

Vital Role of Digital and Adaptive Learning Platforms in Flipped Learning Approach: The Case of MEF

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Digital and Adaptive Books Platforms



The Theory of Deliberate Practice*

*Ericsson, K. Anders, Krampe, Ralf Th., Clemens Tesch-Romer. "The Role of Deliberate Practice in the Acquisition of Expert Performance." *Psychological Review* Vol. 100 No. 3 (1993) 363-406. Print.



The Theory of Fun for Game Design*

*Koster, Raph. *A Theory of Fun for Game Design*. Scottsdale, AZ: Paraglyph Press, Inc., 2005. Print.



Metacognitive Theory*

*Flavell, J. H. "Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry." *American Psychologist* (1979) 34, 906 - 911. Print.



Ebbinghaus Forgetting Curve*

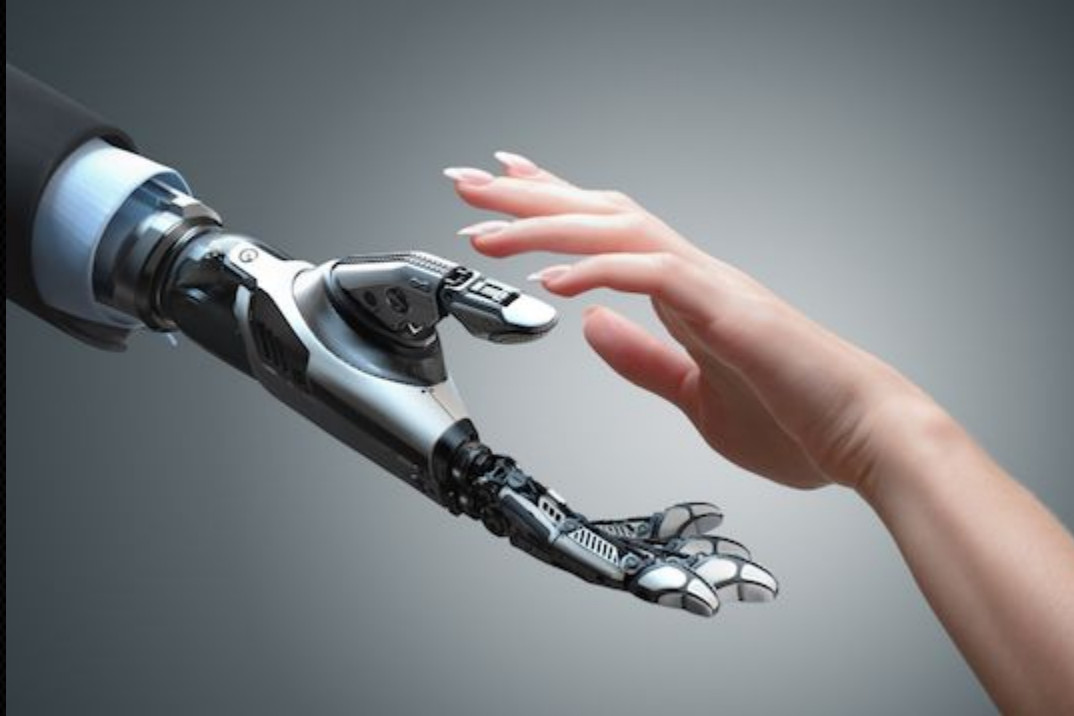
*Ebbinghaus, Herman, Trans. Clara E. Bussenius and Henry A. Ruger. *Memory: A Contribution to Experimental Psychology*. Eastford, CT: Martino Fine Books, 2-11. Print.



McGraw-Hill

Technology vs. Instructors

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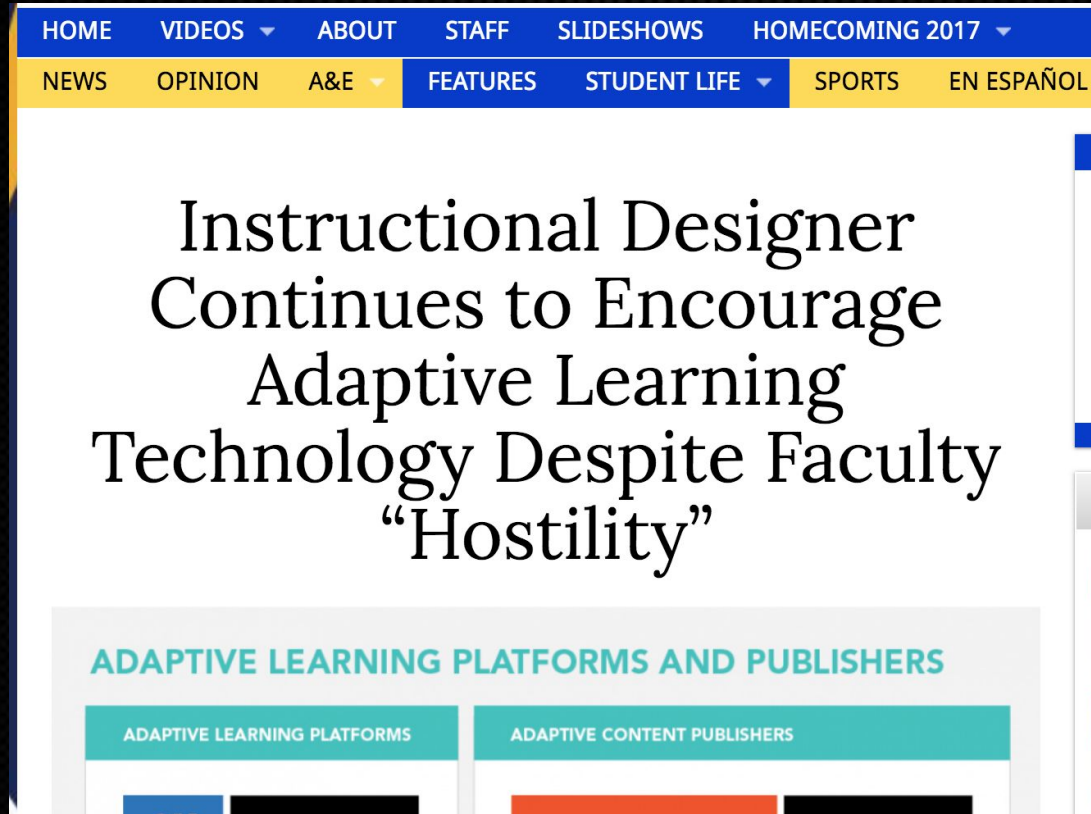
Technology vs. Instructors



Instructor



Is it Easy to Make a Change in Academy?



