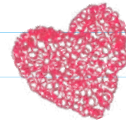
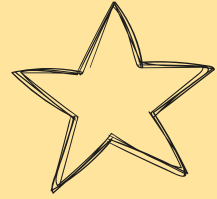


Management of Change for Technology-enhanced Flexible Learning: People, Process & Technologies

Prof. Dr. Meltem Huri Baturay

Atılım University
Director of Center for Teaching & Learning

Founding Leader at L^Earning & Teaching Innovations (LET-IN) R&D
Group



OUTLINE



01

**Technology-enhanced
Learning**



02

**Flexible
Learning**



03

**Change
Management**

The Paradigmatic Change in Education

- Economic and societal influences (Industrial economy to a knowledge economy)
 - The traditional model of instructionism (Papert, 1993) in higher education was not sufficient to educate today's students in a highly complex and competitive global society
- Studies on how the mind works, how people learn, and how they use knowledge (Sawyer, 2006)
- The role of the physical environment in enhancing the learning experience



Innovative Learning Approaches

- **Active learning**

- Provides opportunities for students to do more than just listen (Bonwell & Eison, 1991)

- **Social constructivism**

- Social learning theory by Bandura (1991) claim that students learn within a social context
- Learners without motivation will not be active and engaged in their learning

- **Connectivism**

- A process of learning that connects nodes and information sources (Siemens, 2004)
- Technology can enable some of these connections.
- Learning experience should include opportunities for students to interact and engage with fellow learners

- **Metacognition and Problem solving**

- The ability to understand one's own learning and how that learning occurred
- Students must read, write, discuss or be engaged in problem solving (Bonwell & Eison, 1991)

Innovative Learning Approaches

- Learners, presented with too simple material, do not increase their understanding of the subject matter
- There is much to be done beyond a stand-and-deliver style of teaching
- Students should be given an opportunity for active, collaborative and interactive learning to increase knowledge & retention (Bonwell & Eison, 1991)

01

TECHNOLOGY-ENHANCED LEARNING



Technology-enhanced Learning

Technology-enhanced learning is the use of technology in any teaching and learning situation, from face-to-face to fully online learning (Bates & Sangrà, 2011)

Technology-enhanced Learning

- Technology-enhanced learning is driven by three key factors (James, Krause, & Jennings, 2010; Walker et al., 2014)
 - Enhancing the quality of learning and teaching
 - Meeting student needs & expectations
 - Improving access to learning for students off campus in any context

Why Technology-enhanced Learning?

- Students in the 21 century are proficient with and expect some element of technology in their learning experience
- A positive student experience with better academic outcomes (Aldridge, 2013; Means et al., 2009; Paechter, Maier, & Macher, 2010).
 - Enhanced engagement
 - Flexible learning
 - Distance collaboration
 - Asynchronous communication
 - Enhanced practice and learning outcomes (Clark, 2011; Laurillard, 2007).

Technology-enhanced Learning

LMS

A learning management system

ONLINE COURSES

Online course offerings through distance education

E-ACTIVITIES

Individual activities that utilise a specific technology (e.g Web 2.0)

MOOCS

Massive Open Online Courses

02

FLEXIBLE LEARNING



Flexible Learning

- Learners are granted a variety of choices and take more responsibilities for their own learning (Collis, 1998)
- Offers learners rich learning choices from multiple dimensions (Goode et al., 2007).
- Applies a learner-centered constructivist approach (Lewis & Spencer, 1986)

