Module 5

Evaluating Research Outputs and Researchers, and Non-Academic Impact

Erasmus+ Capacity Building in Higher Education
Assessing and Improving Research Performance at South East Asian Universities
18.3. – 23.3. 2019, International College of National Institute of Development Administration, Thailand

Rosmini Omar
Azman Hashim International Business School

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Specialize: Management

Teach @ UTM, Malaysia HELBUS, Finland MSU,USA (2001-2014)

Active Grants: Erasmus-1.REPESEA 2.FOODI

Consultancy/ Training: in Leadership, HRM, Qualitative Methodologies

Publications: More than 50; latest-British Food Journal

Non-academic/Social Contribution: Patients for Patients Safety (Malaysia & WHO)

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By the end of the training, we hope learners will be able to :

- understand the importance of having **the right environment** that support research performance.

- be familiar with the right research agenda that promote the right research culture.

- be aware of how to achieve academic impact through:
  - evaluate a journal publication and other publications.
  - judge the quality of a journal so they can best place their own research.
  - determine the quality of other people's work and the quality of a department. (
  - aware of how to formulate a paper so as to maximize academic impact.
  - develop a ranking of publications which can suit individual countries.

- understand the importance of non-academic impact and know how to achieve non-academic impact through:
  - Involving in projects for community, industry, environment,culture and heritage

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This training and presentation are to signifcant extent based on the Study material:

„Module No 5 Evaluating research outputs and researchers, and non-academic impact“

Prepared by following authors:

John Hudson, University of Bath
Rosmini Omar, Universiti Teknologi Malaysia
Suzilawati Kamaruddin, Universiti Teknologi Malaysia
Maizaitulaidawati M.Husin, Universiti Teknologi Malaysia
Noraiza Mohd Zamil, Universiti Teknologi Malaysia

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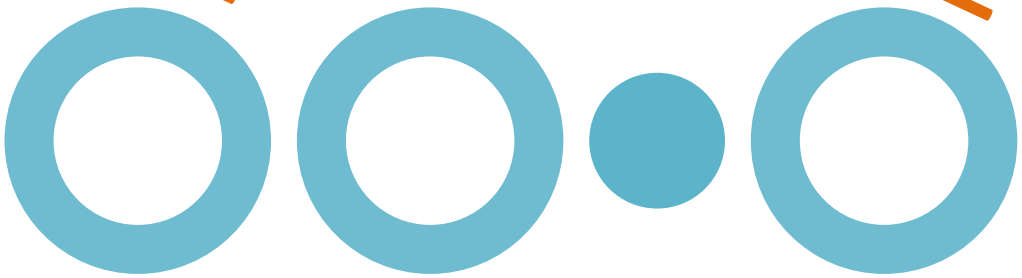
What is IMPACT?

Input

Output

Impact



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What can be intepreted as research impact in general?

- Successful educational materials?
- Publication in a good journal?
- Citations?
- Tweets about the research?
- Success on social media in general?
- Application into another (applied) research?
- Translation of research outcomes into consulting, executive, education practice?
- Participation in policy development?
- Success of graduates?
- Impact on professional/academic societies/practice?....

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Definition of research impact?

It is complicated and too complex to give one certain definition. However…

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Definition of research impact?

Higher Education Funding Council for England (HEFCE) defines impact as an effect on, **change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia.**

More simply, Research Councils UK defines research impact as **the demonstrable contribution that excellent research makes to society and the economy.**

Key aspect of this definition is that **impact must be demonstrable.**

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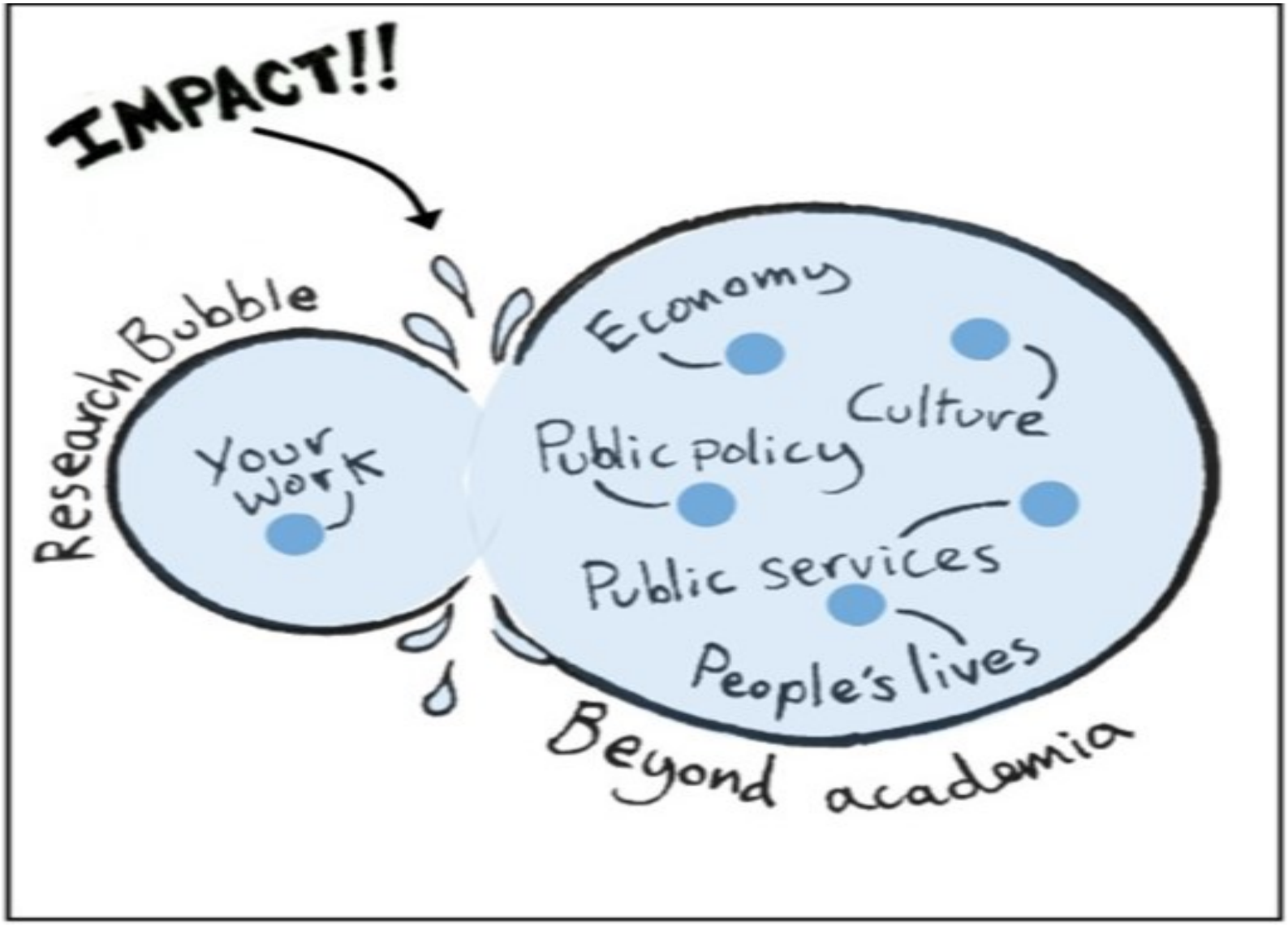

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Why is research impact and its measurement important for government, universities and academics/researchers?

Government:

- Justifies spending on university sector, relative to health, defence, etc.
- Selecting "the best ones" for policy advice.
- Selecting "the best ones" for funding.
- "Soft" influence in international relations.

Universities:

- Visibility in public life –justifies existence to tax-payer/funder.
- Measure of value-for-money.

Academics:

- Enhances case for being given a job.
- Enhances case for promotion.
- Validates the worth of the academic –desire to contribute to society.

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Time to Ponder…

Have you been already somehow evaluated based on your research outputs or are you still evaluated during your study?

What was/are the most important criteria in this evaluation?

Do you think this evaluation was comprehensive and fully appropriate?

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I. Establishing a positive research environment and research infrastructure

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Research assessment examples

Research evaluation has developed during the years from the **Leiden Manifesto** into **Research Assessment Exercise (RAE)** and **Research Excellence Framework (REF)** in the UK, and among the latest, **Research Impact Assessment (RIA).**

While RAE and REF focus on European researchers and institutions, RIA (Adam et.al, 2018) spreads its tools to various regions including the Australia, Canada, United States, Europe and several countries in Asia such as Iran (Yazdizadeh et.al, 2016) and Qatar (Grant et.al, 2013).

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The **Leiden Manifesto**, published in **Nature** on April 23, 2015, was developed by Diana Hicks, professor of public policy at the Georgia Institute of Technology, Atlantia, Georgia, USA; Peter Wouters, professor of scientometrics; Ludo Waltman, researcher; Sarah de Rijcke, assistant professor at the Centre for Science and Technology Studies, Leiden University, the Netherlands; and Ismael Rafols, science-policy researcher at the Spanish National Research Council and the Polytechnic University of Valencia, Spain.
The 10 principles of the Leiden Manifesto about evaluating research are :

1. Quantitative evaluation should support qualitative, expert assessment
2. Measure performance against the research missions of the institution, group, or researcher.
3. Protect excellence in locally relevant research.
4. Keep data collection and analytical processes open, transparent, and simple.
5. Allow those evaluated to verify data and analysis.
6. Account for variation by field in publication and citation practices.
7. Base assessment of individual researchers on qualitative judgement of their portfolio.
8. Avoid misplaced concreteness and false precision.
9. Recognize the systemic effects of assessment and indicators.
10. Scrutinize indicators regularly and update them.

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Steps in UK order to promote right research culture and environment

In the UK example, the government draws four initiatives in promoting the right research culture, namely:

1. a mission differentiation between research and teaching based university;
2. de-regulation of governance which fosters more autonomy for universities;
3. criterion-referenced faculty recruitment and promotion systems which involve the use of one's ability, qualification and quality of performance in order to secure university employment and promotion;
4. mixed funding structure which uses block funding or special funding allocation and performance-based funding to encourage or motivate researchers.

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How the research environment affects the research impact?

What represents the research environment for you?

Which factors included in the research environment could determine researchers' performance and quality of research at institution in general?

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How the research environment affects the research impact?

For example the study done on research evaluation in Sweden depicts that **leadership, communication and good administrative** order have a more significant impact on the institutions and group of researchers in comparison to bibliometric data (Karlsson, 2017).

This specific illustration strengthens the critical needs to measure precursors of research outputs and impacts. In REF, this is defined as Research Environment.

In International School of Research Assessment (2018), similar measure is constructed as 'research process' or ''guidelines for an effective process of research assessment'.

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Combining the various research assessments leads us to the following factors that makes up research environment:

A) Context analysis;

B) Clarity of Purpose for Research;

C) Identification of Stakeholders and their Needs.

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A) Context analysis:

This can be assessed from both internal and external environments.
The **internal environment** of an institution that consists of the:

- leadership or support from top management,
- research strategy,
- staff and students,
- equality and diversity,
- research income,
- research centre's support (Karlsson, 2017).

And it also includes:

- infrastructure and facilities,
- collaboration and contribution to the discipline (Adam et.al, 2018).

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A **strong leadership** committed to research for instance, commonly develop a **sense of direction** toward **international visibility, social value through good ethical practice and inspiring working climate** (Schmidt and Graversen, 2017).

When discussing the internal environment, Thorpe et.al (2017) suggest institutions to incorporate **staff satisfaction survey** to know their level of feeling supported. Further focus group sessions could also be held to understand their needs in producing impact-driven research.

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The **external environment** which universities could apply established frameworks such as „PESTLE“

- political,
- economic,
- social,
- technology,
- legal,
- environmental.

or „STEEPLED“

- social,
- technological,
- economic,
- environmental,
- political,
- legal,
- ethical,
- demographic.

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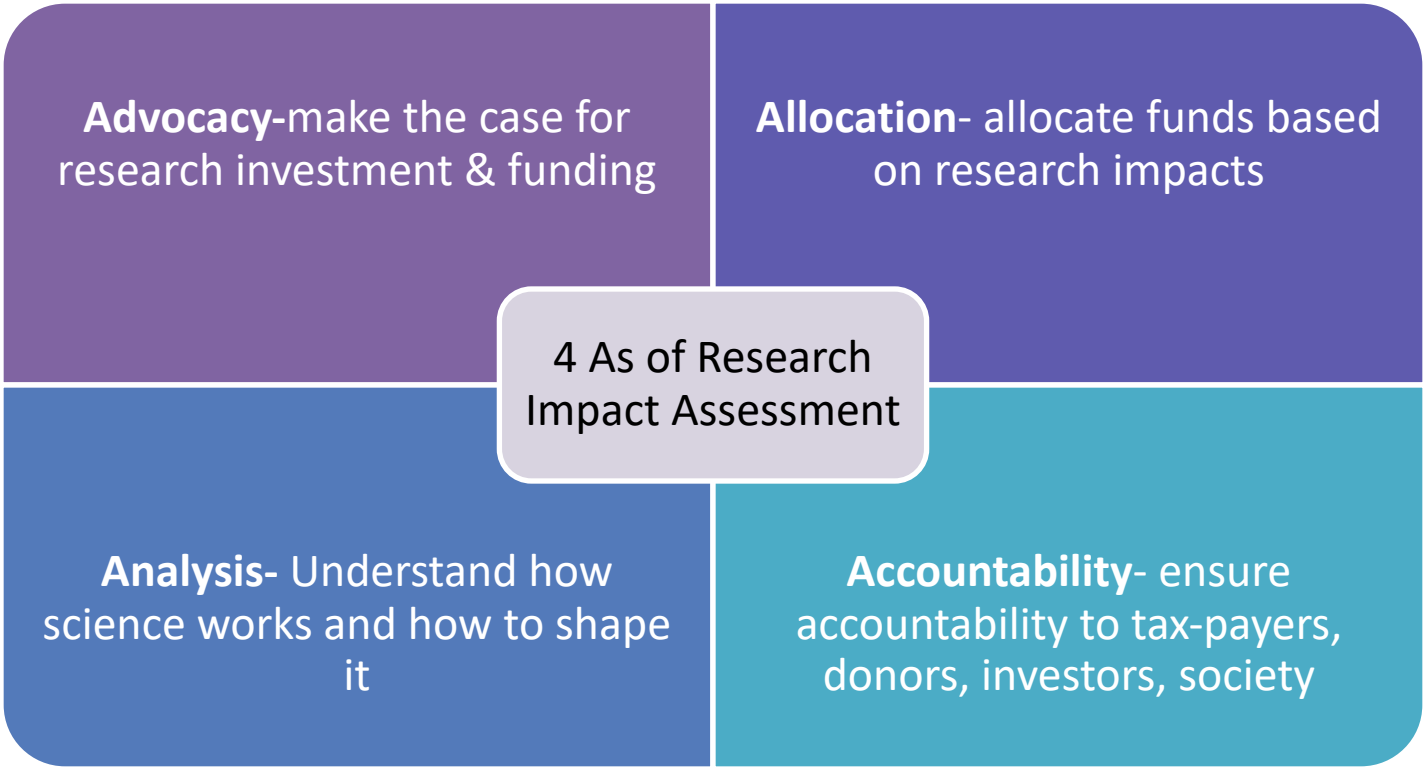
B) Clarity of Purpose for Research

A clear mission and strategy for research at the university and department level should enlighten a sense of purpose in pursuing any case for research. Four purposes of research assessment:



Adam et.al (2018)

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Mission setting

- A school's mission specifies its targeted society.
- A school articulates and executes its mission through research activities and impacts that makes a difference to targeted society.