Dinçer Özoran



Currently

Associate Director at CELT

- *Coordinating Educational Technologies
- *LMS System Admin
- *Support Instructors for
Technology/Pedagogy for Flipped Learning

Currently

Writing his PhD thesis on **Flipped Learning**
at EdTech Program of METU

Another Digital and Adaptive Learning Day...



eText



Critical Thinking Exercises



Interactive Lecture



End of Chapter Exercises



Study Plan



Document Makeovers



Flashcards



Comprehensive Exam



Video Exercises



Assisted-graded Writing Assignments

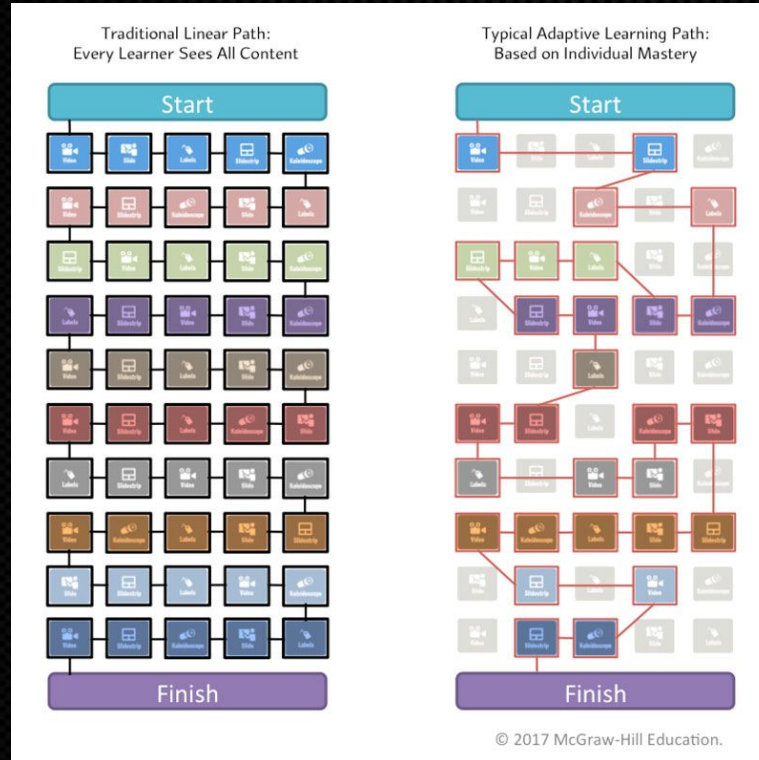


Simulations

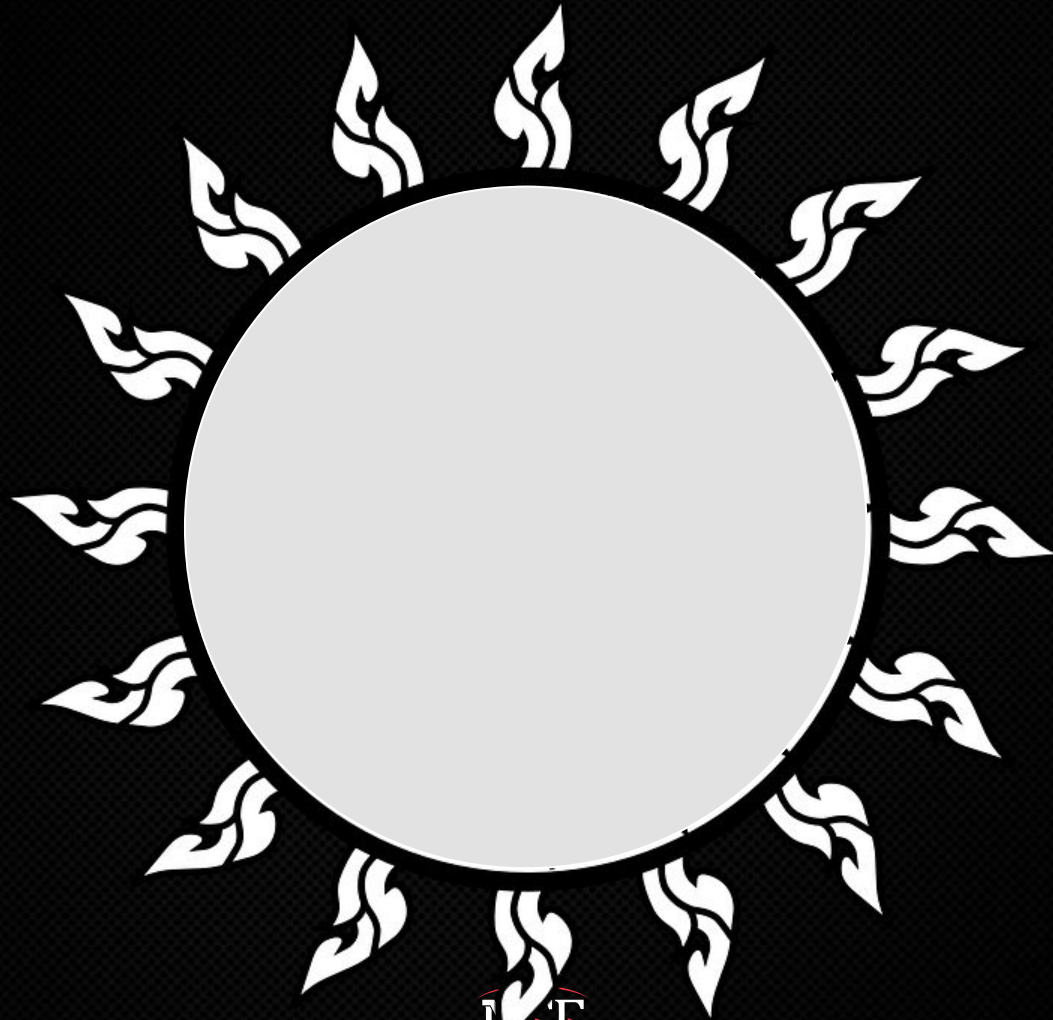


and more..

Another Digital and Adaptive Learning Day...

