Yükseköğretimde Öğretme ve Öğrenme Süreçleri Yönelimleri

Prof. Dr. Nuray Senemoğlu
Hacettepe Üniversitesi
Eğitim Programları ve Öğretim Anabilim Dalı

n.senem@hacettepe.edu.tr
profdrnuray@gmail.com
Cell: 0 533 224 64 20

Burada balık olduğuna dair pek de bir işaret yok …

Çalıştay Hedefleri

Bu çalışmanın sonunda katılımcıların aşağıdaki hedeflere ulaşması beklenmektedir:

1. ***Yükseköğretimde*** *'öğretme'nin* geçirdiği **evrimi** anlayabilme

2. Yükseköğretimde ***eski ve yeni*** öğretme yönelimlerini karşılaştırabilme

3. ***Öğrenmeyi*** etkileyen ***değişkenleri*** ve ***tam öğrenme modelini*** kavrayabilme

4. Öğrenmenin oluşumunu ***bilgiyi işleme modeli*** ve ***beyin araştırmalarına*** dayalı olarak açıklayabilme.

5. ***Öğrenici dostu öğretimi düzenleyebilme (Yapılandırmacı)***
- *Öğrenmenin oluşumuna göre öğretimi düzenleyebilme*
- *Durumda öğrenmeyi işe koşabilme*
- *Probleme Dayalı Öğrenmeyi gerçekleştirebilme*
- *Proje yoluyla öğrenme ilkelerini uygulayabilme*

Learners Perceptions about Faculties' Instructional Activities in Maths and Science

f, %, $\bar{X}$	None (1)		Rarely (2)		Sometimes (3)		Often (4)		Always (5)		N=47 $\bar{X}$
AT THE BEGINNING OF THE COURSES	f	%	f	%	f	%	f	%	f	%	
1. At the beginning of the semester, providing and informing students with syllabus which includes objectives of course, construct of content, teaching methods, and evaluation type and time	27	57	10	21	5	11	3	6	2	4	1,8
2. At the beginning of the semester, providing students with only content list for the course	**19**	**40**	**10**	**21**	**11**	**23**	**5**	**11**	**2**	**4**	**2,2**
3. At the beginning of the semester, providing list of the books to be read	4	9	8	17	3	6	13	28	19	40	3,7
DURING TEACHING AND LEARNING PROCESS											
4. Attracting learners' attention to the subject matter with by concrete examples, anecdotes, real-life situations etc.	13	28	14	30	12	26	4	9	4	9	2,4
5. Starting the lesson directly after entering the class	**1**	**2**	**6**	**13**	**3**	**6**	**24**	**51**	**13**	**28**	**3,9**
6. Increasing learners' curiosity to subject matter	15	32	16	34	9	19	5	11	2	4	2,2
7. Explaining the students what learning objectives to be achieved	**24**	**51**	**16**	**34**	**4**	**9**	**2**	**4**	**1**	**2**	**1,7**
8. Explaining the students why they are going to learn this subject; where they will be able to use this subject-matter	21	45	11	23	9	19	6	13	-	-	2,0
9. Helping the students to relate new learning experiences to previous ones	**5**	**11**	**13**	**28**	**18**	**38**	**10**	**21**	**1**	**2**	**2,8**
10. Guiding learners to use inquiry learning	15	32	13	28	10	21	8	17	1	2	2,3
11. Guiding learners to use discovery learning	**24**	**51**	**7**	**15**	**9**	**19**	**6**	**13**	**1**	**2**	**2,0**
12. Giving opportunity for learners doing self-evaluation and fostering self-development	23	49	10	21	10	21	3	6	1	2	1,7
13. Facilitating learners how to use learning strategies effectively	**21**	**45**	**16**	**34**	**5**	**11**	**4**	**9**	**1**	**2**	**1,9**
14. Guiding learners to be creative and critical	16	34	13	28	12	26	3	6	3	6	2,2
15. Directing learners having higher order thinking skills and produce knowledge.	**15**	**32**	**15**	**32**	**7**	**15**	**4**	**9**	**6**	**13**	**2,4**
16. Delivering lessons lecture based	6	13	6	13	4	9	10	21	21	45	3,7
17. Guiding learners to learn by cooperative learning	**17**	**36**	**15**	**32**	**8**	**17**	**5**	**11**	**2**	**4**	**2,1**
18. Explaining students abstracts concepts, symbols, formulas, facts and events by concrete examples	10	21	15	32	10	21	9	19	3	6	2,6
19. Using materials and tools effectively to provide effective learning for learners	**15**	**32**	**10**	**21**	**7**	**15**	**10**	**21**	**5**	**11**	**2,6**
20. Providing equal interaction among students	9	19	8	17	5	11	12	26	13	28	3,3
21. Treating students fairly.	**4**	**9**	**6**	**13**	**9**	**19**	**15**	**32**	**13**	**28**	**3,6**