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C) Identification of Stakeholders and their needs

Research is not a personal indulgence. It is a well-informed action to produce something of a greater value for the individual researchers, colleagues their institutions and the larger universe of other organizations.

Hence, excellence in research at both institutional and individual level heavily depends on satisfying priority concerns of stakeholders.

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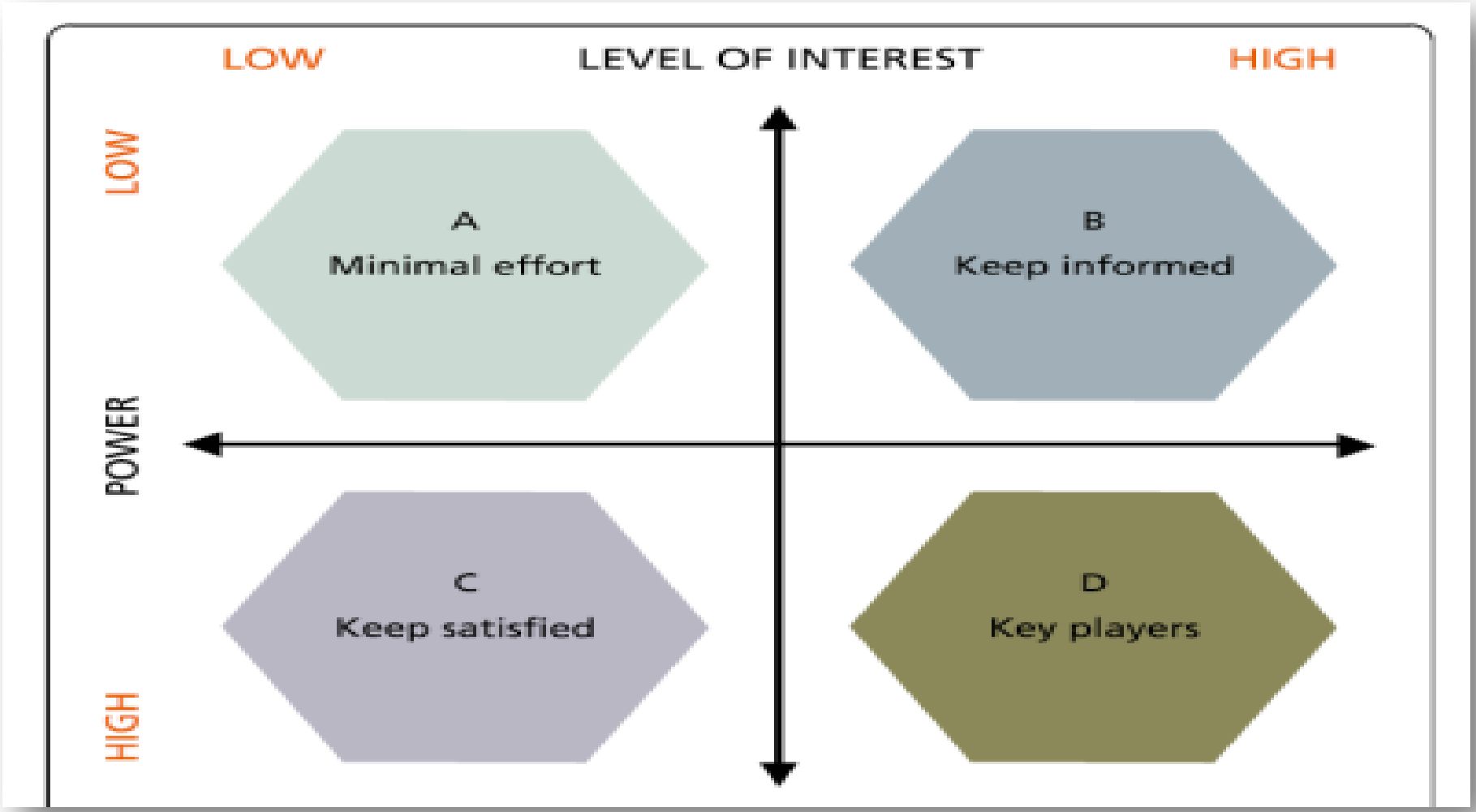
Mendelow Matrix- stakeholders analysis.



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Working with stakeholders

Build long-term, two-way, trusting relationships with those who will use your research and co-generate new knowledge together:

• Have two-way dialogue as equals with likely users of your research,

• Build long-term relationships with the users of your research,

• Work with knowledge brokers and facilitators,

• Understand what will motivate research users to get involved,

• Work with stakeholders to interpret findings and co-design communication products.

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Exercise (work in groups: 30 minutes):

How is your university characterised as an institution?

What is the mission of your university? How is it defined? What are the main core values of university?

Who are the key stakeholder of your university (classified them into four segments) and are their needs and how can university satify them?

Who can be the key stakeholder of a research project?

What kind of central support (at university) already exists or could be benefitial for researchers?

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What is an effective research environment?

UK Concordat to Support Research Integrity's definition:
A research environment is underpinned by a culture of integrity and based on good governance, best practice and support for the development of researchers.

It includes:
- Clear policies, practices, procedures to support researchers.
- Suitable learning, training, mentoring and supporting researchers.
- Robust management systems to ensure policies relating to research.
- Awareness amongst researchers of standards and behaviours expected of them.
- Systems that identify potential concerns at an early stage and mechanisms for providing support.

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What is an effective research environment?

REF definition:
Research environment is assessed in terms of its 'vitality' and 'sustainability' ('environment' covers strategy, people, income infrastructure facilities, collaboration & contribution to the discipline).

Here's what some of the participants said about what a 'healthy' and effective research environment means to them:
"A culture of excellence in terms of research, in terms of expectations, in terms of commitment to graduate education„

"Opportunities to discuss and develop research ideas"

"Externally competitive but internally cooperative"

"People talk to each other a lot… there is mutual respect and mutual support"

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REF assessment of Research environment

The assessment period for research environment in REF2014 was 1 January 2008 to 31 July 2013.

The assessment of the research environment narrative and indicators contributed 15% of the overall assessment.

Research environment was assessed on the '**vitality and sustainability**' of both the submitted unit and its contribution to the wider research base.

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REF Environment data (REF4a/b/c)

Each submission included data as follows:
Research doctoral degrees awarded (REF4a) - Number of research doctoral degrees awarded in each academic year to students supervised within the submitted unit.
Research Income (REF4b) - External research income (spend on research grants and contracts) in each academic year by the submitted unit.
Research Income-in-kind (REF4c) - Estimated value of Research Council facility time allocated through peer review and used by staff in submitted units.

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REF narrative for research environment

REF5 narrative				
Section and relevant assessment weighting	Main Panel A	Main Panel B	Main Panel C	Main Panel D
Overview; Research Strategy;	25%	20%	(not specified)	25%
People: - Staffing strategy and staff development; - Research students;	25%	30%		25%
Income, infrastructure and facilities;	25%	30%		25%
Collaboration and contribution to the discipline.	25%	20%		25%

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Criteria and definitions of starred levels for the assessment of environment

Star level	Definition
4*	An environment that is conducive to producing research of world-leading quality, in terms of its vitality and sustainability.
3*	An environment that is conducive to producing research of internationally excellent quality, in terms of its vitality and sustainability.
2*	An environment that is conducive to producing research of internationally recognised quality, in terms of its vitality and sustainability.
1*	An environment that is conducive to producing research of nationally recognised quality, in terms of its vitality and sustainability.
Unclassified	An environment that is not conducive to producing research of nationally recognised quality.

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Exercise (work in groups: 35 minutes):
Describe in more detail and try to assess the internal and external research environment of your university by its frameworks/factors.
Do the SWOT analysis using these factors.

Internal environment	External environment
- leadership or support from top management, - research strategy, - staff and students, - equality and diversity, - research income, - research support, - infrastructure and facilities, - collaboration and contribution to the discipline	„STEEPLED“ - social, - technological, - economic, - environmental, - political, - legal, - ethical, - demographic.

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Mission:
To lead in the development of holistic talents and innovative technologies for universal well-being and prosperity.

Definition:
UTM is a leading innovation-driven entrepreneurial research university in engineering, science and technology located …

Core values:
Integrity,
Synergy,
Excellence
Sustainability.

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MYRA

In Malaysia, the Ministry of higher education introduced MyRA: an acronym for the **Malaysian Research Assessment Instrument** for assessing the quality of research.

It was undertaken at every university in Malaysia.

It is a comprehensive system developed to assess the research capacity and performance of all Higher Education Institutions (HEIs).

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MYRA data is devided to:

Section A is General Information, where the university provides data related to Number of Academic Staff and fulltime students. (What kind of indicators would you suggest to use?)
Section B provides details on the aspects of Quantity & Quality of Researchers (What kind of indicators would you suggest to use?)
Section C details out the information on Quantity & Quality of Research. (What kind of indicators would you suggest to use?)
Section D focuses on the Quantity of Postgraduates (Master & PhD by Research). (What kind of indicators would you suggest to use?)
Section E elaborates on the Quality of Postgraduates
Section F promotes Innovation & Intellectual Property. (What kind of indicators would you suggest to use?)
Section G details out income generation activities through Professional Services and Gifts/Endowment. (What indicators would you suggest to use?)
Section H lists all the Networking and Linkages being successfully forged by the universities and CoEs.
Section I Highlights of all Support Services available to the University.

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Section A	Section B	Section C	Section D	Section E
Number of Academic Staff	Total number of academic staff involved as principal investigator of	a. Total number of publication in citation indexed journals including refereed	a. Total number of PhD graduates in the year	Number of postgraduate intake with Cumulative Grade point average ≥ 3.0 or equivalent
a. Professors	a. University funded	b. Cumulative impact factor of publications	b. Ratio of PhDs graduated to academic staff	Number of postgraduate intake with CGPA ≥ 3.25 or equivalent
b. Associate Professors	b. National funded	c. Cumulative citations of publications	a. Total number in the year	Percentage of postgraduates via research modes (with thesis) with fellowships/grants
c. Senior Lecturers	University/ National funded	d. Total number of publications in non-citation indexed Journal	b. Ratio of PhDs enrolled to academic staff (Including staff	
d. Lecturers	c. International grants	e. No. of research books (4 chapters in research book(s) are equivalent to 1 book)	c. Percentage of PhD enrolled in S&T	

Section F	Section G	Section H	Section I
a. Total number of patents granted a1) International a2) National	Income generated from training courses (non-degree programme)/post-graduate fees	a. Total number of MOUs signed	Total number of laborotaries full operational and calibrated
		b. Total number of programmes implemented under each MOU	a. Total number of books /titles
	Income generated from consultancy excluding contract research)	c. Total number of staff involved in joint research project.	b. Total number of online books /titles
b. Total number of patents pending	Endowment (including professorial chairs)	d. Total number of international students participating in undergraduate/	
	Gifts (money, equipments/ research materials, etc.)(worth ≥ RM5,000.00 each)	e. Total number of students sent abroad for training	

Successful research culture includes:

Fussy (2017) identified four complementary characteristics that make research prosper in universities:

1. Dedication to research

2. Talented academic staff and students

3. Favourable and efficient governance

4. Sufficient resources for efficient research and learning

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1. Dedication to research

- Successful research institution prioritises research as equal to teaching and community service.
- Is committed to the p**roduction, dissemination and translation** of excellent research from various fields and disciplines.
- Is involved in the production of **basic and applied research**, deliver **research-led undergraduate teaching and learning**, run **extensive postgraduate research programmes** and **leverage local and international research networks** and partnerships (Altbach, 2013; Shin & Lee, 2015).

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2. Talented academic staff and students

- Most of the academic staff members from successful research institutions possess the advanced **academic qualifications from highly respectable universities**, which provide them with confidence and skills to undertake research (Ma, 2013; Gerard et al., 2013; Balbachevsky, 2016).
- They also benefit enormously from the **students' creativity and efforts**. Students in successful research universities are familiarised with the research culture thus have more advantage to engage in research (Bienenstock, 2008; Salmi, 2009; Altbach, 2013).
- They are **highly selective**. Harvard University, for instance, accepted 6% only of its total applicants, while the acceptance rate at Yale stood at 8%. The same practice is being carried out at UK's research universities as well, where the acceptance rate at Oxford and Cambridge was 18 and 21% in 2010 (Heyneman& Lee, 2013).

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3. Favourable and efficient governance

- Successful research institutions are characterised by **having a political strength to withstand external interference and government policies.**
- Their **leaders have autonomy in making decisions** concerning academic core activities, university policy, recruitment and financial affairs (Bienenstock, 2008; Salmi, 2009; Altbach, 2013).
- For example the rise of the Hong Kong University of Science and Technology (HKUST) to fame and innovative character is greatly attributed to the highly autonomous environment prevailing in the Hong Kong higher education system (Gerard et al., 2013).

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4. Sufficient resources for efficient research and learning

- Successful research institutions recognise that the efficient research and learning requires state-of-the-art **libraries, classrooms, seminar rooms, high quality laboratories** and the fastest internet connections, in order to easily communicate and access diverse and rich data (Altbach, 2013; Shin & Lee, 2015).
- Successful research universities are investing heavily in research and teaching infrastructures.
- Top-ranking countries for producing ground-breaking research allocate a considerable amount of GDP to research and development (R&D). The United States leads with the allocation of 28%, followed by China (19.6%), Japan (9.6%), Germany (5.7%), Republic of Korea (4.4%) and the UK (2.5%).

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Strategies to Develop Research in Higher Education

Fussy (2017) writes in detail on strategies used by UK governments in developing their university: The strategies involve:

1. Government initiatives;

2. Institutional initiatives.

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What kind of government initiatives could lead to improvement the quality of research at HEIs in general and your home country particularly?