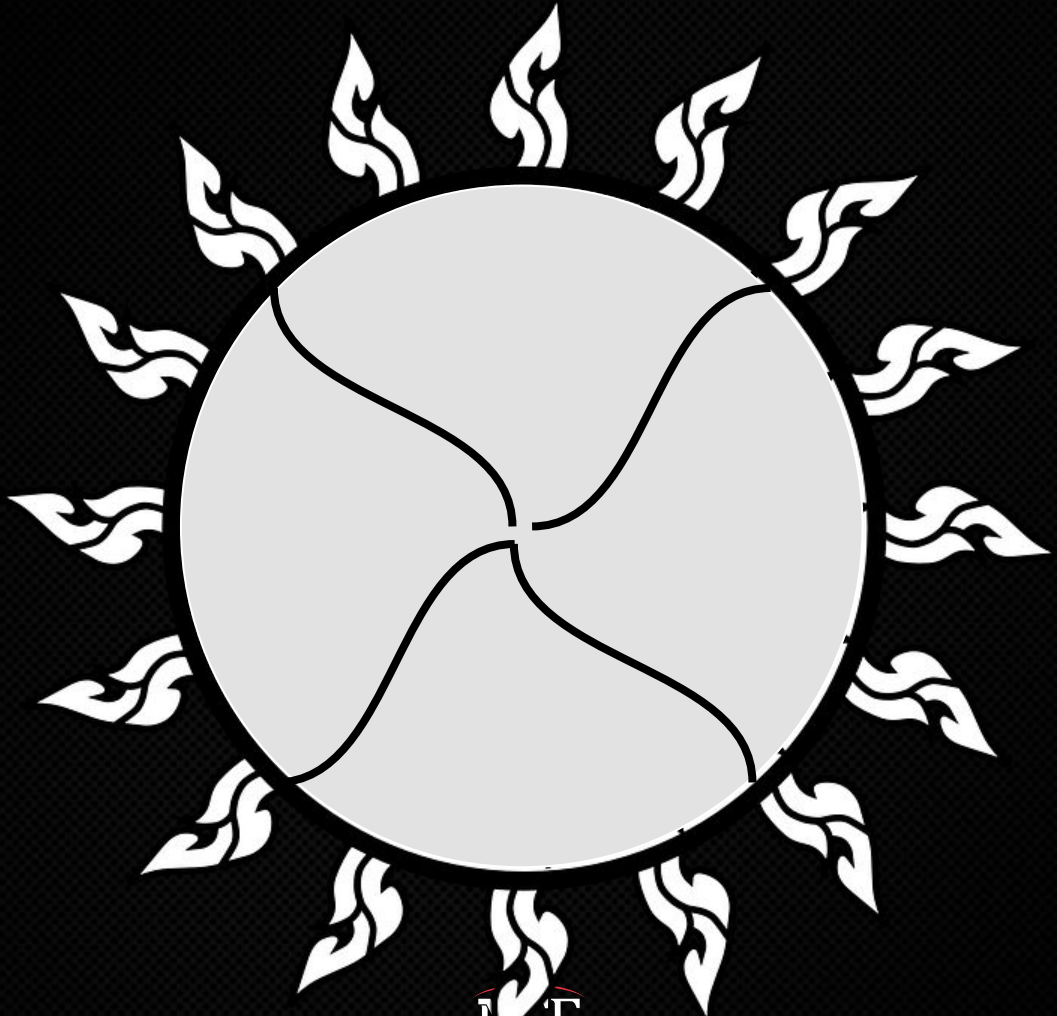


Your Course in LMS



LMS

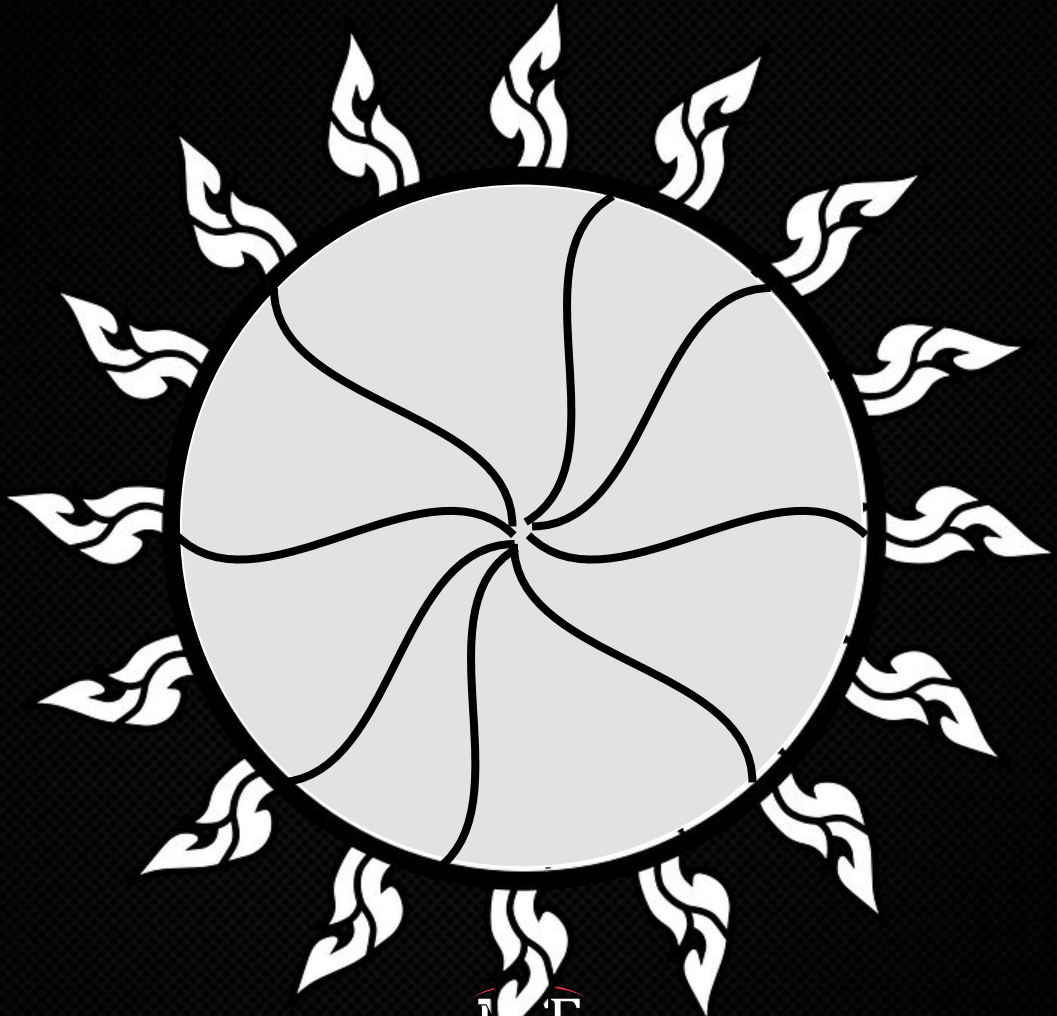
+ Instructional
Design by
Professors



LMS

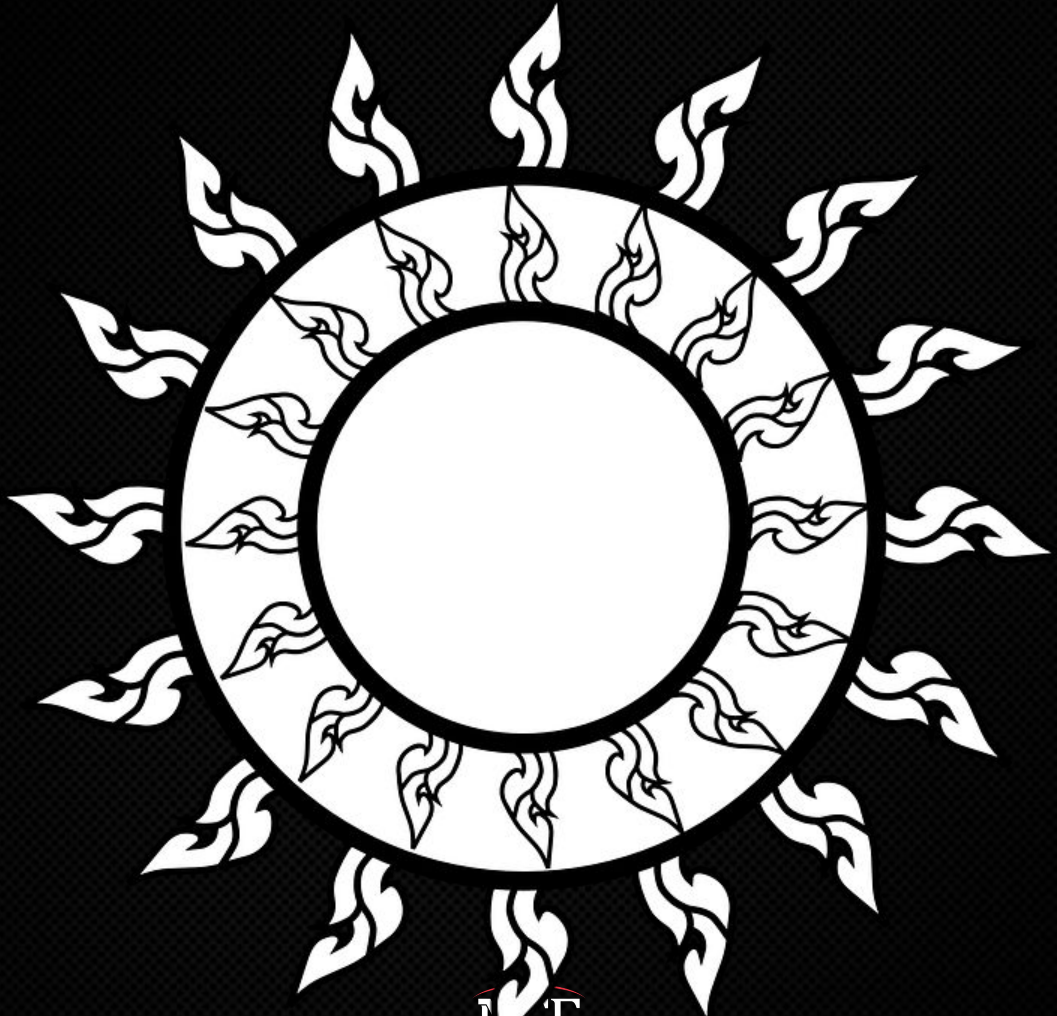
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LMS

