Curriculum Vitae

1. Name Surname : Bengi BİRGİLİ

Contact Information

Address: MEF Üniversitesi MaslakAyazağa cad. No:4
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2. Date of Birth : 10.10.1988

3. Title : Research Assistant, Ph.D.

4. Educational Background :

Degree	Division	University	Year
Ph.D.	Educational Sciences-Curriculum & Instruction	Middle East Technical University	2014-2022
Visiting Scholar	Doctoral Program in Philosophy, Education	University of Vienna/ Universität Wien	Spring 2019
Graduate	Educational Sciences-Curriculum & Instruction	Middle East Technical University	2012-2014
Undergraduate	Primary Education (Middle School Mathematics)	Boğaziçi University	2006-2011

5. Employment

Görev	Affiliation	Year
Dr. Research Assistant	MEF University, Faculty of Education, Department of Elementary Mathematics Education	October 2022 –
Research Assistant	MEF University, Faculty of Education, Department of Elementary Mathematics Education	September2014 – October 2022

6. Theses

6.1. Master Thesis

Open Ended Questions as Alternative to Multiple Choice: Dilemma in Turkish Examination System

Advisor: Prof. Dr. Ercan KİRAZ, The Department of Educational Sciences, Curriculum & Instruction, Middle East Technical University (METU), Ankara, Turkey

6.2. **Ph.D. Dissertation (August 4, 2022), Graduation (October 5, 2022)**

Mixed Methods Research at the Intersection of Mathematics Teachers' Adoption of Curriculum Change and Assessment of Students' Readiness Level through Educational Neuroscience Methods

Advisor: Prof. Hanife AKAR, PhD, The Department of Educational Sciences, Curriculum & Instruction, Middle East Technical University (METU), Ankara, Turkey
Co-advisor: Asst. Prof. Tuna ÇAKAR, PhD, The Department of Psychology & Computer Engineering, MEF University, İstanbul, Turkey

6.3. **Postdoc- WERA Mentoring Programme**

Postdoc study and mentee under the agreement with the World Educational Research Association (WERA) (Prof. Dr. Dr. h.c. mult. Ingrid Gogolin, Hamburg University and Dr. Chue Kah Loong, Senior Lecturer, National Institute of Education- Psychology and Child & Human Development, Nanyang Technological University, Singapore) between November 2022 - May 2023.

- Educational assessment
- *Assessment for a sustainable future* Book Project, Technology in Assessment chapter

7. Publications

7.1. Articles in International Refereed Journals

Demir, Ö., & **B. Birgili** (**In Press**). "The mediating role of instructional design and video length between grade level and pupil-content interaction in instructional mathematics videos on YouTube" *Education and Information Technologies* (Q1).

Aydın, U., & **B. Birgili** (2023). "Assessing mathematical higher-order thinking skills: An analysis of Turkish university entrance examinations" *Educational Assessment*. https://doi.org/10.1080/10627197.2023.2202311

Saralar-Aras, İ. & **B. Birgili** (2022). "An assessment of pre-service mathematics teachers' techno-pedagogical content knowledge regarding geometry" *International Journal of Psychology and Educational Studies, 9*(4), 1307-1327. https://doi.org/10.52380/ijpes.2022.9.4.920

Taylan R. D., Z. Tunç-Pekkan, U. Aydın, & **B. Birgili. "**Teacher educators in K-12 classrooms: How to nurture professional development and research" *Journal of Higher Education Theory and Practice*. 22(1), 2022. https://doi.org/10.33423/jhetp.v22i1.4974

Birgili, B., & Ö. Demir. "An explanatory sequential mixed-method research on the full-scale implementation of flipped learning in the first years of the world's first fully flipped university: Departmental differences" *Computers & Education*. 176, 104352 (January, 2022). doi: https://doi.org/10.1016/j.compedu.2021.104352

*This study has been awarded by Turkish Scientific and Technical Research Institution Publication Encouragement Award (UBYT: Incentive Program for International Scientific Publications) [Fall 2022]

Birgili, B., & K. A. Kırkıç. "Evaluation of a strategic management program: context, input, process, product model as a prototype for business academies" *TEM Journal.* 10(1), 204-214 (2021). doi: 10.18421/TEM101-26

Birgili, B., F. N. Seggie, & E. Oğuz. "The trends and outcomes of flipped learning research between 2012 and 2018: A descriptive content analysis" *Journal of Computers in Education*. 8(1), (2021). doi:10.1007/s40692-021-00183-y

Birgili, B. "Comparative Reflection on Best Known Design Models: Notes from the Field." *Current Issues in Emerging eLearning*. the Center for Innovation and Excellence in eLearning, and sponsored by the College of Advancing and Professional Studies at the University of Massachusetts Boston, USA, Vol.6:

Iss. 1, Article 5. Available at: https://scholarworks.umb.edu/ciee/vol6/iss1/5 (2019).

Birgili, B., F. N. Seggie, & Z. Kızıltepe "Investigating the Relationship between Volitional Strategies and Academic Achievement in a Flipped Learning Environment" *Croatian Journal of Education*. 21(1), 345-375 (2019).

Aydın U., Z. Tunç-Pekkan, R. D. Taylan, **B. Birgili,** & M. Özcan. "Impacts of a University-School Partnership on Middle School Students' Fractional Knowledge." *The Journal of Educational Research.* 111(2), 151-162 (2018). (Q1)
Aydın, U., Z. Tunç-Pekkan, R. D. Taylan, **B. Birgili,** & M. Özcan. "Equity in middle school students' fractional knowledge: Does school type matter in Turkey?" *European Journal of Education Studies*. 3(9), 480-496 (2017).

Birgili, B., Z. Kızıltepe & F. N. Seggie. "Teaching Method Preferences of Teachers: The Cooperative Teaching Method" *World Studies in Education*. 17(2), 37-52 (2016).

