Metrics and Measurement: Capturing the economic and social value of higher education civic engagement

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Metrics and Measurement: Capturing the economic and social value of higher education civic engagement

- Metrics and measurement for university civic engagement why?
 Can it be done?
 - current thinking about higher education impact and value
 - methodologies and concepts
 - ► The challenge of valuing 'non financial' or 'non market'activities
 - Socially modified economic valuation a new approach

Thinking about Higher Education Impact and value - current views

- Universities as an economic players (organisations that create jobs in a region, attract export earnings, etc)
- Universities increasing the skills base of the country (through teaching)
- Universities' research as part of the innovation 'ecosystem', generating benefits to the economy through the transfer of research knowledge outside the university
- Universities having a wider societal impact providing civic leadership, contributing to cultural and political life and stability, contributing to the general well-being of the nation

Metrics and Measures - do we need them?



"Better metrics do not of themselves deliver better outcomes. You can't fatten a pig by weighing it ..."



"....But if you don't have some means of weighing it you may find yourself unable to persuade others that it's as fat as you believe..."



Flying Pig Syndrome

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From: Geoff Mulgan "Effective Supply and Demand and the Measurement of Public and Social Value " 2011



Metrics and valuation of non-market activity can it be done?

- A range of Methodologies and concepts in use in other sectors:
- Social Audit and Accounting (the 'triple bottom line')
- Social Return on Investment (SROI)
- The concept of 'public value generation'
- And Socially Modified Economic Valuation "Wake up and smell the SMEV..." (The Poppletonian...)

"Wake up and smell the SMEV..." (Laurie Taylor: The Poppletonian January 2012)

- Socially modified economic valuation a holistic approach
- Uses recognised economic techniques to identify and value all of the things that the university does (Teaching, Research, civic engagement, industry liaison/enterprise, and everything else)
- ► Then puts the economic valuation of university work into the context of our social priorities giving a higher 'weight' to the things that society wants most

Let's forget about money

- Economic Valuation is not about money; it's about *resources*
- It is about identifying everything the University produces (the outputs)
- And counting how much of it the University produces (quantification)

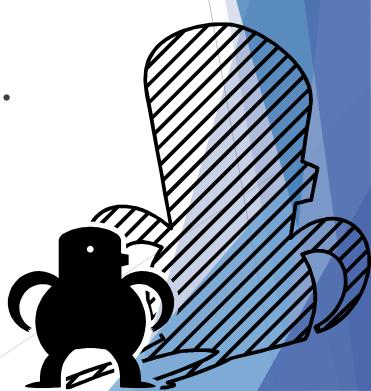


Shadow pricing

- Then you can apply an 'economic price' (market-equivalent) to all of the outputs using 'shadow-pricing' where necessary.
- ► This gives us the total economic value of what the University produces.

Economic value

Quantity x economic price.



Shadow-Pricing Non-market outputs

- HEIs are not unique in producing non-market outputs
- Recognised ways exist of imputing a value to non-market outputs

 (and are used by the World Bank, UK Treasury Green book etc)
- These include finding parallel markets ('free market',
 equivalents), using 'contingent valuation'- willingness to pay,
 willingness to accept 'hedonic pricing', 'Travel cost' or 'Time
 cost'.

Examples of Shadow-Pricing Non-Market HEI Outputs

- Parallel markets for:
 - Public Policy Advisory Work
 - Sports Centre Community Memberships
- Time-cost Method for:
 - Public Lectures & events open to the public
 - Performing Arts Events
 - Galleries/Museums/Exhibitions
 - Wider Community Use of Library Services

Public Policy Advisory Activity SOME EXAMPLES										
Type	Description	Type of staff (Senior academic/ Professor, Lecturer, Senior Manager (etc)	How Many staff	Approx time involved	Paid?	'Parallel market' or Free Market price comparison				
Parliament Adviser	Advisor to Rural Affairs Committee	Senior Academic	1	15 days per year	Expenses only	Commercial consultancy rate for senior expert consultant				
Member of Government Expert Advisory Group	SG Statistics Expert Users Advisory Group	Senior Academic	2	4 mtgs/yr x 3 hr mtgs	None	Commercial consultancy rate for senior expert consultant				
Member of public policy network group	LocalHealth Trust pharmacy network	Lecturer	3	Varied estimate 4 hours/month input per member of staff	None	Commercial consultancy rate for expert consultant				
Board Member Government Agency	Regional Development Agency	Senior Manager	1	6 mtgs/yr x 3 hour nmtgs	Nominal/ honorarium	Commercial consultancy rate for senior expert consultant				
Board Member Government Agency	Local Health Board	Senior Academic	1	6 mtgs/yr x 3 hr mtgs	Nominal/ honorarium	Commercial consultancy rate for senior expert consultant				