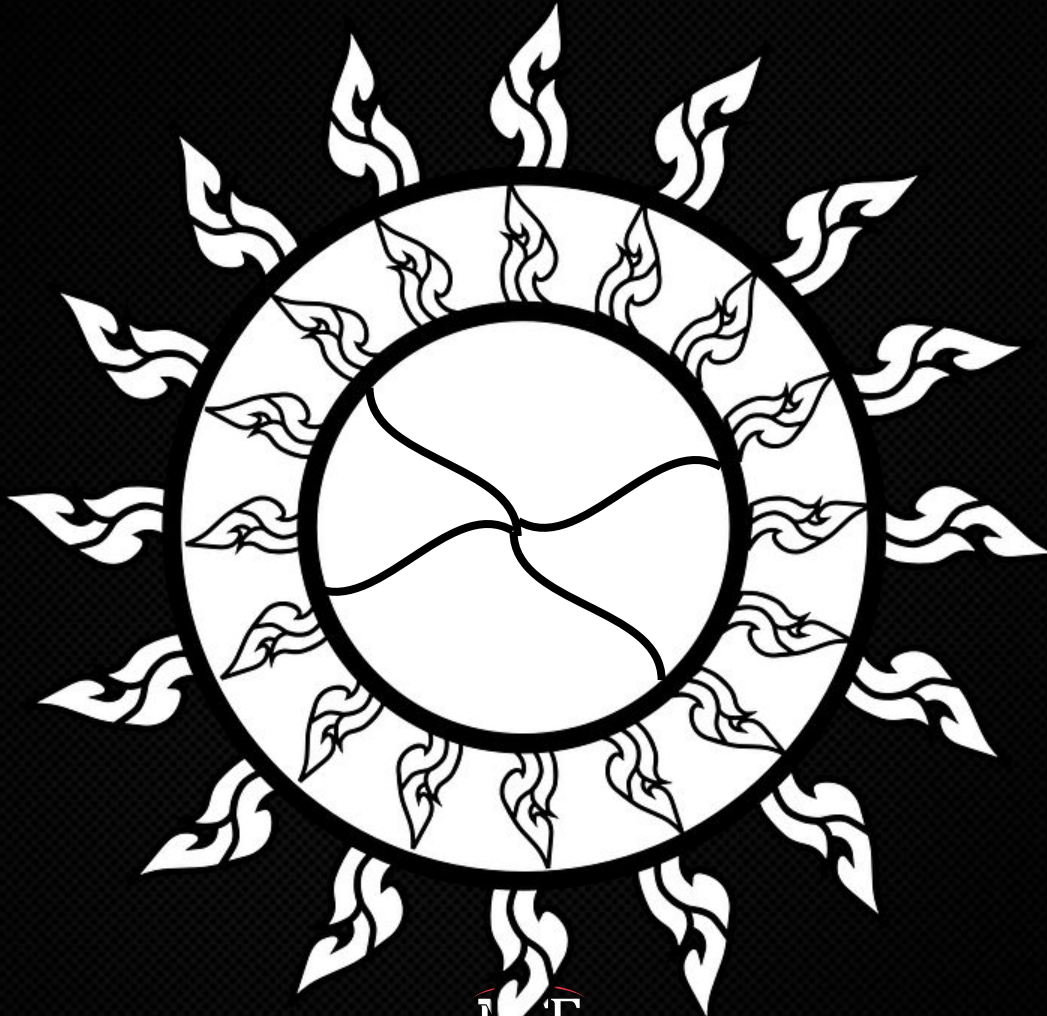
+ Digital and
Adaptive
Platforms



LMS

+ Digital and
Adaptive
Platforms

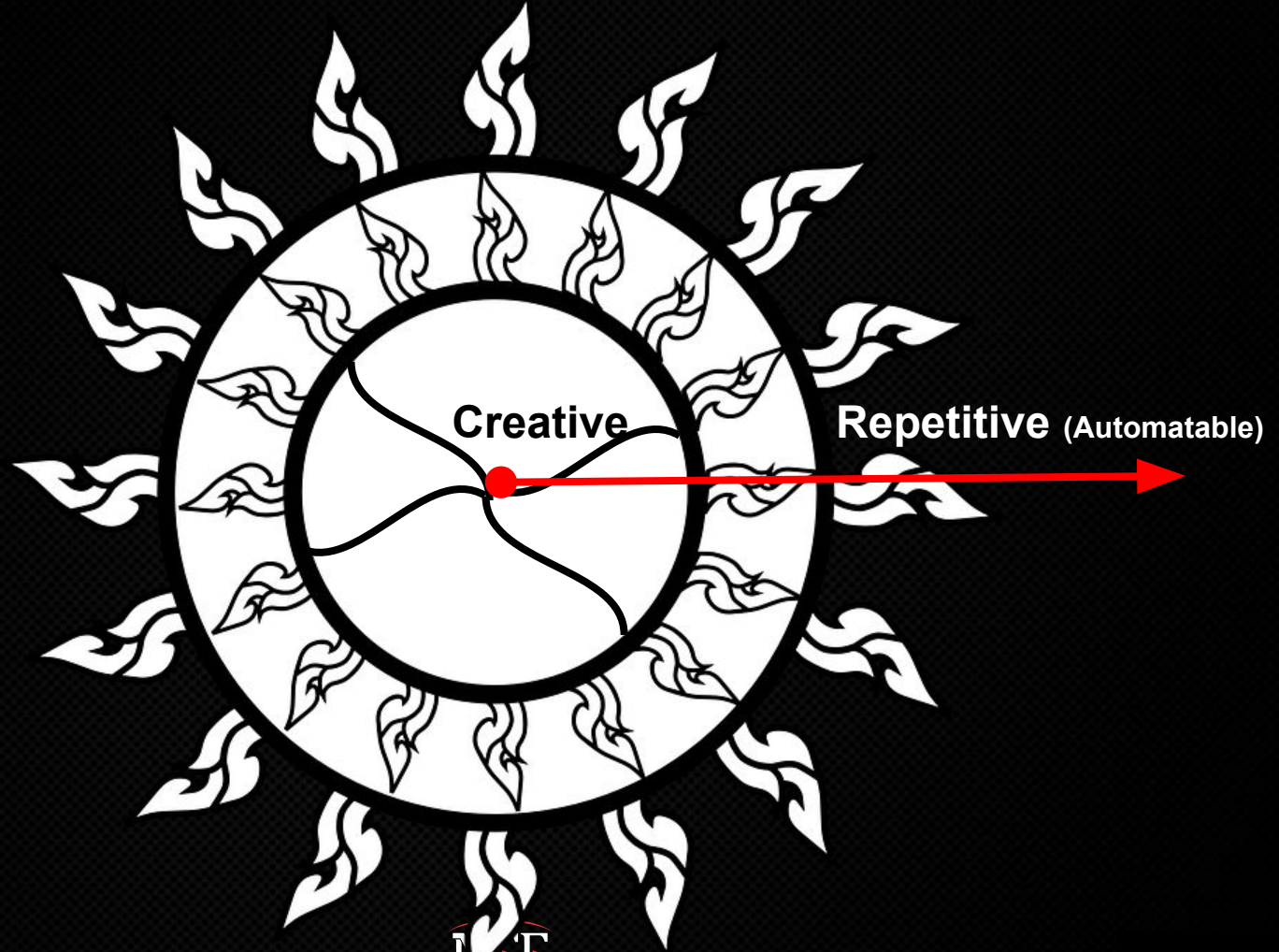
+ Instructional