Birgili, B. "Creative and Critical Thinking Skills in Problem-based Learning Environments", *Journal of Gifted Education and Creativity*. 2(2), 9-21 (2015).

Birgili, B., & B. Çalık. "Gifted Children's Educations and a Glance to Turkey", *Journal of Gifted Education Research*. 1(2), 67-77 (2013).

Çalık, B., & **B. Birgili.** "Multiple Intelligence Theory for Gifted Education: Criticisms and Implications", *Journal for the Education of Young Scientist and Giftedness.* 1(2), 1-12 (2013).

7.2. Articles in National Refreed Journals

Birgili, B. (Şubat, 2021). *Ölçüt'e Otantik Bir Bakış: Sınıf İçi Ölçme*. İstanbul İl Milli Eğitim Müdürlüğü Ölçme Değerlendirme Merkezi. *1*, 6-9. http://istanbul.meb.gov.tr/dergi/istanbul_olcme_degerlendirme/mobile/index.html websitesinden ulaşılmaktadır.

Birgili, B. & Aydın, U. (2020). Veri Analizi Konusunda Kullanılan Portfolyo Değerlendirmesinin 7. Sınıf Öğrencilerinin İstatistik Başarısına Etkisi [The Effect of Portfolio Assessment Used in Data Analysis Unit on 7th Grade Students' Statistics Achievement. *Mersin Üniversitesi Eğitim Fakültesi Dergisi [Mersin University Faculty of Education]*. 16(3), 730-752.

Mesutoğlu, C. & **Birgili, B.** (2017) Awareness of misconceptions in science and mathematics education: Perceptions and experiences of pre-service teachers. *Journal of Kırşehir Education Faculty [KEFAD]*. 18(2), 525-545.

Aydın, U., Tunç-Pekkan, Z., Taylan, R. D., **Birgili, B.,** & Özcan, M. (2017) Okulda Üniversite Modeli: Beşinci sınıf öğrencilerinin kesir bilgisi gelişiminden yansımalar. *Kastamonu Üniversitesi Eğitim Fakültesi Dergisi*. 25(5), 1979-1994.

7.3. International Conference Papers and Proceedings

Birgili, B., Can, R., Çakar, T., & Akar, H. (2023). Differential Effect of Young Adults' and Students' MetaCognitive Skills in Mathematics Problem Solving Process. Poster accepted at CogSci 2023, Sydney, Australia, July 26-29, 2023.

Birgili, B., & Özcan, M. (2023, June 8-11). Okulda Üniversite Modelinin 10. Yılına Doğru: Boylamsal Değerlendirme. Paper presented at X. International Eurasian Educational Research Congress at TED University, Ankara.

Birgili, B., & Aydin, U. (2023, April 26-28). Elementary students' attitudinal characterizations on the use of colour and size in fractions. Paper presented at Applying Education in a Complex World, Teaching and Learning Conference (AMPS), Sheridan College, Toronto, Canada.

Saralar-Aras, I., & **Birgili, B.** (2023). In the Pursuit of a Course Design: A TPACK-based Geometry for Preservice Mathematics Teachers. Paper published at Oxford Symposium Summer 2023.

Birgili, B., G. Öztemür, M. Akay, & H. Özkan. (2022). Exploration of video and audio feedback on academic product quality in pre-service teacher education. Paper accepted to be presented at EARLI/JURE 2022 Conference, July 18-22, 2022, University of Porto, Portugal. [Roundtable Session]
* This study has been awarded by ***Jacob Foundation*** as presenter and attendee for JURE 2022 [withdrawn]

Saralar-Aras, İ., & **B. Birgili.** (2022). Designing a course to help preservice teachers to teach geometry: A TPACK approach to teaching. Paper accepted to be presented at EARLI/JURE 2022 Conference, July 18-22, 2022, University of Porto, Portugal. [Paper session]
* This study has been awarded by ***Jacob Foundation*** as presenter and attendee for JURE 2022 [withdrawn]

Tunc-Pekkan, Z., Taylan, R. D., **Birgili, B.,** & Ölmez, İ. B. (2022). An examination of pre-service mathematics teachers' experiences at an online laboratory school. In Jankvist, U. T., Elicer, R., Clark-Wilson, A., Weigand, H.-G., & Thomsen, M. (Eds.), *Proceedings of the 15th International Conference on Technology in Mathematics Teaching* (ICTMT 15) (pp. 197 – 204). Copenhagen, Denmark: Aarhus University.

Taylan, R. D., Tunc-Pekkan, Z., **Birgili, B.,** & Ölmez, İ. B. (2022). Enhancing prospective mathematics teachers' noticing skills through online laboratory school activities. In Fernández, C., Llinares, S., Gutiérrez, A., & Planas, N. (Eds.), *Proceedings of the 45th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 4, pp. 107 – 114). Alicante, Spain: PME.

Taylan, R. D., Z. Tunç-Pekkan, **B. Birgili** & İ. B. Ölmez (2022). Enhancing prospective mathematics teachers' noticing skills through Online Laboratory School activities. Paper accepted to be presented at 45th Conference of the International Group for the Psychology of Mathematics Education (PME45) Conference, July 18-23, 2022, The University of Alicante, Spain.

Akay, M., **B. Birgili**, H. Özkan, & G. Öztemür (2022). Exploring academic product quality among pre-service teachers and counselor candidates: Audio vs. video feedback. Paper accepted to be presented at ATEE Winter Conference, April 20-22, 2022, Sestri Levante, Italy.

Akay, M., **B. Birgili**, H. Özkan, & G. Öztemür (2022). The analysis of pre-service teachers and counselor candidates' academic product quality: Audio vs. video feedback. Paper accepted to be presented at ATEE Dublin Spring Conference, May 25-27, 2022, Ireland.

