

SCALE-UP

Student-Centered Activities for Large Enrollment Undergraduate Programs

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SCALE-UP People

North Carolina State University

Faculty

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+ David Haase

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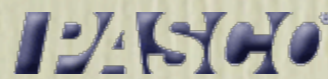
+ John Park (Science Education)

Graduate Students

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SCALE-UP: Student-Centered Activities for Large Enrollment Undergraduate Programs

- Actively **engage** students in their learning
- Design an **environment** to support learning
- Develop/modify instructional **activities**
- **Assess** impact on learning
- **Encourage** others to adopt what works

After 2 weeks
we tend to remember...

10% of what we read

20% of what we hear

30% of what we see

50% of what we
hear and see

70% of what
we say

90% of
what we
say and
do

Nature of
Involvement

Verbal Receiving

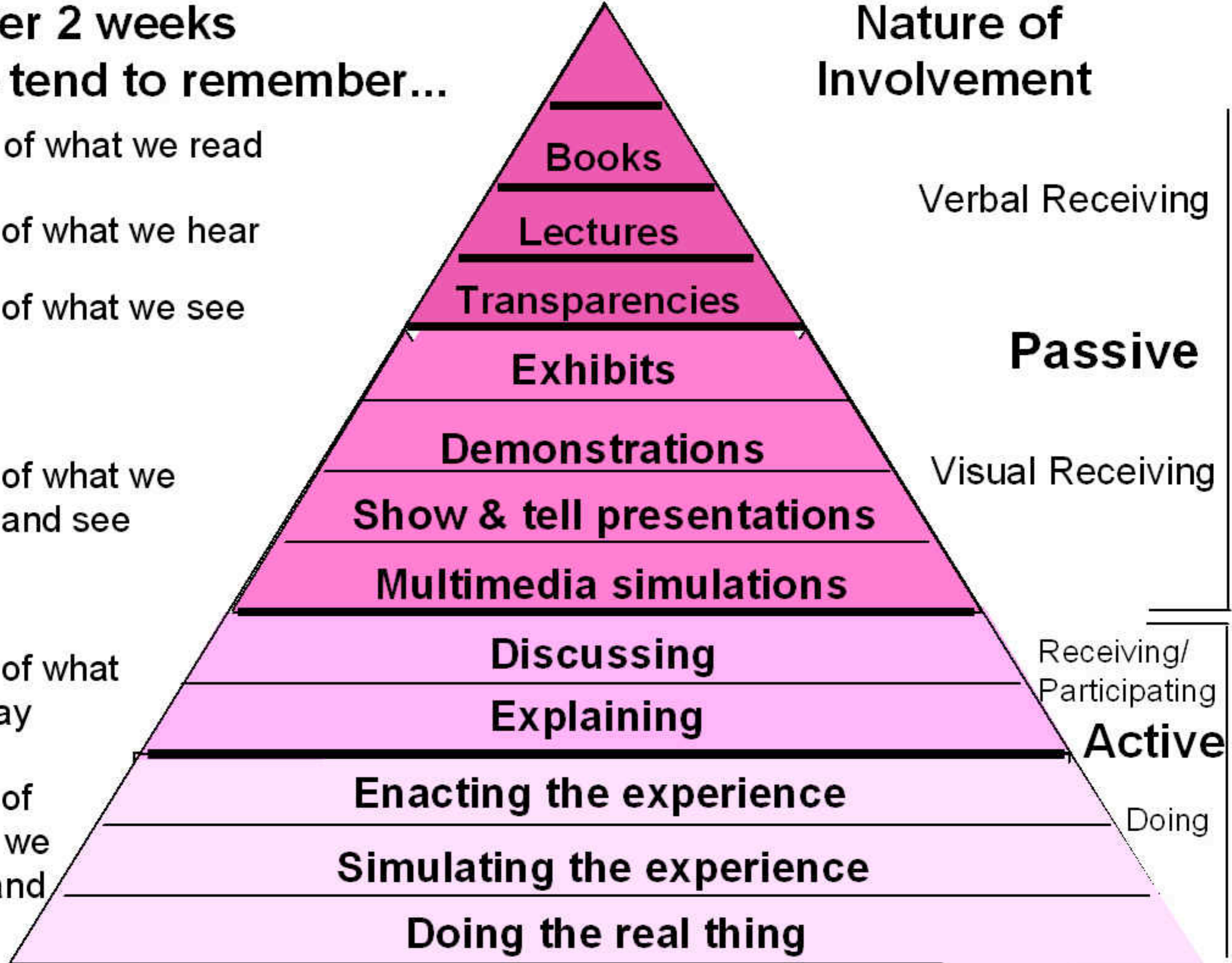
Passive

Visual Receiving

Receiving/
Participating

Active

Doing



Active Learning

Individuals vs Groups
Day 1, Walking from NY to LA

Compare:

Body Language

Initiative

Sound Levels

Involvement w/ Material

Cooperative Learning Benefits

- Active/interactive learning (at upper Bloom levels)
- Individuals get stuck & give up. Groups share resources
- Students see alternative strategies.
- More and better questions are asked.
- Cognitive Rehearsal: students learn more when they teach others (just like us)

Cooperative Learning “Secrets”

- Individual **accountability**. Each member is responsible for doing their own fair share of the work and for mastering all the material.
- Positive **interdependence**. Team members have to rely upon one another.
- Face-to-face **interaction**. Some or all of the group effort must be spent with members working together.
- Appropriate use of **interpersonal** skills. Members must receive instruction and then practice leadership, decision-making, communication, and conflict management.
- Regular **self-assessment** of group functioning. Groups need to evaluate how well their team is functioning, where they could improve, and what they should do differently in the future.

A little history lesson...