X= 1 - 1.8 none; X= 1.8 - 2.6 rarely; X= 2.6 - 3.4 sometimes; X= 3.4 - 4.2 often; X= 4.2 – 5.0 always

Yükseköğretimde "öğretme"nin Tarihçesi

Amerikan yükseköğretimi birbirleriyle de örtüşen üç aşama geçirmiştir (Johnson et al, 1991).

BİRİNCİ AŞAMA

Koloni döneminde öğretim, öğrencileri sağlam kişilikli **vatandaş** oluşturmaya; **sivil ve dini liderler** olarak yetiştirmeye odaklanmıştır.

- Öğretme, papazlık kadar ***kutsal bir görev*** olarak görülmüştür.
- Öğrencilerin, **entelektüel, ahlaki ve manevi** gelişimleri ***öğretim üyelerine emanet*** edilmiştir.
- Öğretim üyeleri gerek sınıf içinde gerekse sınıf dışında ***eğitim rehberleri*** olarak görülmüştür.

İKİNCİ AŞAMA: HİZMET

Ulusun inşasına yardım etmek üzere **topluma hizmet** odaklı aşamadır.

- Hizmet yönelimli vatansever yetiştirmek esastır
- Profesörlerden beklentiler
  - ***demokrasi***, üretim ve ***tarımı*** geliştirecek bilgiyi yaymak
  - Söz konusu bilgiyi üretecek ***uygulamalı araştırmalar*** yapmak .

PHASE THREE: BASIC RESEARCH

The third phase began in the early 1900's

- Focused on the ***advancement of knowledge*** through ***research***
- Faculty were ***hired to teach*** but evaluated as ***published researchers***,
- Conducting ***basic research*** and ***publishing results*** in ***reputable journals*** were the highest status and the ***most rewarded responsibility*** of faculties.

In more recent years:

- Faculty are expected to blend all three responsibilities; **teaching**, ***service***, and **research**
- However, Research and Publication dominate
- ***Theory*** surely ***leads to practice***, but practice also leads to theory. And

teaching can shape both research and practice.

The deemphasis of teaching is based partially on misperception:

- Teaching is a routine function
- Anyone who knows the subject can teach
- This view labelled as the **old paradigm**

LEARNER ACTIVITY:

BLIND HAND

LEARNER ACTIVITY:

Now, what do you think in which phase the Turkish Universities are and why?

OLD PARADIGM:

The old paradigm of ***college teaching*** is based on **John Locke's** assumption that the ***untrained student mind*** is ***like a blank sheet*** of paper waiting for the instructor to write on it.

In accordance with ***assumptions old paradigm***, Faculty implements following principles in teaching:

1. **Transferring knowledge** from faculty to students
   - Faculty's job is to give it
   - Student's job is to get it (to memorize and then recall)

2. Filling passive empty vessels with knowledge

3. Conducting education within context of ***impersonal relationships among students*** and between faculty and students: ***Based on*** the ***Taylor model*** of ***industrial organizations***. ***Students*** and ***faculties*** are ***perceived*** as parts of ***"education machine"***

He comes and goes to the classroom like a robot

4. Maintaining ***competitive organizational*** structure in which ***students*** work to ***outperform*** their ***classmates*** and ***faculty*** work to outperform their ***colleagues***

5. ***Classifying*** students with ***their grade***

6. **Anyone** who have PhD in the field, **they can teach** without ***training*** to do so.

(He should go through it step by step instead of skipping around the lesson)

Students often do not learn what faculty think they are teaching by the old paradigm

LEARNER ACTIVITY:

Changing Sculpture

*"**It is time** for us to **reaffirm** that **education-** that is, **teaching** all its forms-is the **primary task** of higher education"*

(Stanford University president Donald Kennedy).

