

Workshop 'Research design with the Idea Puzzle software'

Number of contact hours

8 (four sessions of two hours each, in one or more days)

Recommended number of participants

15 (to ensure that everyone has an equal opportunity to present their research design)

Audience

PhD candidates in any field of knowledge, preferably in the first or second year of their doctoral studies.

Introduction

The <u>Idea Puzzle software</u> is a decision-making tool that helps PhD candidates improve the coherence of a research proposal, article, or thesis in the light of Philosophy of Science (<u>Morais & Brailsford, 2019</u>). It also helps review the strengths and weaknesses of a research project in any field of knowledge (<u>Parente & Ferro, 2016</u>). To date, it has helped design more than <u>7000 research projects</u> worldwide.

The Idea Puzzle software poses 21 questions, helps answer them, and allows the self-evaluation of each answer in terms of decision-making status. The help function of the Idea Puzzle software includes examples of research designs in different fields of knowledge that have won the Idea Puzzle Prize as well as definitions, introductions, tips, and bibliography. The output of the Idea Puzzle software is a research design with 21 answers, an overall score, and a coloured jigsaw puzzle of progress that can be shared in PDF or in Word.

In 2023, the Idea Puzzle software was a finalist of the <u>Sage 15K GBP Concept Grant</u> from a total of 89 research software tools. The jury considered the theoretical framework of 21 decisions unique and praised the way the Idea Puzzle software helps PhD candidates design their research. In the same year, Sage Research Methods Community published an article on research design with the Idea Puzzle software (<u>Morais</u>, 2023).

Transversal skills

After the workshop, the participants will be able to: a) acknowledge the relation between epistemology, methodology, ontology, and axiology; b) coherently align the theory, method, data, rhetoric, and authorship of a research proposal, article, or thesis with the Idea Puzzle software; and c) review the strengths and weaknesses of an empirical research project in any field of knowledge.

Methodology

Each session of two hours will include one hour of theoretical presentation of the contents and one hour of practical application to the research design of each participant. The participants in the workshop will receive one-year free access to the <u>Idea Puzzle software</u>.

Study plan

Session 1) Theoretical decisions of your research: keywords, streams of thought, research gap, research question or hypothesis, and state of the science.

Session 2) Methodological decisions of your research: philosophical stance, research strategy, data collection, data analysis, and quality criteria.

Session 3) Empirical decisions of your research: unit of analysis, level of analysis, nature of data, origin of data, and sample.

Session 4) Rhetorical decisions of your research: pathos, logos, and ethos. Authorial decisions of your research: wisdom, trust, and time.



Assessment

<u>Deliverable 1</u>: Five working days before the workshop, participants will deliver the initial version of their individual research design created with the Idea Puzzle software in PDF format. <u>Attendance and participation</u>: Participants are required to attend three of the four sessions and actively engage with the lecturer and peers during teamwork and individual presentations. <u>Deliverable 2</u>: Five working days after the workshop, participants will deliver the final version of their individual research design created with the Idea Puzzle software in Word format. <u>Ricardo Morais</u> will insert 21 comments of personalised feedback on the same document (one per each of the 21 decisions of the Idea Puzzle software).

Publications

Morais, R. (2023). Philosophy of science and doctoral research design: The case of the Idea Puzzle software. *Sage Research Methods Community*, November 10.

Morais, R., & Brailsford, I. (2022). Knowledge visualisation for research design: The case of the Idea Puzzle software at the University of Auckland. In Information Resources Management Association USA (Ed.) *Research anthology on innovative research methodologies and utilization across multiple disciplines* (pp. 351-366). Hershey, PA: IGI Global Publishing.

Parente, C., & Ferro, L. (2016). Idea Puzzle (www.ideapuzzle.com), created by Ricardo Morais. *Academy of Management Learning & Education*, 15(3), 643-645.

Morais, R. (2010). Scientific method. In A. Mills, G. Durepos, & E. Wiebe (Eds.) *Encyclopedia of case study research* (Vol. 2, pp. 840-842), Thousand Oaks, CA: Sage Publications.

Lecturer



Ricardo Morais, married and father of three daughters, is Assistant Professor of Management at Católica Porto Business School and Director of Idea Puzzle. Since 2013, he coordinates the <u>seminar 'How to design your PhD'</u> at the European Institute for Advanced Studies in Management (EIASM) in Brussels. He holds a PhD in Strategic Management from the University of Jyväskylä, Finland, having graduated in Management from the Faculty of Economics of the University of Porto. He is also an alumnus of HPI School of Design Thinking in Germany. His research interests are

interdisciplinary, including Philosophy of Science, Strategic Management, Design Thinking, and Spirituality in Management. Since 2002, he has published more than 30 academic articles, chapters, and papers about these topics and lectured in 112 universities from 28 countries. He is a member of the Philosophy of Science Association, Strategic Management Society, and Academy of Management.

Testimonials

ChatGPT prompt: what is the Idea Puzzle software? Retrieved on July 24, 2024

By using the Idea Puzzle software, researchers can improve the clarity, coherence, and rigor of their research projects, making it a valuable tool for academic research planning and execution.

Hasok Chang, Hans Rausing Professor of History and Philosophy of Science, University of Cambridge, United Kingdom

Your course certainly constitutes an innovation in the teaching of Philosophy of Science.

Daniela Duca, Head of Product Innovation, Sage Publishing, United Kingdom

We love your approach and how the Idea Puzzle software helps students and early career researchers go through the process of developing their research.

Irena White, PhD in Education, Flinders University, Australia



I feel that if I would have known the Idea Puzzle software early in my PhD, I could have saved myself a lot of wasted time and avoided several 'dead ends'. In 2021, I received the Flinders University Vice Chancellor's Medal for PhD Thesis Excellence.

Pedro Palma, Idea Puzzle Prize Winner 2022, Environment and Sustainability, Universidade Nova de Lisboa, Portugal

When delivering the final version of my doctoral thesis, I remembered the Idea Puzzle software again. This tool helped me a lot to think through my research design and awoke my interest in Philosophy of Science. The awareness and knowledge of philosophical assumptions proved crucial to make my research more coherent and robust.

Riina Kerner, Idea Puzzle Prize Winner 2021, Management Science, Estonian Business School, Estonia The Idea Puzzle software is an excellent tool that assisted me in considering all my ideas under the philosophy of science umbrella. It also helped me advance to the next steps of my PhD studies. After winning the Idea Puzzle Prize, I was nominated for the best PhD candidate at my university.

Pablo Delgado, Idea Puzzle Prize Winner 2020, Electrical, Electronics, and Automation Engineering, Universidad Carlos III de Madrid, Spain

Idea Puzzle software is a powerful tool that helps clarify your research ideas. It has been very useful to me, since I have been able to organise all the research design of my doctoral thesis and find which are the weakest and the strongest points.

Jaume Gardela, Idea Puzzle Prize Co-Winner 2018, Animal Medicine and Health, Universitat Autònoma de Barcelona, Spain

The Idea Puzzle software lent me the opportunity to focus my research design making it more logical and coherent through 21 questions. As more questions I answered, I realized that my research design had gaps in research ambiguity that perhaps I had never stopped to think about it.

Leonardo La Rosa, Idea Puzzle Prize Co-Winner 2017, Media Research, Universidad Carlos III de Madrid, Spain

The Idea Puzzle software helped me shorten the parts of my research project which were overdeveloped such as the literature review and focus my efforts on those which were underdeveloped such as the methodology and sample. After winning the Idea Puzzle Prize, I won the Outstanding Thesis Award at my university.