The CWTS Leiden Ranking: a responsible approach to university ranking

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CWTS Leiden Ranking

- Focused completely on scientific performance of universities

- Based purely on bibliometric indicators; no survey data or data provided by universities

https://www.leidenranking.com/
**CWTS Leiden Ranking**

- High quality data collection and advanced bibliometric methodology
- Separate indicators of size-dependent and size-independent scientific performance
- No composite indicators

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Advanced bibliometric methodology

- Robust indicators insensitive to ‘extreme values’
- Fine-grained field classification system
- Fractional counting approach
- Core publications only
Dimensions in the Leiden Ranking

- Scientific Impact
- Collaboration
- Open Access Publishing
- Gender Diversity
Principles for Ranking Universities

Design  Interpretation  Use
Design of rankings

• One size doesn’t fit all

• Separate the relative from the absolute

• Be explicit about the definition of a university

• Be transparent
Interpretation of rankings

- Compare and contrast (Comparisons between universities should be made keeping in mind differences between universities)

- Uncertainty in university rankings should be acknowledged

- Look at the underlying data (An exclusive focus on ranks of universities should be avoided; values of underlying indicators should be taken into account)
Take into account values of indicators

Rockefeller University
Rank 1 \((PP_{\text{top 10\%}} = 28.2\%))

Queen Mary University London
Rank 50 \((PP_{\text{top 10\%}} = 14.8\%))

University of Bari Aldo Moro
Rank 550 \((PP_{\text{top 10\%}} = 8.0\%))

Difference in \(PP_{\text{top 10\%}}\) is two times larger for universities at ranks 1 and 50 than for universities at ranks 50 and 500
Use of rankings

• **Not everything that counts can be counted** - Dimensions of university performance not covered by university rankings should not be overlooked.

• **Know your level** - Performance criteria relevant at university level should not automatically be assumed to have same relevance at department of research group level.

• **Handle with care, but don’t discard** - University rankings should be handled cautiously, but they should not be dismissed as being completely useless.
Conclusion

• Rankings provide valuable information…
  ...but only when designed, interpreted, and used in a proper manner

• University rankings are here to stay...
  ...but we can change the rules of the game