Dr Hilal S. Yildiz
Curriculum Vitae

Key Qualifications: Design and Development of e-Learning Projects, Development of videos and simulations for technical training, Learning program development with the theoretical background of how people learn and interact, Conducting and reporting scientific research, Conducting educational data mining and learning analytics research, Data visualising, Learning Management System Administration

1. Personal information

Email:	hilal.yildiz@tedu.edu.tr
Websites:	https://scholar.google.com.tr/citations?user=Khe3h0QAAAAJ&hl=tr
	https://uk.linkedin.com/in/hilalsedayildiz

2. Education

2016-2020 **PhD in Open and Distance Education**
Institute of Social Sciences, Anadolu University, Turkey

2019-2020 **Fellowship in Education and Educational Technology**
Institute of Educational Technology (IET), Open University, UK
Grade: 3.84/4.00 (1ˢᵗ class
Honours)
Thesis title: Determining Learner Profiles and Behavioral Patterns in Massive Open Online Courses Using Clustering Analysis: The Case of Learn Turkish System
Supervisors: Prof Dr. Tevfik Volkan Yuzer (lead), Prof Dr. Bart Rienties (second)

Sponsored by the Scientific and Technological Research Council of Turkey with an academic excellence award to meet the following goals

- Developing a holistic prediction model on the behavioural patterns of learners using data from 10,000 learners' participation in course activities
- Operated data mining processes to perform clustering analysis to form a model of learner behaviours according to cultural background and demographic information
- Validated models' predictive powers using Learning Analytics and Educational Data

Mining on trace data from 5,000 Syrian refugees learning Turkish as a second language using a MOOC
- Exploring how Syrian learners' characteristics affect behaviour when learning a language using a MOOC via a MANOVA analysis

2014-2016 **Master of Arts in Open and Distance Learning Grade: 3.97/4.00 (1ˢᵗ class Honours)**
Institute of Social Sciences, Anadolu University, Turkey
Thesis title: Predicting Student Achievement with Neural Networks: The Case of Anadolu University
Supervisor: Associate Dr. M. Recep Okur

Achieved the following:
- Analysed activity and demographic data of approx. 600,000 students from a Computer Science course at Anadolu University in 2015 and 2016 using data mining techniques
- Modelled 32 combinations of parameters using cleaned data sets with Multilayer Perceptron and Radial Basis Function algorithms to assess the explanatory power of variables concerning students' success
- Identified Multilayer Perceptron networks as the most accurate model with an error rate of just 3%

2010-2014 **Bachelor of Science in Computer Science and Instructional TechnologiesEducation Grade: 3.21/4.00 (1ˢᵗ class Honours)**
Faculty of Education, Eskisehir Osmangazi University, Turkey

3. Teaching Experience

2018-Present **Lecturer, Dr.** TED University, Ankara, Turkey

- Designed and developed online course materials on Instructional Design and Development, Open and Distance Learning and Digital Classroom Management courses, and delivered them online.
- Provided UX counselling service for the design and development of the website of the university.

2018-2020 **Lecturer (Visiting)** Yasar University, Izmir, Turkey
- Designed and delivered undergraduate courses at the Faculty of Science and Letters in both English and Turkish on the following topics: Meaning and Semiotics; Research Culture; Design Culture; Aesthetic Culture; Ethics Culture; Project Culture; Behavioral Sciences
- All courses received a mean rating of at least 4.4 out of 5.0 from students
- Developed 35 pages hosted on the university Intranet to support colleagues delivering online courses

2018-2019 **Instructional Designer and Developer Enocta Inc., Istanbul, Turkey**

- Conducted literature review on Web 2.0 Technologies in the work setting and digital literacy
- Developed an instruction manual for each of the 20 most common Web 2.0 tools and instruction manuals on digital literacy
- Developed reading materials on Open Access, Advanced Web search techniques, Reliable Information Sources, Open Educational Resources, Massive Open online courses

2018-2018   **Instructional Designer and Developer (TÜBİTAK funded project) The Scientific and Technological Research Council of Turkey**
- Developed modules for mathematics teachers on PISA and its requirements for students