Ölmez, İ. B., Tunç-Pekkan, Z., Taylan, R. D., & **Birgili, B.** (2022). Preservice Teachers' Math Teaching Anxiety in an Online Laboratory School. Paper presented at American Educational Research Association Meeting [AERA], 2022 Annual Meeting, April 21-26, San Diego, CA, USA, 2022. [Roundtable Session titled "Researching Inservice and Preservice Teachers' Mathematics Knowledge and Practice"].

Ölmez, İ. B., Tunç-Pekkan, Z., Taylan, R. D., & **Birgili, B.** (2021). Math teaching anxiety in an online laboratory school. Paper presented at the 5th International Symposium of Turkish Computer and Mathematics Education (TURKBILMAT-5), Alanya, Turkey. [Paper Presentation in a Panel Session]

Taylan, R. D., Tunç-Pekkan, Z., **Birgili, B.,** & Ölmez, İ. B. (2021). Supporting prospective mathematics teachers' noticing of students' thinking through online laboratory school activities. Paper presented at the 5th International Symposium of Turkish Computer and Mathematics Education, October, 28-30 2021, Alanya, Turkey. [Paper Presentation in a Panel Session]

Tunç-Pekkan, Z., Taylan, R. D., Ölmez, İ. B., & **Birgili, B.** (2021). An examination of pre-service mathematics teachers' experiences at an online school. Paper presented at the 5th International Symposium of Turkish Computer and Mathematics Education, October, 28-30 2021, Alanya, Turkey. [Paper Presentation in a Panel Session]

Tunç-Pekkan, Z., Taylan, R. D., **Birgili, B.,** & Ölmez, İ. B. (2021). An examination of pre-service mathematics teachers' experiences at an Online School. Paper presented at the 15th International Conference on Technology in Mathematics Teaching [ICTMT15], September 13-26, The Danish School of Education, Aarhus University, Copenhagen, Denmark, 2021. [Paper Presentation] see here

*This study has also been published in the conference proceedings. Its Theme: Making and Strengthening "Connections and Connectivity" for Teaching Mathematics with Technology.

Saralar-Aras, İ., & **Birgili, B.** (2021). Pre-service Maths Teachers Techno-Pedagogical Content Knowledge Regarding Geometry. Paper presented at the JURE2021 Conference, August 18-20, Belgium Online, 2021. [Online Poster Presentation] see here

*This study has been awarded by ***Jacob Foundation*** as presenter and attendee for EARLI and JURE 2021

Birgili, B., & Aydın, U. (2021). The MATH Taxonomy as a Tool for Analyzing University Entrance Examination Mathematics Items. Paper presented at the ITC 12th Conference on Tests and Testing, A Colloquium on Diversity and Equity in a Globalized Digital World: Opportunities and Challenges for Assessment. July 09-12, 2021. [Virtual Poster Session]

*Attending as an ***Early-Career Scholars*** *by ITC Committee*

Birgili, B., Akar, H., & Çakar, T. (2021). An Ecological Approach to Identifying Mathematics Teachers' Response to Curriculum Change in Their Achievement Tests. Paper presented at American Educational Research Association Meeting [AERA], 2021 Annual Meeting, April 9-12, San Francisco, USA, 2021. [Roundtable Session titled "Teachers, Power, and Equity in Mathematics Education"].

*This study was supported by MEF University Academic Support Program

Birgili, B., & U. Aydın. (2020). The MATH Taxonomy as a Tool for Analyzing University Entrance Examination Mathematics Items. Paper accepted to be presented at the 12th Conference of the International Testing Commission (ITC). July 14-17, Belval, Luxembourg. http://itc-conference.com/announcements/page/92?parrent=75 (Conference canceled- Covid-19 Outbreak)

*This paper has been awarded by the ***ITC Young Scholar Committee*** as one of the 4 accepted studies among ***Early-Career Scholars***. (Sponsorship reimbursements finalized)

Birgili, B. (2020). Questioning Status: An Expert System Modeling for Assessment of Open-Ended Items. Paper accepted to be presented at American Educational Research Association Meeting [AERA], 2020 Annual Meeting, April 17-21, San Francisco, USA, 2020.

Birgili, B. (2019). "A Utopian Need: Artificial Intelligence Systems to Evaluate Open-Ended Questions" Paper accepted to be presented at American Educational Research Association Meeting [AERA], 2019 Annual Meeting, April 5-9, Toronto, Canada, 2019. [SIG-Large-Scale Assessment] [Format of Presentation: *Paper*, New Research Methods for Large-scale Assessments].

Özcan, M., & **B. Birgili** (2019). "The Evaluation of a University-School Partnership Model: A Longitudinal Study on 'University within School'" Paper presented at American Educational Research Association Meeting [AERA], 2019 Annual Meeting, April 5-9, Toronto, Canada, 2019. [Division K- Teaching and Teacher Education/Division K- Section 06: Field Experiences: Student Teaching, Supervision, School/Community Collaborations, and Innovative Approaches and Models] [Format of Presentation: *Roundtable Session*, *Institutional Perspectives on Preservice Teacher Field Experiences*].