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1. Government initiatives

Fussy (2017) explains that policymakers, national education leaders and university leaders pay attention to four key initiatives in their endeavours to develop university research:

1. Mission differentiation,

2. Deregulation of governance,

3. Criterion referenced faculty recruitment and promotion systems

4. Mixed funding structure.

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1.1 Mission differentiation

Countries that have succeeded in developing a successful research culture in their higher education systems begin with **mission differentiation within higher education institutions** (Shin, 2013; Altbach, 2013; Hladchenko et al., 2016).
Mission differentiation mostly involves selecting: two types of Higher Education Insitutions:

1. „**research**“ universities (usually small number of the best) – designated as research-based institutions.

2. other universities - designated as **teaching-based institutions or technical/vocational-based.**

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1.1 Mission differentiation

Each type of the university receiving different treatment in terms of funding and human resource management.

Research-intensive universities often receive more research-specific funding, employ academic staff based on their research performance and minimise the teaching workload.

Historically, the most notable mission differentiation can be drawn from the 1960 California's Master Plan, when the US state of California developed a three-tier classification of its higher education institutions:
- the University of California (UC),
- California State University,
- California Community College systems (Shin, 2013; Altbach, 2013).

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1.1 Mission differentiation – criticism

Shortcomings:

- the way of **promoting elitism**;
- **discouraging competition among universities**, as selected universities may continue to remain at the top of academia;
- elite univeristies receive special attention from the government and the wider community (Shin and Lee, 2015; Hladchenko et al., 2016).

Ways of adressing these shortcomings:

- some governments (such as South Korea, China and Germany) have **expanded the number of universities in their lists of research based institutions.**
- **universities are evaluated after every five years** and the outcome of the evaluation can lead to relegation for underperforming institutions or promotion for excellent performing institutions.

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1.2 Deregulation of Governance

Favourable and efficient governance is one of the key features demonstrated by a successful research HEIs.

Governments have introduced deregulation policies that foster more autonomy in universities.

Transformation from national organisations into independent public corporations (Shin, 2013).

Deregulation of governance implies authonomy of univeristies in:
- the task of staff recruitment,
- financial management,
- management issues in general,
- selection of leaders with no or little government interference.

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1.3 Criterion-Referenced Faculty Recruitment And Promotion Systems

Criterion-referenced in these institutions involves the use of one's ability, qualification and quality of performance in order to secure university employment and promotion in various ranks associated with the academic career .

Academic staff career advancement is now based on individual academic's research output

Some governments in Asia (e.g., China, South Korea) have recently adopted similar approaches to academic staff hiring and promotion systems.

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1.4 Mixed Funding Structure

Two main methods of funding universities adopted by governments:

A) Block funding - involves funding universities based generally on the annual student intake while the performance-based funding considers the institution's performance.

B) Performance-based funding / Competitive funding - allocation is based on the evaluation of the research performance of an institution, which is also called the research performance based funding It requires universities to submit their research outputs for assessment to a peer-review panel.
The assessment results form the basis for the allocation of research funds to universities by higher education funding councils
(Ito & Brotheridge, 2007; Edgar & Geare, 2013).

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1.4 Mixed Funding Structure

Governments (Germany, Spain, Italy, Taiwan, Korea, Japan, Malaysia, Singapore) often use in addition to block funding also special funding to fund science and innovation and allocate some funds for open competition.

The use of research performance-based funding is largely practised in developed and emerging economies - drive towards improving the quality and performance of university research (Edgar &Geare, 2013; Leathwood & Lead, 2013).

The United Kingdom in 1986, introduced the Research Assessment Exercise (RAE) and since 2014 introduced the Research Excellence Framework (REF). Australia in 1988 introduced the Excellence in Research for Australia (ERA); Hong Kong in 1993 instituted the Hong Kong University Grants Committee (HKUGC) to evaluate the research productivity of universities within Hong Kong. ..

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What kind of institution initiatives could help to improve the quality of research at HEIs?

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2. Institution initiatives

Such efforts include:

2.1 Mentoring early career researchers,

2.2 Institutional collaborations and networking,

2.3 Incentivising and rewarding active researchers and instituting postgraduate and professional development programmes.

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2.1 Mentoring early career researchers

Many research-intensive universities to attach junior researchers to a group of experienced researchers to tap their research knowledge and skills.

Mentoring and participation in research teams or research communities facilitated learning of research skills among early career academics.

It is reasonable to train mentors formally and acknowledge their importance (also financially).

For example mentoring was an essential component of a successful research capacity-building in the United States Stephens et al. (2011).

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2.2 Institutional collaboration and networking

It generates opportunities for high performing academics to involve in mobility programs.

Universities are increasingly integrating internationalisation by establishing Research Chairs and Postdoctoral Fellowships positions with a purpose of attracting senior researchers and excellent young researchers throughout the world (Jacob & Meek, 2013)

-In Sweden and the United States, institutional and researchers' collaboration were seen as an important strategy to link researchers from different disciplines, stimulate researchers intellectually, broker external opportunities and attract external funding (Bland et al., 2005; Magnus, 2012).

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2.3 Instituting postgraduate and professional development programmes

Postgraduate and professional development programmes provide a conducive and enabling environment for members of academic staff and students to gain and hone their research skills.

Educational attainment at postgraduate level and research experience boosted the research confidence of academic staff and significantly impacted their research productivity (Quimbo and Sulabo, 2013) found

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Training on Research based on example of UK University

Many universities in UK, used so called Research Development Framework (RDF) in assisting academic researcher in research.

The Researcher Development Framework is a professional development framework for planning, promoting and supporting the personal, professional and career development of researchers in Higher Education.

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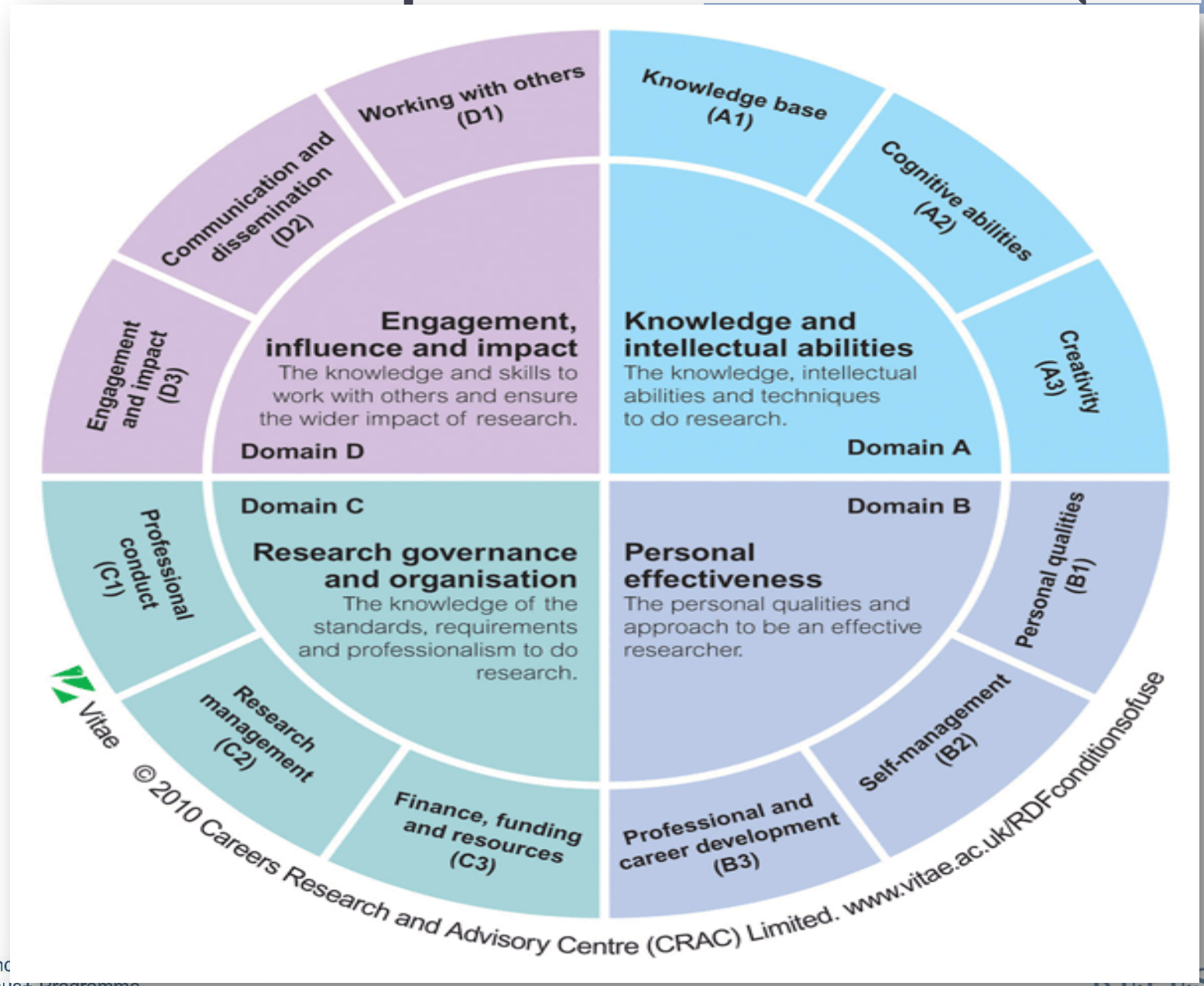
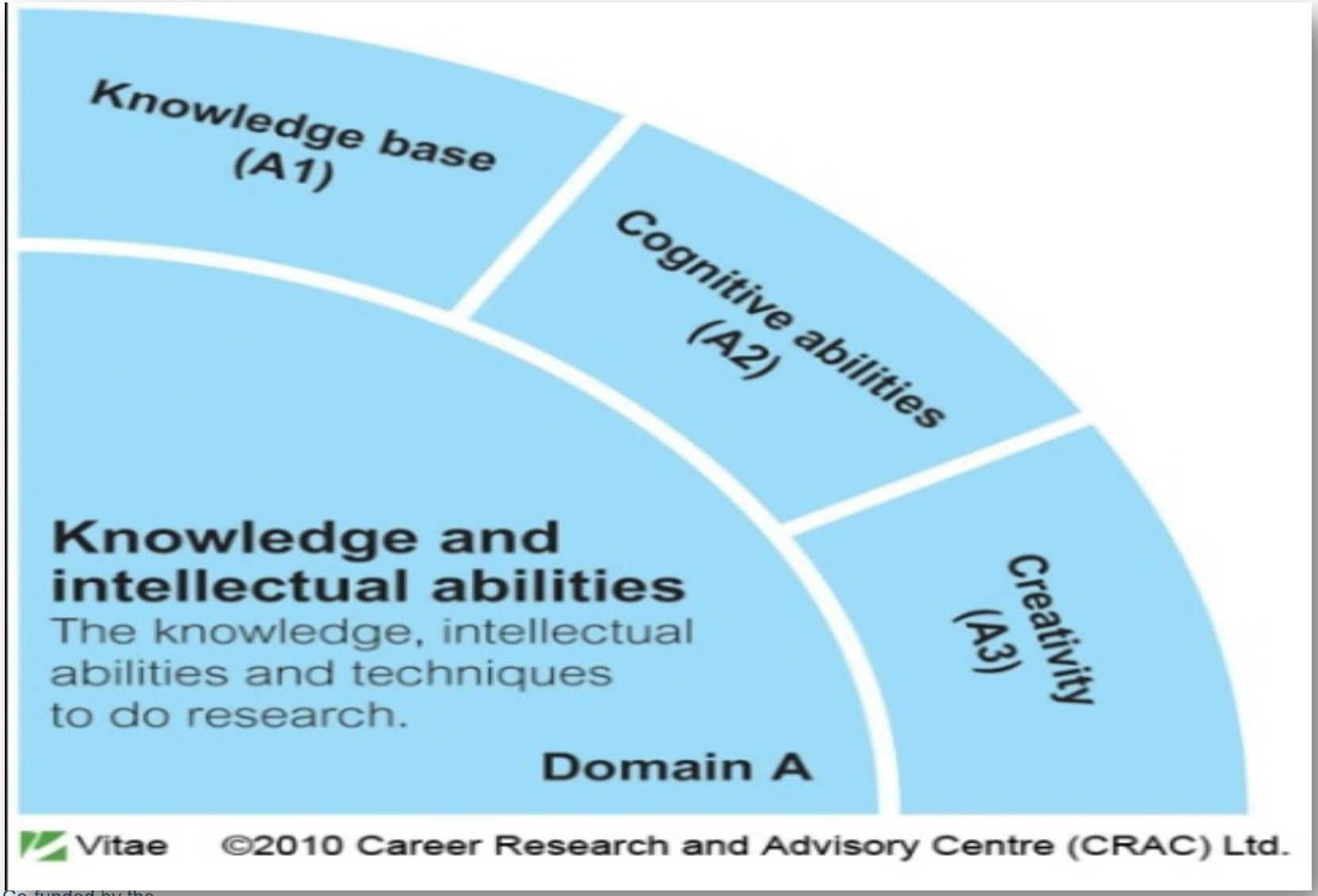
Research Development Framework (RDF)



Source: Sussex University Website

RDF - Domain A: Knowledge and intellectual abilities



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Source: Sussex University Website

1. What kind of knowledge and intellectual abilities are necessary to do research with the impact? (Most important knowledge and tech. skills to become a good researcher?)

Self Assessment (write down):

2. What knowledge-based abilities do you already have at good/sufficient level?
3. What cognitive abilities do you already have at good/sufficient level?
4. What creative abilities do you already have at good/sufficient level?
5. Which of them are you already using in your research?
6. What kind of your knowledge and intellectual abilities have to be improved in order to further improve your research and its impact?