Design by
Professors



LMS

+ Digital and Adaptive Platforms

+ Instructional Design by Professors



Creative

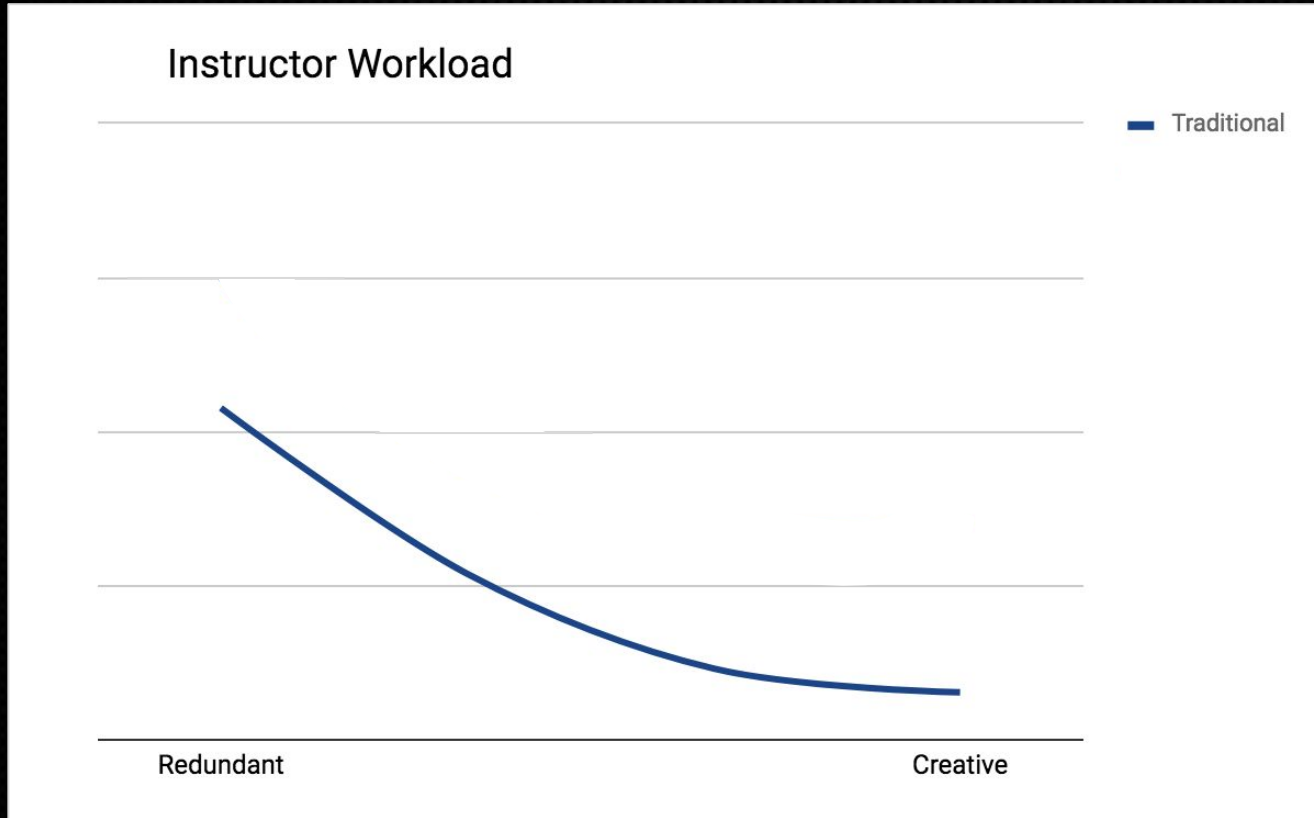
Repetitive (Automatable)