2016-2018   **Instructional Designer, Developer and Researcher (With Scholarship) Learn Turkish Language MOOC Project Yasar University, Izmir, Turkey**
- Ensured accessibility of video, for example by preparing subtitles
- Developed how-to tutorials to help learners
- Conducted research on CALL, Language MOOCs, Cultural Differences in Online Learning Environments
- Developed and delivered online certificate exams
- Supported Turkish instructors about how to design and develop online learning materials
- Provided technical support for online sessions via BigBlueButton

2016-2017   **Instructional Designer and Developer (EU funded project) Enocta Inc, Istanbul, Turkey**
- Created an interactive learning environment that included simulations of software packages

2015-2016   **Learning Management System Administrator/Course Coordinator, Anadolu University, Eskisehir, Turkey**
- Developed interactive assessment materials
- Managed logistical tasks such as student enrollment
- Wrote learning analytic reports

4. Knowledge, Skills, and Abilities

Teaching expertise: Research Methods, Project Development And Management, Educational Research Techniques, 21st Century Skills, Digital Skills For Teachers, Information Technology, Distance Education, Web 2.0 Tools and their integration to Curriculum, Technology Enhanced Learning, Instructional Design, Development of Interactive Learning Materials
Research expertise: Educational Technology, Learning Analytics, Educational Data Mining, Moocs, Learning Design And Development
Research methods expertise: Literature Review, Interviews, Observations, Video Data, Survey Instruments, Quasi-Experimental Studies, Thematic Analysis, Case Studies, Statistical Modelling
IT skills: Articulate Storyline, Adobe Captivate/Indesign/Photoshop, Camtasia, BigBlueButton, Adobe Connect, Tableau, Rapid Miner, Knime, R, SPSS/PSPP, NVivo, PHP, CSS

Learning Management Systems: Blackboard (Certificated System/Community/Content Administrator), Moodle, Canvas, Sakai, Efront, Atutor

5. Publications and Research Contributions

Peer-reviewed Journal Articles

Yildiz, H.S., Rienties, B., Rizvi, S., Ozan, O. (*manuscript in preparation for the special issue on LMOOCs of ReCALL Journal*). Learning Turkish as a Second Language versus as a Foreign Language with an LMOOC: Perspective of the Syrian Learners.

Yildiz, H.S. (*manuscript in preparation*). Developing a plagiarism awareness scale for undergraduate online learners.

Yildiz, H.S., Ozan, O., Ozarslan, Y. (in press). Differentiation and Adaptation of Massive Online Courses for Foreign Language Teaching: Turkish Case. *Journal of Higher Education.*

Aydın-Menderis, İ., **Yıldız, H. S.** (submitted). Using Image Processing in Open and Distance Learning. *JOMUDE.*

Ozan, O., Ozarslan, Y., & **Yildiz, H. S.** (2018). MOOLC design and development process for an agglutinative language:
Türkçe Öğreniyorum case. *The Turkish Online Journal of Educational Technology,* 2, 156-164.

Yıldız, H. S., Okur, M. R. (2018). Predicting Achievement with Artificial Neural Networks: The Case of Anadolu University Open Education System. *International Journal of Assessment Tools in Education. 5*(3).

Yıldız, H. S., Kılınç, H., İbileme, A. İ., Fırat, M. (2017). An Examination of the Changes in Turkey's National Education
Levels Between 2010 and 2015. *Journal of Higher Education and Science. 7*(3), 601-610.

Yıldız, H. S. (2017). Review of the book Intelligent Data Analysis for E-Learning Enhancing Security and Trustworthiness in Online Learning Systems, by J. Miguel, S. Caballe, F. Xhafa. *Turkish Online Journal of Education (TOJDE). 18*(4), 191-194.

Yıldız, H.S. (2017). Transition process to University 4.0: a conceptual approach. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi. 3*(2), 164-176.

Yıldız, H.S. (2017). Adult learners' views on Massive Open Online Courses. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi. 3*(1), 188-208.

Okur, M. R. & **Yıldız, H.S.** (2016). Short videos as student support material: Anadolu University Open Education System Watch-Learn Platform. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi. 2*(2), 150-167.

Book Chapters

Yildiz, H.S. (2020). Artificial Education in Open and Distance Learning. In V. Yuzer, & M. Kesim (Eds.), *Open and Distance Learning Technologies.* Istanbul, Turkey: PEGEM Academy.

