

# **GAMZE KARAER, PH.D.**

## **Curriculum Vitae**

Visiting Research Scholar, Educational Psychology  
Washington State University, College of Education  
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### **PROFESSIONAL BACKGROUND**

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#### ***Education***

2022	Ph.D.	Special Education, Eskisehir Osmangazi University, Türkiye
2016	M.S.	Science Education, Eskisehir Osmangazi University, Türkiye
2014	B.S.	Elementary Science Education, Eskisehir Osmangazi University, Türkiye

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#### ***Professional Experience***

2021– 2022	Visiting Research Scholar, University of Iowa, USA
2019 – present	Research Assistant, Hakkari University, Türkiye

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#### ***Courses Taught***

##### Undergraduate

EMB403 – Special Education and Inclusion (2022-2023/Fall)  
ERSMBS402 – Individualization and Adaptation of Instruction (2022-2023/Spring)  
HEOE102 – Learning Disabilities and Gifted & Talented (2022-2023/Spring)

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#### ***Dissertation***

**Karaer, G.** (2022). Comparison of Two Different Strategies in Science Education for Students with Specific Learning Disabilities. Eskisehir Osmangazi University, Türkiye. Advisor: Dr. Macid Ayhan Melekoglu.

## RESEARCH EXPERIENCE

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### *Publications*

- Karaer, G., & Hand, B.** (2023). Examining the impact of argument-based inquiry (ABI) on special education students' development of critical thinking, science and language skills. *Journal of Thinking Skills and Creativity (Under review)*.
- Karaer, G., Melekoglu, M. A., & Hand, B.** (2023). Examining the use of embedded generative strategies with graphic organizers to improve reading comprehension skills of students with learning disabilities. *Learning Disability Quarterly, (Under review)*.
- Karaer, G. & Melekoğlu, M. A.** (2020). Review of studies on teaching science to students with specific learning disabilities. *Ankara University Faculty of Educational Sciences Journal of Special Education, 21(4)*, 789-818.
- Karaer, G., Karademir, E. & Tezel, Ö.** (2020). Evaluating the use of project-based teaching on the science laboratory course according to the views of the classroom teacher candidates. *Journal of Qualitative Research in Education, 8(1)*, 73-95.
- Karaer, G., Karademir, E. & Tezel, Ö.** (2019). Determination of pre-service classroom teachers' opinions towards the argumentation-based instruction method in science laboratory. *Eskisehir Osmangazi University Journal of Social Sciences, 20*, 217-241.
- Balbag, M. Z. & **Karaer, G.** (2017). The problems of primary school teacher faced in the science teaching process. *Trakya University Journal of Education Faculty, 8(1)*, 29-47 (IPTES 2016 Special Issue).
- Balbag, M. Z. & **Karaer, G.** (2016). The opinions of the science teachers towards science teaching problems. *Journal of Research in Education and Teaching, 5(3)*, 1-11.
- Balbag, M. Z., Leblebici, K., **Karaer, G.**, Sarıkahya, E. & Erkan, Ö. (2016). Science education and teaching problems in Turkey. *Journal of Research in Education and Teaching, 5(3)*, 12-23.
- Karaer, G.** (2016). Comparative study of national basic science teaching curriculum: a sample of Turkey and Estonia. *Journal of Education (ESTÜDAM) 1 (1)*, 55-76.

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### *National and International Conference Presentations*

- Karaer, G., & Melekoglu, M. A.** (2022, March). Science instructional practices: comparison of two strategies for students with learning disabilities. Poster presentation at the *95th NARST International Annual Science Education Conference (NARST-2022), Vancouver, BC/Canada*.
- Karaer, G., & Cavkaytar, A.** (2020, October). Characteristics of Individuals with Intellectual Disabilities: Biomedical Risk Factors. Poster presentation at the *30<sup>th</sup> National Special Education Conference, Bursa/ Turkey*.