Tunç-Pekkan, Z., & **B. Birgili** (2019). "From Theory to Practice: Investigating Middle School Students Fraction Knowledge and Participatory Role" Paper accepted to be presented at European Society for Research in Mathematics Education [CERME 11], February 06-10, Utrecht University, Netherlands, 2019. [TWG23: Implementation of Research Findings in Mathematics Education] [Format of Presentation: *Poster*]

Birgili, B., & E. Kiraz. (2018). Comparing Open-Ended (OE) and Multiple-Choice (MC) Questions in Large-Scale Examinations. Paper presented at European Conference on Educational Research [ECER 2018], September 03-08, The Free University of Bolzano-Bozen, Bolzano, Italy, 2018. [NW09: Assessment, Evaluation, Testing and Measurement] [Format of Presentation: Pecha Kucha]

Birgili, B., & C. Mesutoğlu. (2018). A Comparative Analysis of K-5 Science and Mathematics Curricula in Ireland and Turkey: Engineering Practices. Paper presented at European Conference on Educational Research [ECER 2018], September 03-08, The Free University of Bolzano-Bozen, Bolzano, Italy, 2018. [NW03: Curriculum Innovation] [Format of Presentation: Paper]

Tunç-Pekkan, Z., Taylan, R. D., Sohtorik, S., & **Birgili, B.** (2018). Internship Experience Through 'University within School' Model. Paper presented at Association for Teacher Education in Europe [ATEE Annual Conference 2018], August 20-22, The University of Gavle, Sweden, 2018. [ATEE RCD: Curricula in Teacher Education] [Format of Presentation: Paper]

Birgili, B., Göl, S., & Özcan, M. (2018). A Longitudinal Study on Evaluation of 'University within School': A Teacher Education Model. Paper presented at X. Uluslararası Eğitim Araştırmaları Kongresi [X. International Educational Research Congress], April, 27-30, Nevşehir Hacı Bektaş Veli Üniversitesi, Nevşehir, Turkey, 2018.

Aydın, U., Tunç-Pekkan, Z., Taylan, R. D., **Birgili, B.,** & Özcan, M. (2017). University-School Partnership: A Lens for School Type Differences in Fractional Knowledge. Paper presented at European Conference on Educational Research [ECER 2017], August 21-25, University College UCC, Copenhagen, Denmark, 2017.

Birgili, B. & Kiraz, E. (2017). A Metacognitive Perspective to Open-ended Questions vs. Multiple-choice. Paper presented at European Conference on Educational Research [ECER 2017], August 21-25, University College UCC, Copenhagen, Denmark, 2017.

*****One of 27 ***Emerging Researchers Bursary Winners*** in the World, at European Conference on Educational Research (ECER 2017), by EERA in University College Copenhagen, Denmark, 21th – 25th ofAugust, 2017.

** This research was also supported by The Scientific and Technological Research Council of Turkey (TUBITAK) [2224-A- 2017/6]

Birgili, B., & Fell-Kurban, C. (2017). Evaluation of a flipped course by using illuminative model. Paper presented at 3rd European Conference on Curriculum Studies, June 16-17, University of Stirling, Scotland, UK, 2017.

Birgili, B., & Kiraz, E. (2017). A Dilemma in Examination System: Can Open-ended Questions be an Alternative to Multiple-Choice? Paper presented at XII. European Conference on Social and Behavioural Sciences, January 25-28, Catania, Sicily, Italy, 2017.

Birgili, B., İler, C., & Engin -Demir, C. (2016). Flipped learning approach in a private university: A needs-assessment study. Paper presented at 4th International Conference on Curriculum and Instruction. October27-30, Belek-Antalya, Turkey, 2016.

Birgili, B., & Özcan, M. (2016). University within School: Evaluation of a New Teacher Education Model. Paper presented at European Conference on Educational Research [ECER 2016], August 22-26, University College Dublin, Ireland, 2016.

Birgili, B., & Kiraz, E. (2016). A Qualitative Analysis of Differential Effect of Multiple-choice and Open- ended Questions on Metacognition and Affect. Paper presented at European Conference on Educational Research [ECER 2016], August 22-26, University College Dublin, Ireland, 2016.

Tunç-Pekkan, Z., Taylan, R. D., **Birgili, B.,** Aydın, U., & Özcan, M. (2016). Academicians as teachers: Nurturing teaching experience. Paper presented at 13th International Congress on Mathematical Education [ICME], July 24-31, Hamburg, Germany, 2016.

Taylan, R. D., Tunç-Pekkan, Z., Aydın, U., **Birgili, B.**, & Özcan, M. (2016). Investigating fifth-grade students' conceptions of fractions on the number line. Paper presented at National Council of Teachers of Mathematics Research Conference [NCTM], April 13-16, San Francisco, USA, 2016.

Aydın, U., **Birgili, B.,** Tunç-Pekkan, Z., Taylan, R. D., & Özcan, M. (2016). The effect of University within School Model-based instruction on 5th grade students' achievement in fractions. Paper presented with Round Table Session at the American Educational Research Association Meeting [AERA], April 8-12, Washington, DC, USA, 2016.

Birgili, B. (2016) "Comparison between Some Pioneer Instructional Design Models", 18th International Congress of World Association of Educational Research [AMSE-AMCE-WAER], May 30-June 2, Eskisehir, Turkey, 2016.

Birgili, B. (2016) "In What Ways does an Instructional Design contribute to Creative and Critical Thinking Skills in Problem-based Learning Environments?", 18th International Congress of World Association of Educational Research [AMSE-AMCE-WAER], May 30-June 2, Eskisehir, Turkey, 2016.

Birgili, B., Z. Kızıltepe, & F. N. Seggie (2015) "Teaching Method Preferences of Primary and Secondary School Teachers: The Cooperative Teaching Method", International Conference for Teaching and Education, International Journal of Arts and Sciences (IJAS), October 19-22, Rome, Italy, 2015.

Mesutoğlu, C., & **B. Birgili** "Fen ve Matematik Eğitimi Işığında Kavram Yanılgıları: Öğretmen Adaylarının Deneyimleri" VII. Uluslararası Eğitim Araştırmaları Kongresi. Mayıs 28-31, Sıtkı Kocman Üniversitesi, Muğla, Türkiye, 2015.

Birgili, B., & Z. Kızıltepe "Öğretmenlerin Gözünden Okul Ikliminin Öğrenme Boyutuna Bir Bakış: Işbirlikli Öğretim Yöntemi", VI. International Congress of Educational Research, Haziran 6, Hacettepe Üniversitesi, Ankara, Türkiye, 2014.

