Richmond, L., McCutcheon, V., and Cullen, K. (2008) *Shaping Metrics for HEI Cultural Engagement - Knowledge Transfer*. Project Report. University of Glasgow.

http://eprints.gla.ac.uk/85817/

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AHRC PROJECT REPORT

SHAPING METRICS FOR HEI[1] **CULTURAL ENGAGEMENT - KNOWLEDGE TRANSFER**

Introduction

An application was submitted to the Arts and Humanities Research Council (AHRC) for support for a project that would identify and define activities deemed relevant to Knowledge Transfer (KT) - Cultural Engagement (CE), and propose appropriate means to evaluate them. It was acknowledged from the outset that efforts at agreeing "metrics" for the impact of such activities had been attempted before, albeit with limited success. (One such notable example has been lately provided by the Higher Education and Business Community Interaction Survey (HEBCIS) which has collected some data on social, community, and cultural engagement for some years; however, the robustness and consistency of the data for these purposes have often been questioned.) Consequently, this Project was approved by AHRC, and commenced in August 2008.

Executive Summary (of recommendations)

1. Adopt the Glasgow Cultural Metrics (twin-track) Model, using channels rather than activities for measurement and funding support of KT-CE activities

2. Define "core/capital" and "development/project" channels, with agreed examples of activities that would be measured within each generic channel

3. Thereafter, funding bodies should support the former with ear-marked, or general funding streams, and the latter from special initiative, or horizon funding streams

4. Adopt self-assessment against specified objectives; predominantly quantitive data (with external audit) for core work. For development activities, make use of peer-review, predominantly assessing a narrative report

5. Both should be augmented/informed by traditional assessment methods, for example through professional Accreditation, publications record, etc.

6. Weighting of different channels should be avoided, unless there is a short-term requirement to promote a strategic initiative

7. Should it be deemed necessary, on occasion, a significant factor/multiplier should be used, in order that the AHRC strategy is realised, and the practitioner institution adequately compensated for the skewing of activities

8. Guidelines for AHRC reviewers assessing applicants' evaluations of the impact of their proposal for the award of funding support are required urgently

9. Emphasise that such metrics are intended to encourage and widen the scope of activities, rather than drive practitioners to adopt a conservative interpretation of Cultural Engagement and of its potential for sharing knowledge

10. Implementation of the model should be trialled over a period of 12 months, thereby allowing for development and testing of the model to continue, and in particular to give time for consideration of the REF Pilot study, due for publication imminently.

11. Extend the project for developing and testing metrics with a further funding allocation, building on this work

[1] Within the HEI ambit we include universities, colleges, local authorities, independent cultural institutions, etc., or indeed any organisation which may apply directly, or in the capacity of

partner/collaborator, for Research Council funing

Methodology

In addition to wide reading of current literature on the topic (c/f Appendix 1), and participation in a London conference by the Principal Investigator and one other Team member, the Project Team established an Advisory Group from whom further ideas and suggestions were gleaned. Following these steps, a Workshop structure was developed, then piloted using Advisory Group members together with other interested practitioners (14) from within the University of Glasgow. In light of the advice received and the experience of the Pilot Workshop, the formal Workshop programme and itinerary was developed (c/f Appendix 2), in guideline format only, and information on it was disseminated across the HE sector, and to professionally-related disciplines.

Three Workshops were scheduled, and held in Glasgow (18 February 2009), Aberdeen (20 February), and Edinburgh (25 February). In order to maximise representation from different interest groups, while ensuring that it operated as a genuine Workshop, and not a Lecture, numbers at each venue was restricted to 30 (including presenters and facilitators). All Workshops were fully booked, and each had a waiting list. We were successful in attracting cross-sectoral interest (as illustrated in Appendix 3).

At each 4-hour Workshop, an initial description of our task was followed by exploration of examples of activities, volunteered by participants, that they felt would qualify as "cultural engagement", whether practiced in their own institutions or not. The full list of activities suggested for inclusion is attached (c/f Appendix 4). As a means of illustrating how a model had been developed in the past, to assess the impact of KT activities in the area of economic development, the example of that model, already accepted and in use in that sphere (c/f Appendix 5), was described and discussed in detail.

All the activities that had been suggested had been written on "post-it" notes, and efforts were next devoted, first, to see where there was any similarity between them and, secondly, if they could be attributed to generic transfer mechanisms, or exchange "channels". This concept derived from the economic model, where the full range of transfer activities had produced a similar concern that measuring activities was both time-consuming and unreliable in its conclusions. Interestingly, while there was some agreement between different Workshops over a few channels, each Workshop suggested a different list of channels in the majority of cases (c/f Appendix 6). Even more interestingly, there was wide disagreement both between and within Workshops, about whether any weighting might be attached to individual activities or channels, and if so, what that might be. Discussion of this concept was prompted by recognition that, within the economic KT model, some activities, and channels, were regarded as more productive/desirable than others, and weighted accordingly; for example, work with Small and Medium-sized Enterprises was considered of higher priority within the funding bodies' strategies than partnerships with major international institutions, and so activities that were grouped within that channel received a weighting factor of five in the distribution of funds. In our experience, a factor of five has not changed significantly institutional activities. To this we will return, in the context of the developed and recommended model.

