

The multifaceted relationship between EIA practice and universities

*– from **research and capacity building** through delivery of **graduate recruits to partnership working** –*

considering how better understanding on each side could further advance the delivery of effective EIA.

By Prof Thomas B Fischer

Mentimeter survey

A series of live polls were run during this presentation the results can be downloaded alongside these slides @ www.fothergilltc.com/eiaconference/day1

- (a) <https://www.menti.com/3ivdpcsnos>
- (b) <https://www.menti.com/2y7uhcnbpc>
- (c) <https://www.menti.com/nk8uzfo2ov>

1 Research

What EIA Research?

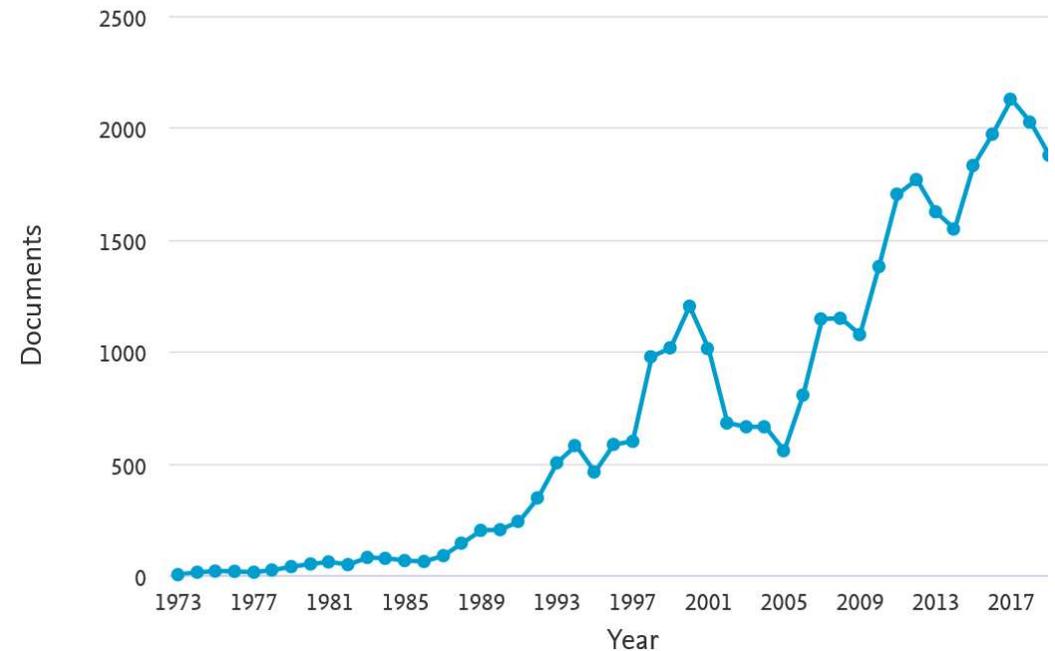
Connection with capacity building and teaching

How much is there and what does it do?

EIA Research

- Scopus database (mainly journal articles):
 - ‘Environmental Impact Assessment’: Nearly 35,000 documents (for comparison: ‘spatial planning’ has only nearly 9,500 and ‘town planning’ has 3,850 documents)
 - Over a quarter of all publications since 2015

Documents by year



Scopus is the largest abstract and citation database of peer-reviewed literature: scientific journals, books and conference proceedings

EIA Research

Filter by subject area

<input type="checkbox"/> Environmental Science	(25,354) >	<input type="checkbox"/> Multidisciplinary	(1,004) >	<input type="checkbox"/> Arts and Humanities	(208) >
<input type="checkbox"/> Agricultural and Biological Sciences	(5,258) >	<input type="checkbox"/> Chemical Engineering	(786) >	<input type="checkbox"/> Health Professions	(101) >
<input type="checkbox"/> Social Sciences	(4,875) >	<input type="checkbox"/> Economics, Econometrics and Finance	(779) >	<input type="checkbox"/> Veterinary	(65) >
<input type="checkbox"/> Earth and Planetary Sciences	(4,251) >	<input type="checkbox"/> Computer Science	(652) >	<input type="checkbox"/> Neuroscience	(55) >
<input type="checkbox"/> Engineering	(3,597) >	<input type="checkbox"/> Business, Management and Accounting	(607) >	<input type="checkbox"/> Nursing	(43) >
<input type="checkbox"/> Medicine	(2,600) >	<input type="checkbox"/> Physics and Astronomy	(491) >	<input type="checkbox"/> Psychology	(29) >
<input type="checkbox"/> Energy	(2,520) >	<input type="checkbox"/> Materials Science	(466) >	<input type="checkbox"/> Dentistry	(8) >
<input type="checkbox"/> Chemistry	(1,851) >	<input type="checkbox"/> Immunology and Microbiology	(362) >	<input type="checkbox"/> Undefined	(1) >
<input type="checkbox"/> Pharmacology, Toxicology and Pharmaceutics	(1,598) >				
<input type="checkbox"/> Biochemistry, Genetics and	(1,319) >	<input type="checkbox"/> Decision Sciences	(342) >		

Source: Scopus

EIA as an interdisciplinary decision support tool:

- About 5% of all publications
- The remaining 95% are also of some relevance

Where is EIA research done?