Birgili, B., & B. Çalık "Future of Education at 21. Century: A Literature Review about Giftedness and Gifted Children", I. International Symposium on Sociology of Education, May 10-11, Ankara University, Ankara, 2012.

7.4. National Conference Papers Published in the Proceedings

Birgili, B., F. N. Seggie, & Z. Kızıltepe "Relationship Between Academic Volitional Strategies and Students' Achievement in Flipped Learning Environment" Paper presented at the 2nd International Higher Education Studies Conference, October, 12-14, Aska-Lara Resort & SPA, Antalya, Turkey, 2017.

Kirkic, K. A., & **B. Birgili** "CIPP (İGSÜ-İÇERİK-GİRDİ-SÜREÇ-ÜRÜN) Modeli ile Şirket Akademisi Öğretim Programlarının Değerlendirilmesi." [Evaluation of Business Academy Curricula with CIPP Model] Paper presented at Education Management Forum (EYFOR 8) at TOBB Sosyal Tesisleri, October 19-21, Ankara, Turkey, 2017.

Tunc-Pekkan, Z., **B. Birgili,** R. D. Taylan, & U. Aydin. Okulda Üniversite Modeli'nin İlk Yıl Uygulamasının Değerlendirilmesi. [Evaluation of First Year Implementation of University within School Model] Paper presented as Comprehensive Research Study at TurkBilMat Symposium, May 17-19, Afyonkarahisar, Turkey, 2017.

Taylan, R. D., Z. Tunc-Pekkan, **B. Birgili**, U. Aydin, & M. Ozcan "Beşinci sınıf öğrencilerinin kesir bilgisinin sayı doğrusu üzerinde gösterimi ile ilgili düşünüş biçimlerinin araştırılması" [Investigating fifth-grade students' conceptions of fractions on the number line]. Paper presented at 12. Ulusal Fen ve Matematik Eğitimi Kongresi [National Science and Mathematics Education Congress] [UFBMEK], September 28-30, Karadeniz Technical University, Trabzon, Turkey, 2016.

Tunc-Pekkan, Z., **B. Birgili**, & M. Ozcan "Okulda Üniversite Modeli ile Kesir Öğretiminin Öğrenci Başarısı ve Sınıf içi Katılıma Etkisi" [The Effect of Instruction of Fraction with University within School model on student's achievement and classroom participation]. Paper presented at 12. Ulusal Fen ve Matematik Eğitimi Kongresi [National Science and Mathematics Education Congress] [UFBMEK], September 28-30, Karadeniz Technical University, Trabzon, Turkey, 2016.

Aydin, U., Z. Tunc-Pekkan, R. D. Taylan, **B. Birgili,** & M. Ozcan "Okulda Üniversite Modeli- Temelli Öğretimin 5. Sınıf Öğrencilerinin Kesir Bilgisini Geliştirme Üzerine Etkisi" [The effect of University within School model-based instruction on 5th grade students' development of fraction knowledge]. Paper presented at 12. National Science and Mathematics Education Congress [UFBMEK], September 28-30, Karadeniz Technical University, Trabzon, 2016.

Ozcan, M., Z. Tunç-Pekkan, R. D. Taylan, U. Aydın, & **B. Birgili** (2015) "Okulda Universite Modeli Çerçevesinde Matematik Öğretimi", VI. Eğitim Yönetimi Forumu [EYFOR]. November 5-7, International Cyprus University, Nicosia, Cyprus, 2015.

Tunc-Pekkan, Z., R. D. Taylan, U. Aydin, **B., Birgili**, M. Ozcan, Akbal, K., & A. Mermer (2015). "Okulda Üniversite Modeli Çerçevesinde Matematik Öğretimi: Öğrencilerin Derse Katılımının Artırılması" [University within School model mathematics teaching: Increasing students participation] Paper presented at Eğitimde İyi

Örnekler Konferansı [Best Practices in Education Conference], Eğitim Reformu Girişimi [Innovation of Education Reform], April 11, Sabancı University, İstanbul, Turkey, 2015.

Basokcu, E., & **B. Birgili** (2015) "Ben Kimim?" [Who am I?]. Scientix Fen ve Matematik Eğitimi Konferansı [Scientix Science and Mathematics Education Conference], June 15-16, Baskent Ogretmenevi, Ankara, Turkey, 2015.

Birgili, B. "Öğretmen Eğitiminde Yeni Adımlar: Lider ve Girişimci Öğretmen" [New steps in teacher education: Leader and entrepreneur teacher]. XI. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi [National Science and Mathematics Education Congress], September 11-14, Cukurova University, Adana, Turkey, 2014.

Birgili, B., & B. Savas "FETAD: Fen ve Teknoloji'de Atasözleri Deneyi" [FETAD: Proverbs experiment in science and technology] XI. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi [National Science and Mathematics Education Congress], September 11-14, Çukurova University, Adana, Turkey, 2014.

Savaş, B., & B. Birgili "Fen ve Teknoloji Dersine Atasözleri Entegrasyonu" [Integration of proverbs in science and technology lesson]. Poster presented at 11. Eğitimde Iyi Örnekler Konferansı [Best Practices in Education Conference], Eğitim Reformu Girişimi [Innovation of Education Reform], May 3, Sabancı University, Istanbul, Turkey, 2014.

Birgili, B. Ilerlemecilik ve Yeniden Yapılandırmacılık: Öğretmen Eğitimine Yansımaları [Progressivism and reconstructionism: Reflection on teacher education]. 1. Eğitim Felsefesi Ulusal Sempozyumu [Philosophy of Education National Symposium], November 21-22, Ankara University, Ankara, Turkey, 2013.