One other model, with two variants, emerged and was debated at the workshops; specifically, the question of whether or not time input could serve as a proxy for measurement. The variants were time input by practitioners (e.g. in composing, researching, preparing, building, etc.) to an activity, and/or time input by users at

an activity (e.g. attendance at a conference, participation in an interactive exhibition, etc.) The sense of the workshops was that there were significant issues associated with this model, in both of its configurations. Practitioner input gave no guarantee of quality, was subject to abuse, failed to recognise experience, and so on; user input was not seen as sufficiently discriminating when it came to measuring against different activities; for example, attendance at a concert was almost bound to last two hours (say), while visiting an exhibition might be much shorter but no less significant in its impact. Indeed, the former might be regarded as a captive audience, and the latter voluntary, but both might be evaluated as though identical. Similarly, live broadcasting of that concert might reach millions, but the audience could not safely be counted as committing 2 hours each; conversely, an on-line exhibition could reach similar numbers, and be re-visited on several occasions. The practitioner input to both concert and exhibition, however, would remain the same. Faced with such difficulties, this model was not pursued (but for further consideration, we would recommend the report by Ursula Kelly *et al*, "Towards the Estimation of the Economic Value of the Outputs of Scottish HEIs").

While the time input model was not broadly favoured, it did offer a concrete example from within a wide spectrum, extending from Contingent Valuation (CV) studies to those on the Social Return on Investment (SROI). It would be simplistic, perhaps, to describe these as representative exclusively of economic and social arguments; nevertheless, the emphasis in the former is towards calculating and placing a "proper" value on cultural activities, while the emphasis in the latter model is to develop a ratio which relates the value of social benefits to the value of investment made to realise those. It might well be argued that these alternative models are, interestingly, more notable for what they have in common than for what separates them. Either may be useful at a wider strategic and/or over-arching policy level; however, as tools for the practitioner arguing the case for financial support of an exhibition, the administrative cost of collecting such data may be prohibitive, and a major deterrent to pursuing projects. For the Research Council assessor, too, the level of complexity in interpreting data in the context of modest funding decisions, also seems excessive.

Arising from all of the above, it was clear, and widely accepted at each Group discussion, that while a meaningful evaluation was required and would be helpful, it had to be straightforward and un-burdened by excessive administrative costs to report. In short, the benefits of measurement had to be demonstrably greater than the cost of collecting the data. These were the guiding principles, therefore, and while obstacles should, quite correctly, be acknowledged, they should not prevent the development, implementation, and wide acceptance and use of a model.

A final note in relation to the methodology is that, in order to ensure that as wide a range of activities and different model proposals as possible could be explored, no information from successive Workshops was added to the web site, until the process was complete.

Proposed Model

As noted previously, attempts to agree metrics for activities in the area of KT-CE have met with little success. However, an existing impact assessment model was already in use for traditional strands of KT, and we considered means by which this might be tailored, then applied to CE. It was recognised that, difficult though it is to assess the direct economic impact of transferred research activities, an entirely different level of difficulty was added, where outcomes were less obviously financial and more concerned with human well-being and personal fulfilment. This insight also meant that, because it was widely agreed that assessing the impact of individual activities would be unfeasibly time-consuming (for often questionable results), grouping activities into delivery "channels" offered an alternative basis for evaluation.

In essence, the developing (and increasingly parallel) model for the transfer of knowledge, might be simply illustrated as starting from the following straight-line progression (while not denying the multi-directional dimension):-

Cultural knowledge > transfer activities > transfer channels > users[2] > impact

If, as the Workshops insisted, measuring impact dependably is impossible, because of the competing and complementary factors distorting and exaggerating the outcomes, and measuring "users", or audiences gives no indication of quality, then only the first three components in this model are capable of any meaningful measurement. Measuring knowledge might offer a mechanism, but it is the transfer of knowledge, not the knowledge itself for which we are required to suggest metrics. The activities themselves are so numerous and dynamic, that participants were broadly unanimous in rejecting these as the basis for developing metrics, not least because geographic and resource considerations were obvious and direct limitations on different knowledge sources, and a defined list of activities was viewed as unhelpful in encouraging innovation. It was also the area which was deemed most administratively burdensome.

To illustrate the point graphically, the linear model described above may be re-titled and expanded as follows:-

Knowledge >	*Activities >*	*Channels >*	*User Measures >*	*Impact*
Performance	Music master classes	Performances	No. in audience	Well-being
	Concerts	Publications	Time spent	Personal fulfilment
		E-engagement	Online "hits"	Better educated
Educational	Lunchtime lectures	Consultation	Enquirers	More tolerant
	Family days	Access	Size of collections	Less criminality
	Answering enquiries	Publications	No. of students at taught courses	Safer
	Access to archives	E-engagement	Contact hours	
Curatorial	Online catalogues	Exhibitions	Grants attracted	
	Heritage walks	Publications	No. of staff	
	Dinosaur display	E-engagement		

All of which left the means of transfer, or channels, as the most sensible basis for developing metrics.