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Domain A: Knowledge and intellectual abilities					
A1 Knowledge Base					
1. Subject Knowledge	Has, at least, core knowledge and basic understanding of key concepts, issues and history of thought. Knows of recent advances within own research area ;and in related areas. Is working towards making an original contribution to knowledge. Is developing a broader awareness of international and non-academic aspects of knowledge creation.	Develops detailed and thorough knowledge/ understanding of own and related subject areas – and becomes familiar with associated areas in other disciplines/research areas. Demonstrates link between own research and real world affairs. Situates knowledge in international context.		Stimulates new knowledge; may make outstanding breakthroughs. Considers multiple perspectives. Has deep and holistic understanding of strategic direction and intellectual developments of discipline/research area and its inter-relatedness with other disciplines/research areas. Uses this knowledge to enrich own discipline/research area. Exercises international influence.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
2. Research methods – theoretical knowledge	Understands relevant research methodologies and techniques and their appropriate application within own research area.	Appreciates the value of a range of standards and methods f or information/data collection and analysis; assesses and demonstrates usefulness and validity of information/data	Combines and justifies methods/techniqu es designed specifically for an investigation in a flexible and vigorous manner	Recognises the value of alternative research paradigms and is able to work in, and support others working in, an inter-disciplinary way	
3. Research methods – practical application	Uses a range of research methods linked to study area. Shows growing competence in own subject area developing awareness of alternative methods and techniques	Develops research approach and applies a range of appropriate methods and techniques with confidence.	Educates others in the appropriate selection and use of research design, information/data collection and management, analysis and methods.	Creates new models and hypotheses, research designs, data collection and analysis techniques. Sets expectations for application of methods locally, nationally and internationally.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
4. Information seeking	Acquires and develops search and discovery skills and techniques. Identifies and accesses appropriate bibliographical resources, archives and other sources of relevant information including web-based resources. Makes best use of a range of current tools and techniques. Assesses the reliability, reputation, currency, authority and relevance of sources. Seeks feedback from relevant groups to access other insights.	Conducts advanced searches using a range of information software, resources and techniques; recognises their advantages and limitations. Recognises the importance of bibliometrics and citations.	Shows highly developed awareness of appropriate sources for research. Uses a range of specialist print and on-line resources, as appropriate. Manages bibliometrics and citations to best advantage and with a high level of proficiency. Educates others in information/data seeking, accessing, evaluating and verifying techniques.		

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
5. Information literacy and management	Designs and executes systems for the acquisition and collation of information using information technology appropriately. (Develops awareness of information/data security and longevity issues. Knows where to obtain expert advice, i.e. information/data managers, archivists and librarians.	Develops awareness of the creation, organisation, validation, sharing, and storing of information/data and the associated risks. Understands legal, ethical and security requirements involved in information/data management, especially over time. Has knowledge of purpose of metadata.	Advises and educates peers, less experienced researchers, students and staff in discipline/research area-specific information/data management techniques, data security, legal and ethical requirements.	Develops new techniques for information management. Keeps abreast of and anticipates trends in the design and use of information/data collection, analysis and preservation.	

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Sub-domains and descriptors	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
6. Languages	Has excellent knowledge of language(s) appropriate for research, including technical language.	Learns additional language(s), including technical, appropriate for research and career development.	Becomes fluent/expert in additional relevant language(s).		

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	Phase 1	Phase 2	Phase 3 Phase 4 Phase 5
7. Academic literacy and numeracy	Ability to understand, interpret, create and communicate appropriately within an academic context. Prepares grammatically and syntactically correct presentations. Writes in a style appropriate to purpose and context Is mathematically competent to undertake research in own discipline; understands and applies any statistics that may be used in the discipline/research area; analyses data and uses appropriate computer packages. Is IT literate and competent in using information and digital technology.	Continues to develop academic literacy abilities within wider contexts; understands the literacy requirements for different communication media. Develops capabilities in IT and digital technology, as appropriate. Presents complex ideas with clarity. Understands analytical or statistical procedures in related disciplines/research areas and continues to develop mathematical ability.	Has high level academic literacy and numeracy across a range of contexts and communication media. Keeps up to date with the use of the latest IT and mathematical tools, techniques and procedures for the discipline/research area. Educates, advises and guides others in academic literacy and numeracy skills, as appropriate.

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A2 Cognitive abilities

1. Analysing	Critically analyses and evaluates own findings and those of others. Validates datasets of others.	Has well developed analytical abilities with knowledge of a range of methods. Willing to learn new ones. Develops the analytical understanding of less experienced researchers.	Has outstanding analytical abilities
2. **Synthesising**	Sees connections between own research and previous studies. Benefits from guidance with synthesising information/data and ideas.	Critically synthesises new and complex information from diverse sources. Recognises patterns and connections beyond own discipline/research area.	Makes imaginative leaps of understanding across disciplines/research areas/agendas and beyond academia

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3. Critical thinking	Able to understand argument and articulate own assumptions; developing independent and critical thinking. Has the ability to recognise and validate problems. Recognises multiple ways of knowing and alternative paradigms	Recognises significant and important arguments and can evaluate the assumptions of others. Is capable of original, independent and critical thinking and has the ability to develop theoretical concepts.	Is proficient and confident in applying critical thinking skills. Stimulates critical thinking in less experienced researchers and peers.	Is a creative critical thinker, acknowledged nationally and internationally Stimulates critical thinking at discipline/research area and policy levels.

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4. Evaluating	Summarises, documents, reports and reflects on progress. Evaluates the impact and outcomes of own research activities. Assesses the quality, integrity and authenticity of primary and secondary research information/data. Accepts and gives constructive criticism.	Evaluates progress, impact and outcomes of peer researchers' activities. Advises and guides less experienced researchers on the quality, integrity, authenticity and validity of primary and secondary research information/data. Is able to provide and accept constructive criticism.	Monitors and evaluates progress, impact and outcomes of a range of other researchers' activities. Effectively manages difficult criticism.	Creates evaluation processes and evaluates progress, impact and outcomes for national/ international organisations and/or projects.

5. Problem solving	Isolates basic themes of own research; formulates basic research questions and hypotheses.	Formulates and applies solutions to a range of research problems and effectively analyses and interprets research results.	Identifies new trends, complex questions and broader problems; designs substantial projects. Challenges particular hypotheses and refines them.	Leads a research agenda by making major contributions to understanding. Design projects that challenge traditional thinking in general and progress research themes.

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A3 Creativity

1. Inquiring mind	Demonstrates a willingness and ability to learn and acquire knowledge. Demonstrates flexibility and open-mindedness. Develops a style of questioning and questioning technique.	Identifies and asks useful, challenging questions; always curious.	Sees beyond immediate questions to unexplored areas. Confidently enquires, challenges and questions.	Anticipates cutting-edge questions. Encourages challenge and inspires curiosity	
2. Intellectual insight	Absorbs and appropriates ideas; is intellectually astute. Creates ideas and opportunities by investigating/seeking information.	Recognises new trends; is insightful; goes beyond the obvious. Develops own conceptual approach/understanding of intellectual position. Shows initiative and works	Identifies where discipline/research area is going and to some extent influences the intellectual agenda. Independently and confidently shares own lateral thinking.	Makes connections between previously unrelated issues. Influences and stimulates the intellectual agenda for the discipline/research area.	Provides outstanding breakthrough thinking for the discipline/research area and has strategic input to other disciplines/research areas.

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A3 Creativity				
3. Innovation	Understands the role of innovation and creativity in research. May engage in inter-disciplinary research.	Exercises critical judgement and thinking to create new and/or imaginative ways of understanding. Develops new ways of working on a topic and has innovative ideas. Identifies which ideas are likely to be successful.	Goes beyond recognising to realise the potential of ideas. Drives and delivers innovative research projects. Encourages, inspires and works with others; actively seeks collaborations for inter-disciplinary research.	A visionary; challenges traditional viewpoints.
4. Argument construction	Constructively defends research outcomes. Provides some evidence in support of ideas. Structures arguments clearly and concisely.	Rigorous in argument construction and production of evidence. Produces convincing arguments to defend research theses.	Produces finely honed argument rapidly. Educates, advises and guides others in argument construction.	

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5. Intellectual risk	Tests the boundaries, is willing to expose ideas to a critical audience and to critically appraise other research.	Challenges the status quo in thinking within discipline/research area.	Pioneering; takes intellectual risks appropriately.

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RDF - Domain B: Personal Effectiveness

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Source: Sussex University Website

1. What kind of personal qualities and approaches are necessary in order to do become effective researcher?

Self assessment (write down):

2. What is your strength with respect to personal qualities and approach?

3. What is your weakness with respect to personal qualities and approach?

4. What kind of personal qualities or approaches should you improve in order to further improve your research and its impact?

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Domain B: Personal effectiveness					
B1 Personal qualities					
1. Enthusiasm	Maintains enthusiasm and motivation for own research. Recognises the need for passion and pride in own work. Is highly motivated even when work is mundane.		Is passionate about research: enthuses others; inspires enthusiasm in the discipline/research area.		Inspires communitie of internationa researchers.
2. Perseverance	Demonstrates self-discipline, motivation and thoroughness. Perseveres in the face of obstacles and set-backs but benefits from peer, supervisor or leader support. Is developing some resilience. Deals effectively with the routine aspects of research.		Perseveres through difficulties while supporting others. Is resilient.	Perseveres steadfastly and leads the way for others.	Dedicated and stimulated b obstacles an challenges.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B1 Personal qualities					
3. Integrity	Understands and demonstrates standards of good research practice in the institution and/or discipline/research area. Seeks guidance as necessary.	Acts with professional integrity and honesty, takes especial care in information/data handling and dissemination and engagement with others Demonstrates standards of good research practice without need for guidance and encourages professional integrity in others.	Acts as exemplar to and advises peers and less experienced members of staff, respecting their views and engaging effectively in discussion.	Sets expectations and standard of conduct. Advises all staff and contributes to institutional and disciplinary policy/practice.	Shapes policy and procedures of good practice in research in the HE sector, professional associations and bodies.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B1 Personal qualities					
4. Self-confidence	Aware of some personal abilities and willing to demonstrate them. Recognises boundaries of own knowledge, skills and expertise and draws upon and uses sources of support, as appropriate.	Aware of range of own skills and enjoys demonstrating them. Able to defend ideas in the face of reasonable challenge both from colleagues and others. Capable of directing others.	Is confident of own skills and ideas in the face of strong challenge – seeks challenges. Builds a range and variety of support structures. Contributes to others' support; recognises need for collegiality.	Comfortable that own ideas are likely to be radical/ unusual; has self-confidence to initiate challenge and engage with others. Maintains a variety of support structures. Develops confidence in others	Seeks out sophisticated challenges to any new/ unusual/ radical ideas. Inspires confident behaviour in others

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B1 Personal qualities					
5. Self-reflection	Makes time to reflect on practice and experience. Develops strengths and improves on weak areas. Seeks personal feedback.	Has heightened awareness of own strengths and weaknesses. Strives for excellence, seeks and takes personal feedback on performance and acts on it.	Continuously seeks ways to improve own performance and that of less experienced researchers and/or team/department/institution. Encourages self-reflection in others. Leads by example.		
6. Responsibility	Gradually takes complete responsibility for own project and own well-being; develops independence.	Takes responsibility for own and others' projects (students and less experienced colleagues). Delegates responsibly. Alert to the well-being of others	Accepts and takes responsibility for building/leading research team and developing its members. Engages in and encourages the development of well-being in other researchers/the team.	Has leading responsibility for delivering highly skilled researchers for academic and non-academic professions. Is responsible for leading the discipline/research area nationally and/or internationally. Engages in and encourages the development of well-being in academic and non-academic colleagues.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B2 Self-management					
1. Preparation and prioritisation	Prepares and plans project to meet objectives and, with support, is able to adapt if necessary.	Takes strategic view of project; priorities, plans and is forward thinking; deals with the unexpected.	Anticipates future directions and trends in research, prepares for the unexpected. Recognises good ideas. Sees the gaps and opportunities in project plans and evaluates the changes needed.	Plans, balances and responds effectively and appropriately to change and the unexpected. Gives evidence for the need for change of priorities. Prioritises and switches focus between multiple projects/tasks. Influences environment; has strategic vision	
2. Commitment to research	Commits to and completes first project and establishes research credentials.	Evaluates and manages potential distractions. Dedicated: has purposeful and determined focus on developing own research.	Has a purposeful and determined focus on developing excellence in research, taking it from the ordinary to the extraordinary.		Determines to leave a legacy of inspirational research.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B2 Self-management					
3. Time management	Manages own time effectively to complete research project; adheres to clear plan.	Is establishing own time management systems: delivers projects on schedule, responds flexibly.	Has established own time management skills, advises others and acts as role model. Manages multiple or complex projects to time; balances constraints.		
4. Responsiveness to change	Adapts approach when required to; seeks guidance and recognises risks.	Adapts to changes; balances risk and opportunity. Knows when to seek advice and reassurance.	Engages with change; expects change and is prepared for it, manages risk accordingly. Advises and reassures less experienced researchers.	Embraces change and anticipates risk. Responds decisively, coaches and reassures others.	Promotes change and contributes to institutional change initiatives; is willing to take reputational risk.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B2 Self-management					
5. Work-life balance	Is developing an awareness of work-life balance issues. Uses support and advisory resources when necessary to avoid undue pressure and to enhance personal well-being. Considers the needs of others	Maintains an acceptable work-life balance and manages pressure. Notices and helps manage the pressure on colleagues and less experienced researchers.	Actively maintains attention to work-life balance issues. Promotes an effective work-life balance for self and team. Sensitive to signs of pressure on and stress in colleagues, students and staff; provides support, advice and management where necessary. Influences departmental, institutional or disciplinary policies on work-life balance and well-being.		

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B3 Professional and career development					
1. Career management	Takes ownership for and manages own career progression, sets realistic and achievable career goals, identifies and develops ways to improve employability. Presents own skills, personal attributes and experiences through effective CVs, applications and interviews. Begins to establish a career network.	Forms credible career plans; critically reflects on experiences and pursues a cycle of self-improvement. Seeks advice, guidance or coaching from appropriate professionals. Initiates and sustains networks and relationships that may encourage opportunities for employment.	Is in process of establishing career trajectory; uses networks and coaching opportunities to manage own career. Actively develops less experienced researchers. Coaches others for specific academic activities. Uses networks to enhance the employability of others.	Is an established researcher. Maintains career momentum. Extends and manages career networks. Acts as role model; creates opportunities for others and nurtures researchers' careers.	Is an exceptional career role model: an exemplar and inspiration to others. Engages in succession planning.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B3 Professional and career development					
2. Continuing professional development	Demonstrates self-awareness and the ability to identify own development needs. Appreciates the need for and shows commitment to continuing professional development. Recognises transferability of own experience and articulates this to potential employers or line managers. Develops and maintains own records of achievement and experience.	Becomes familiar with employers' requirements and develops skills accordingly. Actively seeks opportunities to enhance skills and take responsibility, formally or informally, within a research environment. Maintains a portfolio of achievement and experience.	Has realistic view of own potential in academic or non-academic job market and adapts career development plans appropriately. Supports and encourages the continuing professional development of others. Helps others make informed decisions in the light of employers' requirements. Reflects on skills and creates opportunities to develop further. Demonstrates, with evidence, initiative and competence in a wide range of contexts.	Acts as continuing professional development role model for others. Is influential in setting standards and devising criteria to define the skills required of professional researchers. Contributes to the culture of continuing development within own institution and discipline/research area. Actively acquires information and feedback on matters affecting the direction of discipline/research area/department/institution and on colleagues and less experienced researchers in relation to their professional development.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B3 Professional and career development					
3. Responsiveness to opportunities	Demonstrates an insight into the transferable nature of research skills to other work environments and the range of career opportunities within and outside academia. Understands and takes advantage of a broad range of employment and professional development opportunities within and outside academia, including work experience and internships.	Seeks out appropriate opportunities to enhance employability and may gain international experience; has realistic and mature approach to job search including positions outside academia.	Recognises, creates and confidently acts on opportunities with the potential to develop own career within or outside academia. Understands the complexity of the academic job market; able to advise others effectively and in a sensitive manner. Actively creates and champions opportunities for others within and outside academia. Is responsive to collaborative opportunities across disciplines/research areas and with non-academic organisations.		