- Karaer, G., & Melekoglu, M. A.** (2020, October). Science teaching practices for students with specific learning disabilities. Oral presentation at the *30<sup>th</sup> National Special Education Conference, Bursa/ Turkey*.
- Karaer, G., & Diken H. İ.** (2018, October). Investigation of Longitudinal Studies on Early Symptoms and Intervention Methods in Children with Specific Learning Disabilities in Early Childhood (2010-2017). Oral presentation at *28<sup>th</sup> National Conference on Special Education, Eskisehir/ Turkey*.
- Karaer, G., & Melekoglu, M. A.** (2018, October). Review of Studies on Teaching Science to Students with Specific Learning Disabilities. Oral presentation at *28<sup>th</sup> National Conference on Special Education, Eskisehir/ Turkey*.
- Karaer, G., Karademir, E. & Tezel, Ö.** (2017, May). Project based learning activities integrated STEM in science laboratory. Oral presentation at the *International Conference on Education in Mathematics, Science & Technology (ICEMST-2017), Kuşadası/Turkey*.
- Karaer, G.** (2017, April). Evaluation of the primary school social skills in terms of PISA examination reports. Oral presentation at the *26<sup>th</sup> International Conference on Educational Sciences (ICES- 2017), Side/ Turkey*.
- Karaer, G., Karademir, E. & Tezel, Ö.** (2016, September). Opinions of primary school teacher candidates about argumentation-based teaching and sample activity practice. Oral presentation at *12<sup>th</sup> National Conference on Science and Mathematic Education (UFBMEK), Trabzon/ Turkey*.
- Karaer, G., Karademir, E. & Tezel, Ö.** (2016, September). Evaluation of the Effect of Project Based Instruction Practices on Science Laboratory Course According to the Opinions of Pre-Service Classroom Teachers. Oral presentation at *12<sup>th</sup> National Conference on Science and Mathematic Education (UFBMEK), Trabzon/ Turkey*.
- Balbağ, M. Z. & **Karaer, G.** (2016, May). Sınıf öğretmenlerinin fen öğretiminde karşılaştıkları sorunlar. *15. Uluslararası Sınıf Öğretmenliği Eğitimi Sempozyumunda sunulan sözlü bildiri (USOS-2016), Muğla/ Türkiye*.
- Balbağ, M. Z. & **Karaer, G.** (2016, May). Fen bilgisi öğretmenlerinin fen öğretiminde karşılaştıkları sorunlara yönelik öğretmen görüşleri. *International Conference on New Trends in Education'da sunulan sozlu bildiri (ICONTE-2016), Antalya/ Türkiye*.
- Balbağ, M. Z., Leblebicier, K., **Karaer, G.**, Sarıkahya, E. & Erkan, Ö. (2016, May). Türkiye'de fen eğitimi ve öğretimi sorunları. *International Conference on New Trends in Education'da sunulan sözlü bildiri (ICONTE-2016), Antalya/ Türkiye*.

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### **Book Chapters**

- Karaer, G., Karademir, E. & Tezel, Ö.** (2017). Process-based activities in science teaching (argumentation and project-based teaching practice examples). E. Karademir, (Ed.), *Skill interaction in sample and application supported science teaching* in (p. 213-251). Ankara: Pegem Akademi.

- Karaer, G.** (2017). Special teaching methods in science education. M. Sönmez Kartal, Ö. Toper Korkmaz, (Ed.), *Science and social studies teaching in special education* in (p. 39-62). Ankara: Pegem Akademi.
- Tezel, Ö. & **Karaer, G.** (2017). Development of science teaching activities using cultural children's game and toys in the science teaching process. I. Koleva & G. Duman (Ed.), in *Educational research and practice* (p. 206-214). Sofia: St. Kliment Ohridski University Press.
- Karaer, G.** & Tezel, Ö. (2017). Designing science teaching activities using cultural children's game and toys. I. Koleva & G. Duman (Ed.), in *Educational research and practice* (p. 215-223). Sofia: St. Kliment Ohridski University Press.
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### ***Projects***

**Project Title:** "I Overcome Obstacles by Producing" (Eastern Anatolia Development Agency 2019 Social Development Support Program- [SDSP]), TRB2/19SOGEPGDP/0005). Role: Researcher

**Project Title:** "Comparison of the Effectiveness of Argumentation and Project-Based Teaching Methods on Pre-Service Teacher Candidates in Science Laboratory" (Scientific Research Project, 2016/21A104). 2015-2016. Role: Researcher.

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### ***Certifications, Licenses, & Other Qualifications***

Social and Behavioral Responsible Conduct of Research Certificate (University of Iowa, USA)

Human Research Certificate-Social & Behavioral-IRB-02 (University of Iowa, USA)

Basic Healthcare Communication Certificate (Kirkwood Community College, USA)

Nvivo 11 Beginner Training Certificate (Turkiye)

Nvivo 11 Advanced Training Certificate (Turkiye)

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### ***Professional Memberships & Reviewer Appointments***

Council for Learning Disabilities (2021- present) Membership ID: 69934120

National Association for Research in Science Teaching (2022-present) Membership ID: 1019596

European Science Education Research Association (2017-2020) Membership ID: 25253498

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### ***Seminars & Workshops***

Visiting Lecturer (October 17-21, 2022). *Special Education and Inclusion in Turkey*. The EU Erasmus +Staff Mobility Program. Tallinn University, Tallinn/Estonia.

Speaker (February 22, 2017). *The Role of Children's Toys in Personality Development*. Psychology -Pedagogical Researches of Childhood. Moscow/Russia.

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### ***Funded Grant Proposals***

**Karaer, G.** (2021). *Comparison of Two Different Strategies in Science Education for Students with Specific Learning Disabilities*. The Scientific and Technological Research Council of Turkiye (TUBITAK). 2214-A- International Research Fellowship Programme for PhD Students (\$21,600).