No attempt having been made to "shoehorn" separately suggested channels into a common descriptor, at the Workshops, the authors nevertheless could see substantial areas of over-lap, suggested as follows:-

Channels proposed at Workshops	"Generic" channels
Performance	Performances
Exhibitions/Events	Exhibitions
Publications	Publications
Consultation	Consultation
Access to Materials/Resources	Access
Public debate/Policy generation	Consultation
Lectures	Learning
E-engagement	E-engagement
Projects	Fit to other channels depending on balance of content
Competitions	Fit to other channels depending on balance of content
Sponsorship	Fit to other channels depending on balance of content
Facilities	Access
Festivals	Fit to other channels depending on balance of content
Partnerships	Fit to other channels depending on balance of content
Networks	Learning or consultation
Workshops	Learning
Other	Fit to other channels depending on balance of content

In sum, therefore, the eight channels we would identify as offering the best prospect against which to develop KT-CE metrics are as follows:-

1. Performances
2. Exhibitions
3. Publications
4. Consultation
5. Access
6. Learning
7. E-engagement
8. Other

Though we believe these generic channels can be used for the majority of activities, we also anticipate that a piloted version of whichever model is adopted would reveal exceptions, and provide a basis on which further study and refinement should be based.

It is perhaps worth re-emphasising here why Workshop participants felt strict quantitative measures such as audience numbers for a concert, student contact hours for learning, number of partners, etc. to be inappropriate measurements.

- Firstly, a complex and unfamiliar composition might attract a very small audience, but have a greater impact than a "standard" performance;
- equally, some exhibitions might be guaranteed to bring large audiences, but arguably add less to the sum of human knowledge than an exhibition supported by novel research into a little-known but fundamentally important artist
- again, any exhibition presented in a major urban centre is likely to attract larger visitor numbers than even the same exhibition in a smaller town; however, the proportion of the local population engaged in the smaller venue, and consequently the cultural impact, may be far greater
- simply counting numbers, rather than channels, will both discourage risk in programming, and reward conservatism, neither being the role of HEIs or the correct basis for enabling innovation and/or excellence.
- furthermore, much of the knowledge and information exchanged is through informal routes, with un-assessed learners, participating for pleasure and self-improvement, and therefore incapable of reliable formal measurement.

All of the above, however, is not to say that KT-CE is incapable of assessment, and we suggest the following model as a first step towards realising this:-

Cultural Engagement Ecosystem
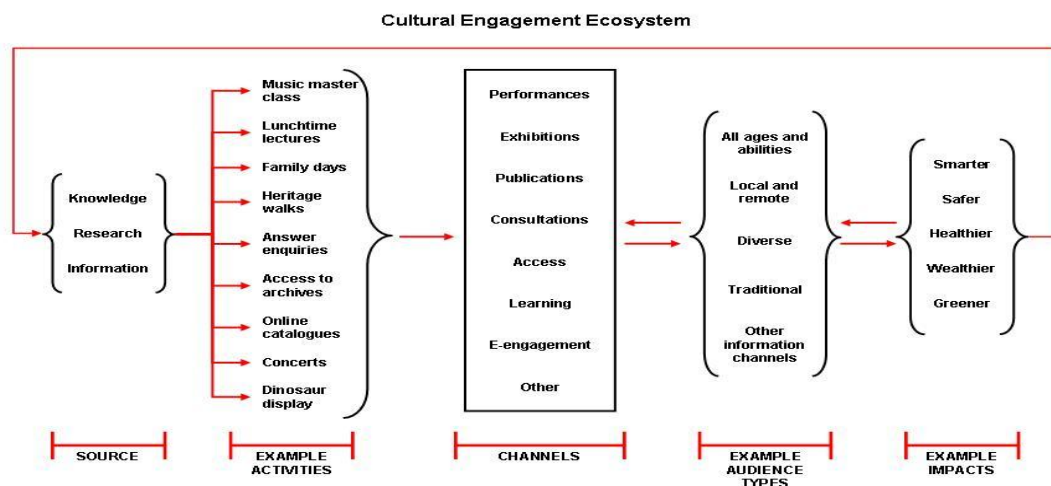
If it is accepted a) that the activities are too many to merit individual and reliable comparable evaluation, b) that measurement of the "audiences" would be both over-bureaucratic and not likely to be acceptable to those audiences, and c) that the eventual impact is so influenced by inputs beyond the control of our institutions, then once again we see that sources and channels remain to us to evaluate. In respect of the former, while other measurements of quality are already in place (examples would include professional Accreditation, tourism star-ratings, RAE submissions, etc.) its transfer is neither secured nor indeed necessarily implied, and thereby confirms by another route that the "channels" alone remain with potential for evaluation.

To this we will return, and question. However, we would first wish to acknowledge a further key finding from the workshops, to add to the concerns expressed particularly over administratively heavy metrics, and the potential for inhibiting innovation and making institutions fundamentally risk-averse. Specifically, a real

and repeated concern was expressed by some (but not all) practitioner participants at the workshops about the weighting of their users. We were unable to reach consensus on a ranking of importance of their users, and the majority believed that such prioritisation of some groups would skew activities inappropriately. (Note, this was an example of back-referencing the channels of evaluation to the activities themselves, and cautioning against the risks to certain activities, and crucially users, as a consequence of the model.) This is a finding which we have endeavoured to respect.

Participants were also aware of the uncertain financial basis on which cultural institutions operate, so a desire was expressed for evaluation that both recognised the need for funding in support of key tasks, augmented by others that could encourage innovation and risk-taking. In any event, these were felt often to be mutually dependent. By way of an example, taken from the museum sector, custodial responsibilities including "pedestrian" documentation of the collections is an absolute, as well as an absolute prerequisite for "fast-lane" innovative exhibitions. Consequently, some protection was sought for **core activities** that provided a foundation for project work, even while additional reward was expected for excellence and innovation in **developmental projects**.