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B3 Professional and career development					
4. Networking	Develops and maintains co-operative networks and working relationships with supervisors, colleagues and peers, within the institution and the wider research community. Uses personal and/or online networks effectively for feedback, advice, critical appraisal of work and for responding to opportunities. Engages with learned societies and public bodies	Shares external networks with less experienced researchers/students. Builds professional rapport. Becomes respected member of learned society(ies).	Leads networks. Have national, international and policy-making network connections with academic and non-academic bodies and organisations, and in public and private research and development areas.	Has influential connections with significant bodies and organisations; has high impact on society through academic and non-academic bodies and organisations.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
B3 Professional and career development					
5. Reputation and esteem	Speaks with authority on own topic. Begins to be known as a good researcher	Maintains position in debates about own research areas. Is establishing a reputation in the discipline topic/research area and locally	Has an established and growing reputation in own and, possibly, other disciplines/research areas; increasing research esteem. Conducts peer review internally and acts as reviewer for projects and journals. Supports the development of the reputations of less experienced researchers.	Is a leading, well-known national authority and speaker on own focal topic and related areas and in some international arenas. Acts as reviewer for external chairs. Actively promotes the reputation and esteem of department/team, colleagues, peers and less experienced researchers.	Is globally renowned; becomes international authority and leading speaker on own focal topic and related areas. Actively champions the reputation of the discipline/research area and own institution

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RDF - Domain C: Research Governance and Organisation

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Source: Sussex University Website

1. What kind of knowledge and skills in research governance and organisation are necessary for a researcher?

2. What kind of knowledge and skills in research governance and organisation are necessary for a management of research project?

3. What kind of knowledge and skills in research governance and organisation have you already applied in practise?

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Domain C: Research governance and organisation

C1 Professional conduct

Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
1. Health and safety	Understands relevant health and safety issues and demonstrates responsible working practices. Takes responsibility for own work space. Aware of impact on others and wider environment.	Recognises the significance and relevance of health and safety regulation and guidance. Sets example, can educate and advise peers and less experienced researchers/ students. Takes responsibility for immediate work environment and people in it.	Sets expectations, educates, trains and guides peers and less experienced researchers in health and safety. Manages and takes responsibility for health and safety within department.	Determines departmental/local expectations on health and safety matters. Educates, trains, guides and disciplines students and staff. Determines institutional policy and/or contributes ideas to national policy.	Shapes policy and procedures of own institution, national or international professional associations/ bodies

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Sub-domain	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C1 Professional conduct					
2. Ethics, principles and sustainability	Understands and applies the relevant codes of conduct and guidelines for the ethical conduct of research; seeks advice from supervisor. Demonstrates awareness of issues relating to the rights of other researchers, of research subjects, and of others who may be affected by the research. Is mindful of own impact on the environment. Understands how to behave and work in a sustainable way.	Makes own ethical judgements about work and advises less experienced researchers and students. Challenges potential or actual unethical behaviour of others. Acts and works in a responsible way to create a sustainable environment.	Sets expectations and ensures ethical principles are adhered to within own research environment. Educates and advises peers and less experienced members of staff. Acts as exemplar, advises peers and staff on environmental issues; promotes sustainable attitude.	Determines appropriate ethical conduct for discipline/research area; advises policy makers. Drives local environmental policy and promotes sustainable approach to research among colleagues/ department.	Shapes policy and procedures of the HE sector and professional associations /bodies. Promotes public understanding of the ethical issues raised by research.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C1 Professional conduct					
3. Legal requirements	Has basic understanding of legal requirements surrounding research, e.g. Data Protection Act, Freedom of Information Act, Equality Act 2010 and equivalent Northern Irish legislation.	Understands the legal obligations of the profession and can advise peers and less experienced researchers, especially on ownership of data and the requirements of the Data Protection Act.	Assumes, for the local research context, responsibility for working within the legal framework; sets expectations, advises peers and less experienced members of staff.	Advises staff and contributes to institutional policy. Ensures that students and staff have equality of opportunity and are treated fairly.	Shapes policy and procedures of the HE sector and professional associations /bodies. Leads by example.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C1 Professional conduct					
4. IPR and copyright	Has basic understanding of data ownership rules as they apply to own research.	Has sufficient understanding of copyright, IPR, licensing to advise peers and less experienced researchers. Understands the value of open access of research outputs to researchers and the wider society. Manages the deposit of research outputs, open and wider access, and the Creative Commons lisense	Sets local expectations among staff/team/department. Engages in the commercialisation of intellectual property where appropriate. Advises all staff and contributes to institutional policy		Shapes policy and procedures of the HE sector and professional associations / bodies.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C1 Professional conduct					
5. Respect and confidentiality	Within own research respects the right of participants to confidentiality and anonymity. Respects colleagues.	Advises peers and less experienced researchers on respect, confidentiality and anonymity. Encourages others to respect colleagues; challenges those who do not respect others.	Sets expectations, advises peers and less experienced members of staff.	Directs local policy, advises all staff and contributes to institutional policy	Shapes policy and procedures of the HE sector and professional associations/bodies.
6. Attribution and co-authorship	Understands concept of attribution and applies it consistently and fairly to appropriately recognise contributions and co-authorships.	Advises peers and less experienced researchers on bibliometrics and citation practice.	Sets expectations, advises peers and less experienced members of staff	Directs local policy, advises all staff and contributes to institutional policy.	Shapes policy and procedures of the HE sector and professional associations/bodies.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C1 Professional conduct					
7. Appropriate practice	Understands and adheres to the rules and regulations concerning academic malpractice in the institution in which based and of professional body and funder, if appropriate.	Has sufficient understanding of the rules of academic malpractice to advise peers and less experienced researchers. Challenges malpractice.	Sets expectations, advises peers and less experienced members of staff.	Directs local policy, advises all staff and contributes to institutional policy. Is involved in decisions regarding malpractice.	Shapes policy and procedures of the HE sector and professional associations/ bodies

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C2 Research management					
1. Research strategy	Aware of how own research aligns with the research strategy of the institution and strategic focus of the discipline/research area. Develops understanding of broader context of research.	Ensures research contributes to the discipline/research area and own institution and also to wider aims of all stakeholders, the public and the business sector		Shapes and influences broader research agenda.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C2 Research management					
2. Project planning and delivery	Applies effective project management through the setting of research goals, intermediate milestones and prioritisation of activities. Acts on decisions agreed with supervisor/line manager and delivers results	Independently defines a manageable research project. Understands project management cycles and is able to draw on a range of project management techniques and tools. Allows for wider public access to and long-term preservation of research information/findings. Manages problems and conflict.	Defines large research projects, draws up long-term plans for research. Uses range of project management strategies. Clarifies priorities; sets expectations, keeps project on track.	Effectively manages multiple research projects and both the research agenda and bureaucracy for various projects. Able to take unpopular but evidence-based appropriate decisions.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C2 Research management					
3. Risk management	Makes basic risk assessment and is able to manage risks in own project with support. Aware of risks in virtual environments and when using interactive communication technologies.	Assesses risks in own research environment, takes responsibility for others in that environment. Aware of risks to research information over time.	Conducts thorough risk analysis for self, team and others; quick to identify risks and confidently manages them.	Accepts responsibility for risk management; educates and advises others. Determines and directs procedures/ expectations for own institution.	Shapes policy on risk management for the HE sector and professional associations/ bodies.

Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C3 Finance, funding and resources					
1. Income and funding generation	Understands the processes for funding and evaluation of research. Writes own research proposal.	Has broad awareness and knowledge of key relevant funding sources and grant application procedures. Recognises the significance of income and funding generation for own institution. Applies for small grants/fellowships successfully.	Aware of wider economic context. Understands funding complexities and variety of sources for funding. Educates, advises and guides others on income and funding generation. Applies for increasingly larger grants, seeking alternative sources. Engages in income generation for own institution. Supports funding applications led by others.		Influences funding policy within the HE sector and professional associations/ bodies.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C3 Finance, funding and resources					
2. Financial management	Understands the basic principles of financial management. Has some commercial awareness.	Has knowledge of required financial management systems. Keeps basic accounts and reconciles them. Manages own grant. Develops deeper commercial awareness.	Is expert in the use of required financial management systems for audit tracking and budgetary planning? Understands institutional and national financial systems for supporting research. Manages multiple budgets; educates, advises and guides others.	Helps shape/contributes to funding policy and financial management processes and commercial awareness in institution /department.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
C3 Finance, funding and resources					
3. Infrastructure and resources	Makes efficient use of available resources. Knows immediate academic system/work environment, departmental or faculty.	Makes creative use of available resources; cultivates useful connections. Aware of research organisations' reporting mechanisms and house styles, and of procurement law and best practice. Recognises corporate culture and what is acceptable within it; acknowledges the impact of own role within it.	Contributes to the planning and resource management of the department; accepts responsibility for own and others' actions. Procures and maintains resources appropriate to range of projects; mindful of economies of scale.	Drives/directs/influences internal use of infrastructure and resources. Contributes to institutional administration and governance; chairs high level institutional committees. Makes persuasive arguments for the allocation of resources and appropriate infrastructure	

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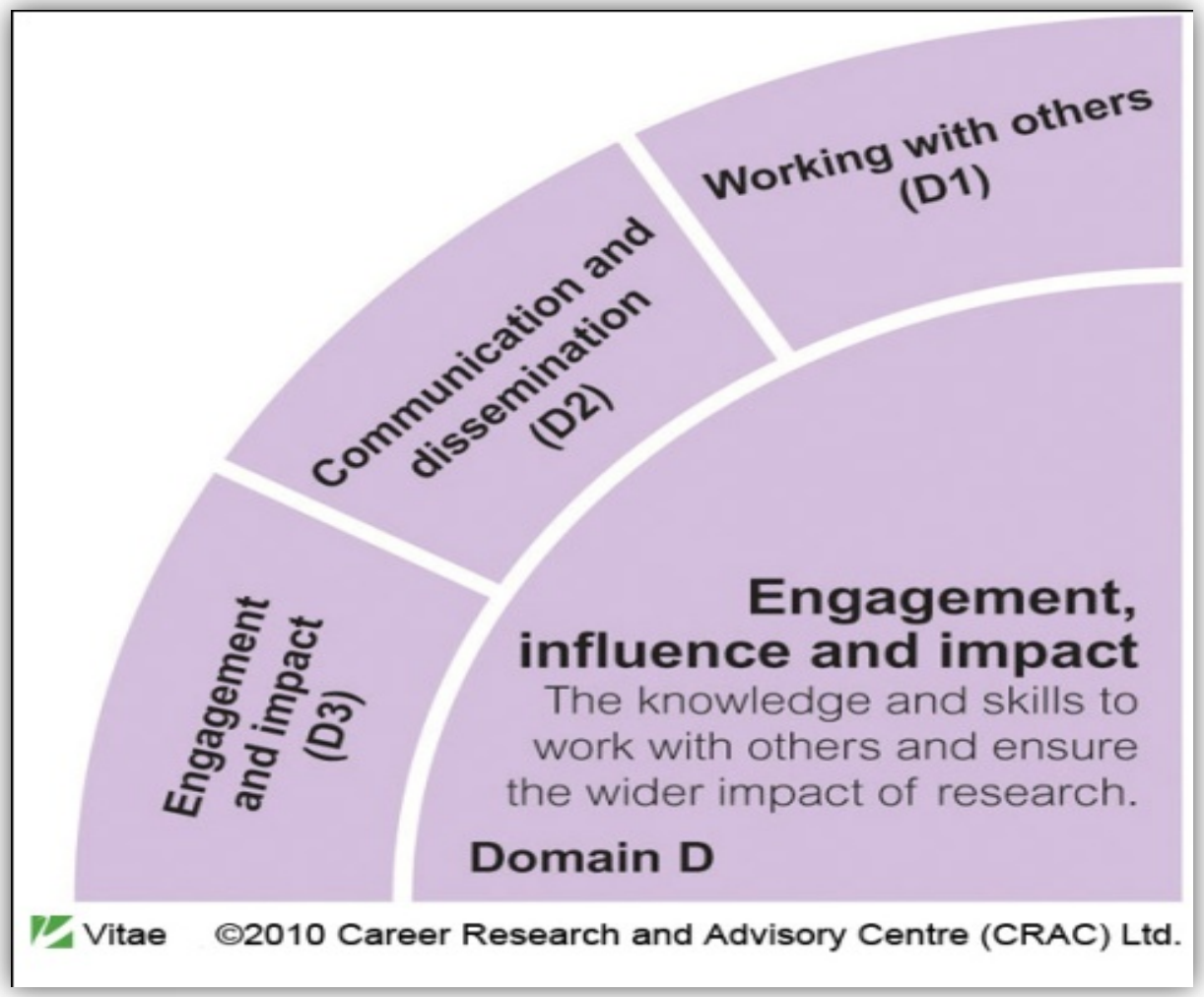
RDF – Domain D: Engagement, Influence and Impact



Source: Sussex University Website

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1. What kind of personal qualities and skills are required with respect to engagement, influence and impact in research practice?

Self Assessment (write down):

2. What are your strengths with respect to engagement, influence and impact of your research?

3. What is your weakness with respect with respect to engagement, influence and impact your research?

4. What kind of personal characteristics and skills you want to improve in order to further improve your research and its impact? (and why?)