College teaching is changing

- We are dropping the **old paradigm** of teaching and
- adopting **NEW PARADIGM** based on ***theory*** and ***research*** that has clear **applications *to* instruction.**

SOME of the PRINCIPLES of NEW PARADIGM

1. Knowledge is ***constructed***, ***discovered***, and ***extended*** by ***students***
2. ***Students actively*** construct their ***own knowledge***
   - ***Learning*** is conceived of as something a learner does, ***not something*** that is ***done to learner.***

Everything was just like throw up on the chalkboard, and you had to write it down.
If you didn't understand that was your problem.

- **Students** do not ***passively accept*** knowledge from the ***instructor*** or ***curriculum.***
- Students ***activate their existing cognitive structures*** and ***construct new*** ones to subsome the new input.

Everybody slept during the lesson.
He was speaking in a monotone. He talked himself and listened

LEARNER ACTIVITY:

What do you think what the sentence is describing this picture?

Despite the **academic advantages** of **involving students in *active discussions*, many instructors do not do so.**

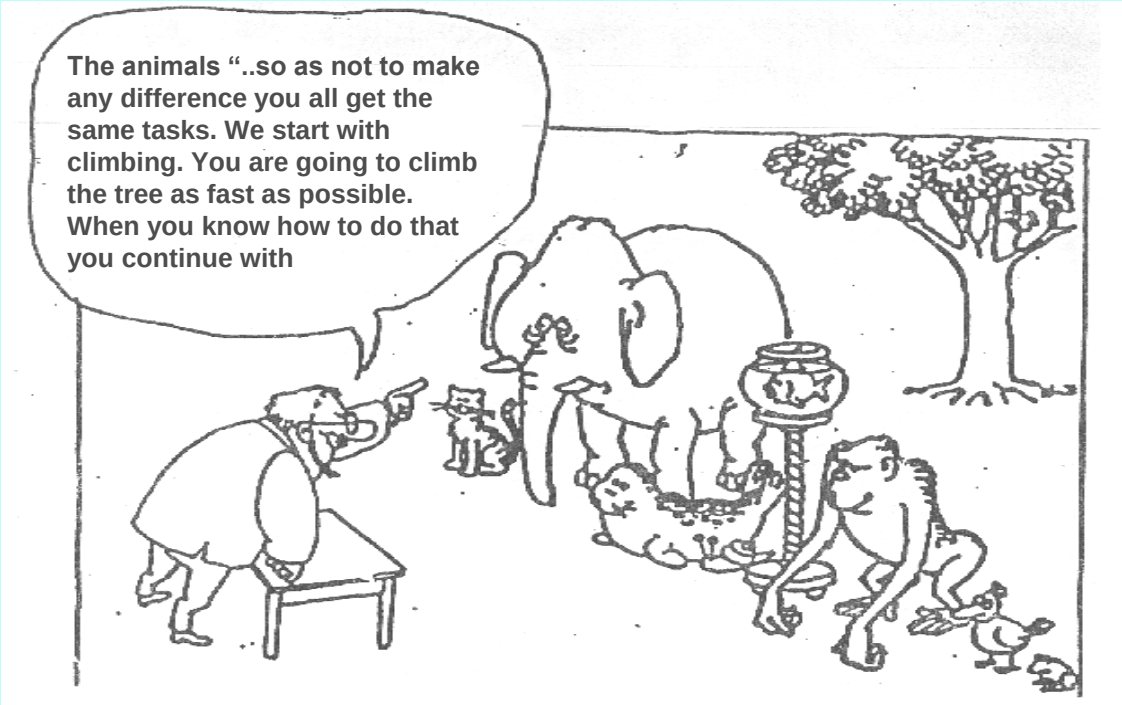
- Probably the **most frequent** strategy used is **whole-class discussions.**
- In this case, Frequently **many of the students** have a role as a ***"spectator"*** (Bames, 1980).
- **Karp** & **Yoles** (1988) documented that ***in the classes*** of ***less than 40 students***, **four** or **five** students **accounted for 75 %** of all interactions

- ***Stones*** (1970) ***surveyed*** over ***1000 college students*** and ***found*** that

  60 % of students stated that **a large number of classmates** hesitated **to ask questions**, even instructor encouraged them to do so.

