions for alternative arrangements. (400-word limit)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Strongly disagree | Disagree | Somewhat disagree | Somewhat agree | Agree | Strongly agree | No opinion |
| The conceptual  framework that  underpins the cluster  analysis. |  |  |  | Yes |  |  |  |
| The variables and  methods employed in  undertaking the  cluster analysis. |  |  |  | Yes |  |  |  |
| The resulting make  up of the clusters, i.e.  the membership. |  |  |  |  |  | Yes |  |
| That the overall  approach to  clustering helps  Research England to  meet the stated  purposes of the KEF  and ensures fair  comparison. |  |  |  | Yes |  |  |  |

The College considers that a clustering approach is appropriate, as different types of institution have different missions. However, the College considers that each individual institution should be able to determine which cluster they belong in, in relation to its goals (this may require a supporting argument relating to their own KE strategy). This is because each institution should play to its own strengths and should be judged by these. The College considers that given the existing clusters, it is certainly in the correct one; however, it is mindful that not all members of its own and other clusters will feel the same way. The institutions in Cluster V have similarities in the sense that they are Russell Group institutions with a large Medicine component, so may act in a similar way in regards to research partnerships. However, in terms of IP and commercialisation, the number of spin-outs varies dramatically, so the clustering approach is not so useful in this instance.

In the absence of provisions to allow an institution to nominate itself (with appropriate evidence) to a particular cluster, perverse incentives may apply, possible leading to effects which the KEF was not intended to produce.

In terms of the usefulness for the public, the naming of each cluster should clearly state its function, this will remove any ambiguity relating to the purpose of the exercise.

**7. Perspectives and metrics**

**Knowledge exchange covers an extremely diverse range of activity and it is appropriate that some HEIs will perform more strongly in different areas that align more closely with their mission and strategic goals. We have therefore proposed a range of seven perspectives. The following questions will seek your views on the number and range of perspectives and metrics proposed.**

**Perspectives**

* **Research partnerships**
* **Working with business**
* **Working with the public and third sector**
* **Skills, enterprise and entrepreneurship**
* **Local growth and regeneration**
* **IP and commercialisation**
* **Public and community engagement**

**Taking into account the overall range of perspectives and metrics outlined in the consultation**

**document, do you agree or disagree that a sufficiently broad range of KE activities is captured. Comments.**

Strongly disagree

Disagree

Somewhat disagree

Somewhat agree

Agree

Strongly agree

No opinion

We consider that the KEF is likely to be most successful if it has a clear focus on activities which transfer knowledge from HEIs to businesses, charities and the state in order to drive economic growth and well-being through the development of new products, services and policies. We consider public engagement to be important, but it is different from the other categories, and reporting comparisons with them is not easy. One of the most important mechanisms for Knowledge Exchange is the employment of graduates in roles where they will directly use the skills and knowledge that they have acquired in their degrees. The new Graduate Outcomes survey contains a question to capture this information, and could therefore be a source of a relevant metric.

**Taking into account the range of metrics outlined in the consultation document, please**

**indicate [using a % sliding scale] whether you consider that they adequately represent**

**performance in each of the proposed perspectives/ Taking into account the range of metrics outlined in the consultation document for this perspective, please provided any comments on the balance and coverage of the proposed metrics. (400-word limit).**

**Research partnerships**

* **Contribution to collaborative research (cash and in-kind) as proportion of public funding (HE-BCI table 1a)**
* **Co-authorship with non-academic partners as a proportion of total outputs (data provider TBD)**

75%.

It is agreed that ‘Contribution to collaborative research’ metric should be included. It is not currently used to determine HEIF, however the College feels that there should not be a distinction between collaborative research and contract research in determining HEIF. However, the College recognises that there are issues with ‘in kind’ contributions being reported using different methodologies by different institutions, so this issue would need to be addressed first.

Co-authorship with non-academic partners is easy to game, will be open to abuse and hard to validate, and because of this there is a risk that the metric will not be particularly meaningful, but just easy to count. In addition to this, the rate of co-authorship with non-academic partners can vary a lot between different industries. The pharmaceutical industry is, for example, far more willing to publish the results of research in papers than (for example) the automotive and aeronautical industries. For this reason, counting the outputs should be complemented with a narrative statement to explain with what types of industries the institution tends to engage with.

**Working with business**

* **Innovate UK income (KTP and grant) as proportion of research income (Innovate UK)**
* **Contract research income with businesses per academic FTE (HE-BCI table 1b)**
* **Consultancy income with businesses per academic FTE (HE-BCI table 2)**

50%.

Industrial income (as shown in the HESA FSR), as well as being an input measure, is a good proxy for the extent to which institutions are responsive to the needs of industry and are delivering value to their industrial partners. There is currently no metric here that links what we do with businesses in the region/regeneration space, for example there is no recognition for developing local ecosystems and economies by supporting non-imperial College start-ups with incubation, investment, jobs created and business support. The only thing that can be claimed in this system would be rental income. This is where there is a cross over with “educational” outreach and “business” outreach.