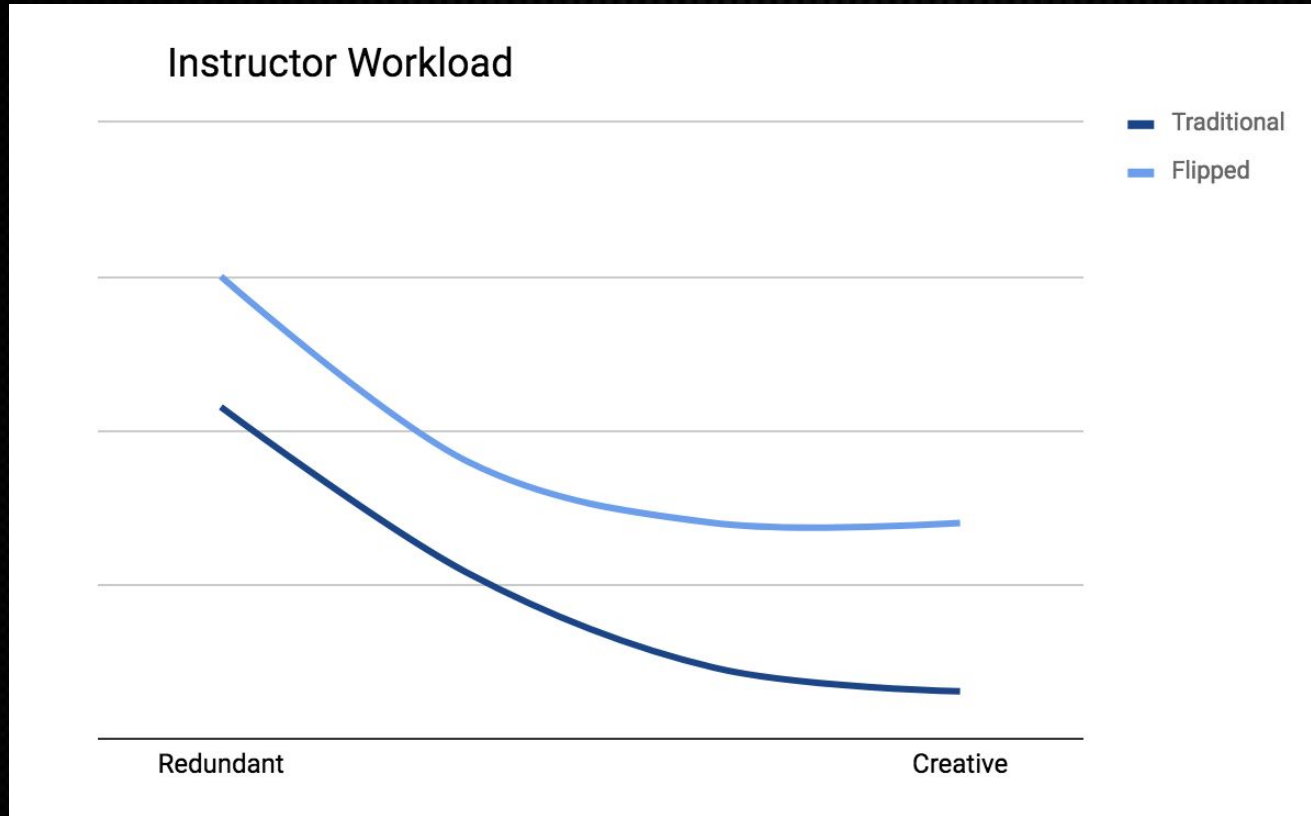
Advanced Content *Curation*
Authentic Problems, Cases, Projects
Individual/Group Feedback,
Mentoring,
Integration of Advanced EdTech

