Social Cognitive Theory
as presented by Albert Bandura
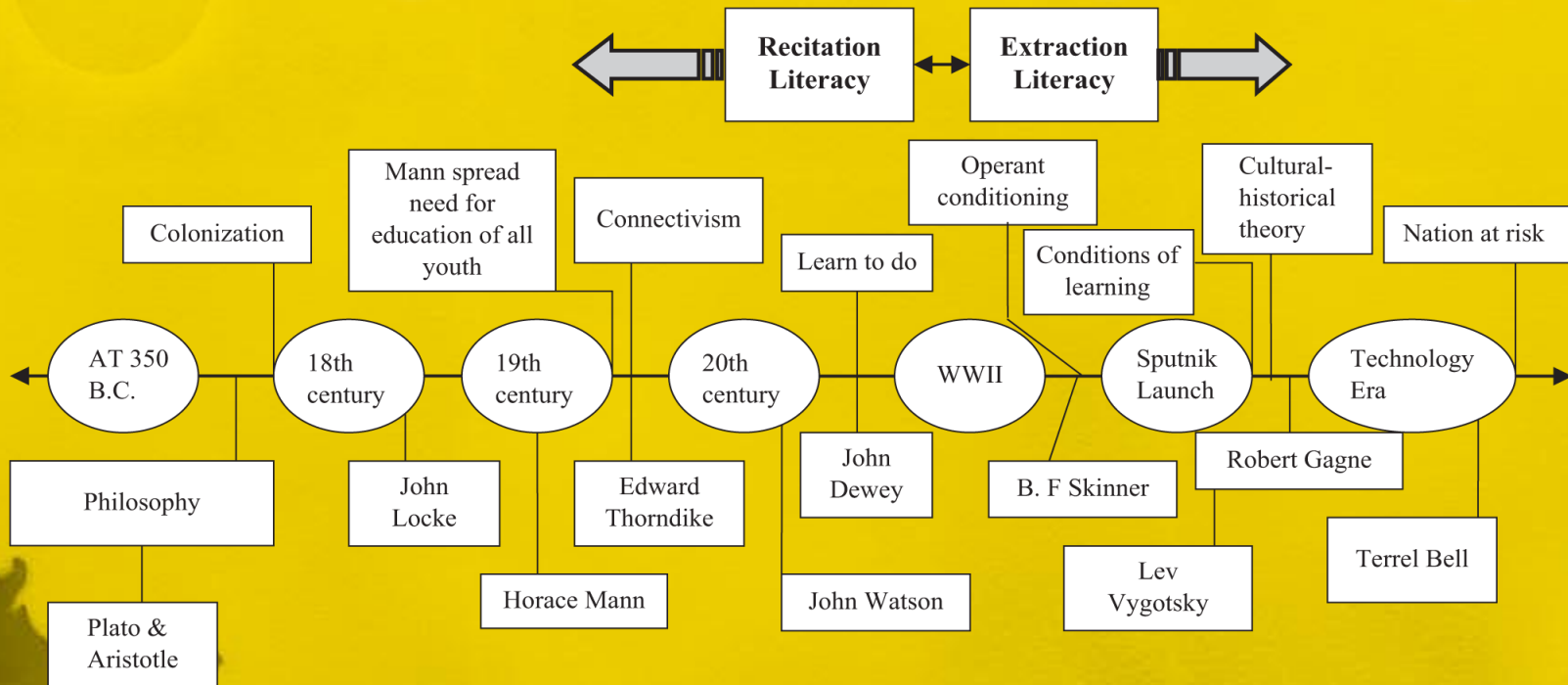
EPSY 6304
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Social Cognitive Theory

✓ What distinguishes Albert Bandura's *Social Cognitive Learning Theory* from many others is that he created one of the "grand theories" that is still utilized and continues to thrive to this day.

✓ His theories are applied in psychology, classrooms, higher education, sports, health, business, medicine, social political spheres and many other contexts.

Learning Theories through the Ages

Recitation Literacy ←→ **Extraction Literacy**

- Colonization
- Mann spread need for education of all youth
- Connectivism
- Operant conditioning
- Cultural-historical theory
- Nation at risk
- Learn to do
- Conditions of learning

AT 350 B.C. — 18th century — 19th century — 20th century — WWII — Sputnik Launch — Technology Era

- Philosophy
- John Locke
- Edward Thorndike
- John Dewey
- B. F Skinner
- Robert Gagne
- Plato & Aristotle
- Horace Mann
- John Watson
- Lev Vygotsky
- Terrel Bell

50th — 40th Century BC
Caveman 100%
Every member of a cavemen population is a hunter-gatherer.