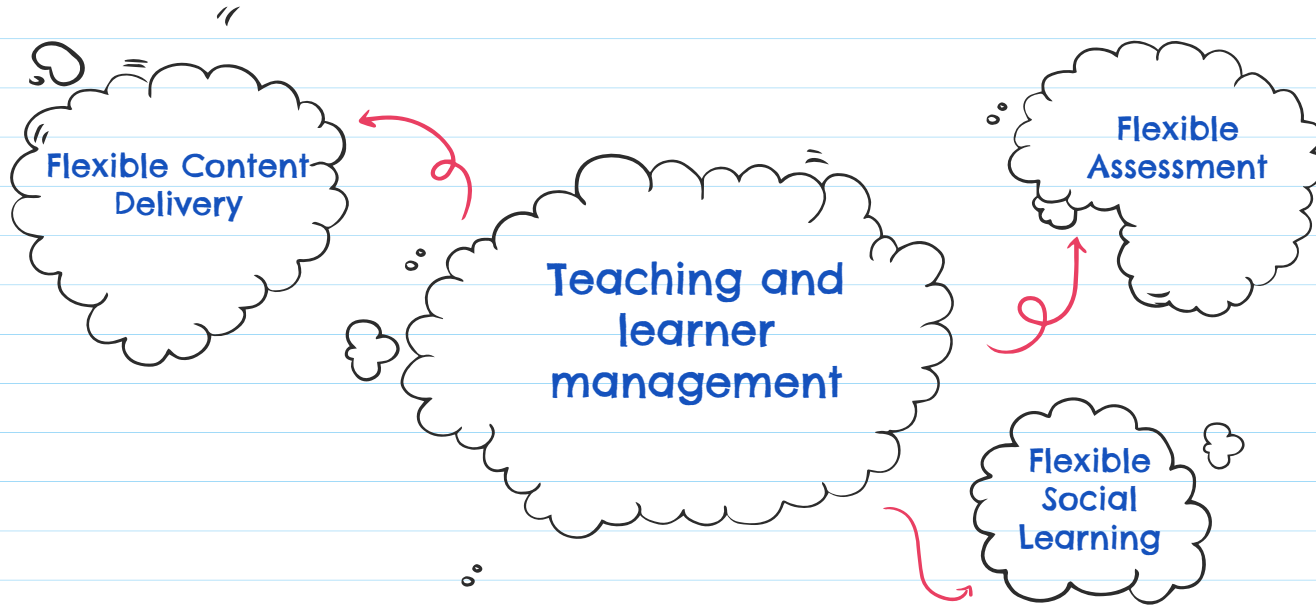


Flexible Learning

Learning choices cover:

- Class times
- Course content
- Instructional approach
- Learning resources and location
- Technology use
- Assessment type
- The requirements for completion dates and communication medium

Flexible Learning



Flexible Content Delivery

- When and where the learning occurs?
- What and how students will learn?
- How to deliver instruction?
- What strategies can be used?
- What types of learning resources?
- What technologies are useful for learning, teaching and administration?

Flexible Delivery Modes

Student has a choice in how and where to access learning materials according to his needs

F2F

On campus

ONLINE

Off campus
Computer-mediated
learning offers
mechanisms for it

BLENDED

A mix of online and
traditional means of learning



The Blended Model

- Blended learning aims to mix technology-enhanced learning with more traditional forms
 - A more student focused approach to teaching and learning
 - Flipped Classroom



Flexible Instruction

- Lecture
- Case Study
- Debate
- Discussion
- Student-led discovery
- Experiential Learning Activities
- Academic games or competition
- Brainstorming
- Drill and practice



Flexible Online Content Delivery



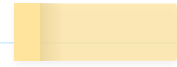
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Computer-based/assisted
learning/training



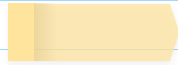
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Courseware



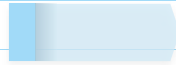
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M-learning



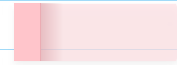
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Virtual Learning
Environments