This, then, suggested two possible metrics models; the first proposed a weighting of the different channels, in an attempt to encourage some delivery methods and, by extension, outcomes. This idea was not widely supported by participants at the workshops. The second model suggested a separation of different activities within those channels, a twin-track evaluation, in essence. What the two models had in common, and pointed towards an acceptable solution, was the possibility of different forms (or changing emphases between forms) of evaluation, involving both self-assessment and peer review. By way of illustration, we show below the two optional models, and the facility for separate treatment of separate engagements, we believe without burdensome costs.

a) Cultural Metrics (weighted channel) Model

Knowledge generation	Channels

Core activities …	… contributing to:-
Rehearsal	1. Performances
Documentation	2. Exhibitions
Research	3. Publications
Security	4. Consultation
	5. Access
etc.	6. Learning
	7. E-engagement
	8. Other

Under this model, so-called "core activities" might be evaluated by self-assessment, against specified targets. These could, of course, be subject to peer review, or audit, on a random basis, to support the realistic setting of targets. The "channels", on the other hand, might be expected to be more routinely evaluated

through peer review (probably tempered by self-assessment through comment and clarification). It may be worth suggesting further that funding for core activities could very well come from core, or General University Funding, while the channels would seek financial support from Horizon University Funding, KT-CE and similar.

b) Cultural Metrics (twin-track) Model

Core activities	Project/ development tasks
Rehearsal with performance	Opera in shopping mall
Cataloguing and exhibitions	International loans; touring exhibitions
Research with publication	Foreign language catalogue
Expertise with policy shaping	AHRC project to propose metrics
Research and labels	Diversity agenda
Education	Novel pedagogy
On-line exhibitions	Digitisation of collections

Alternatively, "core activities" in this model include not simply knowledge development, but correctly acknowledge that the transfer of knowledge is also core; indeed, to suggest otherwise is to reduce the role of higher education institutions to that of knowledge accumulation, not communication, sharing, transfer or exchange. Hence music rehearsal is viewed as incomplete until it is performed; research requires publication, and so on. Projects, therefore, are associated with innovation and risk-taking in respect of the channels of exchange adopted. By that token, core activities (more broadly interpreted) should still be evaluated using self-assessment against specified objectives (again subject to occasional confirmation using peer review or similar) and the channels of knowledge exchange (more closely defined) evaluated primarily using peer review. Again, funding would then fall, respectively, to General University Funds, and Horizon University Funds, including KT-CE.

It is probable that AHRC funding can then be directed to support channels, possibly weighted (albeit contrary to many views expressed in the workshops) towards innovative channels, but that consideration goes beyond the remit of this Report.

By including both peer- and self-assessment, some extra desirable but otherwise difficult to allocate data could be incorporated. For example, it was noted above that a "time input" model as a proxy for impact was suggested, and reference made also both to Contingent Valuation and Social Return on Investment; self-assessment would allow inclusion of such information, at the determination of the practitioner, and in light of their assessment of the costs of generating the data. Any evidence can be incorporated and interpreted, rather than over-looked altogether, and become a focus for the peer review element, if so desired.

There is, of course, further work required in agreeing what constitutes "core" and what "development" work. Any work with students might be regarded as core; it's

what we do as institutions of higher education. Rehearsals for music students is surely core; but is a live performance optional and developmental? If that distinction remains a moot point, especially as students are involved in both stages, other core activities may never see student engagement; for example, cataloguing of a heritage collection (archives, museum objects, etc.) is certainly regarded by practitioners (and their accrediting bodies!) as core, while exhibitions informed by that activity may be optional … but students might be involved in neither (other than as volunteers or members of the public, for the respective activities).

On balance, we would recommend the Glasgow Cultural Metrics (twin-track) model, above, for measuring outcomes and impacts from Knowledge Transfer in the sphere of Cultural Engagement.

Notwithstanding that recommendation, we fully acknowledge the complexity of the debate, as well as of the process of measurement. Consequently, we would recommend further that implementation of such a model should be trialled over a period of 12 months, thereby allowing for development and testing of the model to continue.

<u>Appendices</u>

1.   Sample bibliography

2.   Workshop Programme

3.   Participating organisations

4.   List of activities highlighted at Workshops

5.   KT Impact Model

6.   "Channels" suggested at each Workshop

Appendix 1
Sample Bibliography

"About KTP and the Creative Industries" [network proposal to AHRC]
University of Birmingham; 2007 (?)

 "The Evidence Base for Arts & Culture Policy" [literature review]
Scottish Arts Council; January 2008

"Framing Quality in the Arts – a Canvas for Partnership Working" [review and
evaluation
Scottish Arts Council; October 2008   of quality
framework]

"Implementing New Horizons" (incl. SFC paper, end-2008) [response to Universities
                                                              Scotland
                                        paper]

"Leading the World: the economic impact of UK arts and humanities research"
AHRC Report; June 2009

"Measuring Intrinsic Value: how to stop worrying and love economics"
Bakhshi, Freeman and Hitchen; May 2009

 "Metrics for the Evaluation of KT Activities at Universities"
Martin Holi, (w. Kevin Cullen); Library House for UNICO, 2005 (?)

