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Why collaboration is necessary for research in academia?

Hassan Abbas Khawaja

Research Group Leader
IR, Spectroscopy, and Numerical Modelling

Associate Professor
Department of Automation and Process Engineering
Faculty of Engineering Science and Technology

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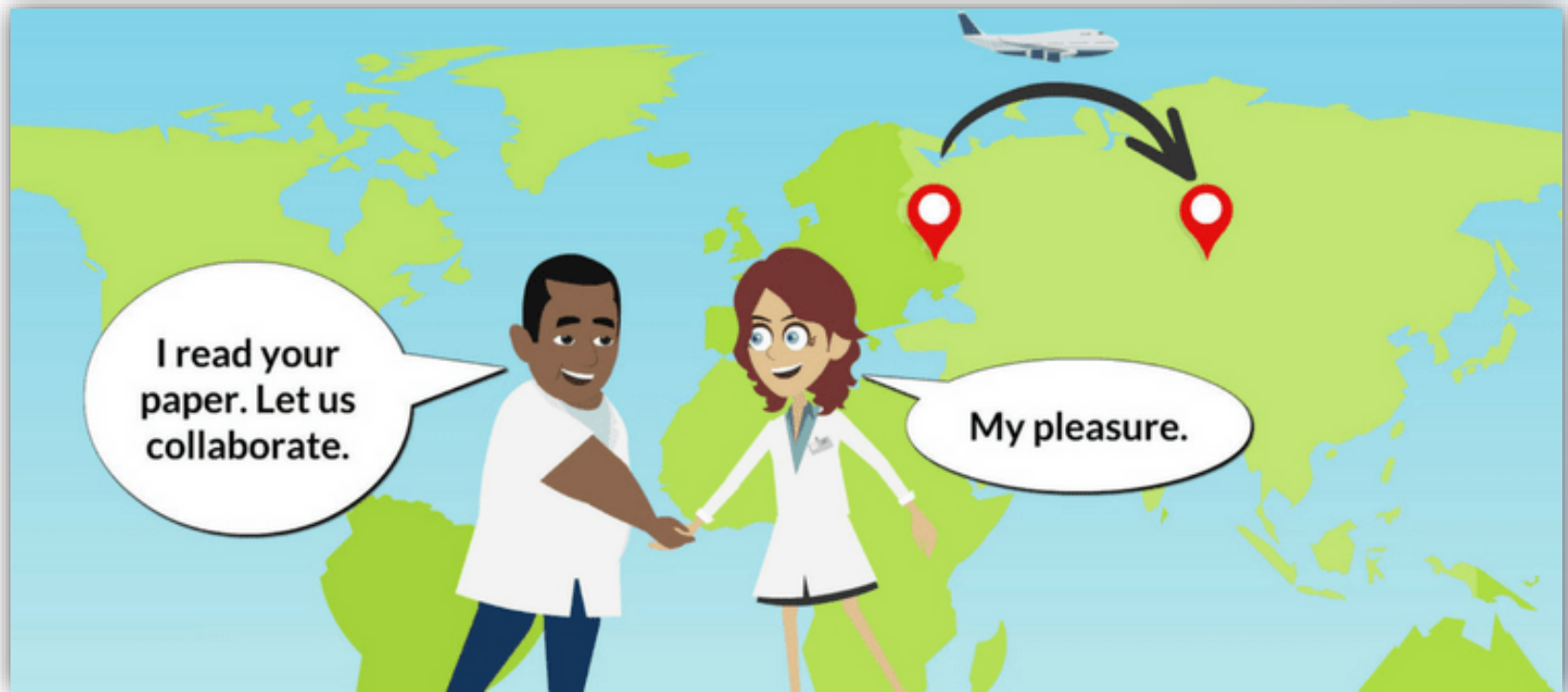


Overview

- Research
- Collaboration
- Research + Collaboration
 - Benefits
 - Challenges
 - Types
 - Legalities
 - Dos and Don'ts
- Academia
 - Factory of Knowledge
 - Learn
 - Teach
 - Create
 - Disseminate
- Academic ↔ Industry
- Reflection
 - My own career
 - UN SDGs

Collaboration

The term "**collaboration**" in academic research is usually thought to mean a partnership between two or more academic faculty members who are pursuing mutually interesting and beneficial research.