3. Faculty efforts aimed at developing students competencies and talents:

- **The new paradigm** develops **students competencies and talents** under the assumption that with effort and education they can be improved.
- **Quality control in American industry** is chancing. New focus is on **curing the cause of defeats** rather than to continue to reject defective parts.
- **Likewise, academia** need to **focus its attention on identifying** the source of its ***"failures."***



A Clear Image

Please quickly answer the following question:

- The one word that describes me best is
- What I value most in life is
- What motivates me is
- What I like most about my job is
- Money, time, and responsibility aside, I would rather be doing _____ more than anything else
- If I could meet two great people who inspire me most they would be

Under the New Paradigm;

a. ***Student*** performance is ***monitored*** and ***when student*** FALTERS, ***help and support*** is provided and

b. When a ***student fails***, the educational ***practices*** are ***examined*** and ***modified to prevent*** such a ***failure occurring*** again ***in the future***.

- **Shortly, *The old paradigm*** controls quality through emphasizing ***selection*** and ***weeding-out processes.***
- **The new paradigm** controls quality through continually ***refining the educational process*** to ***cultivate*** and ***develop*** students' competencies and talents
- **Under the new paradigm** colleges **add value** by ***developing students' potential*** and ***transforming students*** into more ***knowledgeable*** *and* ***committed individuals***

4. ***Education*** is **a personal transaction** among students and between faculty and students as they work together.

- All education is ***social process*** that cannot occur without ***interpersonal interaction***
- Learning is a **personal** but **social process** that occurs through **interpersonal interaction** within a ***cooperative context***
- ***Individuals***, working together, ***construct shared knowledge*** and understanding.

- Long term, **persistent efforts** to achieve come **from the heart**, not the head and **the heart** is nurtured through relationships with peers and faculty.
- **Love of Learning** and **Love of each other** are what inspire students to commit more and more of their energy **to their studies**.
- **Caring and committed relationships** provide meaning and purpose to Learning.
- **Caring and committed** relationships **contribute** to achievement and productivity, physical health, psychological health, and constructive management of stress.

How to develop students' commitment to learning;

Students' commitment to learning nurtured by their knowing that

- their **contributions** to **classmates learning**, and
- their **own progress** in gaining knowledge and expertise, are perceived ***recognized*** *appreciated* and ***collaborated*** by their **classmates** and **faculty**.

5. All of before mentioned can only take place within ***cooperative context.***

6. ***Teaching*** is a ***complex application of theory*** and ***research*** that **requires considerable instructor training** and **continuous refinement of skills** and **procedures.**

SHORTLY;

- New paradigm of ***teaching is to help students construct their knowledge*** in an ***active way*** while ***working cooperatively*** with classmates ***so that students' talents*** and ***competencies*** are ***developed***.
- Achieving these aims require instructors training continuously in education.

Comparison of Old and New Paradigms of Teaching

	Old Paradigm	New Paradigm
Knowledge	Transferred from Faculty to Students	Jointly Constructed by Students and Faculty
Students	Passive vessel to be failed by Faculty's knowledge	Active constructor, Discoverer, Transformer of Own Knowledge
Faculty purpose	Classify and Sort Students	Develop Students' Competencies and Talents
Relationships	Impersonal Relationships among Students and between Students and Faculty	Personal Transaction among Students and Between Faculty and Students
Context	Faculty and Students Competitive / Individualistic	Cooperative Learning in Classroom and Cooperative Teams Among Faculty
Assumption	An Expert can Teach	Teaching is Complex and Requires Considerable Training