"Proving Value and Improving Practice: a discussion about Social Return on
Investment"
Museums Libraries Archives, Research Resources publication; April 2009

"Quality of Life and Well-Being: measuring the benefits of culture and sport"
The Scottish Government, 2006

 "Scottish universities in the marketplace"
Cullen, Kevin. (2007) " in Engwall, L and D Weaire (Eds.) *The University in the
Market*

"The squeeze on Universities"
Cullen (2006), *The Milken Institute Review*, Volume 8, Number 4.

"Supporting Excellence in the Arts"
McMaster Report to DCMS; January 2008

 "Towards the Estimation of the Economic Value of the Outputs of Scottish HEIs"
Ursula Kelly, *et al*; University of Strathclyde, for SFC; 2008

 "Universities and Society: Strategies of Engagement" [conference paper]
Centre for Knowledge, Innovation, Technology and Enterprise (KITE);
Newcastle University Business School, 2008

Also, AHRC Research Grants Peer Review;
    New Impact Summary and Plans; February 2009

Appendix 2
Workshop Programme

09.00 to 09.30:   Registration and refreshments

09.30 to 09.45:   Introduction to the day

09.45 to 10.15:   Identification of cultural engagement activities

10.15 to 10.30:   Presentation of existing economic Knowledge Transfer model

10.30 to 11.00: Discussion of cultural engagement framework

11.00 to 11.45:   Refreshment break and informal discussion

11.45 to 13.00:   Discussion and development of model for Cultural Engagement KT
model

Glasgow – 18 February 2009

AHRC
Glasgow School of Art
Heriot-Watt University
RSAMD
University of Edinburgh
University of Glasgow
University of Stirling
University of Strathclyde
UHI

Aberdeen – 20 February 2009

Aberdeen City Council
Birmingham Institute of Art & Design
Peacock Visual Arts
University of Aberdeen
University of Abertay Dundee
University of Dundee
University of St Andrews

Edinburgh – 25 February 2009

Edinburgh College of Art
Edinburgh Napier University
Museums Galleries Scotland
Open University in Scotland
Queen Margaret University
Scottish Arts Council
University of Aberdeen
University of Edinburgh
University of St Andrews
University of Stirling
Universities Scotland

Appendix 4
List of activities highlighted at Workshops, then allocated into suggested broader
generic areas

Exhibitions
Art exhibitions
Academics in exhibitions in & out of the university
Museum displays
Staff exhibitions
Travelling exhibitions
Maintaining collections
Natural history centre programme
Lemur
Cultural Intermediary
Applied arts
Exhibition, lectures, recitals - collaborating
Loans to other museums/exhibitions
Heritage - sense of place, archive, local studies/special collections

Consultations
Potential Funders
Stakeholders
Univ M&S
Elected members
Sponsors
Public
Staff
Students
Kids
Families
Industry
Community groups
Artists
Peers
Tourists
People avoiding rain
Spiritual shelters
Exhibitor contacts
Media
Politicians & policy workers
Learners
Researchers

Projects
Heritage
Student/research projects
Partnership outreach projects
Student placements, internships, cultural heritage organisations
Cultural intermediary
Town/country traits
Archaeology - Practical, Study, Interpretation & access
Science & engineering Ambassador Scheme (SEA) or Research in Residence
(RIR) - Places students/industry workers/volunteers into schools (mostly) to help

with curricular or extra-curricular activities
Music Hall 150th anniversary (14 Sept 09) Bring science, maths & music together to mark an important city celebration

E-engagement

Memory collecting
Museum website
Blogging
Websites
Video-conf. teaching for school classes
Web based interaction
Creation of archives: physical & digital
Virtual, online exhibition
Interactive art
Digital archives

Competitions

Art competition
Award ceremonies for prize winning
projects e.g. KTP
Games tournament
Business ideas competition
Encouraging staff involvement e.g. Cultural engagement 2008 (11 mini projects)
Aberdeen music prize
AIYF compose - Partnership event, Aberdeen international youth festival & Aberdeen music prize

Sponsorship

Communicating works of art - visual, music, other performance
Public art commission
Residencies & production
Sponsoring creativity - Photo diary, creative writing, S.R books, O.A books

Facilities

Botanical Gardens
Trip to the library
Sport Facilities & Programmes
Visiting a local heritage site
Libraries
Going to the cinema
Museums
Museum Collection
Museum Access
Museum interpretation
behind - the - scenes
tours of unity facilities
tours of architectural
features of University Building
Visual Art of Campus
Museum Exhibit
use of Museum
Space for reception

Access

Museum Display

Online Access to collection
Cultural Heritage (C.H.)
C.H. access to interviews
C.H. access to academic projects drawing on those materials
School Visits
Object Handling Session
Sculpture or Public Art
Loans of Collection to other institutions for display
Museum / Exhibition Tours
Archaeological Excavations
Family History / Archives
Access to Collection Lib/Museum/Archives
CE - Heritage, Sense of Place
Study Access and Museum and online collections
Access to research collection Libraries/Museum/Archives
Library/Archives/Museum Catalogues available online
Identification services