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Domain D: Engagement, influence and impact					
D1 Working with others					
1. Collegiality	Shows consideration to others. Listens, gives and receives feedback and responds perceptively to others.	Is approachable, demonstrates interpersonal sensitivity. Ensures everyone has a shared understanding.	Keeps people informed of wider institutional issues. Promotes collegiality, regardless of status. Engages in supportive peer review with colleagues.	Exemplar for collegial behaviour in department/institution. Cascades knowledge. Solicits and attends to feedback from colleagues at all levels.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D1 Working with others					
2. Team working	Understands own behaviours and impact on others when working in and contributing to the success of formal and informal teams. Appreciates contributions of other team members including non-academic members. Thanks people for their contribution.	Understands leadership in team environments; recognises the strengths of team members and works effectively to achieve mutual goals. Coaches less experienced researchers and students. Gives credit to people for their contribution. Builds support and coalitions to attain goals	Leads, manages and delegates impartially. Is sensitive to intentions, needs and positions of team members; acts accordingly to achieve success. Manages expectations and resolves conflict. Coaches team members; helps team members clarify their roles and responsibilities. Acknowledges the results of the team. Actively seeks collaborative partners.	Recruits, trains and builds sustainable team; develops staff and facilitates relationships. Collaborates with key figures/teams internationally.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D1 Working with others					
3. People management	Negotiates activities and deadlines with supervisor/ line manager.	Develops own management style. Supervises/manages and develops less experienced researchers and students with sensitivity. States clear expectations, clarify goals and negotiates realistic deadlines so that people know what is expected of them. Sets an example in relation to equality and diversity matters; challenges inappropriate behaviour. Motivates and encourages others.	Has established an independent personal management style. Rewards good performance and deals effectively with under-performance. Explains the rationale behind decisions and the importance of issues. Ensures appropriate equality and diversity policies and procedures are implemented. Empowers others	Creates nurturing/supportive culture for others. Ensures the implementation of equality and diversity policies. Leads by example, inspires others, and communicates vision.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D1 Working with others					
4. Supervision	Engages in peer support and evaluation, and undergraduate support and assessment.	Provides support and advice to peers and less experienced researchers. Takes on co-supervision role. Welcomes feedback on own supervisory skills.	Encourages the development of autonomy in others. Takes on lead supervisor role. Supports the development of supervision skills in others. Keeps up to date with supervision policy and procedure. Actively seeks feedback on own supervisory skills and techniques; provides feedback for less experienced colleagues.		

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D1 Working with others					
5. Mentoring	Effectively supports the learning of others when involved in teaching, mentoring, demonstrating or other research activities. Recognises the importance of mentorship and receiving mentoring	Develops skills as a mentor and uses own mentorship effectively. Encourages peers and less experienced researchers to present at conferences, write and publish joint or individual papers. Acts as a mentor to students	Acts as mentor to less experienced colleagues. Helps mentees and other people to see opportunities and take up new challenges. Identifies potential in others; empowers people. Sets challenges but builds and develops confidence; manages the over-confident.	Is a role model. Shares networks; creates opportunities for others. Shapes the mentoring strategy of own institution. Involves people in decision making and leadership roles, promoting their autonomy. Nurtures talent; develops skilled researchers.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D1 Working with others					
6. Influence and leadership	Engages in debate and invites challenge. Develops awareness of need to gain support. Recognises implications of own research for real life contexts. Learns of the value to academia of engaging in dialogue with those who use the outputs of research to achieve influence and impact.	Influences and leads less experienced researchers and students. Listens actively and communicates confidently. Presents a convincing case. Engages with stakeholders and users of research to extend influence and impact of research within and beyond academia. Develops awareness of different leadership styles.	Takes responsibility for key areas of work. Generates excitement about ideas. Recognises and encourages the contributions of others. Offers ideas that encourage people to think differently; states expectations clearly as a role model. Develops own leadership style. Protects less experienced researchers in an academic context. Demonstrates initiative and competence in leading people, resources and services, formally or informally	Highly influential in academic and non-academic spheres. Presents and defends strong or radical ideas. Is recognised as making significant contributions to policy-making bodies and academic committees. Can use range of leadership styles; includes and enables others; convinces through argument; involves others in decisions. Promotes the value of own staff and department/institution.	Has exceptional influence; internationally renowned. Input sought by policy makers, funding bodies, etc.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D1 Working with others					
7. Collaboration	Aware of the value of working collaboratively to benefit research and for maximising the potential for impact. Co-produces research outputs with supervisors/ research leaders. Recognises common/conflicting interests within own and adjacent disciplines/research areas.	Builds collaborative relationships with a range of colleagues within own and adjacent disciplines/ research areas and with stakeholders and users of research to co-produce research outputs. Actively participates in and contributes to collaborations and external relationships.	Manages and negotiates collaborations and external relationships; contributes to development of discipline/ research area. Works in multi- or cross-disciplinary contexts; thinks comparatively	Builds collaborative relationships with a range of external organisations and bodies; negotiates at national and international level. Actively builds capacity in collaborations and external relationships nationally and internationally; contributes to reputation and vibrancy of department/institution.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D1 Working with others					
8. Equality and diversity	Is sensitive to and respectful of individual differences. Develops awareness of diversity and difference within working environment. Understands equality and diversity requirements of institution.	Appreciates and works with diversity and difference in education/ research.	Acts as role model for personal conduct when dealing with diversity and difference; educates, advises and guides less experienced researchers. Makes positive use of diversity and difference to enrich research projects and outputs.	Sets example locally, nationally and internationally. Helps shape departmental/ institutional policy and implementation.	

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Sub-domains and descriptors	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D2 Communication and dissemination					
1. Communication methods	Constructs coherent arguments and articulates ideas clearly to a range of audiences, formally and informally, through a variety of techniques. Actively engages in knowledge exchange and debate with colleagues, sometimes between disciplines/research areas. Appreciates the skills of rhetoric.	Presents work confidently. Able to persuade others, asking timely and appropriate questions. Can communicate research effectively to a diverse and non-specialist audience. Recognises the value of ideas from outside academia and incorporates them where appropriate. Actively engages in inter-disciplinary knowledge exchange.	Eloquently makes the complex accessible. Demonstrates incisive interrogative and interview techniques. Actively engages in knowledge exchange with the public, business, industry, the professions and other users of research.	Varies approach and presents research to professional peers/expert and non-expert audience in an inspirational way. Produces finely honed argument rapidly.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D2 Communication and dissemination					
2. Communication media	Develops skills in a range of communication means, e.g. face-to-face interaction using interactive technologies, and/or textual and visual media, where useful/necessary Has a web presence as a researcher. Uses audio-visual aids effectively in presentations.	Is confident in face-to-face interactions. Uses interactive communication technologies for networking, information/data sharing and promoting research presence. Engages with locally available media. Makes the complex accessible using a wide range of audio-visuals as appropriate. Willingly learns additional skill	Confidently uses e-resources. Establishes and leads virtual research environments. Collaborates and communicates research 'virtually'. Uses media and web media. Continuously seeks self-improvement in terms of media usage. Educates, advises and guides others.	Maintains advanced level of knowledge and skill in interactive communication technologies. Is aware of and engages with international media.	Is an institutional / disciplinary leader with global presence on key issues.

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D2 Communication and dissemination

Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
3. Publication	Understands the processes of publication and academic exploitation of research results. Produces some publishable material in print, electronic or other format. Is developing awareness of the range and diversity of outlets for publications.	Understands how research is evaluated and published in print, electronic or other format. Produces publishable material of high standard; may co-author/collaborate with others. Disseminates in a range of research, professional and public outlets.	Regularly publishes and is involved in editing/may be editor of national publication. Aims for the most prestigious publication in academic and non-academic outlets. Actively seeks collaborative and/or interdisciplinary partners. Supports and enables less experienced researchers to publish . Willingly peer reviews publications.	Chooses to actively publish in a variety of outlets, sometimes solicited contributions; is involved in editing/is editor of international journal or other form of dissemination. Targets appropriate journals to gain an extensive track record of high quality published research.	Internationally and publicly renowned for publications Serves on influential editorial boards.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D3 Engagement and impact					
1. Teaching	Contributes to teaching at undergraduate level. Assists in the supervision of undergraduate projects. Participates in research meetings (seminars, workshops, conferences, etc). Has a developing awareness of the ways research influences/interacts with teaching.	Has a developing awareness of own teaching style and techniques. Is involved with the assessment of student knowledge and supervision of projects. Assists in the development of student research skills. Willing to co-supervise postgraduate research projects. Recognises the significance of translating research into other educational outputs. Organises research meetings; seminars, workshops, conferences.	Improves own approach and develops wider repertoire of teaching styles and techniques. Contributes to and manages the teaching and learning programmes in the department and contributes to the development of the curriculum in own area. Values the teaching-learning-research connection and interactions. Educates, advises, guides and manages less experienced researchers. Builds supervisory experiences; Attracts new postgraduate researchers	Leads teaching programmes and their evaluation/quality assurance procedures. Pursues opportunities to develop research-informed teaching. Actively encourages and promotes a culture that links research and teaching. Mentors supervisors of postgraduate researchers.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D3 Engagement and impact					
2. Public engagement	Understands and appreciates the value of engaging with the public, willingly participates. Open to influence of public interactions on own work. Responds to local opportunities and existing activities; presents aspects of research at public events	Contributes to promoting the public understanding of own research area. Actively seeks ways to realise opportunities for public engagement. Facilitates engagement with others, leads on local opportunities, is involved with national programmes; makes appropriate use of external support for these activities. Recognises the mutual benefit of engagement to research, researchers and the public.	Facilitates opportunities for public dialogue, connects with users of research and beneficiaries; leads major public engagement projects and funding applications. Helps to shape the public's conception of research. Facilitates a dialogue between the public and researchers; educates, advises and guides less experienced researchers about the importance of public engagement. Initiates activities; building track record of public engagement. Creates a climate where engagement activity is valued.	Establishes public engagement reputation, gives strategic support, promotes projects and supports funding applications. Is known advocate for public engagement in discipline/research area; Occupies specific public engagement post(s) or personal chair	

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D3 Engagement and impact

Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
3. Enterprise	Creates ideas and identifies opportunities internally and externally. Develops ideas in an innovative manner within own institution or externally. Understands the process of commercial exploitation of research results. Learns of the value to academia of establishing relationships in business /commercial context	Demonstrates high motivation and commitment to take forward enterprising ideas. Appreciates the significance of the research-enterprise relationship. Understands different environments, appreciates and, where appropriate, contributes to knowledge exchange within society. Becomes more aware of commercialisation and entrepreneurship.	Leads others in a range of environments to solve problems in a creative and innovative manner. Builds strong networks to acquire resources and influence change through knowledge exchange. Turns ideas into real ventures which enrich research and transfer knowledge and expertise to wider audiences internally and externally. Recognises potential for new products and novel applications of research for commercial and/or social benefit. Highly skilled at developing relationships in commercial context.	Stimulates, creates and builds extensive relationships in business/ commercial context. Establishes recognised reputation for enterprise and knowledge exchange. Provides strategic leadership and support to others relating to enterprise. Is highly skilled in getting new technologies and/or new ideas adopted by non-research specialists/industry. Acts as advocate for enterprise.	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D3 Engagement and impact					
4. Policy	Understands the relevant policy-making processes and presents findings in a policy friendly format. Analyses policies and understands the wider contexts in which they are situated.	Recognises, understands and appreciates the importance of policy making to research and the importance of research to policy making. Engages in dialogue with the public, policy makers, government and other key organisations. Evaluates the impact of policy and its fitness for purpose.	Produces research which can inform the development or enhancement of policy. Educates, advises and guides less experienced researchers	Understands/ builds the relationship between academia and the policy-making process and makes the appropriate links to influence policy making. Advises and informs all staff on impact of policy on research.	Has the ability to get research knowledge into the policy-making process through a variety of mechanisms. Is able to influence policy by working directly with key policy makers.

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D3 Engagement and impact					
5. Society and culture	Develops awareness of the impact of research on wider society and of the impact of society, the environment and culture on research. Understands concept of corporate social responsibility.	Recognises, understands and appreciates the potential impact of research on society, the environment and culture. Engages in dialogue with the community and/or relevant stakeholders. Has deeper understanding of corporate social responsibility and acknowledges the impact of own role within it.	Actively seeks ways to enrich society and culture with research projects and outputs. Educates, advises and guides less experienced researchers in corporate social responsibility. Politically astute	Sets example locally, nationally and internationally. Helps shape departmental/institutional policy and implementation. Uses politics to advantage. Sets expectations of staff in respect of corporate social responsibility	

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Sub-domains	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
D3 Engagement and impact					
6. Global citizenship	Shows a broad understanding of the context in which own research takes place, at the national and international level.	Recognises impact of own and others' research as global citizens. Develops international contacts and networks; engages with and understands other cultures.	Sets example and expectations; takes lead on impact issues for discipline/research area and/or institution. Can educate, advise, train and guide peers, researchers and staff in international research issues.	Has global impact. Takes lead; sets example and agendas, and influences policy on national and international scale.	

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- scholarly impact will always perhaps be of most interest and importance to academics, but we do not live in a vacuum from real world problems; problems to which the academic via their research can make a fundamental contribution in generating pragmatic solutions.
- over the last decade, the discussion of universities' research impact on society and the economy, extending beyond academia has gained importance.
- no study has provided a satisfactory monetarised estimate of the total impact of research funding at the aggregate level.
- even at the simpler level of specific projects, such estimates tend to be lacking.

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Research for social impact

Academic experts, as already indicated, should not deliver ***"research for research"***, but research with ***real social impacts***. There exist more paths, how to achieve it, almost in any socio-political conditions.

The **optimum situation** is the case when the recipient (state or the private sector) actively invites academia for co-operation. The co-operation between the private sector and academia works well almost in all countries and has different forms.

Much more complicated issue is the co-operation between the state (all levels) and academia. The quality and scale of such co-operation depends on capacities of both partners.

In **developed countries** the state actively seeks for advice and data from well established universities with long term research tradition.

However, in politicised regimes evidence based policy making contradicts to goals of ruling governments – and moreover, academia may not be well prepared for real and independent advice.

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The EUPACK research indicates that:

In most of the **EU Member States policy advice** is taken from **several sources**

- top civil servants (mandarins),
- cabinets (political), or
- external experts (*consultants, academics, international organizations, think-tanks or businesses*).

The findings from the country reports also confirm that many EU MS also rely on **a combination of these sources** of policy advice

(*e.g. Austria, Croatia, Estonia, Greece and Romania with a combination of mandarins and cabinets; Germany, Denmark, Finland, France, Latvia or UK combining mandarins and external experts; or some countries such as Malta, the Netherlands or Portugal combining all 3 sources of policy advice*).

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We can say that Total Impact (TI) is the sum of all the net benefits attributable to the research converted into monetary terms *discounted over time and space*:

$$TI = \sum_{i=1}^{I} \sum_{t=0}^{T} \sum_{s=1}^{S} \alpha_{its} B_{its} d_{it} d_{s}$$

Research needs to be transformed into innovation. This include product, process or policy innovation and α_{its} is the proportion of the innovation which is attributable to the research. B_{its} are the net benefits of the innovation in impact i, period t and spatial location s. This relates to a single piece of research which has I different impacts such as revenue, jobs, health and the environment. d_{it}, the time discount factor which is assumed invariant over spatial location and between uses.

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The important of research impacts is real as it is required to be declared both when the researcher apply for research funding, in reporting on the use of funding.