Basic Content Creation
Quizzes
Exams
Tests
Grading
Basic Feedback

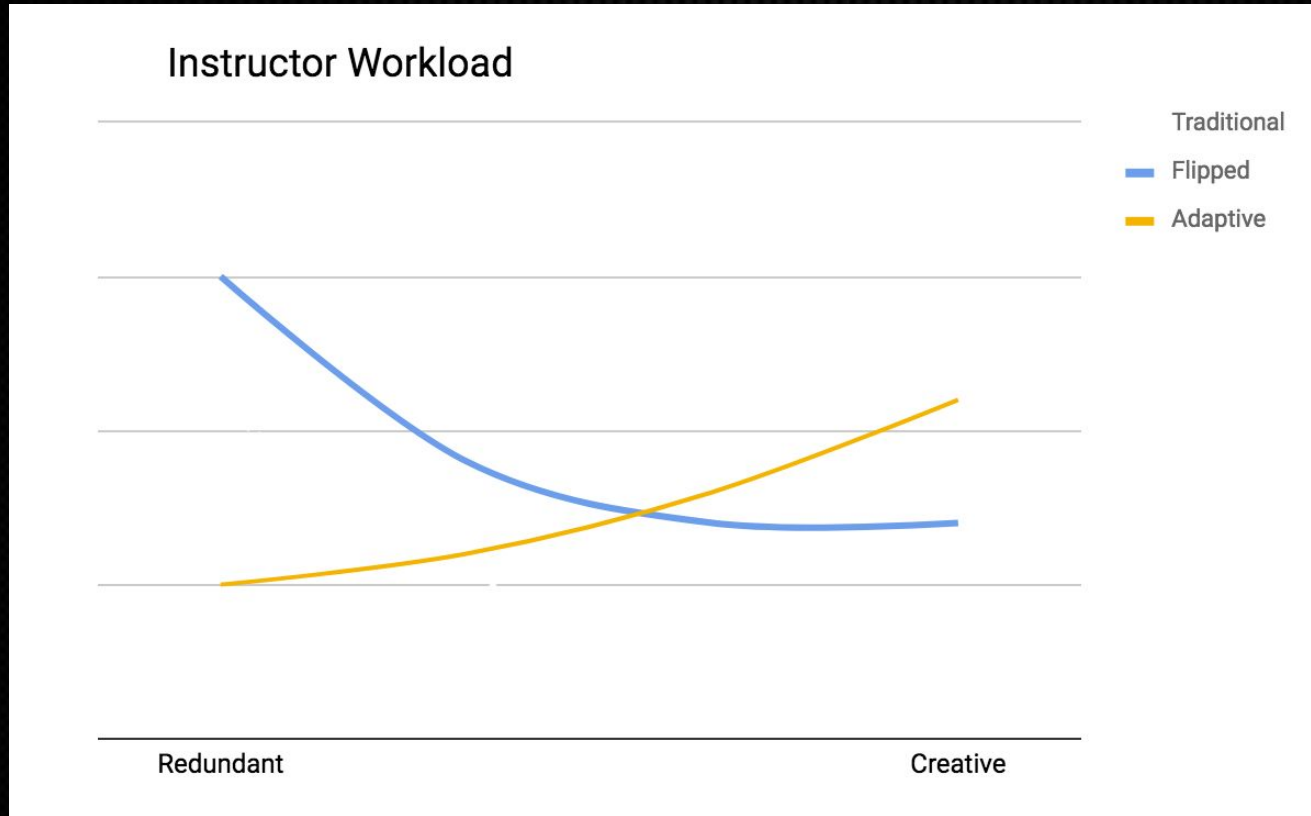
Changes in Instructor Workload



Changes in Instructor Workload



Changes in Instructor Workload



Background of MEF

MEF University, Non-Profit, Foundation University

Founded by **İbrahim Arıkan**, primarily a Physics Teacher, **creator of MEF Schools** and a successful businessman, the vision was set to be an **innovative university** in the way the education they provide.



(1941 - 2016)

MEF University

Proposed by founder **Rector Muhammed Şahin**, our University embraced *flipped approach* to learning and teaching as their global educational philosophy from day 1.

2012 MEF University was established

2013 Muhammed Hoca assigned as Rector

2014 Begin to accept students

2016 First book published

2018 First Bachelor Graduation.

2018 FLGI Summit, 187 Elements of FL

flglobal.org/elements/



MEF University

5 Faculties (15 Bachelors Program)

Engineering, Law, Design, Education, Business
and Social Sciences

2 Institutes (13 Masters Program)

200 instructors

3300 students.

We are 4, working at Research Center for
Learning and Teaching Practices (CELT)



Views of MEF Instructors on these Platforms

Prof. Dr. Can Fuat Delale, Calculus II



The platform boasts a rich library of questions.

*With quizzes and homework, the student is presented with a **randomly assigned question** that is categorized based on the level of difficulty. These are **graded automatically**. Another fine attribute of the system is that it allows students with an environment to **study on their own**.*

Prof. Dr. Semra Ağralı, Supply Chain Management



It is not the kind of thing you can assess the usefulness of, without utilizing it directly.

For instance, an online quiz is uploaded online on Monday night and they have time until Tuesday night to wrap it up. I have allowed them to go back, check on their own responses and make amendments. That is because I mostly used the quizzes as a tool to make them think “I couldn’t do this one, let me go back and rectify”, instead of assessing their level of understanding.

Students views from MEF



The course also helped me get my self-learning involved.

“When I make use of the platform to study for an exam, I can access plenty of **questions I had not tackled before.**” 2nd Year Student.

“The course also **helped me get my self-learning involved.** Special thanks to the instructor.” 3rd Year Student.

“The course structure was well-prepared. **I like to use e-books during class.**” 3rd year Student.