Policies

Contribution and development of festivals activities; exhibition, performances, seminar/talks
Using culture to deliver other agendas
Facilitating Arts Activities For Others
How people interact with the Environment
Public Engagement with Sciences – Lectures, Science Café, Natural History Centre
Public Policy information & influence

Workshops

Calligraphy
Illumination
Music Workshops
Drama seminar schools
Art workshops
Holding creative writing workshops, public access
Pottery
Paper-making
Print-making
Type-setting
Model-making
Reading groups
Hat making workshops using recycling materials
Drama training for amateur/professional performers
Musical instrument making for children
Drawing groups
Story-telling collection of memories, oral history
Organising competitions
Enlightenment programmes to the public
Workshops in Art, knowledge, theatre, handling objects

Networks

Book groups
Family history
Talking/chatting about a cultural experience
International events/social/arts/language
Participating in a post exhibition discussion

Creating landscapes building & environments

"No good fit"

Going on holiday abroad
Maintaining competency frameworks e.g. skillset
Defining culture
Critics reviewing artistic/cultural events
Collecting folksongs
Brass rubbing
management photograph competition
Family history research
Photography
Stamp collecting & swapping
Architecture university building
Book swaps
Sitting in a park
Walking tours
Archaeological digs and volunteers
Competition for primary school children to design cover for Burns edition
Request for photos for family events retirements, 80th birthday etc
Watching a film
Arranging for a studio time for up and coming bands/helping produce & distribute CD's
CPD when aimed at staff of heritage organisations - repeat customers
Composing

Performances

Poetry readings
Meet the author
Theatre
Drama & music societies
Singing/playing
Writing a play
Lectures
Public lecture in Dundee on its history at Verdant works - Linked to BBC/OU Co production - A history of Scotland
Watching/playing sport & supporting it.
A computing lecturer who is able to sing in a choir at night thanks to the day job

Lectures

Student Enterprise training
NASA Training for kids
Give talks/presentations on items of cultural significance
Conference Presentation - information on behaviour
Fine Art - Exhibitions, public lectures and courses
Speaking to visiting groups, i.e. schools, local history etc..
Friday Event - public lectures
GFT and other talks

Publications

Writing outputs, journals, theatre, dance & performance training
Digital city model with G.C.C
Publication - evaluation
Describe & interpret cultural items in popular form in web
Knowledge catalyst "1938 FAIR" British Empire Exhibition
Advising overseas government on publishing policy

Teaching and advising on Digitalisation of the publishing process
Teaching all aspects of publishing process, both in the book & electronic form
Setting up links between Scottish & Indian Universities on all aspects of Publishing education
Advising on effective book distribution strategies
Establishing procedures for evaluating and selecting textbooks
Teaching the skills of authorship
Books, articles, editions
Reinterpreting Mackintosh
Writing/publishing research papers
Website learning & exchange tool
Publication blogs
Recordings, broadcast, CD issue, Internet
Editing Literary/ Historical, other works, collections
Programme notes, products, performances, cinemas
Media - newspapers, broadcasts - Interviews, Quotes, Credits
Write article in press

Exhibitions/Events

Staff & student shows around Glasgow & Scotland
Open Days - Building & Lectures open for community
Sculpture Tours
Walking with Dinosaurs
Contribute items to displays & exhibitions
Critical encounters tramway
Alumni events
Schools & workshops
Exhibitions organised by archaeologists across Highlands, Islands
History of Art into museums
Public workshops related to film screening & other performances
Open seminars
Lunchtime Art lectures
Exhibition of archive material
Student festival
Galleries
Heritage walks
Hill races on campus
Cycling events
School visits to museum
Integrate dance & art
Travelling exhibitions - National, International
Family Days
Talbot rice art gallery
Loan parts of collection to others
Master-class workshops
Study Tours

Consulting

Consultancy - Archive & evaluation
Answer questions about cultural artefacts
Consultancy - National & International
Evaluation/Monitoring/Research of community/Article projects
Presentations to other disciplines
Publishing policy
Engagement with other cultures

Consultancy, Arts advisors
Student projects, ceramic rounders for Clackmannanshire council
Informing art exhibition outside the university
Workshops discussing research findings
Use of HEI review

Public debate/policy

Health Education
Commonwealth Games, legacy
Cultural Enterprise office
Informing policy & practise, eg…record management, strategies for visitor engagement
Being interviewed by media
Staff members of boards in art & culture organisations
Policy advise in relation to culture
Design, Innovation Scotland
Coach House trust
Responses to consultation documents
Advisory roles, e.g. on boards of/curate at national galleries
Cross disciplinary events e.g. religion & medicine, health
Development of international museum network
Philosophy/Ethics/religion - Public discussion & debates

Access to Materials, Resources

Make items of cultural importance (books/medieval mss etc) available to public in reading room
3-D visualisation
Mackintosh tours & special collections
Mackintosh Italian sketchbook
Falkirk football club, use of facilities
Library access
Conversation
School Packs, downloadable
Museum collections
Provision of sports facilities (depending on your definition of culture)
Largest provider of Edinburgh festival fringe venues
New product development
New topics for Curriculum development
External use of libraries
Digitisation of archives
Web discussions
Online catalogue of collections
Use of building for filming
Kist O' Richer - Scots/ Gaelic archive digitisation
Linkage with arts & cultural organisations
Use of HEI equipment/facilities fro community uses
Development of publically available research materials, I.e. DVDS, websites