**Working with the public and third sector**

* **HE-BCI contract research income with the public and third sector per academic FTE (HEBCI table 1b)**
* **HE-BCI Consultancy income with the public and third sector per academic FTE (HE-BCI table 2)**

100%.

The College feels that these two metrics capture its activities in working with the public and the third sector.

**Skills, enterprise and entrepreneurship**

* **HE-BCI CPD/CE income per academic FTE (HE-BCI table 2)**
* **HE-BCI CPD/CE learner days delivered per academic FTE (HE-BCI table 2)**
* **HE-BCI Graduate start-ups rate by student FTE (HE-BCI table 4)**

75%.

The College records metrics based on its incubator programme, i.e. the number of start-ups housed by university incubators, the number of start-ups graduated from an incubator program, and the number of active incubator graduate companies. It would be possible for the College to include these metrics if a narrative statement was included to go alongside this metric.

**Local growth and regeneration**

* **Regeneration and development income from all sources per academic FTE (HE-BCI table 3)**
* **Additional narrative/contextual information**

25%.

The College recognises this category to be hugely complex, with many interdependent factors involved, so it is supportive of the narrative element being used here. Regarding the HE-BCI Table 3 metric, we should look beyond this Government/EU regeneration funding and look also at what external (private) investment has been brought in to develop local ecosystems and infrastructure, for example investment to build new space.

This aspect is only currently represented on the radar charts by HE-BCI Table 3, to which the College often gives a nil-return. This nil return represents a lack of inputs from particular, specified (normally EU) sources, and not a lack of activity on the College’s part. Our extensive collaborations with industrial partners to drive regeneration at White City is not fairly represented in this metric. The College will have an opportunity to counter this with the narrative statement, but is concerned that the general viewer may look at the metric without reading the statement, and so get a skewed perception of the College. There is an urgent imperative to develop an output metric in this area.

**IP and commercialisation**

* **Research resource (income) per spin-out (HEBCI table 4)**
* **Average external investment per formal spinout (HE-BCI table 4)**
* **Licensing and other IP income as proportion of research income (HE-BCI table 4)**

50%.

Current spin-out survival metrics fail to distinguish between companies that are adding to the UK economy and those that are barely surviving. There is currently undue emphasis placed on counting the numbers of patents, and this may distort behaviour in unhelpful ways. More attention should be given to whether they are useful or impactful.

Licence revenue metrics should track the total number of revenue generating licences, but also indicate whether the majority of income in this area is from either a few big licences or many small ones. Also, whether this licence income results from a product sold to customers or is from milestone payments due during the product development phase. The HE-BCI form provides the total number of licences generating income, it does not provide any information about this type of detail.

The measurement of invention disclosures needs to distinguish between those taken forward as ‘cases’ rather than those that are not. What counts as an invention disclosure is difficult to define because we receive may enquiries about ideas from inventors, we will then have a preliminary discussion with them, and then identify the ones that have sufficient commercial merit to justify undertaking prior searches and other checks to assess whether there is valid IP that can be protected. It can be argued that this is the point at which we could define the case as an invention disclosure. However, different universities will have different approaches to this process, and it would be difficult to ensure consistency of definition across the sector.

Some forms of IP (e.g. copyright in software code) do not require registration, but are still valuable, so it would be useful to record these. Cases of IP that are converted to commercial deals should be measured (however, it should be noted that multiple cases could be included in one deal, so a mechanism needs to be found to deal with double counting.) The conversion rate of IP cases to commercial deals is an internal measure that most TTO/Universities use to measure their success rate. The timeframe for the conversion rate varies from 1-4 years (time lapse from disclosure date to commercialisation) so it is quite difficult to measure this parameter. Consequently, most TTOs measure the ratio between the number of IDS and deals executed within the same reporting period.

**Public and community engagement**

* **Time per academic staff FTE committed to public and community engagement (paid and free) across:**

1. **Events (HE-BCI table 5)**
2. **Performances (HE-BCI table 5)**
3. **Museums and galleries (HE-BCI table 5)**

* **Additional narrative/contextual information**

50%.

Metrics could include income from and expenditure on engagement. However, more guidance and consistency is needed on how funds awarded for engagement are recorded on research grants. Other relevant metrics could include the number of people where training has been given to support public engagement activities, partnerships in the community, metrics around patient involvement and staff numbers to support the activity. Ultimately, however, the most accurate measure of impact is written or verbal feedback from those engaged with, which is difficult to capture and assess in terms of metrics.