5

Immersive Learning
Environments



6

MOOCs

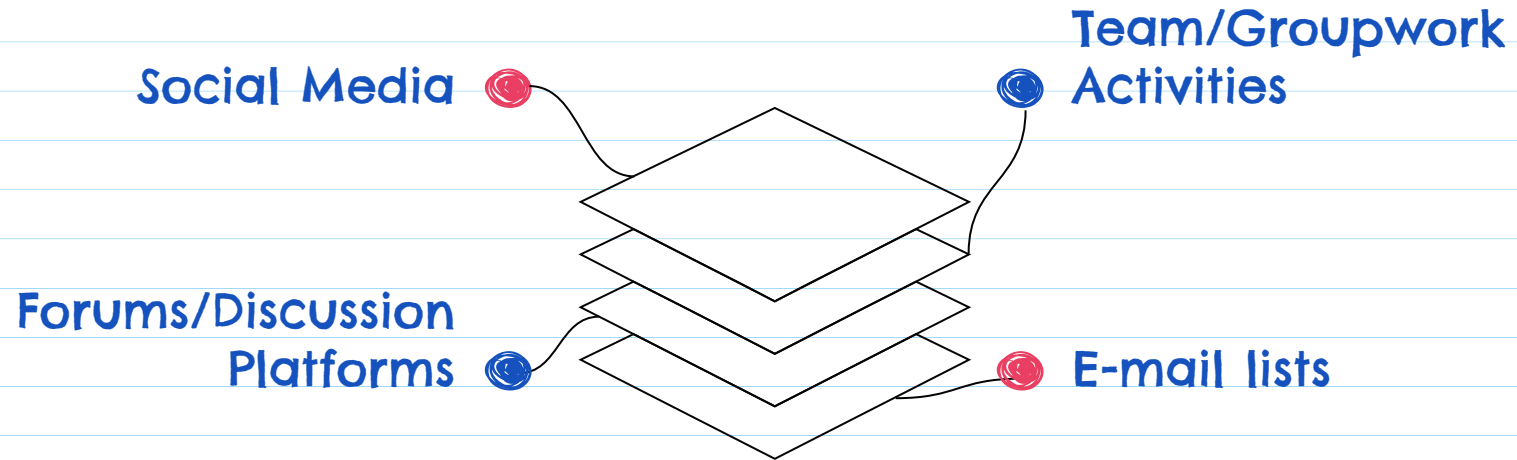
Flexible Assessment

- When and how to provide assessment and evaluation?
- What kind of supports and services should be provided for students and instructors?

Flexible Assessment

- Team projects, group work and peer assessment
- Adaptive/flexi-level assessment through computer-based testing
- According to students' progress, simpler or harder questions or assignments can be given
 - multiple-choice testing
 - e-portfolios
 - online project-based learning

Flexible Social Learning





03

CHANGE MANAGEMENT

Rogers' Theory of Diffusion of Innovations

- Diffusion of innovations is a theory that seeks to explain:
 - how
 - why
 - at what rate new ideas and technology spread
- Rogers (2003) argues that diffusion is the process by which an innovation is communicated over time among the participants in a social system.

Change Management for TEFL

01



PEOPLE

02



PROCESS

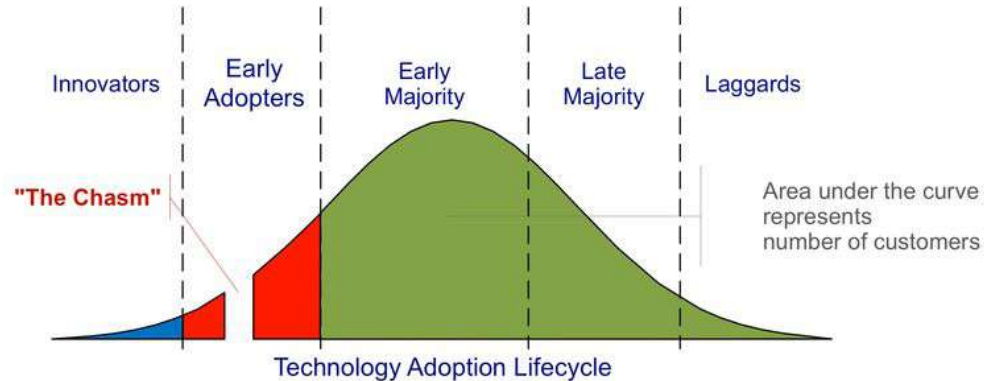
03



TECHNOLOGY

PEOPLE

- Change is difficult, and individuals accept it at different rates
- People can be divided into five categories in terms of how they accept change



PEOPLE

- Teaching faculty/teachers from diverse disciplines and with a variety of teaching experiences
- Students
- Administrators
- Experts in learning theories
- Experts in learning technologies
- Technical People