Research + Collaboration

Benefits

- Knowledge sharing
- Expertise
- Experiences
- Ideas
- Drive

$$1 + 1 = 11$$

The Mathematics of Collaboration



Research + Collaboration

Challenges

- Credit/Acknowledgement
- Unequal Resources (Labs, Expertise)
- Potential for Idea/IP Theft
- Unequal Contribution
- Status Quo
- Unreciprocated Attitude
- Cultural Differences
- Bureaucracy



Research + Collaboration cont.

Types

- One-to-one individuals (relationship based...), usually informal
- Individual-to-organizations, usually formal
- Organization-to-organization, usually formal and legal
- Within organization (internal), cross-department/colleges, etc.
 - Unstructured
 - Robustly Structured
 - Medium Structured
 - Highly Structured
- Outside organization (external)



Research + Collaboration cont.

Legalities

- Letter of intent (LOI)

A letter of intent (LOI or Lol, or Letter of Intent) is a document outlining the understanding between two or more parties which they intend to formalize in a legally binding agreement.

- Memorandum of Understanding (MOU)

An MOU is: An over-arching and ordinarily non-legally binding document indicating an intention to undertake collaboration with a foreign institution; A writing that describes a very broad concept of mutual understanding, goals, and plans shared by the parties.

- Non-Disclosure Agreement (NDA)

NDA's, or non-disclosure agreements, are legally enforceable contracts that create a “confidential relationship” between a person who has sensitive information and a person who will gain access to that information.

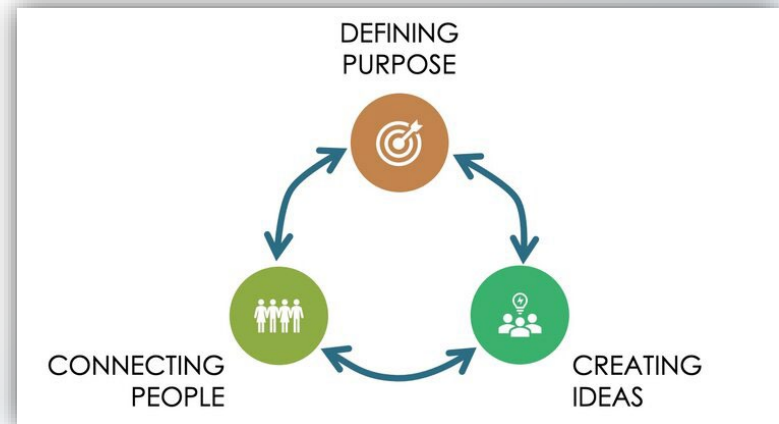
- Contracts/Agreements

An agreement is any understanding or arrangement reached between two or more parties. This may or may not be legally binding.

Research + Collaboration cont.

Dos and Don'ts

- Dos
 - Be honest
 - Be openminded
 - Be culturally aware
 - Be appreciative about common interests
 - Be respectful about differences



- Don'ts
 - Avoid discussing conflicting matters (e.g., politics, religion)
 - Avoid discussing financial differences (e.g., per capita income, GDP)
 - Avoid disclosing internal matters/confidential information (e.g., work politics, pay grades)
 - Avoid pushing for dates/deliverables
 - Avoid commitments

Academia

The life, community, or world of teachers, schools, universities, and education.



Academia cont.