- Top 10 international places (EIAR, IAPA and JEAPM):

- ✓ *North-West University (55/ 38)*
- ✓ Murdoch University (42)
- ✓ **University of Liverpool (41) (Fischer; Jha-Thakur)**
- ✓ Aalborg Universitet (40)
- ✓ **University of East Anglia (37) (Bond; Cashmore)**
- ✓ Universidade de Sao Paulo - USP (32)
- ✓ **Oxford Brookes University (32) (Therivel, Glasson, Durning)**
- ✓ University of Saskatchewan (25)
- ✓ Università degli Studi di Trento (23)
- ✓ Utrecht University (22)

Source: Scopus

- And further UK places:

- ✓ University of Manchester (22) (*Wood, Lee, Jones*)
- ✓ **University of Strathclyde (11) (Joao)**
- ✓ Imperial College London (9) (*Sheate*)
- ✓ Aberystwyth University (8) (*Weston*)
- ✓ **University of Dundee (6) (Jackson, Illsley)**
- ✓ Newcastle University (6) (*Gazzola, Onyango*)

A lot more places teach EIA, but don't do research

EIA Research in the UK

- *‘Nearly half of the papers included some systematic practice reviews, e.g. reporting on the quality of environmental statements (making up 10% of the entire set of publications) or the quality of assessment procedures. In this context, spatial/land use, infrastructure and energy were the most widely covered areas.’ Other areas included waste management, mining, tourism, events and resource management.*

Source: Fischer et al, 2015

EIA Research in the UK

- *'Numerous papers mentioned good practice cases with regards to different aspects, including e.g. quality of documentation, public input, impact on decision making, innovative methodological approaches and others'*
- *'Overall, there is a good link with both practice and theoretical aspects', BUT*
- Very few publications on legal issues as well as on specific methodological aspects AND (importantly) on criticism of existing practices with a view of improving them.
- Critical papers tend to 'deconstruct' rather than 'develop' EIA.

Source: Fischer et al, 2015

EIA Research in the UK

- About 100 EIA related PhDs prior to 2015 (starting 1981) and about another 25 PhDs since then
- BUT: Very few research council funded research projects (about 7 with a total value of not more than £500K); EIA as an inter- and trans-disciplinary subject finds it difficult to obtain research funding.