Performance

Staff performances/recording/broadcasts/publications
Concerts for public
Students going to public performances
Music/dance performances at HEI
G 12 performance
Professional practise, directing, writing
Radio Stations

Performance at MacRobert Arts centre
Film screenings
Giving conference presentations
Concerts - platform for incoming professional performers
Concerts - professional performance led/participated by staff
Concerts - GU/staff community performances
Currently planning road-show by performance students with sets by art students, costumes by textile student etc..
Rock off concert by students of popular music performance & traditional music in Gaelic & English (annual event)
Ballet tour by students of dance performance at Ballet West, various venues across Highlands & Islands

Miscellaneous

Taggart
4PI Interactive drama
James Tait Black prize for literature
Music in the community programme with local schools
Advise - user evaluation
preserve items of cultural heritage for future generations
Engaging schools in performing music, theatre
Artists & writers in residence
Small scale arts projects
History, Science of technology
Sponsorship of cultural events
Research fellows
Creative writing qualifications
Developing audio visual material based on local heritage
Conversations with cab drivers
Christmas project with "alternativity" & fair-trade
What is produced
Produce graduates employed by cultural industries
Conversation with artists
Creative fellowships, Paining & architecture
Race for life - use campus
History of science, Darwin trail with botanical gardens - science & history
Impact indirectly on families of our students
University campus open days, inviting the outside community in
Presentation to reading groups, women's institutes - university staff to public
Interview with media (TV, Radio , Press)
Educational outreach programme to young people in HEI & across country
Engaging schools in architecture - making decorative wall in the school
European (minority language) song contest offer to public, from Ireland, Scotland (annual event Inverness)
Work Placements
Educated pass' Widening participation programme with youth football teams
Recognition for cultural achievements - honorary grades
Edin Uni press
Staff exchanges
CPD - projects in schools 1/2 year

Appendix 5
"Glasgow Model" for measuring KT activities in the area of economic development, illustrating the emergence of "channels", and weighting protocol

A Research & Knowledge Transfer Ecosystem

Glasgow University has been closely involved in the development of the Knowledge Transfer (KT) model for the UK, particularly the development of appropriate measures and indicators used to allocate KT funding. We believe that the model we have developed is useful in explaining the complex and non-linear relationships between research activities, Knowledge Transfer and socio-economic impacts. It should be noted that the model was developed primarily in the context of economic impacts, but, as covered in this paper, can be extended to look at other areas of research-related impact.

There are two premises upon which we have based all of our thinking:

1. That Knowledge Transfer is a legitimate and extremely important part of the University Mission. The University exists to create knowledge and disseminate knowledge. The three main dissemination mechanisms are:
   - Publication: to enable knowledge to be used by readers
   - Teaching: to enable knowledge to be used by students
   - Knowledge Transfer: to enable our knowledge to be used by 'users' such as business and the public

   Looked at in this way KT is an essential university activity rather than a recently invented new mission.

2. Following on from this, the primary purpose of Knowledge Transfer is to get the outcomes of the research we undertake out into the world to be used by someone – in the same way as we want our publications to be used and our students to use the knowledge we impart to them. This is important as it defines a system seeking to maximise knowledge flows rather than income.

The model below looks at the key aspects of how research, Knowledge Transfer users and impacts all relate to each other.

How Research leads to Impact via Knowledge Transfer
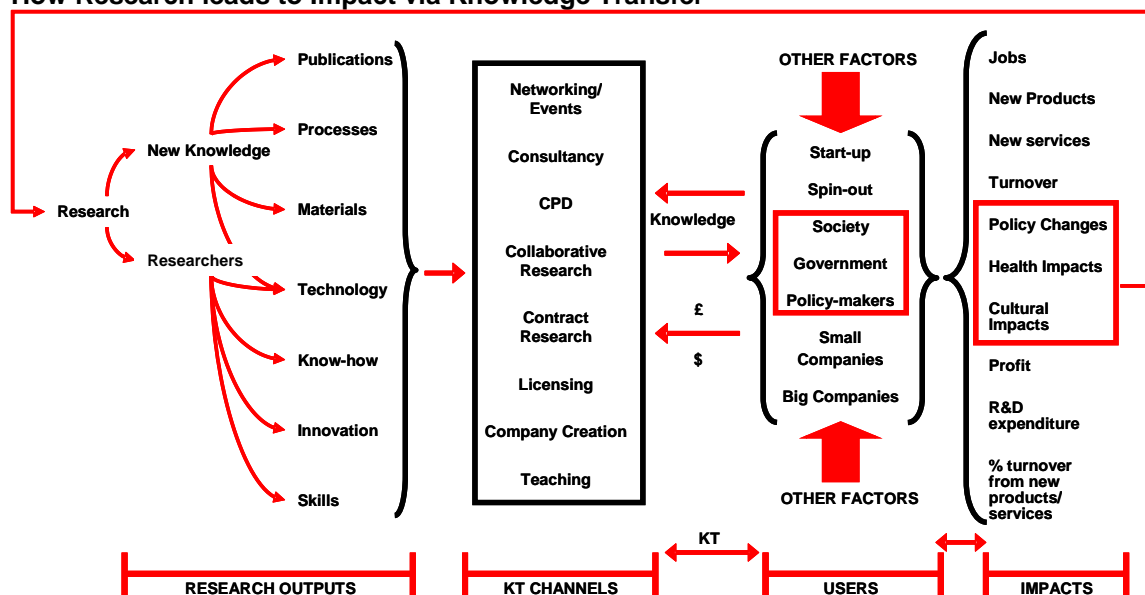
Research Outputs
The primary outputs from research are new knowledge and trained researchers.