In some countries (including Malaysia), the researcher also needs to provide details of the strategy for achieving impact.

In Malaysia, the government invests around £3 billion annually in research, and requires funding applicants to demonstrate the contribution of their research to society and the economy.

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What is the impact on economy and society?

For academics, the word “impact”, is normally related with the research impact factor or other metrics based mostly on citations.

In contrast to the academic perspective of research impact, practitioners hold a very different view.

HEFCE (2011) defined impact as “an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia”.

Australian Research Quality Framework (2006)on the other hand, defined impact as “to achieve social, economic, environmental and/or cultural outcomes. This is not to be confused with impact in the academic domain, which is seen more as an indicator of the intrinsic quality of the research on scholarly or academic measures”

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What is the impact on economy and society?

Research can have many different kinds of impacts depending on the discipline and the research organisation.

Multiple impacts have to be taken into account.

To determine research impact, a new approach for evaluation is necessary.

Analysis should be based on the direct and indirect interactions between researchers and stakeholders.

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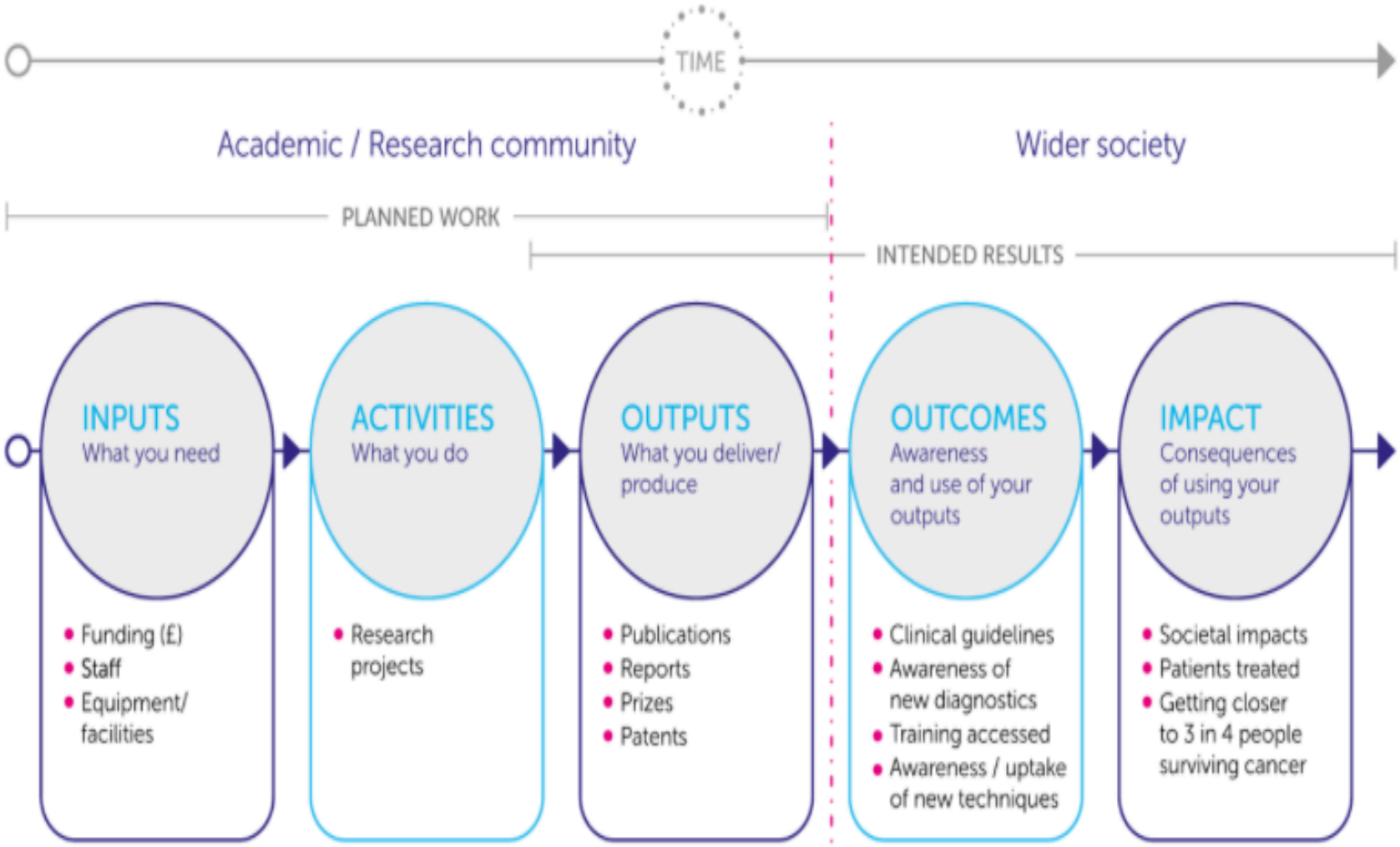
Impact assessment pathway for medical research



Medical research as this discipline is one of the leading discipline in determining social impacts.

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REPESEA

Difference between research outputs and research outcomes

The output could be any measurable results from an organization's activities, e.g., units of housing, number of people placed into employment, number of youth served, etc.

The outcomes would be the specific changes in attitudes, behaviours, knowledge, skills, status, or level of functioning that result from enterprise activities, such as finding a job, avoiding getting sick, or reducing emissions by a certain amount.

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Impact zones

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REPESEA

Research impacts

Research impacts can range from immediate, to short and long-term.

It can also be visible or invisible, progressive or regressive, and intended or unintended.

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Benefits for conducting Social Impact

- Identifying project/ programme stakeholders
- Identifying and prioritizing social issues associated with project
- Mitigating negative impact on communities or individuals
- Enhanced benefits to those affected
- Avoids delays and obstruction in gaining development approval
- Acts as a precautionary measure and avoids costly errors in the future
- Builds the trust and cooperation between community and stakeholders that is necessary for successful implementation of the project.

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Common Methodological Challenges In Measuring Impacts

Challenges	Measurement
Time lags	how do we assess the impact of research if it usually takes a long time for impact to occur? When is the right timing?
Attribution and contribution	how do we attribute particular impacts to particular research projects and researchers (and vice-versa) if research is often incremental and collaborative?
Marginal differences	how do we distinguish between high and low impact if there is no shared understanding of impact or assessment standards yet?
Transaction costs	how do we ensure that the benefits of RIA outweigh its costs if the assessment process can be costly and burdensome?
Unit of assessment	how do we determine an appropriate unit of assessment if research can be multi-disciplinary and multi-impactful?

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What is Social Impact Assessment?

United Nation Public Administration Network (2006) & Rietbergen-McCracken and Narayan (1998) defines Social Impact Assessment (SIA) as advanced endeavors in evaluating implications of specific policy actions that impact society.

The focus is on developing interventions that is based on informed decisions involving a wide range of stakeholders whom are impacted by specific social issues.

This includes programs, projects, adoption of new policies and relatively actions taken by government

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In assessing social impact, we could derive at some common concerns:

Who are the stakeholders of the project/proposed action?
Are project objectives consistent with their needs, interests and capacity?
What social and cultural factors affect the ability of stakeholders to participate or benefit from the proposed policy or project?
What will be the impact of the project or program on the various stakeholders, especially women and vulnerable groups?
Are there plans to mitigate adverse impacts?
What social risks might affect project or program success?
What institutional arrangements are needed for participation and project delivery?
Are there plans to build capacity at appropriate levels?

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We need to:

a) characterize the existing state of aspects being studied,
b) forecast how they may change if a given action or alternative is implemented and
c) develop means of mitigating changes that are likely to be adverse from the point of view of an affected population.

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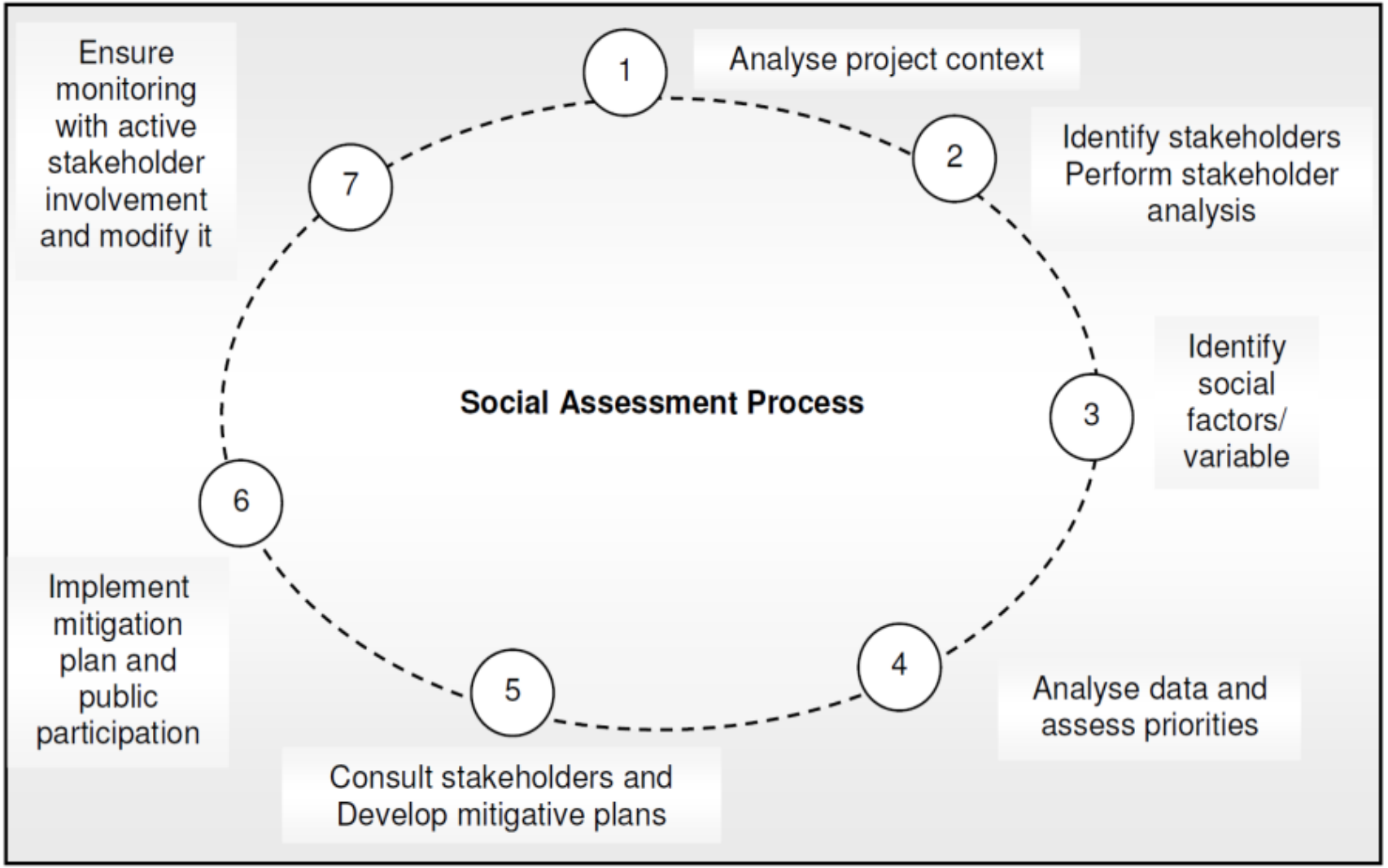
Social Impact Assessment Process



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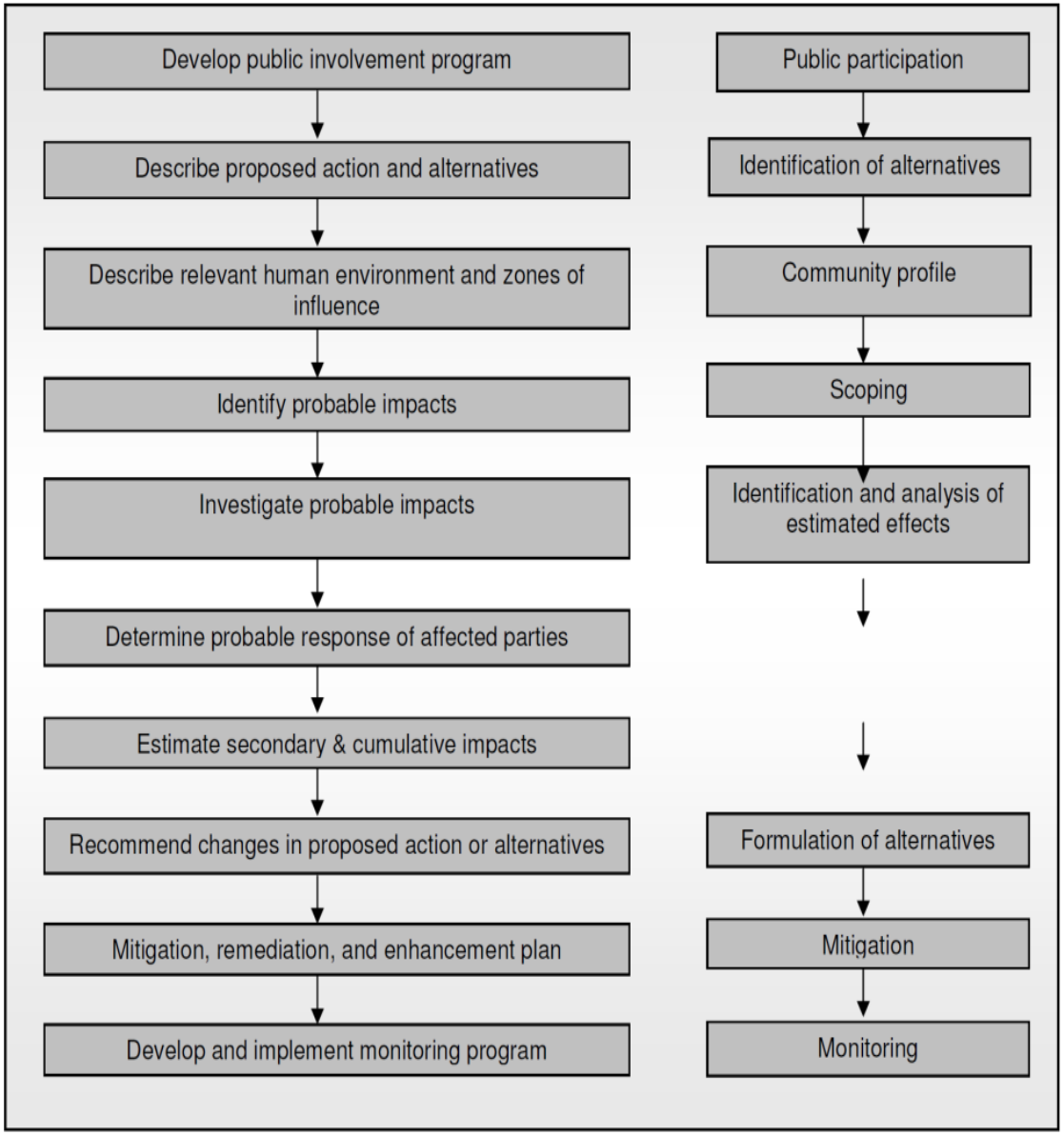
Various Steps of Performing Social Impact Assessment



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Some Social Dimensions that Motivate Social Impact Assessment

Impact on Community & Society:
Ones may relate research impact to society to the improvement in the 'quality of life'.
Quality of life may enhance society's well-being, which includes but not limited to human understanding and world view, wealth and prosperity, basis for decision-making and also practice development.