Source: adapted from Fischer et al, 2015

The EAM Research Centre – Research and Consultancy Grants since 2017

1. *'Instituting space for the environment. How might we give the spatial demands of environmental policy goals a firm presence in the planning system?' NatureScot (12/2020 - 104/2021), CO-I, Fischer; with Cardiff and Dundee Universities.*
2. *Report on the state of health consideration in SEA and EIA in Europe', Fischer and Muthoora, Co-I (with Ben Cave Associates), World Health Organization (12/2020—3/2021).*
3. *'Strategic Environmental and Social Impact Assessment (SESA) for Strategic Comprehensive Transport Development Plan (SCTDP) for the City of Addis Ababa' Environquest (10/2020 – 09/2021), Adviser, Fischer.*
4. *'Embedding the Environment in the Local Development Plan Process – A Think Piece', NatureScot (10/2020 - 11/2020), CO-I, Fischer; with Cardiff and Dundee Universities.*
5. *'Health Impact Assessment in Town Planning – case studies', Fischer and Muthoora, PI, Research Report for Public Health England (09/2020 - 12/2020).*
6. *'Contaminated sites and impact assessment', Fischer and Muthoora, Co-I, World Health Organization (05/2020—9/2020).*
7. *'Strategic Planning and Health'; Fischer and Muthoora, PI, research report for the Local Government Association (10/2019-6/2020).*
8. *'Getting Research into Practice (GRIP): Health Impact Assessment in Town Planning', Public Health England, Fischer and Muthoora, PI, Public Health England (9/2019-5/2020).*
9. *'Liverpool City Region Integrated Impact Assessment of the Spatial Development Strategy – Peer Challenge', Liverpool City Region, Fischer and Muthoora; PI (09/2019-10/2020).*
10. *'Guidelines for Health in Strategic Environmental Assessment', UNECE, EIB and WHO, Fischer, PI, (1/2019-5/2020).*
11. *'Health, Green Infrastructure and impact assessment', SUT Thailand Grant for Chaunjit Chanchitpricha, Fischer, CoI (2019).*
12. *'China- Pakistan Economic Corridor: A Future Risk to the Climate Change and Natural Environment of Pakistan', Commonwealth Grant for Abdul Waheed, Fischer, PI (2019-2020).*
13. *'Circular Economy and Health in Policy, Plan, Programme and Project Processes: A brief for Decision Makers and Planners', WHO, Fischer, Co-I (03/2019-04/2019).*
14. *'Assessing the differences in the intended effects of urban green infrastructure interventions in the UK and Mexico', Wellcome Trust Newton Grant for Juan Carlos Tejeda; Fischer Co-I (2018).*
15. *'Territorial Impact Assessment for Cross-Border Cooperation', ESPON, Fischer and Muthoora, Co-I (5/2018-4/2018);*
16. *'The Future of Environmental Regulations and Directives', RTPI, Sykes and Fischer; Co-I (5/2018-10/2018).*
17. *'(H)IA Online Platform', WHO, Fischer, Co-I (3/2017-06/2018).*
18. *'Leadership in IA', International Workshop support Grant, Fischer, PI (2018-2019).*
19. *'Environmental Assessment in India', ODA Funding with Collaboration of Wildlife Institute of India, Jha-Thakur, PI (2018).*
20. *'Developing guidelines for nuclear power programme SEAs', International Atomic Energy Agency, Fischer, PI (03/ 2016-11/2017).*

2 Capacity Building

- Few UK universities offer EIA training
 - Routinely only by Oxford Brookes; with specialism by e.g. Derby (in the context of a module)
 - On demand by e.g. Liverpool
- Most training by private sector (different from e.g. South Africa)
- Is there a need for ‘independent’ university based capacity building?

10/05/2021

The venue

Location The Foresight Centre is situated 0.5 miles from Liverpool's main line station Lime Street. The Centre is 11 mins walk up hill.

Travel Frequent bus services from the city Centre Queens Square bus station are 10/12/14 and 17. Disabled parking is available on site and is free of charge when displaying a disability permit.

For other parking options see e.g. www.parkopedia.co.uk.

There are direct trains from Manchester airport to Liverpool Lime Street station that take under an hour. There are regular bus services from Liverpool airport.

Hotels There are numerous hotels and guest houses to suit all budgets within walking distance of the Foresight Centre.

How to Register

Contact details

To book a place on the course contact Peter Fawcett. Peter can also answer questions about the course. Email: pfawcett@liverpool.ac.uk

How many can attend?

The maximum number of participants is 25. This ensures a good ratio of trainers to participants.

Where?

The University of Liverpool Foresight Centre (Liverpool, UK)

When?

11-14 June 2019

What will it cost?

£750 including coffee/tea breaks and lunches.

The Essential Training Course on
Health in
Environmental
Impact Assessment

For the new European Environmental
Impact Assessment Directive

The University of Liverpool Foresight Centre
11-14 June 2019



3 Production of graduate recruits

- Over 60 UK universities offering some EAM related master degrees with around 1,000 graduates pa; around 100 with main EIA focus: Liverpool (about two thirds non UK students), Oxford Brookes, Manchester, UEA...
 - In Scotland well known are Dundee and Strathclyde; EAM also included in curricula in e.g. St. Andrews, Edinburgh, Glasgow, Stirling

4 Partnership

- There are existing strong linkages between EIA activities at universities (in particular higher education based) and practice / industry
- However, on most occasions there is a failure to generate added value, as universities often don't function as a 'critical friend', aiming at developing new ideas for enhancing practices, but rather as a 'facilitator' of existing practices

Observations

- Many universities approach EIA from a narrow disciplinary perspective (e.g. ecology, water, soils) with few representing a truly inter-disciplinary approach.
- Many universities teach EIA in a mainly descriptive manner with no associated research happening (with a few exceptions)
- Only few universities aim at supporting innovation of EIA as a decision support instrument.

Observations

- Role of universities in society:

- Communities dedicated to the learning and personal development of their members, especially students;
- Sources of expertise and vocational identity ('professional formation');
- Creators, testers, and sites for the evaluation and application of new knowledge ('research engines'; 'business and industry services');
- Important contributors to society and nations ('civic and community engagement').

Achieved
for EIA?



Thank you