Categories of Adopters

01

Innovators

02

Early Adopters

03

Early Majority

04

Late Majority

05

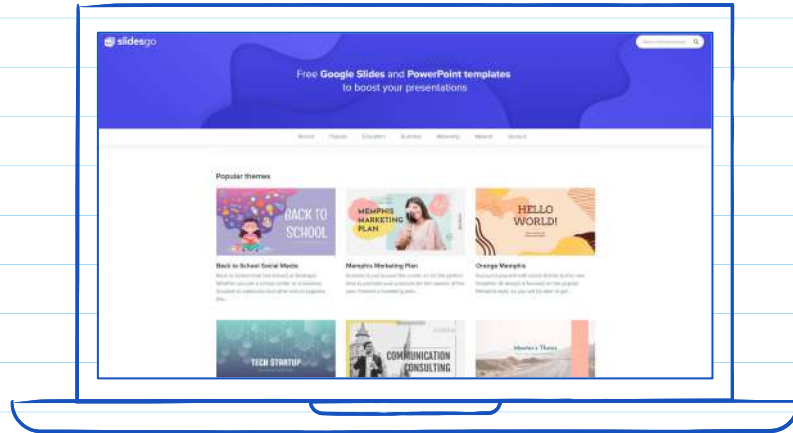
Laggards



INNOVATORS

- The first individuals to adopt an innovation
- They are willing to take risks
- Youngest in age
- Have the highest social class
- Have great financial lucidity, very social and have closest contact to scientific sources and interaction with other innovators (Rogers, 2003).

INNOVATORS

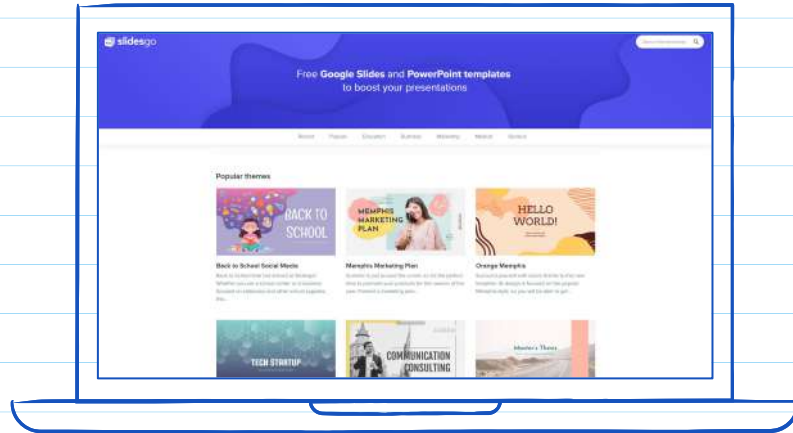


The innovators jump onboard easily—these are the people who wait in line for the newest phone or laptop.

EARLY ADOPTERS

- These are the second fastest individuals who adopt an innovation
- They have the opinion leadership among the other adopter categories.
- Typically younger in age
- Have a higher social status and more financial lucidity
- Advanced education, and are more socially compared to late adopters (Rogers, 2003)

EARLY ADOPTERS

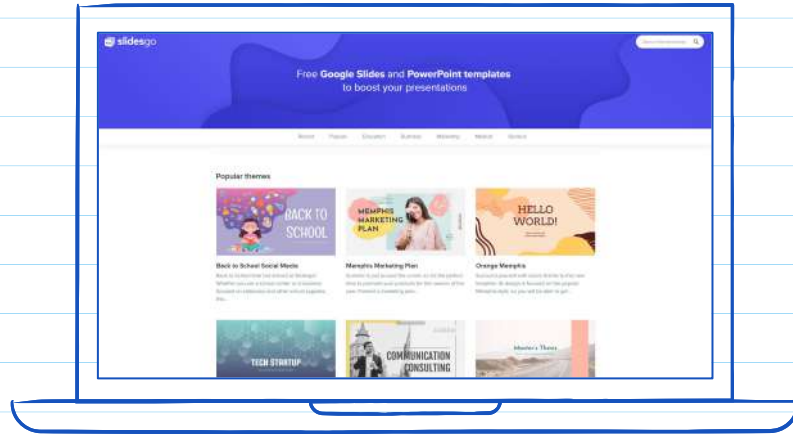


Early adopters, wait for a little more information but are relatively quick to embrace change

EARLY MAJORITY

- These individuals adopt an innovation after a varying degree of time
- This time of adoption is significantly longer than the innovators and early adopters
- Tend to be slower in the adoption process
- Have above average social status
- Contact with early adopters, and seldom hold positions of opinion leadership in a system (Rogers, 2003)