The secondary outputs are manifestations of the new knowledge or the development of the researchers. These are things like publications, new processes, new materials or patentable technology. Alongside these lie the human-skills related to the researchers. The secondary outputs are normally the things that the 'user community' wants to have access to and form the input side of the KT process.

KT Channels
We describe the KT activities as channels as they are the route by which we typically connect the research outputs to potential users. In the past there has been an emphasis on licensing and spin-outs as key 'Technology Transfer' mechanisms, but our model recognises that Knowledge Transfer is very much broader than this.

There are a number of well established and well recognised KT channels through which we disseminate or connect the outputs of research to the potential audiences, customers or 'users'. These range from highly informal 'networking', formal and informal consulting and professional training all the way through to highly formalised commercialisation channels such as licensing and spin outs. All of these mechanisms are legitimate and recognised as effective in connecting research to the user community. In fact income from these mechanisms is what is used to measure KT for the Knowledge Transfer Grant (KTG) in Scotland and HEIF in England.

The volumes of KT activity are extremely high – as you would expect given our argument that KT is a core element of the University mission. Measuring only those KT activities which attract revenue to the University, the University of Glasgow in 2007/8 generated £67m of KT income. Add to this the fact that we believe at least as much KT happens informally and without money exchange and we can see just how large the KT agenda is.

Users or Knowledge Transfer Partners
There are a range of 'users' of the outputs from our research, all of whom have different needs and who can engage with us in a number of ways. For example a major company is likely to engage in informal networking, research collaboration and also licensing. A Government department will often engage with us through consultancy and contract research. Small firms might engage in CPD and informal consultancy. It is therefore impossible to categorise users by the means of engagement or the KT channel as they are very often interchangeable.

What the users want from us is also hugely variable, ranging from informal advice, technical support, evidence for policy decisions, through to spin-out company investments.

Impacts
The ultimate impact results from the user doing something with the knowledge that they gain from us. This is an important point: our users create economic impact, we do not. We help them and try to give them the means to create impact, but ultimately it is they who will create the jobs or the profits or the products or the policies rather than us. The diagram above seeks to show how there are all sorts of other economic, environmental and other factors at play with respect to the users and these will have a significant effect on their ability to create impact. For example, the current economic conditions will significantly affect a company's ability to raise capital to develop a new product. We can have the best technology in the world and transfer it flawlessly to the company, but if they cannot exploit it, there will be no impact. This has significant implications since it means that impact performance is outwith the control of the University and therefore it is not appropriate to measure universities based on the impacts. We cannot take all the credit when impacts result, but neither can we take all the blame when they don't. This has particular relevance in the context of the Cultural Engagement debate.

There are some other points to make around the model and the diagram:

- Linearity: It is extremely unusual for any piece of knowledge to flow smoothly from left to right across the diagram. Knowledge flows around within the system though informal and formal mechanisms, with consultancy leading to discussions relating to a different area which might result in a new piece of research work and involvement of a different set of users. Trying to track these flows is fruitless as the system is non-linear and chaotic in the scientific sense.
- Timescales: Because of the non-linear system the timescales involved in a piece of knowledge moving from research to impact can be measured years if not decades. A piece of knowledge can bounce around within the system for an extremely long time before finding an application with a user and leading to impact. Also, because we accept that we cannot track all the knowledge flows it is often extremely difficult to know whether or not any particular knowledge is moving towards use and impact at any given time.
- Case-studies: The model also helps explain why case-studies inevitably become the mechanism of choice for impact discussions. Once an impact has been achieved it can be reasonably straightforward to look back through the model to see where it came from and how it got there, but that gives absolutely no ability to look forward through the system to see how a piece of research might track through towards a future impact. So case studies are good for describing past success, but do not enable policy development or any understanding of why other knowledge did not make it through to impact.

In Conclusion
The KT channel model helps to define what parts of the system the university has control over and responsibility for and likewise those parts that we don't. In Scotland and the UK we have developed very good measures of the channels through KTG and HEIF and can measure university KT performance and user-engagement performance based on the quantity and quality of activity through the KT channels. We do not have control over the ability of those users to convert the results of KT into impacts. We can and do try to help them to achieve this conversion, but many other factors are also at play. For these reasons we believe that we should continue to assess the channels and, over time, try to map channel activities against the macroeconomic impacts, but not attempt to track or measure the direct economic impact from every piece of research.

Appendix 6
"Channels" suggested at each Workshop

Glasgow	Aberdeen	Edinburgh
Performance		Performance
Exhibitions/Events	Exhibitions	Exhibitions
Publications		Publications
Consultation	Consultation	
Access to Materials/Resources	Access	
Public debate/Policy generation	Policies	
Lectures		
	E-engagement	E-engagement
	Projects	
	Competitions	
	Sponsorship	
	Facilities	
		Festivals
		Partnerships
		Networks
		Workshops
Miscellaneous		"No good fit"