Academia is the factory of knowledge

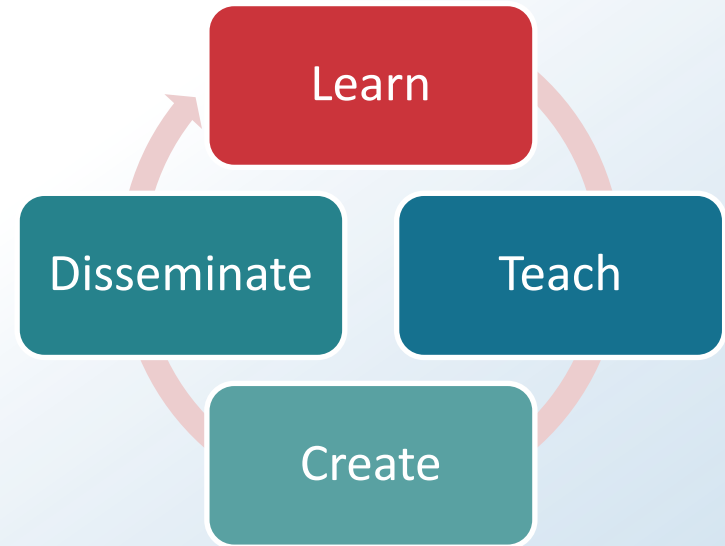
1. Learn knowledge ←
2. Teach knowledge →
3. Create knowledge ←
4. Disseminate knowledge →



Academia cont.

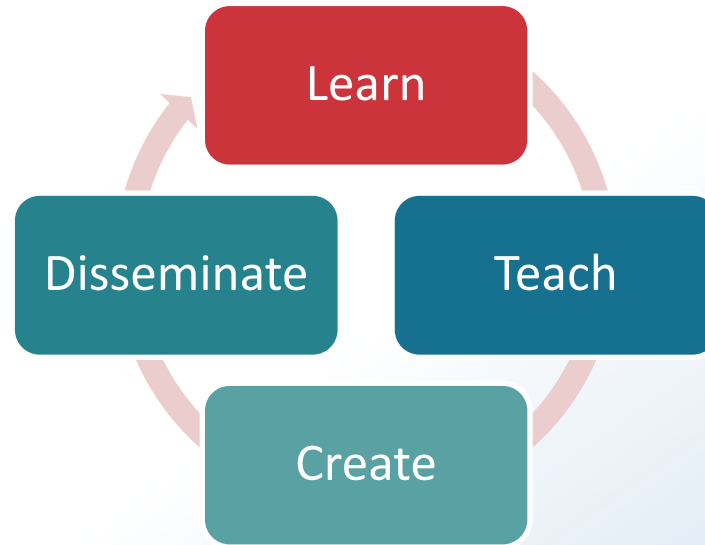
Academia is the factory of knowledge

1. We learn knowledge from **others** ←
 - Publications
2. We teach knowledge to **others** →
 - Courses
3. We create knowledge based on **others** ←
 - Research
4. We disseminate knowledge for **others** →
 - Publications



Academia cont.

Academia is inherently connected with **others**(rely on **others**).



Why collaboration is **necessary** for research in **academia**?

Academia cont.

Where and how to collaborate?

- Participate in Academic Conferences/Workshops
- Membership of Academic Societies/Networks
- Keep your Profiles up to date
 - ORCID
 - Google Scholar
 - Elsevier - Scopus Author ID
 - Web of Science – Publons
 - Academia
 - CRISITN (Norway only)
- Be active on Social Media
 - LinkedIn
- Maintain Websites/Profile Pages
 - Organization webpages



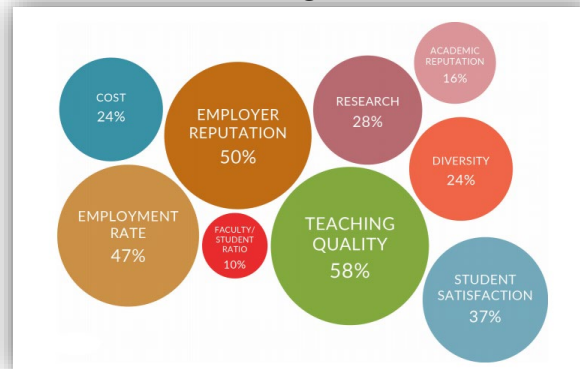
ACADEMIA



Academia cont.

Research **collaboration** is necessary for increasing the general research **productivity** of the universities.