EARLY MAJORITY

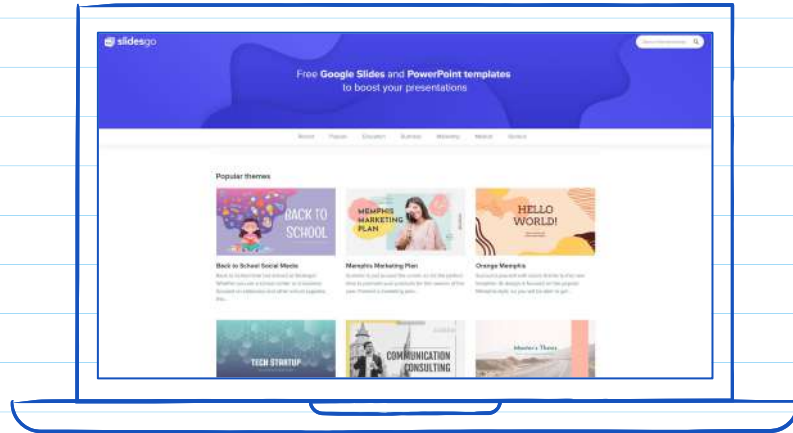


They wait to see how things will work out—they are generally skeptical of change—but they do join once they see an initiative is moving forward

LATE MAJORITY

- Will adopt an innovation after the average member of the society
- Approach an innovation with a high degree of skepticism and after the majority of society has adopted the innovation
- Late Majority are typically skeptical about an innovation have below average social status
- Very little financial lucidity and opinion leadership, in contact with others in late majority and early majority

LATE MAJORITY

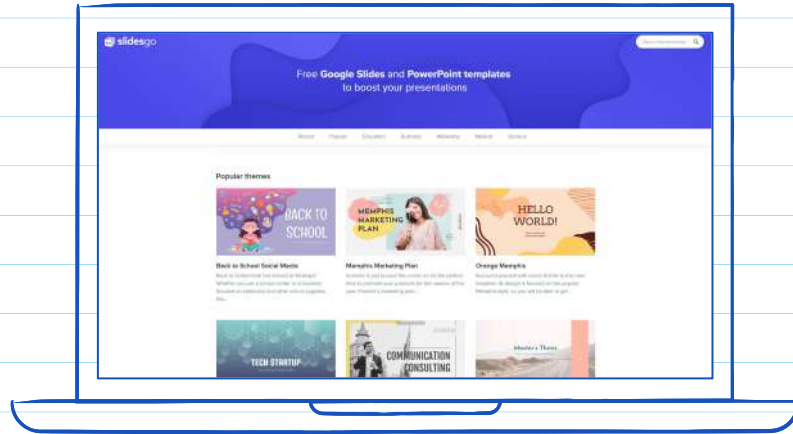


They wait to see how things will work out—they are generally skeptical of change—but they do join once they see an initiative is moving forward

LAGGARDS

- Individuals in this category are the last to adopt an innovation
- Individuals in this category show little to no opinion leadership
- Typically have an aversion to change-agents and tend to be advanced in age
- Tend to be focused on “traditions”
- Likely to have lowest social status and lowest financial fluidity,
- Be oldest of all other adopters, in contact with only family and close friends
- Very little to no opinion leadership

LAGGARDS



These people are very
skeptical of change
and willing to fight to
stop it

PROCESS

- Diffusion of innovations theory identifies two broad categories of adoption decisions:
 - Collective decisions, whereby the community of interest comes to consensus through some means
 - Institutions of higher education, possess mechanisms for collective decision-making, such as faculty senates and other such institutional committees
 - Authority decisions, whereby the adoption decision is imposed from the top down

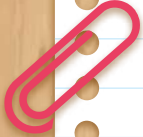
Innovation-decision Process



Innovation-decision Process

- **Knowledge** – represents exposure to the new idea
- **Persuasion** – the individual is interested in the idea and seeks information/details
- **Decision** – the individual weighs up the value of the idea and decides whether to adopt or reject it
- **Implementation** – the individual takes up the idea at varying rates depending on the situation and may seek out further information
- **Confirmation** – the individual resolves their decision to continuing the innovation and may use it