Calik, B., & **B. Birgili** "İlköğretim 6. ve 7. sınıf öğrencilerinin çoklu zeka alanlarının çeşitli değişkenler bakımından incelenmesi" [Examination of primary school 6th and 7th grade students' multiple intelligences in terms of different variables]. 21. Ulusal Eğitim Bilimleri Kongresi [National Educational Sciences Congress], September 12-14, Marmara University, Istanbul, Turkey, 2012.

Birgili, B. "İlköğretim 7. Sınıf matematik dersi istatistik konusunda portfolyo hazırlatmanın öğrenci başarısına etkisi" [The effect of portfolio preparation on students' achievement in statistics topic of 7th grade mathematics lesson]. 10. Matematik Sempozyumu [Mathematics Symposium], September 21-23, Işık University, Istanbul, Turkey, 2011.

7.5. International Blogs, Books or Book Chapters

Uysal, B., & **Birgili, B.** (January, 2023). Is the self-efficacy of maths teachers related to teaching competency? Retrieved from: https://blog.eera-ecer.de/is-the-self-efficacy-of-maths-teachers-related-to-teaching-competency/

Birgili, B. (2022). Yenilikçi öğretim yaklaşımları (Chapter II) [Innovative teaching approaches]. In A. K. Kırkıç (Ed.), *Yenilikçi Okullarda Öğrenme ve Öğretim [Learning and Teaching in Innovative Schools]* (1st ed., pp. 39-71). İstanbul: EFE Academy Publication.

*In this chapter, Flipped Learning in MEF University was explained from a research assistant's point of view.

Birgili, B. (April, 2021). Artificial Intelligence in Student Assessment: What is our Trajectory? EERA Blog. Retrieved from: https://blog.eera-ecer.de/artificial-intelligence-in-student-assessment/

Birgili, B. (Aralık, 2019). Yapay Zekânın Ölçme-Değerlendirmede Kullanımı: Yörüngemiz Neresi? [Usage of AI in Measurement and Evaluation]. Eğitim Bilimleri ve Teknolojileri Uygulama ve Araştırma Merkezi, E-Bülten, Sayı 1. https://www.aydin.edu.tr/tr-tr/arastirma/arastirmamerkezleri/ebtam/Documents/EBTAM-1.pdf

Tunalı, S., Buluz-Kömeçoğlu, B. & **Birgili, B.** (Şubat, 2019). Eğitimde Ölçme-Değerlendirme: Açık Uçlu Sınavların Değerlendirilmesi. "Doğal Dil İşleme ve Eğitim" Yapay Zekâ Çalıştayı -3. [Natural Langugae Processing and Education]
https://tasam.org/tr-TR/Icerik/51443/dogal_dil_isleme_ve_egitim_yapay_zeka_calistayi_-_3_sonuc_raporu

Birgili, B. (Mayıs, 2015). Temellendirilmiş kuram [Grounded Theory]. In Y. Bayyurt & F. N. Seggie (Eds.), *Nitel Araştırma Yöntem, Analiz ve Yaklaşımları [Qualitatire Research Method, Analysis and Approaches]* (1st ed., pp. 103-114). Ankara: Anı Publication. ISBN: 978-605-170-028-1.

Birgili, B., & Kiraz, E. (2017). A Dilemma in Turkish Examination System: Open-Ended or Multiple-Choice? In M. Gammone, M. A. Icbay & H. Arslan (Eds.), *Recent Developments in Education*. (1st ed., pp. 72-80). Poland: Bialystok: E-BWN Publication ISBN: 9788394396336.

8. Projects

- MEF University Scientific Research Projects [BAP] (2022-2023*). Matematik kaygısının ortaokul öğrencilerinin problem çözme becerileri üzerine etkisinin davranışsal ve nörobilimsel (optik beyin görüntüleme) yöntemlerle incelenmesi*
  [Birgili, B., Research Assistant]
  Project Team: Doç. Dr. R. Didem Taylan, Doç. Dr. Utkun Aydın, Dr. Öğr. Üy. Tuna Çakar

- MEF University Scientific Research Projects [BAP] (2020-2021). *Okulda Üni versi te modeli nde matemati k öğretmen adaylarının öğretmenli k beceri leri ni n geli şi mi ve desteklenmesi modeli [A Model on Mathematics Teacher Candidates' Development and Support of Teaching Skills in University within School Model]*
  [Birgili, B., Research Assistant]

  Project Team: Doç. Dr. Zelha Tunç-Pekkan, Doç. Dr. R. Didem Taylan, Prof. Dr. Mustafa Özcan

  Project Director: Doç. Dr. Zelha Tunç-Pekkan; Project Researchers: Doç. Dr. Zelha Tunç-Pekkan, Doç. Dr. R. Didem Taylan, Bengi Birgili (Res. Asst.), Işıl Öztürk (Student), Ayşegül Erdem (Student), Merve Pakdemir (Student)

  (40,000.00 TL)

- MEF University [Australian Aid Program] (11.5.2020-5.4.2021)
  - *First Online Laboratory School*, Turkey Direct Aid Program 2020-2021 (Application Numbers: ANK039ENG20-21), [Birgili, B., Research Assistant & Online Teaching Supervisor]

    Project Director: Doç. Dr. Zelha Tunç-Pekkan; Project Researchers: Doç. Dr. R. Didem Taylan, Dr. Öğr. Üy. İ. Burak Ölmez
    For more info: https://edu.mef.edu.tr/en/online-uygulama-okulu#gsc.tab=0

    ($5,000.00)

- Boğaziçi University Scientific Research Projects [BAP] (2009-2012). *Early Literacy and Dyslexia: Developing Computer Games to Promote Literacy Skills for Young Learners*. (Proje No: 09D201P), [Birgili, B., Researcher]

  Project Director: Yrd. Doç. Dr. Günizi Kartal; Project Researchers: Yrd. Doç. Dr. Nalan Babür, Yrd. Doç. Dr. Ayşegül Metindoğan, and Prof. Dr. Ayşe Gürel.

