

# The information needs of evidence based higher education policy

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# Topics

- Whither evidence based policy?
- ... in the context of higher education?
- The uses of evidence
- The quality, quantity and availability of information: challenges and measures to overcome them
- The "other bird" we want to hit with these measures: the overall quality of administrative IT in HEIs

# Whither evidence based policy?

To make the right policy choices and moves, we need to know

1. Where are we now?

- What are the challenges / strenghts of the present

2. Where are we heading?

- Where are the current trends taking us? time series

3. Where should we be heading?

- What to do to have more strenghts overcome the challenges

For this we need statistics and research

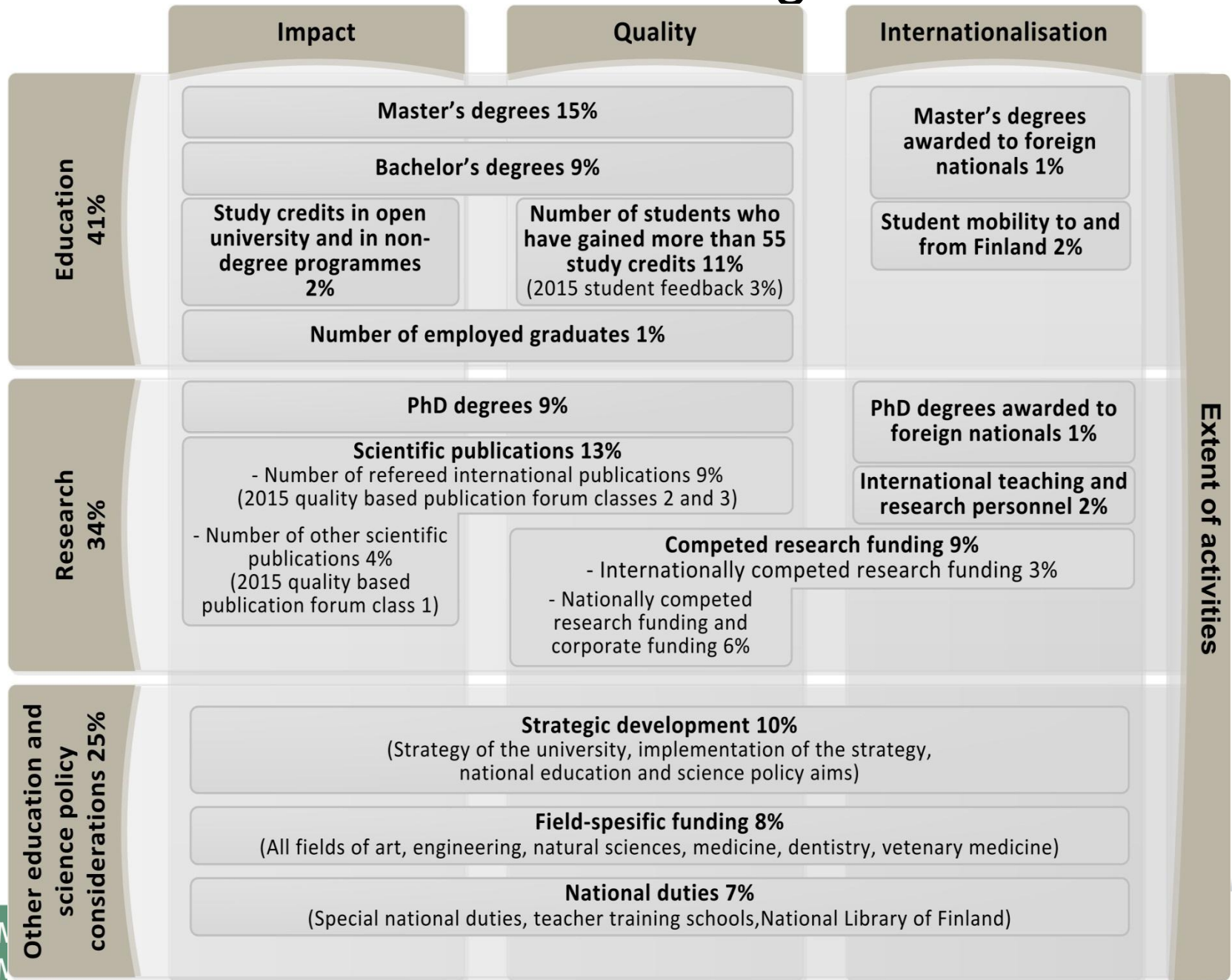
# ...in the context of higher education?

- Information on what: *a national system of higher education: the higher education institutions (+ other research institutions )*
- Internal to the system
  - input and output
- external to the system, but still national
  - other levels of education and society at large: background variables on the student population, employability, etc.
- external and international
  - the performance of the universities in relation to other countries
  - policies in other countries
  - the effects of newly introduced policies in other countries
  - University rankings(?)
  - ...
- Data for analysis made "in house" at the ministry & academic research on higher education

# Uses of evidence, examples

- What the society needs?
  - output goals: degrees & other educational results, research deliverables
  - employment, age structure of the population, etc
- Equality
  - policies for better access: what are the effects of gender, parents educational level, income, "class", etc. and how to do better
- The "internal" performance of the HEIs: efficiency
  - What kind of policies "get more output with the given input"
  - comparisons between national institutions & international comparisons
- Output oriented funding scheme

# Universities core funding from 2013



# The quality and quantity of information: challenges

- Background: we use register based data
  - Person based registers are used extensively in Finnish public administration and services, and a common id code is used in all of these, so register data is available
  - Surveys too
- We need it quickly
- We need it accurately
  - for commensurability between the local HEIs
  - for international comparisons
- We need it with high granularity: not just sums
  - For example, at the level of a single (term long) course done by a student

# Challenges & cures 1

- Commensurability problems: is the data really about the same or similar phenomena in different HEIs?

Commensurability (and interoperability) Is achieved if the information is commensurable at the source: the administrative information systems of the HEIs

→ We introduce, promote and facilitate the use of a common data models for student information systems, data warehouses, etc.



# Challenges & cures 2

- Data is gathered by different authorities (Ministry of education, Statistics Finland, National board of education, The Social Insurance Institution of Finland) with slightly different definitions
- The process from data gathering to getting it to the Ministry is slow
  - We re-organise the data flow from HEIs to different authorities to go through a single "*data warehouse*" to which the Ministry has access.

# Challenges & cures 3

- Only Statistics Finland is able to combine the data internal to the institutions & other data at the level of *a person*
  - for example register based background variables on parents' education, employment after graduation, etc.
- EU Statistics directive and national legislation is strict on not giving this out at a too granular level
- So this kind of combined data is still slow to come about and not very granular

→ We need to live with this...

# The other bird: the quality of administrative IT of HEIs

## Background:

- Finnish Act on Information Management Governance in Public Administration 2011
- *Defines interoperability of public administration information systems:* the technical and content-based interoperability of information systems with the information systems of other authorities in public administration *when the systems use the same data.*
- *Defines enterprise architecture for information management in public administration:* specification of the structure of the information management entity comprising public administration organisations, services, operating processes, processed information and the information systems used, and the technologies, and of the relationship between the entity's component parts;

# The other bird: the quality of administrative IT of HEIs - 2

- Strictly speaking the act does not apply to universities, but the same issues must be addressed.
- Same solutions as above:
  - **Common data models**,
  - **reference architectures** for student information systems & research management
  - a common solution (**the datawarehouse**) to handle the data flows from HEIs to data collecting authorities **and also centralized operational services (student admissions)**

→ interoperability of information systems & commensurate and timely information on the universities

Thank you

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