TECHNOLOGIES

- 
- There are bunch of ideas for leveraging technology to kick your lessons up
 - There should be a reason why you use a technology
 - Incorporate Student Input & Gather Feedback
 - Gamify
 - Let Students Create
 - Get Interactive
 - Have Students Collaborate
 - Project Based Learning
 - Simulations
 - Bring in a Guest or Two

Challenges with Technology-enhanced Flexible Learning

● Students

- Confusion around deciding what, and where and how to study from
- Information overload – with too many resources to handle
- A new challenge of choosing a suitable location – at the institution, at home, at work, or on the move

● Teachers

- To provide a wide range of material tailored to different learning styles and contexts with new media

● Educational Institutions

- How to develop quality processes and support systems to plan for and cope with flexible learning

Challenges with Technology-enhanced Flexible Learning

- Traditional academic workload models
- Academic value of TEL approaches
 - Misconceptions
 - Concerns
 - Reluctancy
 - Negative perceptions
 - Demographics (age)

Barriers to Technology-enhanced Flexible Learning



- Cost
- Intellectual property issues
- Custom and practice
- Teachers' lack of knowledge & skills
- Lack of time
- Lack of funding and University and/or department culture (Walker et al., 2014)
- Lack of reward & recognition
- Lack of hardware and software
- Lack of organizational support

Development of Flexible Learning Strategic Plans

- Teachers who are aware of the appropriate uses of technology and how students can benefit from that use are more likely to adopt technology as an instructional tool (Parisot, 1995)
- Diffusion of technology may be lessened if technical training necessary is not provided for teachers
- Teachers must be included at all levels of the decision-making process of integrating technology into the educational system.

Development of Flexible Learning Strategic Plans

- The institution must give teachers the time and incentive to learn new technologies and incorporate them into the instructional environment.
- Faculty who are aware of the appropriate uses of technology and how students can benefit from that use are more likely to adopt technology as an instructional tool (Parisot, 1995)

Development of Flexible Learning Strategic Plans

- Dedicated workforce and effective management of change are necessary in organizations. There are 6 methods in overcoming resistance to change for school administrators. These are:
 - Education and communication
 - Participation and involvement
 - Facilitation and support
 - Negotiation and agreement
 - Manipulation and co-optation
 - Explicit and implicit coercion

Proposed Strategies for Educational Institutions

- There are strategies to be adopted and applied for implementing qualified technology-enhanced flexible learning:
 - Enable higher-level institutes and departments to accept more responsibility for the instructional activities
 - Provide faculty with more information about the programs and activities
 - Provide strong incentives for faculty to participate
 - Improve training and instructional support for faculty
 - Build a stronger education faculty community
 - Encourage more scholarship and research for technology-enhanced flexible learning
 - Dedicate budgets for the technological infrastructure, support and training mechanisms, and appropriate rewards and recognition systems for staff involved in the programs

Proposed Strategies for Educational Institutions

- More time to develop TEL initiatives
 - The shift from traditional methodologies to TEL is not a simple cut and paste activity
 - redevelopment time to ensure the application of appropriate pedagogy and good practice should be at least 6 months
- More time to implement TEL strategies
 - using TEL strategies required more time and effort than either face-to-face or purely online teaching
 - the break-even time for TEL research and development is a minimum of 3 years alone for effective return on investment and value for money

Proposed Strategies for Educational Institutions

- The successful adoption of technology-enhanced learning approach requires:
 - Creation of clear institutional direction and policy
 - Establishment of a project management
 - Creation of an innovation fund to provide the financial support and incentives to faculty and departments
 - Strategic selection of prototype projects that prove to be exceptionally successful exemplars of effective flexible learning
 - Systematic evaluation of satisfaction and success of the teaching learning, technology, and administration of new course
 - Create a group to address issues, challenges, and opportunities as well as communicate and recommend new directions for the higher education community

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Thanks for listening

Prof. Dr. Meltem Huri Baturay

Founding Leader at LEarning & Teaching INnovations Research & Development Group - LET-IN

Atılım University - Director of Center for Teaching & Learning

e-mails:

meltem.baturay@atilim.edu.tr

mhbaturay@gmail.com



@meltem.baturay

@letinrd