  (Rectory Private Secretary Group Payment)

- Middle East Technical University Scientific Research Projects [BAP] (2017) *Tasarla-Yap- Öğren: Fen Bilimleri Öğretmenlerine Yönelik Mühendislik Tasarım Atölyesi [Design-Do- Learn: Engineering Design Studio for Science Teachers] Scientific Research Foundation. March 4-5, 2017 with RUZGEM and METU Faculty of Education.* [Birgili, B., Workshop Executive]

  Project Director: Doç. Dr. Evrim Baran-Jovanovic, BİLTEMM Center Exec. Director; Prof. Dr. Erdinç Çakıroğlu, BİLTEMM Center Director. Project Researcher: Res. Asst.Canan Mesutoğlu.
  https://tasarlayapogren.wordpress.com

9. Invited Seminars, Workshops, Lectures, Guest Speaker Sessions

- Invited Seminar at LSC 501: Educational Neuroscience, Learning Sciences Master Program, MEF University, Istanbul, Turkey.
    - My Journey into NeuroEducation (2 hours), March 10, 2022.
- Invited PhD Candidate Speaker in *3rd International Student Conference in Educational Sciences (MEFEDUCON-2021),* "Mathematics Teachers' Response to Curriculum Change: An Ecological Approach", May 23, 2021, MEF University, Istanbul, Turkey.
- Workshop Executive in *3rd International Student Conference in Educational Sciences (MEFEDUCON-2021), "*Açık Uçlu Sorularda Bilişsel Stratejilerin Kullanımı" [Usage of Cognitive Strategies in Open-ended Items], May 22, 2021, MEF University, Istanbul, Turkey.
- Workshop Executive in *Nazmi Arıkan Fen Bilimleri Eğitim Kurumları Semineri, "*Sınıf içi Ölçme ve Değerlendirmede Açık Uçlu Sorular" [Open-ended Items in Classroom Assessment], August 24, 2021, Istanbul, Turkey
- Workshop Executive in *2nd International Student Conference in Educational Sciences (MEFEDUCON-2020), "*Açık Uçlu ve Çoktan Seçmeli Soruların Ayrımsal Etkisi" [The Differential Effect of OE and MC Items], March 28-29, 2020, MEF University, Istanbul, Turkey. https://www.mefeducon.com/home-1/
- Guest Speaker in *SCED 120: Academic Orientation in Mathematics and Science Education* offered by Dr. Canan Mesutoğlu, Part-Time Faculty Member, Boğaziçi University. 2017-2018 Spring Semester.
- Guest Speaker in *PRED 325: Developmental Experiences in Mathematics and Science* offered by Dr. Canan Mesutoğlu, Part-Time Faculty Member, Boğaziçi University. 2017-2018 Fall Semester.
- Guest Speaker in *EDS 309: Measurement and Evaluation* offered by Asst. Prof. Utkun Aydın, MEF University. 2016-2017 Spring Semester.
- Artificial Intelligence in Education – Artificial Intelligence for Learning and Teaching Moderated by ESTEN Director Dr. Sevinç TUNALI, TASAM [Turkish Asia Strategic Research Center] 08.02.2019
    - Guest Speaker in Workshop-3 : *Natural Language Processing and AI Usage in the Evaluation of Open-ended Question Formats* Retrieved from: http://www.tasam.org/tr-TR/Icerik/51352/ogrenme_ve_ogretim_icin_yapay_zeka

10. Relevant Accomplishments

10.1. Service

Conference Committee Member of www.egitimdegelecekkonferansi.com www.egk19.com #EGK19, Boğaziçi University, MEF University, Education Reform Initiative (ERG)-Sabancı University Partnership, November 2-3, 2019. (600 participants)

Conference Committee Member of www.egitimdegelecekkonferansi.com www.egk17.com #EGK , Boğaziçi University, MEF University, Middle East Technical University Partnership, November 11-12, 2017. (1200 participants)

Conference Committee Member of www.egitimdedegisim.com #EDK16, MEF University, December 10-11, 2016. (1200 participants)

Editorial Board Members of the Journal of Design for Learning, Stockholm University (**2018- ongoing**)

Editorial Board Members (Artificial Intelligence in Education Section) of the International Journal of Computer Science Education in Schools (**April 2019- ongoing**)

10.2. Awards

- ***Jacob Foundation Award*** by EARLI/JURE2022 Conference (Withdrawn)
- ***Jacob Foundation Award*** by EARLI/JURE2021 Conference
- One of the 4 accepted studies among ***Early-Career Scholars*** awarded by the ***ITC Young Scholar Committee*** of International Testing Commission, UK in the 12th Conference of the International Testing Commission (ITC), July 14-17, Belval, Luxembourg.
- One of 27 **Emerging Researchers Bursary Winners** in the World, at European Conference on Educational Research (ECER 2017), by EERA in University College Copenhagen, Denmark, 21th – 25th of August, 2017.
- EERA **Summer School Scholarship Award**, Curriculum Studies, June 19-20, University of Stirling, Scotland, UK, 2017.
- **METU 2012-2013 Semester Graduate Course Performance Awards, 1st Rank,** (GPA:4.00/4.00), June 2014, Ankara, Turkey.
- **Boğaziçi University Graduation, Dean's Honor List,**(GPA: 3.13/4.00), June 2011, İstanbul, Turkey