- International collaborations → universities' quality index
- Industry correlation → universities rankings



Times Higher Education (THE) World University Rankings
Academic Ranking of World Universities (ARWU) by Shanghai Ranking Consultancy
Quacquarelli Symonds (QS) World University Rankings

*L Aldieri, M Kotsemir, C Vinci (2018) The impact of research collaboration on academic performance: An empirical analysis for some European countries. Socio-Economic Planning Sciences. 62, pp.13-30 <https://doi.org/10.1016/j.seps.2017.05.003>

Academia ↔ Industry

*Strategic **academia-industry** research collaborations provide a myriad of benefits to their participants. For academics, these benefits can include the opportunity to address challenging research questions with **real-world applications**, see their research have **tangible impacts and gain access to new skills, data or equipment**. Companies can improve business performance through **developing new techniques or technologies**, de-risk investment in research, and extend the capabilities and expertise available to the firm.*

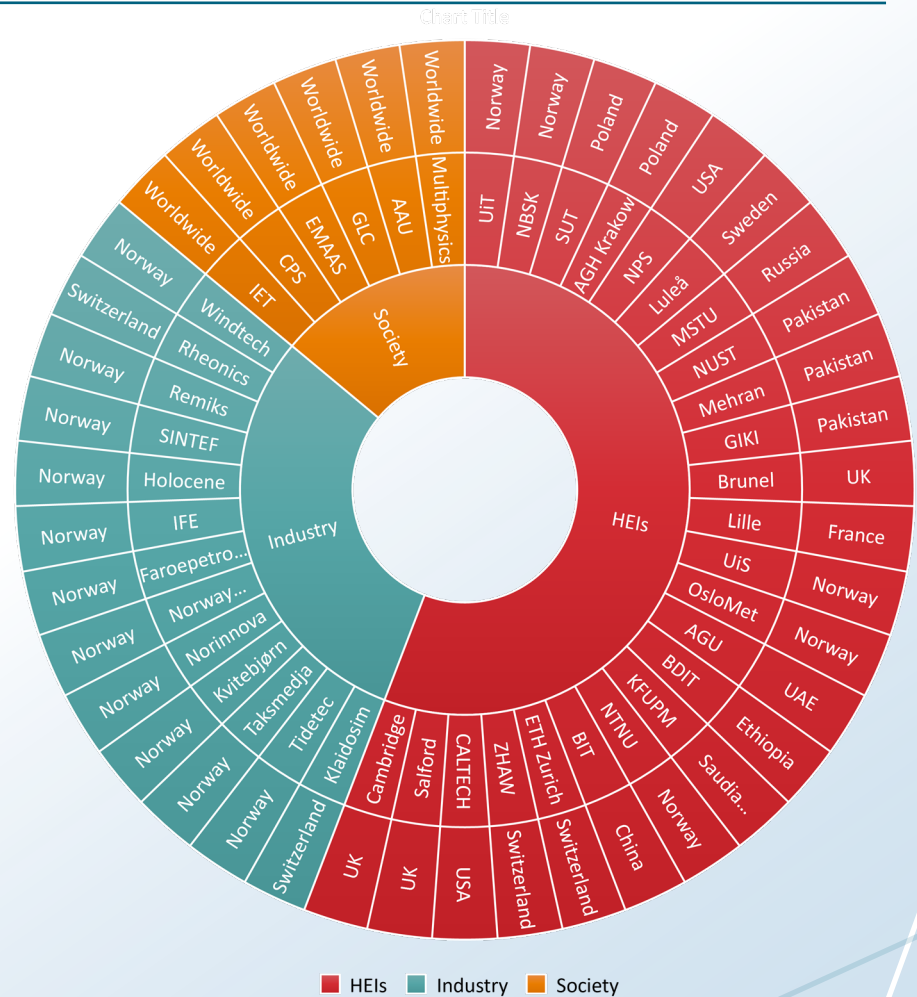


*<https://www.elsevier.com/research-intelligence/university-industry-collaboration>

Reflection (my own career)

Collaborations in my career so far:

- **22** higher education institutions in **13** countries
- **13** industry/business/governmental organizations
- **6** International Academic Societies



Reflection cont.



UN SDGs



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Thank You

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H Khawaja - Webinar: Why collaboration is necessary for research in academia? Al Ghurair University, UAE