Peer-reviewed Conference Papers

Yildiz, H. S., Rienties, B., Yuzer, T. V. (2021). Language Learners' Characteristics and Behavioral Patterns in LMOOCs: The Case of Learn Turkish LMOOC. *CALRG 2021 Online Conference,* 15-16 June, 2021, Milton Keynes, The UK.

Conde Gafaro, B., **Yildiz, H. S.** (2020). Workshop: Supporting Learners' Self-regulation in LMOOCs: What Have We Done and How Far We Can Go?. *Learning at Scale*. 27-29 May, 2020, Atlanta, Georgia, The USA.

Yıldız, H.S., Yuzer, T.V. (2019). Towards Learning Analytics and Educational Data Mining: A Systematic Literature Review. *International Open & Distance Learning (IODL) Conference.* 14-16 November, 2019, Eskisehir, Turkey.

Yildiz, H.S., Aybek, E.C., & Ozarlsan, Y. (2018). E-Learning System Quality Scale (ESQS): A Thurstone Type Scale Development. *AECT 2018*. Kansas City, Missouri, The USA.

Yıldız, H. S., Aybek, E. C. & Ozarslan, Y. (2018). A Model Suggestion for Classifying Responses Given to Open-Ended Items In Open and Distance Learning System. *International Conference on New Horizons in Education (INTE2018)*. 18 –20 June, 2018, Paris, France.

Ozan, O., Ozarlsan, Y. & **Yıldız, H. S.** (2018). MOOLC Design and Development Process for an Agglutinative Language: "Türkçe Öğreniyorum" Case. *International Conference on New Horizons in Education (INTE2018).* 18 – 20 June, 2018, Paris, France.

Yıldız, H. S. & Aybek, E. C. (2018). A Text Mining Implementation On International Conference on Research In Education and Science (ICRES). *International Conference on Research in Education and Science (ICRES)*. 29 April – 1 May, 2018, Marmaris, Turkey.

Aybek, E. C. & **Yıldız, H. S.** (2018). Online Data Collection and Privacy. *International Conference on Research in Education and Science (ICRES).* 29 April – 1 May, 2018, Marmaris, Turkey.

Yıldız, H. S. & Okur, M.R. (2016). Predicting Achievement with Neural Networks: The Case of Anadolu University.
   Global Learn 2016. 28 – 29 April 2016, Limerick, Ireland.

Yıldız, H.S. & Aydın Menderis, İ. (2016). Designing a Mixed Training Program for a Health Sector Employee. 18.
   Akademik Bilişim Konferansı. 3-5 February 2016, Aydın, Turkey.

6. Research Achievements

Funded Research, Projects and Grants

Yıldız, H.S. (Contributed to writing the bid for Anadolu University and The Open University (the UK) as a Primary Applicant/Researcher). *Developing an Online Platform for Trauma-Informed Teaching In Turkey.* The British Council. (Pending- 850.000 TL)

Yıldız, H.S. (Contributed to writing the bid as a scholarship holder). *Developing, Using and Evaluating Flexible Learning Materials with Three-Dimensional Motion Capture Technique*. The Scientific and Technological Research Council of Turkey (TÜBİTAK). (Pending-160.000 TL)

Yıldız, H.S. *Developing a Model to Predict Learners' Performance in the Context of Language MOOCs: The Case of Learn Turkish*. The Scientific and Technological Research Council of Turkey (TÜBİTAK). October 2019- Currently. (150.000 TL)

Yıldız, H. S. Web 2.0 Practices for K-12 Teachers. The Scientific and Technological Research Council of Turkey
   (TÜBİTAK). Interdisciplinary Skills School. Instructor. May 2018– August 2018.

Yıldız, H. S. Differentiated Teaching of Turkish as a Foreign Language through Distance Education. The Scientific and Technological Research Council of Turkey (TÜBİTAK). ScholarshipHolder. October, 2016-2018. (250.000 TL)

Yıldız, H. S. Prediction of Student Achievement with Artificial Neural Networks: Case of Anadolu University. Dissertation Project. Researcher. October 2015 – May 2016. (10.000 TL)