SOME EXAMPLES OF USING TIME COST FOR NON MARKET OUTPUTS											
Туре	Description	Number/openi ng length	Av Visitor no	Estimated length of visits	Total time spent	Economic value					
Temporary exhibition	James Joyce Exhibition	6 weeks,6 day week	30/day	45 mns on average	6x6x30x45 =48,600 hours spent	Hours spent x DfT hourly rate for leisure time hourly rate (£4.46 2002 prices) = £216,756					
Public Lecture	Annual Astronomy Guest Lecture	1 hour	200 attendee s		200 HOURS SPENT	Hours spent x DfT hourly rate for leisure time hourly rate (£4.46 2002 prices) =£892					
External Library visitors	External Library memberships	FTE Number (from SCONUL) 400	Est. annual no. of visits per FTE user (from SCONU) 64	EG. 1.5hours	400x64x1.5 =2880 hours spent	Hours spent x DfT hourly rate for leisure time hourly rate (£4.46 2002 prices) =£51,200					

Examples of some valid potential metrics

- Public Policy Advisory Outputs
 - Number of hours of public policy advisory work delivered per member of staff per annum
- Public Lectures and General Events open to the public
 - Estimated annual attendance numbers and number of attendee hours spent
- Wider Community use of Library Services
 - Number of external (i.e non-academic) users of HEI Libraries
- Wider use of Institutional information resources and knowledge base
 - Annual number of full article downloads from institutional repositories
- Wider community use of Sports services
 - Number of external (community) user memberships of HEI sports facilities and centres

The Dublin City University project

- Pilot project, taking a holistic approach to valuation that can encompass financial, social, cultural and environmental value
- Focussing in detail on the civic engagement activity carried out by DCU and on estimating its economic and social value
- Uses the 'Socially Modified Economic Valuation' approach.
- Other recent and ongoing examples of SMEV application - study for the University of Manchester (complete publication forthcoming), of the digital innovation investments of the UK Higher Education IT agency JISC(ongoing), and of the social and cultural value generated by the British Council in Scotland(ongoing)

Supplementary slides

Terms, Definitions, Concepts

- The 'SMEV' approach founded in fundamental principles of applied economics and statistics
- Uses core definitional sources (eg on the European System of Accounts(ESA 95), the SNA etc
- We are focussed on the role of the Higher Education Institution (HEI)and the capabilities of the HEI not 'Higher Education' in general
- We focus on the outputs of HEIs i.e what the HEIs actually produce
- Current difficulty with metrics development is a tendency to focus on outcomes - which may be desirable or an 'ultimate goal' but often a result of the combination of many different factors
- Only metrics based on outputs can give meaningful performance indicators for HEIs

Social Valuation- modifying the economic valuation to reflect social priorities

How do we develop the right 'weights'? At overall level of society in general

- What does society (that includes all of us) want from our universities?
- How do we know universities are delivering what we want?
- Who speaks for society?
- What are the things we (as members of society) value?
- How do we prioritise these? (If we can only have some of them, which are most important?)

Deciding Social Weights: priorities in the balance

- Our social priorities can give us a set of 'social weights'.
- Application of social weights to the economic value results
- = Social Value generated by Universities

Another way to consider applying social weights is at institutional level 'institutional strategic social weights' based on institutional strategy



Logic Model for universities HEI 'boundary'

The HEI can only exercise control as far as this point

Government interest (Evaluation and Feedback parts of policy cycle)

Implementation and Monitoring part of the ROAMEF policy cycle

Resources

e.g. Numbers of Staff, Space, equipment

HEI

Inputs

e.g. Use of resources –staff hours, arranging venue, timetabling etc to enable activity

HEI

Activities

Carrying out the activity, e.g. teaching a economics 101 course or conducting research in Forensic Science or running a community theatre group

This is our focus for valuation (The output)

HEI

Outputs

Economics 101 course delivered

Research Report or article produced

Patented product or process

Community
Theatre Group
production of
Hamlet
performed

Possible Outcomes

A group of people with better understanding of economics

Improved methods for forensic testing

A group of citizens with improved presentational skills

A group of people with better appreciation of Shakespeare

Wider Impact?

More highly skilled and productive workforce

More competitive economy

More effective justice system

Happier and more confident citizens

Public Value Generation

- Concept originally a 'performance management' framework devised by Mark Moore (Harvard Business School)
- ► Was used by the BBC (2004)
- Has evolved into a more comprehensive approach to assessing 'public value generation'
- Shares much common ground with our 'socially modified economic evaluation' approach (SMEV)