**8. Supplementary narrative**

**We consider that for two perspectives, that on their own, the existing metrics do not provide sufficient measure of the scale and variety of activities undertaken by higher education institutions (HEIs).**

**We intend to work with the sector to develop, where possible, metrics that will capture the outcomes derived from all types of knowledge exchange in the future. In the mean time we propose to supplement both the Local Growth & Regeneration and Public & Community Engagement perspectives by requesting a narrative statement from each provider to set out the main strategic goals, activities, outputs and potential outcomes achieved.**

**Do you consider it appropriate for HEIs to provide narrative text to support the metrics in perspectives that don't currently have fully developed metrics?**

Strongly disagree

Disagree

Somewhat disagree

Somewhat agree

Agree

Strongly agree

**Public and community engagement narrative**

**Overall, is the guidance on the provision of narrative text for this perspective clear.**

Strongly disagree

Disagree

Somewhat disagree

Somewhat agree

Agree

Strongly agree

**Please comment on the proposal to include narrative from HEIs for the public and community**

**engagement perspective, in particular: - where further clarification is required- where refinements could be made- whether there are areas where more consistency across HEIs could be achieved. (400-word limit)**

As the phrase ‘public and community engagement’ can have multiple meanings, the College would find it useful if the guidance would state Research England’s interpretation of the phrase more explicitly. This would help the College to provide a more concise narrative relating to its activities. If the phrase is interpreted differently across the sector, it would render the exercise less meaningful.

**Local growth and regeneration narrative**

**Overall, is the guidance on the provision of narrative text for this perspective clear.**

Strongly disagree

Disagree

Somewhat disagree

Somewhat agree

Agree

Strongly agree

**Please comment on the proposal to include narrative from HEIs for the local growth and**

**regeneration perspective, in particular:**

* **where further clarification is required**
* **where refinements could be made**
* **whether there are areas where more consistency across HEIs could be achieved**

**(400-word limit)**

The explanation of what is required for this narrative is clear. In this case the College would wish to cite at least two regions as its local area: Hammersmith and Fulham (the area around its White City campus) and Kensington and Chelsea (the area surrounding its South Kensington campus). We would like to emphasise however, that highly research intensive institutions are likely to contribute to economic development beyond their immediate region, and in some cases beyond the UK. Cause and effect in local economic and industrial landscape is difficult to unpick.

**We welcome responses on what other types of narrative or contextual information would be helpful. You may wish to consider, for example:**

* **Should the HEI or Research England provide other narrative information?**
* **How should we use other contextual information, such as information on local economic competitiveness described in section 5 of the cluster analysis report?**
* **Would other perspectives benefit significantly from further narrative information?**
* **Would the benefit of adding further narrative information be outweighed by the burden of doing so?**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Strongly disagree | Disagree | Somewhat disagree | Somewhat agree | Agree | Strongly agree | No opinion |
| Overarching institutional statement – provided by the HEI |  |  |  |  |  | Yes |  |
| Overarching institutional statement – provided by Research England |  |  |  |  | Yes |  |  |

The College believes that each institution should be able to provide a narrative explaining what its particular strategic intentions and priorities are relating to knowledge exchange, as this will provide important context for the KEF metrics. Therefore, the College is in favour of an overarching institutional statement to be provided by the HEI.

**9. Visualisation**

**We have provided further information including example visualisations of the KEF within the consultation document.**

**Please indicate [using a % slider scale] your level of support for the proposed method of**

**comparison and visualisation.**

Each of the seven perspectives is to be given equal weighting. 75%

Metrics under each perspective are to be normalised and summed. 25%

The performance of each HEI is to be expressed in a radar chart in deciles, relative to the

mean average decile of the peer group. 50%

Perspectives are not intended to be aggregated into a single score. 100%

Narratives are to be presented alongside the metric score, making it clear that metrics in the

two perspectives of public & community engagement and local growth & regeneration are

provisional, and should be read in conjunction with the narratives. 50%

Visualisation is to be delivered through an interactive, online dashboard which will allow

exploration of the data underlying the ‘headline’ results in various ways. 75%

**Please comment on the presentation and visualisation proposals, for example:**

* **where further clarification is required**
* **where refinements could be made**
* **whether there are areas where more consistency across HEIs could be achieved- how**
* **narratives could be incorporated? (400-word limit)**

The presentation is focusing on the metrics, and the College believes that the metrics are only useful and interesting once they are put into context by narratives. The metrics used in the KEF will inevitably be used by other agencies to rank institutions. However, it has been explicitly stated by Research England that this is not the intended use of the KEF.

The raw data should be very clear within the visualisations. Many of the metrics are subject to normalisation in different ways. An example of this is the ‘Research resource (income) per spin-out (HEBCI table 4)’ metric. This metric measures how much RGC income from industry the College receives in relation to how many spin-outs are formed. A figure of £5m RGC industry income per spinout could be interpreted as the College receiving £5m RGC income from industry per year and producing only one spin-out, whereas in the College’s case it receives ~£50m RGC from industry per year and produces ~10 spin-outs. Currently this data is available to view, however only when you drill into the data and hover over the figures, and the general viewer may not look at the visualisations at this level of detail.

**10. Implementation**

**We will pilot the implementation with a group of HEIs as described in the consultation document. Please provide any comments about the implementation of the KEF. (200-word limit).**

The College believes that it is essential to test the KEF and any potential metrics thoroughly before a full-scale implementation, via a pilot exercise, with further expansion dependent on evaluation of the pilot.

**11. Any other comments**

**If you have any other comments, please share them here. (400-word limit).**

No comment.