

Research teachers: Evaluation of research quality from the perspective of efficiency, efficacy and effectiveness

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Comprehensive evaluation of research quality

Research Quality Triangle:

Efficiency

- Optimal use of resources (time, money, talent).
- Was the result achieved at the lowest cost and in the least time?

Efficacy

Fulfillment of research goals.

Were the expected results achieved?

Effectiveness

- Combination of efficiency + efficacy.
- Was a real and relevant impact generated?

Key measurement indicators

Dimension	Concrete indicators
Efficiency	<ul style="list-style-type: none">Years of service vs. Productivity.Cost per project/article.Salary-results ratio.
Efficacy	<ul style="list-style-type: none">Journal Impact Factor.Collaboration Index.Presence in Scopus, WoS, Google Scholar.
Effectiveness	<ul style="list-style-type: none">Social impact.Research relevance.Contribution to disciplinary development.

Clarivate
Web of Science

Scopus

Google
Scholar

The teacher-researcher: Knowledge builder



Impact Circle:

- Generates knowledge from research experience.
- Authoritatively guides students' scientific learning.
- Links theory and practice in real-world contexts.
- Contributes to solving social and technological problems.

Strategies for strengthening a research culture

To increase the number of competent teacher-researchers:

- Clarify research lines for teachers.
- Continuous updating on emerging topics.
- Participation in national and international academic networks.
- Institutional dialogue spaces to optimize resources.



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