However, different research field has different impact to the society.

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Niederkrotenthaler *et al*., 2011). has proposed a tool to rate the impact of research publications on society.
The impact is calculated from the evaluation of research project, whereby ratings will be determine based on four main factors which are:
(1) the aim of the published research;
(2) the extent to which authors attempt to translate their scientific findings into societal action;
(3) the level, status and target group of the research project's translation.

However, the tool came with a few challenges including problems in computerize calculation and inherent subjectivity.

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Results of the project and its measurement

A result is a product or output which is produced by a given project and which may be quantified.

Some results of projects are difficult to quantify.

Increased awareness is an example of such achievement. This type of results should be measured using polls and satisfaction surveys.

The results of the project may be of diverse nature and consist of both concrete (tangible) results as well as of skills and personal experiences that both project organisers and participants to the activities have acquired (intangible results).

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Tangible results of project

Tangible results may include for example:
- an approach or a model to solve a problem;
- a practical tool or product, such as handbooks,
- curricula, e-learning tools;
- research reports or studies;
- good practice guides or case studies;
- evaluation reports;
- recognition certificates;
- newsletters or information leaflets.

Intangible results are often more difficult to measure. The use of interviews, questionnaires, tests, observations or self-assessment mechanisms may help to record this type of result.

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Intangible results of project

Intangible results may include for example:
- knowledge and experience gained by participants, learners or staff;
- increased skills or achievements;
- improved cultural awareness;
- better language skills.

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What does impact of the project mean?

Impact is the effect that the activity carried out and its results have on people, practices, organisations and systems.

Dissemination and **exploitation** of results plans can help to maximize the effect of the activities being developed so that they will impact on the immediate participants and partners for years to come.

Benefits to other stakeholders should also be considered in order to make a bigger difference and get the most from the project.

The impact of the Erasmus+ Programme is measured not only by the quality of project results but also by the extent to which these results are known and used outside the project partnership.

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Why is it important to share project results? What are the wider benefits?

Dissemination and exploitation activities can often create new opportunities to extend the project and its results or develop new partnerships for the future.

Sharing the results will enable others to benefit from the activities and experiences of the Erasmus+ Programme. Project results can serve as examples and inspire others by showing what is possible to achieve under the Programme.

Successful dissemination and exploitation may lead to external recognition of the work carried out adding further credit to it.

Sharing the results will enable others to benefit from the activities and experiences of the programme (e.g. Erasmus+ Programme). Project results can serve as examples and inspire others by showing what is possible to achieve under the Programme.

Dissemination and exploitation of project results can help to inform future policy and practice.

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Dissemination and Impact of research projects: ERASMUS+ projects

Dissemination is a planned process of providing information on the results of programmes and initiatives to key actors. It occurs as and when the result of programmes and initiatives become available.

Activities serving the dissemination and exploitation of results are a way to showcase the work that has been done as part of the project.

Sharing results, lessons learned and outcomes and findings beyond the participating organisations will enable a wider community to benefit from a work that has received EU funding, as well as to promote the organisation's efforts towards the objectives of Erasmus+, which attaches fundamental importance to the link between Programme and policies.

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Dissemination and Impact of research projects: ERASMUS+ projects

Dissemination activities will vary between projects, and it is important to consider what kinds of dissemination activities are fitted to each participating organisations.

Partners in smaller projects should undertake dissemination and exploitation appropriate to the level of their activity.

Dissemination activities for a mobility project will trigger different requirements than those for a partnership project.

The extent of dissemination and exploitation activities will increase with the size and strategic importance of the project.

When applying, applicants will be asked to explain their intentions/plans for dissemination and exploitation activities, and if successful, required to carry them out.

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Dissemination and Exploitation of research projects: ERASMUS+ projects

Exploitation is:

a) a planned process of transferring the successful results of the programmes and initiatives to appropriate decision-makers in regulated local, regional, national or European systems
b) a planned process of convincing individual end-users to adopt and/or apply the results of programmes and initiatives.

Dissemination and exploitation are distinct but closely related to one another.

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Dissemination and Exploitation of research projects: ERASMUS+ project

Making others aware of the project will impact on other organisations in the future and will contribute to raising the profile of the organisation carrying out the project.

To effectively disseminate results, an appropriate process at the beginning of the project needs to be designed.

This should cover why, what, how, when, to whom and where disseminating results will take place, both during and after the funding period.

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Dissemination and Exploitation of research projects: ERASMUS+ projects

Dissemination and exploitation goals may be to:
- raise awareness;
- extend the impact;
- engage stakeholders and target groups;
- share solutions and know how;
- influence policy and practice;
- develop new partnerships.

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Dissemination and Impact of research projects: ERASMUS+ projects

For structured cooperation projects such as Strategic Partnerships, Knowledge Alliances, Sport, Collaborative Partnerships and Capacity-building projects a good quality dissemination and exploitation plan should include:

measurable and realistic objectives,
a detailed timetable,
providing a resource planning for the activities to be undertaken.

The dissemination part of the Programme is also supposed to raise the quality of the Programme by stimulating innovative projects and sharing good practices.

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Dissemination and Impact of research projects: Example of Jean Monnet Projects

Jean Monnet Projects are required to disseminate and exploit the results of the activities beyond the stakeholders directly involved. This will considerably increase the impact and contribute to a systemic change.

Strongly encouraged to use the relevant existing platforms and tools (i.e. the Jean Monnet directory, the Jean Monnet virtual community). These functions, as part of the general IT tool for Erasmus+, will ensure that the wider public is informed about the results.

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Who are the target audiences?

Identifying target groups, both at different geographical levels (local, regional, national, European) and in the own field of the beneficiary (colleagues, peers, local authorities, other organisations leading the same type of activity, networks, etc.) is essential.

The project plans should be flexible enough to allow target groups and other stakeholders to become involved during the different stages of the project.

Activities of dissemination and messages have to be tailored appropriately taking into account audiences and target groups e.g.:
- end-users of the project activities and deliverables;
- stakeholders, experts or practitioners in the field and other interested parties;
- decision-makers at local, regional, national and European level;
- press and media;
- general public.

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How to disseminate the results?

In order to reach as many people as possible, it is advisable to translate as many communication materials and project outputs in as many languages as posible.

Being creative and thinking of fresh ideas so that the project and results really stand out is always appreciated.

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How to disseminate the results?

Beneficiaries of ERASMUS+ projects could use for example:
the Erasmus+ Project Results Platform (see below);
- project or organisational websites;
- meetings and visits to key stakeholders;
- dedicated discussion opportunities such as information sessions, workshops, (online) seminars, training courses, exhibitions,
- demonstrations, or peer reviews;
- targeted written material such as reports, articles in specialised press, newsletters, press releases, leaflets or brochures;
- audiovisual media and products such as radio, TV, YouTube, Flickr, video clips, podcasts or apps;
- social media;
- public events;
- project branding and logos;
- existing contacts and networks.

How to exploit the results

In terms of exploitation it is important to think about how results can make a difference to the project, end- users, peers or to policy makers.

Exploitation mechanisms include:
- positive reputational effects for the participating organisations;
- increased awareness on a theme, target or area of work;
- increased financial support by other supporters or donors;
- increased influencing on policy and practice.

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When should dissemination and exploitation activities be carried out?

Dissemination and exploitation of results are an integral part the project throughout its lifetime: from the beneficiary's initial idea, during the project and even after European funding has ended.

Setting up a timetable of activities together with the partners involved and allocating appropriate budget and resources is necessary.

The plan shall:
agree realistic targets and deadlines with partners to monitor progress;
align dissemination and exploitation activities with key stages of the project;
offer sufficient flexibility to respond to the needs of the target group as well as wider developments in policy and practice.

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Examples of dissemination and explotation activities at different stages of the project cycle

BEFORE the project starts:
- drafting the dissemination and exploitation plan;
- definition of the expected impact and deliverables;
- consideration of how and to whom dissemination and exploitation outcomes will be disseminated.

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Examples of dissemination and explotation activities at different stages of the project cycle

DURING the project:
- contacting relevant media e.g. at local or regional level;
- conducting regular activities such as information sessions,
- training, demonstrations, peer reviews;
- assessing the impact on target groups;
- involving other stakeholders in view of transferring results to end users/ new areas/policies.
- adding a banner with a link to project card within the Erasmus+ Project Platform on the project website

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Examples of dissemination and explotation activities at different stages of the project cycle

AT FINAL REPORT STAGE

- uploading the final project results and an update of the project description on the Erasmus+ Project Results Platform.

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Examples of dissemination and explotation activities at different stages of the project cycle

AFTER the project
- continuing further dissemination (as described above);
- developing ideas for future cooperation;
- evaluating achievements and impact;
- contacting relevant media;
- contacting policy-makers if relevant
- cooperate with the European Commission by providing useful inputs to its dissemination and exploitation efforts.

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How to assess acutual impact ?

The impact assessment is an essential part of the process. It evaluates achievements and generates recommendations for future improvements.

Indicators could be used to measure progress towards goals. Indicators can be both quantitative relating to numbers and percentages as well as qualitative relating to the quality of the participation and experience.

Questionnaires, interviews, observations and assessments could also be used to measure the impact.

Defining indicators relating to the different project activities should be foreseen at the start of the project and part of the overall dissemination plan.

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How to assess actual impact ?

Some examples are:
Facts and figures related to the website of project organisers (updates, visits, consultation, cross referencing);
Numbers of meetings with key stakeholders;
Numbers of participants involved in discussions and information sessions (workshops, seminars, peer reviews); follow-up measures;
Production and circulation of products;
Media coverage (articles in specialised press newsletters, press releases, interviews, etc.);
Visibility in the social media and attractiveness of website;
Participation in public events;
Links with existing networks and transnational partners; transfer of information and know-how;
Impact on regional, national, EU policy measures;
Feedback from end-users, other stakeholders, peers, policy-makers

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Assesing the Impact and dissemination in Jean Monnet Projects

Jean Monnet Projects are encouraged to:
participate in dissemination and information events at national and European level;
- organise events (lectures, seminars, workshops, etc.) with policy makers at local (e.g. mayors and counsellors), regional and national level as well as with organised civil society and schools;
- disseminate the results of their activities via the organisation of seminars or lectures geared and adapted to general public and civil society representatives;
- network with Centres of Excellence, Jean Monnet Chairs, coordinators of Modules and supported Institutions and Associations;
apply open educational resources (OER), publish the summaries, content and schedule of their activities as well as the expected outcomes.

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Assessing the Impact and dissemination in Jean Monnet Projects

Impact and dissemination (Maximum 25 points)
Assesment based on:

1. The quality of measures for evaluating the outcomes of the teaching activities;

2. The potential impact of the project:
on the institution hosting the Jean Monnet Action;
on the students and learners benefiting from the Jean Monnet Action;
on other organisations and individuals involved at local, regional, national and/or European levels.

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Assesing the Impact and dissemination in Jean Monnet Projects

3. The appropriateness and quality of measures aimed at disseminating the outcomes of the activities within and outside the institution hosting the Jean Monnet Action;

4. If relevant, the extent to which the proposal describes how the materials, documents and media produced will be made freely available and promoted through open licences, and does not contain disproportionate limitations.

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Case study of the dissemination and impact of research project: „Europeanization in Public Administration Reforms“

Outcomes and impact of the project:
To facilitate reform processes, preparation for EU integration and regional cooperation and awareness of importance of PA performance - criteria for EU integration, will be the main outcome.

Public administration and policy programmes which are in general traditionally more nationally oriented will pay more attention to the EU policies and the EU integration and their impact on the governance in the EU countries and target countries.

This will have an impact on the public administration and policy curricula development towards more extensive involvement of the EU issues in teaching and research.

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Expected impact of the project:

Sharing and dissemination of experience resulted from European integration processes among all the target groups for the utilization for the teaching and research will be the main impact. Reform processes, preparation for EU integration and regional cooperation and awareness of importance of PA performance – requirements for EU integration and the EU integration impact will be explored.

Public administration and policy programs which are in general traditionally more nationally oriented will pay more attention to the EU policies and the EU integration and their impact on the governance. This will have an impact on the public administration and policy curricula development towards more extensive involvement of the EU issues in teaching and research.

The EPAR project will support the creation of a more efficient, more transparent and customer oriented, more flexible, and more performance-focused public administration and policy coherent with EU policies in the various countries in the region.

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Expected impact of the project:

Countries have to rise the awareness on the European topics to the highest level. They have to enhance public sector performance by increasing formalized planning, reporting and control across public administration systems. The stress is on open government and citizens participation on national as well as Union level. Public administrations have to modernise accountability and control through ex-ante to ex-post control and develop active communication tools with public for mobilisation of the citizens participation and understanding of the national as well as Union decision making processes.

Accessibility of the project deliverables (in different languages) to target groups will contain different approaches to the evaluation of past efforts, the overview of the current situation and analysis of the avenues of future developments in the field of EU integration process.

Distributed project deliverables to the target groups, should afford evidence regarding the advantages and disadvantages of a policy choice, education approach etc.. It explains why action should be taken at national, EU level and why the proposed response is appropriate – good practices. It may also find that no action should be taken at nation or EU level – bad practices.

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Have you already experience with research project or other type of project (capacity building, exchange, teaching, project for practise ….)?

Write the title of your project and provide a description of your results.

Explain expected impact of the project.

Identify the various groups who have an interest or a stake in the project. Stakeholders are those who are likely to be affected by a project, as well as those that may influence the project's outcomes.

What type of dissemination you used in your project and why? Who was the target audience?

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Exercise (work in groups) :

1. Describe classification of HEIs and key sources of funding of HEIs in Thailand. Are these two somehow related to research outputs and its quality?

2. How can Thailand Government/Ministry of Education improve its initiatives to improve research environment of universities?

3. Present your recommendations.

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„Homework“

- Find and prepare one research paper that you want to publish and another paper that you already published (or some of your colleague).

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