

Zacharoula Smyrniou

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)

Contact Details

Tel. +30 210 727 7917

email: zsmyrniou@eds.uoa.gr

Apella Code: 21852

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, embodied, or through a semiotic system), connectionism, mobile learning etc.
- Innovative approaches 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)*
- "Introductory Course on Digital Technologies in Education: Pedagogical Utilization of Technologies" in the Postgraduate Program Theory, Practice and Evaluation of Educational Work (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:

- ✚ **2023-2025:** SUB.7 Development of Innovation Centers in 13 Regional Directorates of Education, 3.2 - Strengthening the digital capabilities of education and modernization of vocational education and training, 16676 - DIGITAL TRANSFORMATION OF EDUCATION, Employment, Skills, Social Cohesion (2023-2025), as Vice President at the Diophantus Institute of Digital Education.
- ✚ **2024:** #GIL4W - Greek Innovation Lab for Women: Knowledge Transfer Partnership from a Norwegian Policy Agency to Strengthen Women's Expertise in R&I and Entrepreneurship in Greece", Code with MIS code 5161673, MIS: 5161728 version: 1.0 - EP:39 - Ax:BR_NFP - NFP - Bilateral relations at national level - Inv: 5678 - AA: 5618, as Vice President at the Diophantos Institute for Research and Innovation.
- ✚ **2022:** "Tackling gender based cyberviolence among adolescent girls and young women — TRACeD" (Project: 101049706 — TRACeD — CERV-2021-DAPHNE) (2022), as Vice President at the Diophantos Institute for Research and Innovation.
- ✚ **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. Smyrniou) & 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-apothetirio/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://lst2.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. Asimakopoulos, Z., Smyrniou, Z. (2024). *Skills that students develop when engaging in a Cross disciplinary approach of knowledge and the contribution of digital and blended learning environments*. The Electronic Journal for Research in Science & Mathematics Education. <https://ejrsme.icrsme.com/index> (submitted).
2. Panagiota Kaisaridi; Evangelos Pappas; Zacharoula Smyrniou; Martha Georgiou (2024) *The Gender Equation in STEM Education: The Impact of Students' and Teachers' Genders on Attitudes'*. International Journal of STEM Education to International Journal of STEM Education (submitted).
3. Argyri & Smyrniou (2024). "Developing skills and attitudes for preparation future workforce: STEM Education Strategies", to European Journal of Education and Pedagogy, Volume-5, Issue-5. ISSN (Online): 2736-4534 (<https://www.ej-edu.org/index.php/ejedu/article/view/873>).
4. Smyrniou Z, Liapakis A, Bougia A (2023). *Ethical Use of Artificial Intelligence and New Technologies in Education 5.0*. J Artif Intell Mach Learn & Data Sci, 1(4), 119-124.
5. Smyrniou, Z., Pantazopoulou, E., Argyri, P., Georgakopoulou, E. (2023). *The case of Greece on Mentoring Programs in the context of Erasmus+LOOP Project-Scaffolding in Teacher Development: Mentoring and Mentors in Induction Programs*. International Journal of Arts and Social Science. August 2023 Issue. <https://www.ijassjournal.com/2023/V6I8/4146663515.pdf>
6. T. Komninos, M. Paraskevas, Z. Smyrniou and D. Serpanos (2022). "Cyberphysical Systems in K–12 Education," in Computer, vol. 55, no. 5, pp. 81-84, May 2022, doi: 10.1109/MC.2022.3158165.
7. Smyrniou 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.
8. Valente A, Pennacchiotti, C., Smyrniou, 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.
9. Smyrniou 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>
10. Ζαχαρούλα Γ. Σμυρναίου (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

Detailed CV