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TIP - TÓPICOS DE INOVAÇÃO PEDAGÓGICA

Pedagogical Innovation Topics

EVIDENCE-BASED TEACHING

INTRODUCTION

There is a substantial body of research and theory on teaching and learning in higher education. We have at our disposal a large variety of essays on good teaching, best classroom experiences and characteristics of best college teachers (see references).

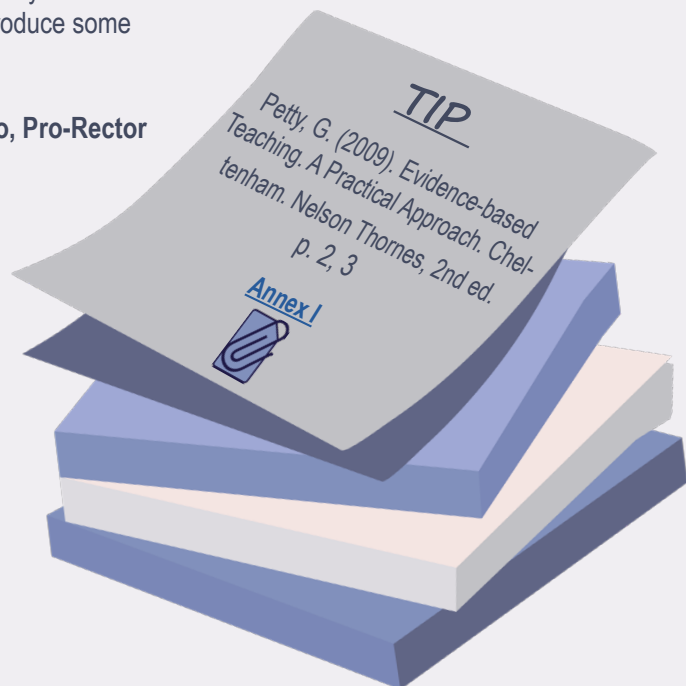
Although emerging from the **evidence produced by educational research**, the main objective of our TIPS is to focus on **practice**.

Two main ideas are crucial to understand our TIPS Series:

1. Any pedagogical option depends on the values, vision and experience of each teacher (frequently aligned with the aims of the department or school where they teach).
2. More than choosing the “best” practice, it is crucial to be aware of how learning occurs and how learning contexts influence students’ outcomes.

We hope you will find our TIPS useful, either if you have recently started your teaching activity, or if you feel there are some areas that need improvement, but you don’t know how to do it, or even if you are an experienced teacher, but want to introduce some innovative approaches to your courses.

Patrícia Rosado-Pinto, Pro-Rector



GO FOR TIPS

WHAT RESEARCH SAYS ABOUT HIGHLY EFFECTIVE TEACHING

1

Teacher's beliefs

Teachers' theories and conceptual models about learning and teaching and why they adopt particular practices seem to play an important role in teachers' attitudes and professional behaviours.

TIP 1

Turner J.C., Christensen A., Meyer D.K. (2009) **Teachers' Beliefs about Student Learning and Motivation.** In: Saha L.J., Dworkin A.G. (eds) *International Handbook of Research on Teachers and Teaching.* Springer International Handbooks of Education, vol 21. Springer, Boston, MA

TIP 2

Coe, R.; Aloisi, C.; Higgins, S. & Major L. E. (2014). **What makes great teaching?** Review of the underpinning research. Durham University.

(Pedagogical) content knowledge

2

There is strong evidence of the impact on student outcomes of teachers' deep knowledge of the subjects they teach. Furthermore it is well documented that experienced teachers also have better facility to identify and anticipate students' common misconceptions.

3

Clarity - Structure

Content knowledge will help teachers to share with students the purposes, key points and key principles in what they are learning. Learning depends on clarity – clarifying learning goals, and providing explicit criteria on how students can be successful (pedagogical contract).

TIP 3

Fry, H.; Ketteridge, S. & Marshall, S.. (2009). **A Handbook for Teaching and Learning in Higher Education**

4

Quality of instruction

There is strong evidence of the impact of this principle on students' outcomes. It includes:

TIP:
Click on the check-boxes to know more about each item.



TIP 4

- Bain, K., (2004). **What the best college teachers do**. Cambridge, Massachusetts. Harvard University Press
- Bransford, J. D. et al. (2000) **How People Learn: Brain, Mind, Experience and School**, Washington: National Research Council
- Davis, B. G. (2009). **Tools for Teaching**. San Francisco. Jossey-Bass, 2nd edition
- **Guidelines on Learning that Inform Teaching at MIT** (2008). Teaching and Learning Laboratory. MIT Massachusetts.

5

Establishing a safe and fair learning climate

A safe and just environment and the ability to manage teaching with clear rules that are consistently enforced, are all relevant to maximising the learning that can take place. This safe learning environment should include transparent and fair assessment methods.

TIP 5

- **Making a difference - a student view of excellent teaching** (2019). National Forum for the Enhancement of Teaching and Learning in Higher Education, Dublin 2019
- **How Learning Works**. Ambrose, SA; Bridges, MW; Lovett, MC; Di Pietro, M. & Norman, MK (2010). San Francisco. Jossey-Bass.

TIP 6

Shulman, L. (2012). **From Minsk To Pinsk: Why A Scholarship of Teaching and Learning?**. Journal of the Scholarship of Teaching and Learning, 1(1), 48-53.

<https://scholarworks.iu.edu/journals/index.php/josotl/article/view/1582>

Scholarship of teaching

The value of inquiring pedagogical practices and on the production of pedagogical knowledge, reducing the gap between teaching and research. Good teaching should be based on rigour and on data collecting.

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TIP 8

UCD TEACHING & LEARNING
- University College Dublin -



TIP 7

Characteristics of Highly Effective Teaching and Learning (CHETL)



TIP 9

UNIPS
University Pedagogical Support
A learning platform for university pedagogical studies



TIP 10

CENTER FOR TEACHING
- Vanderbilt University -



ANNEX I

“Let’s use the methods that work best

(...) the great majority of educational initiatives have positive effects on learning. Improving your handouts, team teaching, tutorials, peer assessment, computer-based instruction, and painting the classroom can all have a positive effect on achievement. But if you don’t have the time to do them all, which will have the greatest effect? (...).

We are knee deep in strategies that could improve things for our students, so the question is not ‘Will this strategy work?’ but ‘Which are the most productive strategies to adopt?’ Answering this last question has been the life work of academics (...)

Let’s try to understand the learning process. It is one thing to know what methods work, quite another to understand why. Without understanding why they work, we are most unlikely to use them effectively. We will also be unable to criticise constructively our own and others’ practice. Thanks to ingenious theorising backed up by rigorous experiments in neural physiology, psychology, social psychology, cognitive science and elsewhere, we now understand a great deal about why we learn, how we learn, and consequently what can help us to learn”. (Geoff Petty, 2009, p. 2, 3)

Petty, G. (2009). Evidence-based Teaching. A Practical Approach. Cheltenham. Nelson Thornes, 2nd ed.