11. Professional Affiliations and Memberships

The European Association for Research on Learning and Instruction (EARLI and JURE), Belgium **2021-ongoing**
American Educational Research Association (AERA), U.S.A **2021- ongoing**
International Testing Commission (ITC), England, UK **2020- 2022**
Austrian Students' Union-ÖH, Austrian Students Organization, Ministry of Education, Vienna, Austria **2019-2020**
Vienna Cognitive Science HUB- "CogSciHub"- network of researchers at the University of Vienna active in various disciplines of Cognitive Science and Neuroscience, Vienna, Austria. **2019-2021**
Turkish Association of Curriculum and Instruction (EPODER), Ankara, Turkey **2014-ongoing**
WERA linked Turkish Educational Research Association (EAB-TERA), Çanakkale, Turkey **2015-ongoing**
*Very active at the Graduate Research Group
European Educational Research Association (Emerging Researchers) (EERA- ECER) – EERA, Berlin, Germany **2017-ongoing**
Network 3. Curriculum Innovation
Network 9. Assessment, Evaluation, Testing and Measurement
The European Association of Curriculum Studies (EuroACS), Stirling, Scotland, UK **2017-2018**

12. Certifications

- Introduction to Probability and Data with R by Duke University – Coursera – (June 16, 2020) Record ID: VBFX526SZF65
- Elements of AI by University of Helsinki & Reaktor (January 4, 2020)
- Flipped Learning 3.0 Higher Education Level-I Certification by Flipped Learning Global Initiative (January 6, 2019)

13. Undergraduate Graduation Projects Supervision

2022-2023 Academic Terms
Malkamak Z., & Orhan, E. N. (2023). The relationship between the technology competencies of the teacher candidates and their perspectives on the use of technology in education.
Sarılıcan, A. S., & Becerik, R. (2023). Preservice teachers' classroom management anxiety in online laboratory school.

2021-2022 Academic Terms
Özkaya, E., & Yalçın, M. (2022). Comparison of classroom management concerns of pre-service elementary mathematics teachers and pre-service English language teachers.
Uysal, B. (2022). Preservice elementary teachers' self-efficacy for teaching mathematics and teaching competency. https://blog.eera-ecer.de/is-the-self-efficacy-of-maths-teachers-related-to-teaching-competency/

2020-2021 Academic Terms
Çelik, E. Y., Kırış, S., & Kayhan, H. (2021). Opinions of secondary school mathematics teachers on EBA (education information network) and their suggestions to develop EBA platform.

2019-2020 Academic Terms
Arda, F. (2020). The relationship between middle school students' conceptual knowledge and procedural knowledge in fractions.
Güler, M. (2020). Comparing probability and data processing topics between mathematics textbooks in terms of content.
Karlık, G. N. (2020). The relationship between mathematics teachers' classroom management style and students' attitudes towards mathematics lesson.
Sağlam, N., & Şenocak, H. (2020). Investigating effect of middle school mathematics learning activities in mathematics anxiety of students.
Yıldırım, F. F. (2020). The effect of mathematics teaching with music on attitude towards mathematics in 5th grade.

14. Undergraduate Internship Supervision (Face to face and online teaching at an Online Laboratory School

- Spring 2023 (4 senior year, 2 junior year pre-service mathematics teachers)
- Fall 2022 (4 senior year pre-service mathematics teachers)
- Spring 2022 (3 senior year, 3 junior year pre-service mathematics teachers)
- Fall 2021 (3 pre-service mathematics teachers)
- Spring 2021 (7 pre-service mathematics teachers)
- Fall 2020 (7 pre-service mathematics teachers)
- Spring 2020 (5 pre-service mathematics teachers)

- Examining the lesson plans of teacher candidates (TCs).
-Analysis of the written curriculum with them.
-Providing written, verbal and sometimes video feedback to their lesson plans. Reviewing the revised plans.
-Going to practicum schools for TCs and observing them during teaching. Three-tiered feedback with mentor teachers.

15. Research and Teaching Assistantship Courses (2014- ongoing)

ELE 103/102 Introduction to Mathematics Teaching
EDS 102 Turkish Education System and School Management
EDS 206 Instructional Technology and Material Design
ELE 301 Internship 1: School Experience and Teacher Assistantship
ELE 302 Internship 2: School Experience and Teacher Assistantship
EDS 307 Principles and Methods of Instruction
EDS 404 Scientific Research Experience II
EDS 405 Internship 3: Teaching Practice
EDS 406 Internship 4: Teaching Practice

16. Course Offerings

- Instructional Design (Undergraduate)
- Instructional Technology & Materials Design (Undergraduate)
- Foundations of Statistics (Small Group Teaching, Private High School)
- Multivariate Statistics (Graduate Candidate, Certification)
- Basic Mathematical Structures (Banking & Finance Vocational Pre-Bac. Degree)
- Middle School Mathematics Teaching and Co-Teaching (5th and 6th grade classes)

17. Refeering for Academic Journals (2022- ongoing)

- *Studies in Educational Evaluation*, Springer
- *Education and Information Technologies,* Springer
- *Cogent Education, Taylor & Francis*
- *Uluslararası Sosyal Bilimler Eğitimi Dergisi, Dergipark*

SHORT BIODATA

Dr. Bengi BİRGİLİ is a research assistant at the department of Mathematics Education at MEF University, Istanbul, Turkey. She received her doctoral degree from the department of Educational Sciences, Curriculum and Instruction Program at Middle East Technical University, Ankara, Turkey. She was a visiting scholar at the University of Vienna in 2019. She has two years of mathematics teaching experience in middle school level and more than two years of teaching from high school level to undergraduate degree. During postdoc, she has been mentored by Dr. Chue Kah Loong, Senior Lecturer, National Institute of Education - Psychology and Child & Human Development from Nanyang Technological University, Singapore with the cooperation of *WERA Mentoring Programme*.

Her research interests are in-class assessment, educational neuroscience, instructional design, curriculum development and evaluation, and flipped learning. She received several publication awards by the Turkish Scientific and Technological Research Council, European Educational Research Association, and International Testing Commission.

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