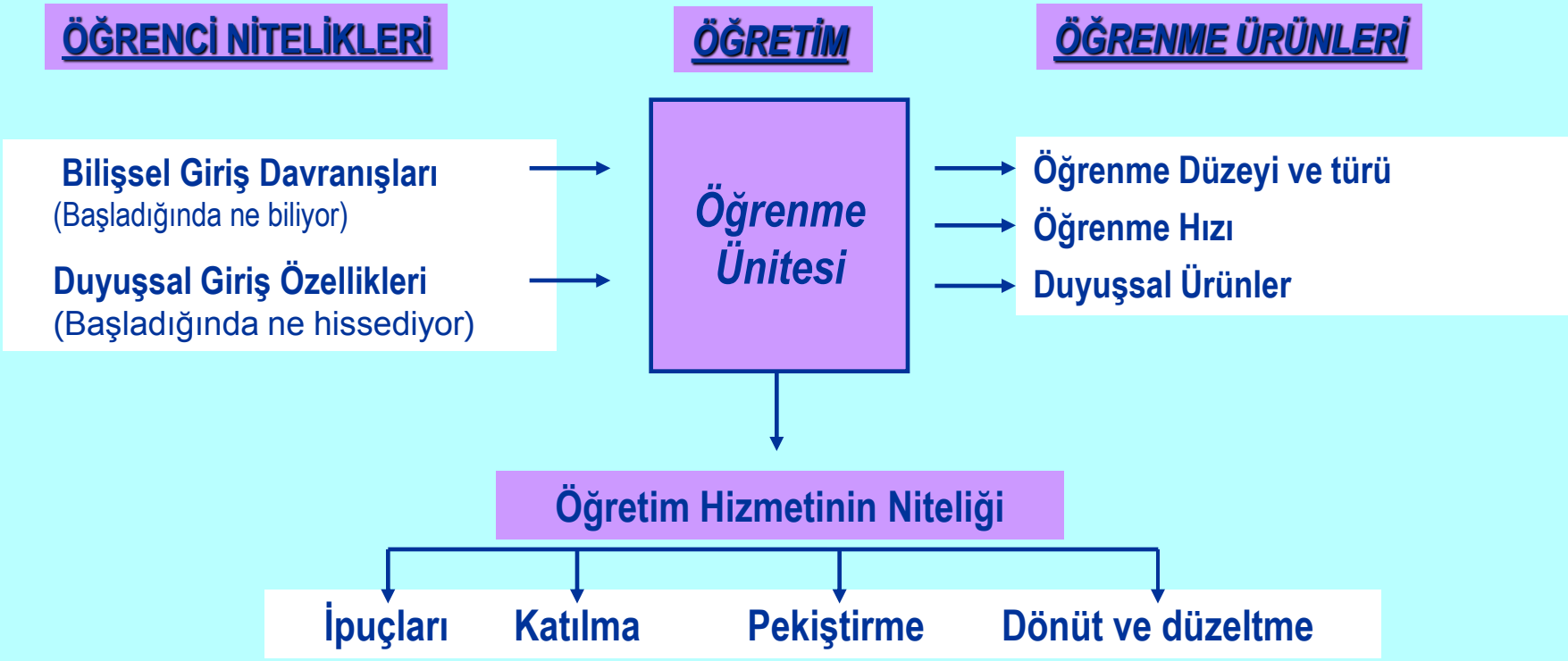
LEARNER ACTIVITY:

What do you think in your class / institution what kind of principles derived from old and new paradigm of teaching have been applied? Why have these principles been applied?

Variables Affecting Learning

- ***Individual's background*** related to education, ***especially family's, peer's,*** and other ***relatives' attitudes*** towards education
- ***Prior knowledge*** related to content
- ***Academic –Self Concept/self efficacy***, motivation, ***interest*** in, and ***attitude towards content area*** which he or she is learning
- ***Knowledge*** and skills in using ***learning strategies***, affective strategies and, ***metacognitive strategies***
- ***Teacher attitude*** towards ***her/himself***, ***teaching*** students, and ***content*** area.
- ***Departmental/***school **environment**, policy, and **attitude** towards ***teaching-learning process***

TAM ÖĞRENME
(OKULDA ÖĞRENME KURAMI)

