The process of evaluation of science in Poland

Przemysław Korytkowski
West Pomeranian University of Technology in Szczecin
Faculty of Computer Science

Evaluation Committee of Scientific Units
Ministry of Science and Higher Education

Science landscape

- About 86 000 researchers (FTE)
- 371 scientific institutions:
  - 159 universities (782 faculties)
  - 68 basic research institutes
  - 144 R&D institutes and companies
Science landscape

<table>
<thead>
<tr>
<th>OECD FOS</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences</td>
<td>13,081</td>
</tr>
<tr>
<td>Engineering and Technology</td>
<td>22,195</td>
</tr>
<tr>
<td>Medical and Health Sciences</td>
<td>13,392</td>
</tr>
<tr>
<td>Agricultural Sciences</td>
<td>7,326</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>16,204</td>
</tr>
<tr>
<td>Humanities</td>
<td>9,097</td>
</tr>
</tbody>
</table>

Source: research by: Korytkowski, Kulczycki

Goals for science policy

"in the parametric evaluation of scientific units, the quality of research outputs (especially prestigious publications and financially rewarded implementation) should be more important than quantity (…)"

In the evaluation, there should be acknowledged only the best research outcomes, and a number of the outcomes should not be just a simple multiplicity of the full-time employment equivalents"

Source: the Higher Education and Science Development Programme for 2015–2030
Evaluation exercises

State Committee for Scientific Research (KBN):

Committee for Research Units Evaluation (KEJN):
- parametric + peer-review: 2013, 2017

2017 evaluation in numbers

- 612,825 outcomes submitted:
  - JRC publications 157,944
  - Publications in Polish journal 218,503
  - ERIH publications 12,705
  - WoS conference proceedings 22,110
  - Monographs 36,799
  - Chapters in monographs 101,113
  - Artistic works 52,876

For the data quality are responsible scientific units.
2013 and 2017 evaluations

Four scientific categories:
- A+, the leading level in the country
- A, very good level
- B, acceptable level with the recommendation to strengthen the scientific activity
- C, Unsatisfactory level

<table>
<thead>
<tr>
<th>Categories in 2017</th>
<th>Number of units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>62</td>
</tr>
<tr>
<td>A</td>
<td>385</td>
</tr>
<tr>
<td>B</td>
<td>441</td>
</tr>
<tr>
<td>C</td>
<td>111</td>
</tr>
</tbody>
</table>

Challenges

- Motivate more researchers to publish in the best journals.
  - Too much publications in Polish journals, in particular in technical and social sciences.
  - Too small participation of Polish humanities - in the world scientific discourse.
- Low scientific level of Polish scientific journals.
- Too few indexed Polish journals? (Especially in the humanities and social sciences.)
Number of publications in Scopus

Polish publications in top journals

Source: Scival
Category Normalised Citation Impact

The share of publications in a quartile

Source: research by: Korytkowski, Kulczycki
Academic staff publishing in the JCR

A share of monographs in English

Source: research by: Korytkowski, Kulczycki
Indexation of Polish journals

Among almost 3,000 Polish scientific journals:
- 356 indexed in Scopus
- 143 indexed in JCR
- 135 indexed in Emerging Sources

Reform – Law 2.0

Goals for research:
- Scientific excellence
- Internationalization
- Visibility
Reform – Law 2.0

- New classification of scientific disciplines
- New evaluation model
- Initiatives for:
  - research universities
  - regional excellence

Law 2.0 - Evaluation

- Evaluation of disciplines at universities and institutes
- A new list of journals and conference proceedings
- The first list of book publishers
- Support program for Polish scientific journals
- ORCID – mandatory for all researchers
A new evaluation model

- 3 instead of 4 criteria:
  1. Publications + patents
  2. Incomes: grants, R&D projects, commercialization
  3. Societal impact

- 3 publications per sum of FTE
- Max 4 publications per person
- Fractional counting of publications

A new evaluation model

- 5 instead of 4 categories: A+, A, B+, B, C
- Min 12 FTE in discipline to be evaluated
- Transition from organizational classification to qualification-based
A new list of journals

- Expert based supported by metrics: SNIP, CiteScore, SJR, IF2, IF5, Article Influence, Category Normalized Citation Impact, CORE

<table>
<thead>
<tr>
<th>2009-2018 scale</th>
<th>2019+ scale</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-15</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>20</td>
<td>0-25</td>
</tr>
<tr>
<td>30</td>
<td>40</td>
<td>25-49</td>
</tr>
<tr>
<td>35</td>
<td>70</td>
<td>50-75</td>
</tr>
<tr>
<td>40</td>
<td>100</td>
<td>75-89</td>
</tr>
<tr>
<td>45</td>
<td>140</td>
<td>90-96</td>
</tr>
<tr>
<td>50</td>
<td>200</td>
<td>97+</td>
</tr>
</tbody>
</table>

Support program for Polish scientific journals

Support the editorial processes:
- Introduction of journal management systems
- metadata
- DOI
- ORCID
- anti-plagiarism

Up to 500 journals will get founding
The first list of publishers

- First level – 80 pts
  meet the ethical and scientific standards of publishing

- Second level – 200 (300) pts
  recognized as leading by the scientific community

Thank you for Your attention!