Week 3
Theory construction and psychoeducational design

EDS-544
Dr. Evrim Baran
The Roads for Psychology in Education

PSYCHOLOGY

• How people learn and develop

EDUCATION

• Help people learn and develop
Check one of the following answers

• Psychologists should conduct laboratory research about learning and development and explain the resulting theories to educators; educators should apply this scientific research to their instruction.

• Psychologists should conduct laboratory research about learning and development without concern for educators; educators should develop instruction that meets the practical needs of their students without examining irrelevant psychological theories.

• Psychologists should study how people learn and develop in real educational situations; basing their research on the challenges of educators; educators should base their instructional decisions on psychological theories of how students learn and develop.
## Three paths for psychology and education

<table>
<thead>
<tr>
<th>Phase</th>
<th>Direction of relation</th>
<th>Period</th>
<th>Emotional tone</th>
<th>Vision for psychology and education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>One-way</td>
<td>Early 1900s</td>
<td>Naïve optimism</td>
<td>Psychology is applied to education; education is recipient of psychology</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Dead-end</td>
<td>Mid- 1900s</td>
<td>Pessimism</td>
<td>Psychology ignores education; education ignores psychology</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Two-way</td>
<td>Late 1900s</td>
<td>Cautious optimism</td>
<td>Education shaped psychological research; psychology shapes educational practice</td>
</tr>
</tbody>
</table>
Learning is like?
Metaphors of Learning

Strengthening a connection
(i.e. adding new behaviors to your repertoire)

Adding files to a file cabinet
(i.e. adding new facts and skills to your knowledge base)

Building a model (i.e. understanding how to fit pieces of information together)

Response strengthening

Knowledge acquisition

Knowledge construction
Metaphors of Learning

<table>
<thead>
<tr>
<th>Learning is</th>
<th>The learner is a</th>
<th>The teacher is a</th>
<th>Typical instructional methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response strengthening</td>
<td>Passive recipient of rewards and punishments</td>
<td>Dispenser of rewards and punishments</td>
<td>Drill and practice on basic skills</td>
</tr>
<tr>
<td>Knowledge acquisition</td>
<td>Information processor</td>
<td>Dispenser of information</td>
<td>Textbooks, workbooks, and lectures</td>
</tr>
<tr>
<td>Knowledge construction</td>
<td>Sense maker</td>
<td>Guide for understanding academic tasks</td>
<td>Discussion, guided discovery, and supervised participation in meaningful tasks</td>
</tr>
</tbody>
</table>
Questions from the Class

• Aren’t empirical evidences part of theory making? How can they go together mutually?

• In social sciences is the existence or nonexistence of theories more beneficial?

• What are the basic elements of theory making in education when the needs of the society are to be considered?

Canan
Questions from the Class

• Constructivism seems to a new paradigm for learning. It requires to consider lots of situational cases some times it is hard to replicate the similar environment, similar participants and similar topics. How much it is true to call constructivism a theory?

Dincer
Questions from the Class

• There is something confusing here, instructional theories or learning theories which one should come first for effective instruction. Although each other has impacts on the other, however one of them must be more important for effective instruction and this must be instructional theories.

Sinem
Questions from the Class

• While reading the articles, I can see how inconsistent I am in my thoughts, is it sad or I am in the way of constructing my own path?

Sinem
Questions from the Class

• Mcdonald believes the main reason for selecting a theory is Zeitgesit; what exactly did he mean by this?

• Values are presented to be important factors in determining goals and methods in education. When the characteristics of our country and the fact that some values are exposed, how can this be handled in our case?

• What is the difference between describing and prescribing defined by Bruner (1966)?
Questions from the Class

• Actually this question is what I want to discuss as well. How come we can ignore other issues and focus on its consistent works? When we remember the process of theory, we can see that at the bottom we have to deal with the problem. If we are not interested in the problem, how can we find a solution why the present theory doesn't work or why we should search for a new alternative?

Bilge
Questions from the Class

• When I first read these sentences, I thought about the teaching strategies which are properly defined from the beginning to the end. If we are talking about a teacher-centered strategy, then teachers should be free to organize the classroom environment; or if we are talking about designing a child-centered environment then how we are able to organize not knowing the learners keeping in mind that every learner is not the same.

Saime