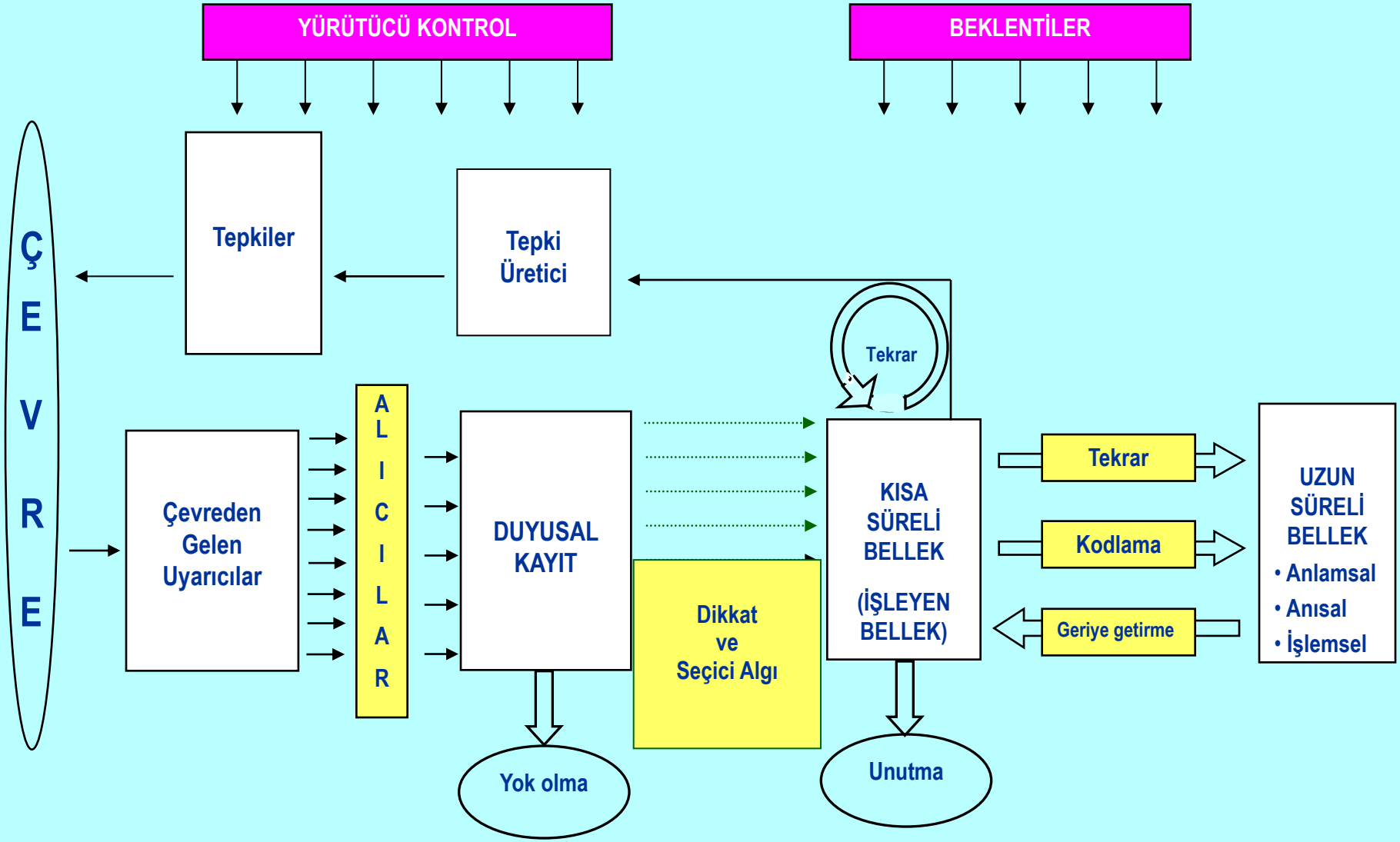


Mastery Learning based on the assumption that given ***enough time*** and a the ***proper instruction***, most ***students*** can ***master any learning objective*** (Bloom, 1976; Guskey & Gates, 1986; Shwell, 1996).

- First students would have to be taught the ***prerequisites*** in order to attain necessary entry characteristics.
- Than the ***necessary instruction***, in terms of ***both amount*** and ***quality***, would be provided.

Some of the Principles for Good Practice in Undergraduate Education

1. *Encourage **student-faculty** contact*
2. *Encourage **cooperation** among students*
3. *Encourage **active learning***
4. *Give **prompt feedback***
5. Encourage ***student to construct** new knowledge with **relating previous knowledge***
6. *Encourage **student to construct** their own knowledge **in multiple ways***
6. *Communicate **high expectations***
7. ***Respect** diverse **talents** and **ways of learning***
8. *Appreciate and reward **student's efforts and learning***


YÜRÜTÜCÜ KONTROL
BEKLENTİLER
ÇEVRE
Tepkiler
Tepki Üretici
Tekrar
Çevreden Gelen Uyarıcılar
ALICILAR
DUYUSAL KAYIT
Dikkat ve Seçici Algı
KISA SÜRELİ BELLEK (İŞLEYEN BELLEK)
Tekrar
Kodlama
Geriye getirme
UZUN SÜRELİ BELLEK
• Anlamsal
• Anısal
• İşlemsel
Yok olma
Unutma

DVD: Problem Based Learning