

# Zacharoula Smyrnaiou

## Associate Professor

School of Philosophy – Faculty of Educational Studies  
with cognitive subject

## «Contemporary Learning Theories and Science Education »

Vice President of the B.O.D. of  
(Government Gazette 204 / 16.02.2021)

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## Studies:

- BA in Science (1991–1995, NKUA)
- MSc in Informatics (1997–1999, NKUA)
- (D.E.A) in Science Education (Teaching Science Specialisation), (1999–2000, Université Paris V (Sorbonne), France)
- Doctorate Degree in Science Education specializing in the use of ICT Tools in Science Education (Thèse de Doctorat) (Dissertation title: ‘Modelling - the contribution of educational software, 2000–2003, Université Paris V (Sorbonne), France).

## Main scientific / research interests:

- Planning, Designing and Use of digital tools and appropriate didactic approaches in learning various subject domains.
- Contemporary theoretical frameworks such as instrumental genesis, representation (mental, embodies, or through a semiotic system), connectionism, mobile learning etc.
- Innovative approached to learning and teaching (Creativity, Embodied Learning, Interest, Argumentation, game-based learning, socio- emotional learning, work- based learning and connection of education to workplaces, theories of transversal skills)
- Developing Research fields in Science Education such as STEM, STEAM, and Neuro-education
- Basic Approaches to Science Teaching such as inquiry-based learning and creativity-enriched inquiry-based learning.
- Responsible Research and Innovation and Science with and for Societies (Swafs).
- Planning tools for Qualitative Research.

## Teaching during the current period:

### (α) Undergraduate courses :

- [Educational Psychology \(or Educational Psychology Applications\)](#)
- [Contemporary learning theories](#)
- [Neuroscience and Education](#)
- [Science and/or Society](#)

### (β) Postgraduate courses:

- “[Educational Curricula, Teaching, Learning and Assessment](#)” Theory, Practice and Evaluation of the Educational Practice (NKUA)
- “[Science Education](#)” in Postgraduate Program in Digital Transformation and Educational Practice (UNIWA-NKUA- ASPETE)
- “[Scientific research](#)” in Postgraduate Program in Digital Transformation and Educational Practice (UNIWA-NKUA- ASPETE)
- “[Teaching Methodology](#)” Doctoral Programme Course, Dental School, (NKUA)

## Participation in research programs:

- 2020-2023: “[Loop](#)”. Scaffolding in Teachers Development: Mentoring and Mentors in Induction Programs. Funding body: European Union, Erasmus+

- **2021-2022:** - [Mobility for learners and staff](#) – Higher Education Student and Staff Mobility (2021-2022) National and Kapodistrian University of Athens (As. Prof. Z. Smyrnaiou) & UNIVERSITE SAVOIE MONT BLANC (Prof. Christophe Roche), Funding body: European Union, Erasmus+ Programme Key Action 1
- **2020-** [«Kids University»](#) in the context of the implementation of the Operation "Innovation Center of the Attica Region" by the Regional Development Funds (RPFs) with Code Number OPS, (MIS) 5030984- ΕΠ «Attica 2014-2020». Funding body: Decentralised Administration of Attica
- **2020 Platform 21+ Lab'** project of the Institute of Educational Policy (IEP) (<http://iep.edu.gr/en/>; <http://iep.edu.gr/el/psifiako-apotheiro/skill-labs>).
- **2018-2019 “In- Service Training of Teachers in the Utilisation and Application of Digital Technologies in the Teaching Practice, B- Level ICT Teacher Training”.** Funding body: European Union, Erasmus+: ΕΣΠΑ
- **2015-2018: ‘CREATIONS’**, Funding body: European Union, Horizon 2020, H2020-SEAC-2014-1 CSA (Project No: 665917)
- **2015-2018: ‘DESCI’**. Developing and Evaluating Skills for Creativity and Innovation. Funding body: European Union, Erasmus+
- **2014-2017: ‘PLAY4GUIDANCE’**. Funding body: European Union, Erasmus+
- **2014-2020: ‘Learning Science Through Theater2’** (<http://lstt2.weebly.com/>), that runs in the framework of Creations project). National Project in collaboration with Science View.
- **2014-2016: ‘European Student Parliaments on Science2’**. National Project in collaboration with Science View.
- **2014-2015: “Design of Educational and Informational Guide and Material & Training Studies Program”** the implementation of which has been assigned to KESD by the Contracting Authority, the Ministry of Education and Religions. "Development and Operation of a Network for the Prevention and Response of School Violence and Bullying"

## Selected Recent Publications:

1. Smyrnaiou Z., E. Georgakopoulou, S. Sotiriou (2020). [Promoting Scientific Creativity through Digital Story Telling](#). International Journal of STEM Education 7 (1), 1-22, 2020. 1, 2020.
2. Valente A, Pennacchiotti, C., Smyrnaiou, Z. et al. (2019). [Seeking co-production of knowledge in alternating training: insights from DESCi first round of world cafés](#). J. Phys.: Conf. Ser. 1286 012056, pp. 1-8.
3. Smyrnaiou Z., Georgakopoulou E., Sotiriou M., Sotiriou S. (2017). [The Learning Science Through Theatre initiative in the context of Responsible Research and Innovation. Journal on Systemics, Cybernetics and Informatics](#) (JSCI), vol. 15, n 5, pp. 14-22, <http://www.iisci.org/journal/sci/Contents.asp?var=&Previous=ISS1705>
4. Smyrnaiou, Z., Petropoulou, E., Menon, S., Zini, V. (2017). [The Innovative Implementation of Evaluation Mechanisms on the P4G Business Game](#). International journal of mathematics and computers in simulation, vol. 11, pp. 75-84.
5. Smyrnaiou Z., Sotiriou M., Sotiriou S. (2017). [What Does Scientific Theatre Do? Toward an Inquiry-based and Semiotic Theory through a Cultural approach](#). International Journal of Education and Learning Systems, vol. 2, pp. 47-58.
6. Kotsari K., Smyrnaiou, Z. (2017). [Inquiry based Learning and Meaning Generation through modelling on geometrical optics in a constructionist environment](#). European Journal of Science and Mathematics Education Vol. 5, No. 1, 14-27.
7. Ζαχαρούλα Γ. Σμυρνάιου (2017). [Νέες εξελίξεις στις σύγχρονες θεωρίες μάθησης στη διδασκαλία και στη μάθηση διαφορετικών γνωστικών αντικειμένων](#). Ηρόδοτος, Αθήνα, 2017, σελ., 928, ISBN 978-960-485-196-6, κωδικός στον Εύδοξο 68407051
8. Riopel, M. et Smyrnaiou, Z. (Eds.) (2016). [New Developments in Science and Technology Education](#). New York: Springer. 220 p. (Based on the proceedings of NDSTE conference).
9. Smyrnaiou, Z., Riopel, M. et Sotiriou, M. (Eds.) (2016). [Recent Advances in Science and Technology Education, Ranging from Modern Pedagogies to Neuroeducation and Assessment](#). Newcastle upon Tyne: Cambridge Scholars Publishing. 390 p. (Based on the proceedings of NDSTE conference).
10. Σμυρνάιου, Ζ., Αργύρη, Π., Γεωργακοπούλου, Ε. (2020). [Ενίσχυση της Κοινωνικής και Συναισθηματικής Μάθησης μέσω διαμεσολαβητικών ψηφιακών εργαλείων στην μετά-κορωνοϊό εποχή](#). International Journal of Educational Innovation (2)-6 σελ. 149-200.

## Detailed CV