6 Characteristics To Increase Technology Adoption -Thorpe, L. (2015)

1 - Leadership from the top

2 - Institutional commitment and investment

3 - Robust and reliable infrastructure

4 - Effective and available support for academic staff

5 - Ability to demonstrate the benefits to the student and staff experience

6 - Evidence-based decision-making and a continuous cycle of improvement

1 - Leadership



2 - Commitment and Investment



Last Spring Semester

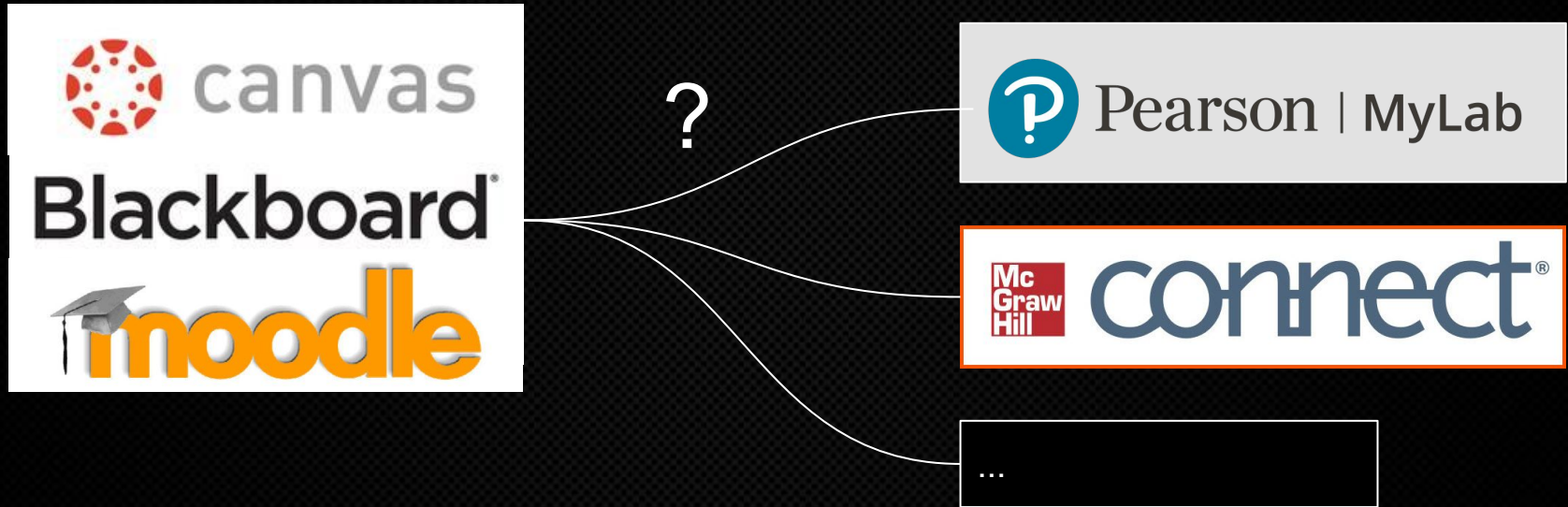
-Trial for free

This Semester onwards

-MEF pays for students

Estimate for this year
0.5 Million TL (100K €/€)

3 - Reliable Infrastructure



4- Support for Academic Staff



- 1-1 training **anytime anywhere**:
in office
in-class
during the day
afterwork
- Technical support:
Provide **Turnkey** LMS Course
- Publishers will employ
on-campus **part-time staff**
dedicated to platforms

5- Promote Benefits among Instructors and Students



Best Practice Meetings among Instructors

Each Instructor knows slightly different parts of the puzzle. Let them talk.

Instructors need to use it efficiently for students acceptance, more work is needed on this.

6- Continuous Improvement

Started with
Interviewing with Instructors and Students

Now
Less individual interviews,
More surveys, focus groups

2017-2018 SPRING (Free Trial)

18 Courses

870 Enrollments

2018-2019 FALL

38 Courses

2.200 Enrollments

Distribution of Enrolments:

ENGINEERING	70%
Business & Soc. Sci.	21%
EDUCATION	7%
MASTER	2%
Law	0%
Design	0%


Important Skill for Promoters of Educational Technology

Mediation



Understand needs and expectations of
Leaders/Directors/Decision Makers
Teachers/Trainers/Instructors/Mentors
Learners

Craft a common ground for people and
technology



Thanks for your attention!
Any Questions?

Flipped classroom struggles to catch on in Europe

Half of continental institutions are developing online learning programmes, survey says

October 23, 2018



By [Ellie Bothwell](#)

Twitter: [@elliebothwell](#)



It's time Europe caught up to flipped learning

The relative lack of flipped learning across Europe compared with the rest of the world could be due to misconceptions around what it actually is, say Caroline Fell Kurban and Muhammed Şahin

December 3, 2018



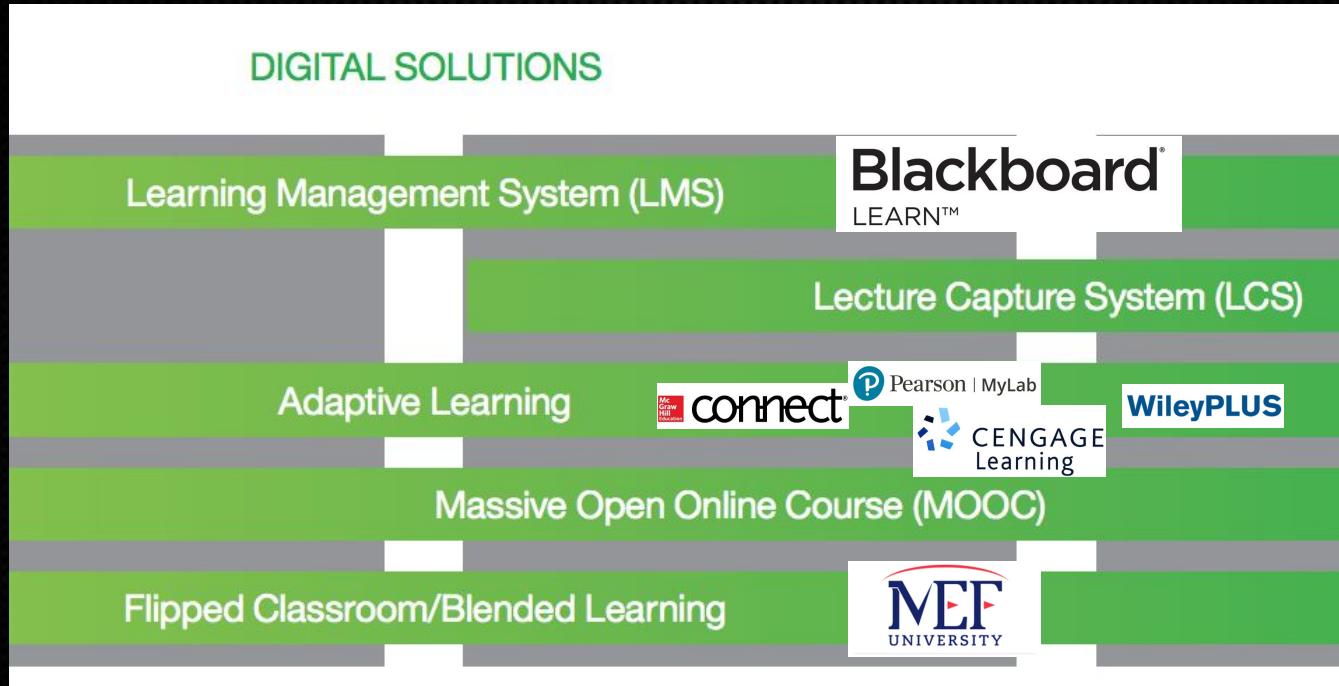
By [Muhammed Şahin](#)

Twitter: [@Muhammed_Sahin](#)

By [Caroline Fell Kurban](#)



Today's Digital Solutions for Education



Source: IBM, April 2016

More Resources

Infographics:

<https://observatory.itesm.mx/edu-trends-adaptive-learning-infographics/>

Are Robots the Future of Education? (2016)

<https://www.d2l.com/blog/robots-future-education/>

Adaptive Learning Analysis and Guidelines (2016)

<https://anastasiajakubow.wordpress.com/2016/11/03/adaptive-learning-analysis-and-guidelines/>

Times Higher Ed, Flipped learning Discussion

<https://www.timeshighereducation.com/news/flipped-classroom-struggles-catch-europe>

<https://www.timeshighereducation.com/blog/its-time-europe-caught-flipped-learning>