Technology:
— Sharp stones to carve drawings into cave walls
— Paints created from powdered minerals, animal blood and fat
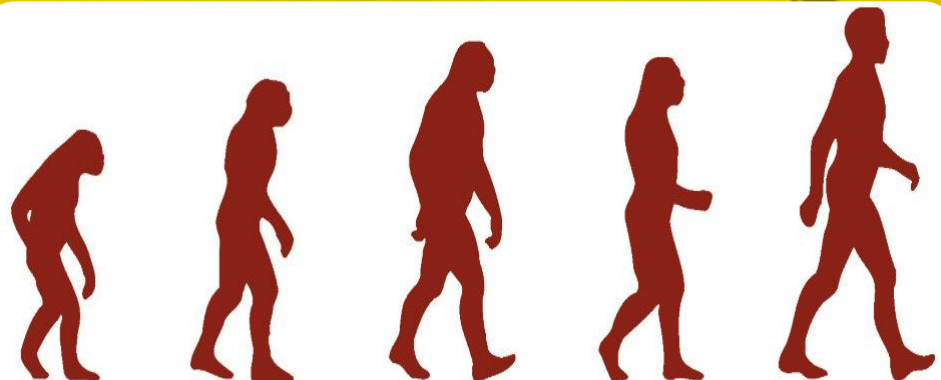— Stone knives and flint spearheads for practical tests in the field

Oral ed.
Skills such as cooking, hunting, tool-making and survival are taught between families by word of mouth, from generation to generation.
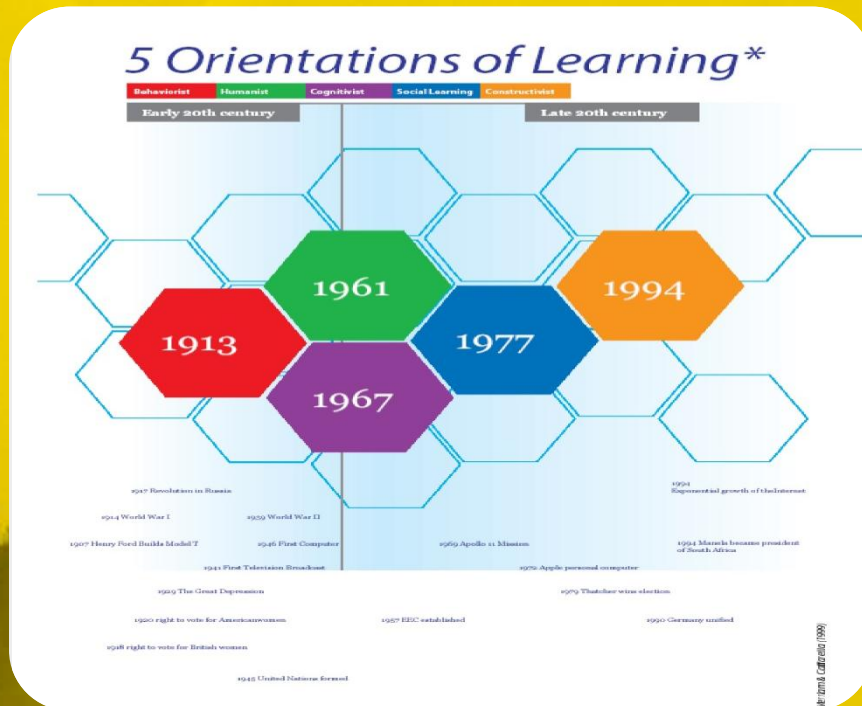
Music
Music was on the Neanderthal curriculum - it is believed their language was based on this rather than words.

Learning Theories through the Ages

5 Orientations of Learning*

| Behaviorist | Humanist | Cognitivist | Social Learning | Constructivist |

Early 20th century — **Late 20th century**

1913
1961
1967
1977
1994

1917 Revolution in Russia
1914 World War I
1939 World War II
1907 Henry Ford Builds Model T
1946 First Computer
1969 Apollo 11 Mission
1941 First Television Broadcast
1972 Apple personal computer
1929 The Great Depression
1979 Thatcher wins election
1920 right to vote for American women
1957 EEC established
1990 Germany unified
1928 right to vote for British women
1945 United Nations formed
1994 Exponential growth of the Internet
1994 Mandela becomes president of South Africa

"They are able who think they are able."

Virgil

Circa 1631 A.D.. John Comenias writes the first textbook that utilizes visual aids in order to employ other senses while learning. This was based on his theory of *Pansophism*.
At the dawn of the nuclear age educational theories develop and explode on the scene in vital fashion as the United States takes science and research more seriously.

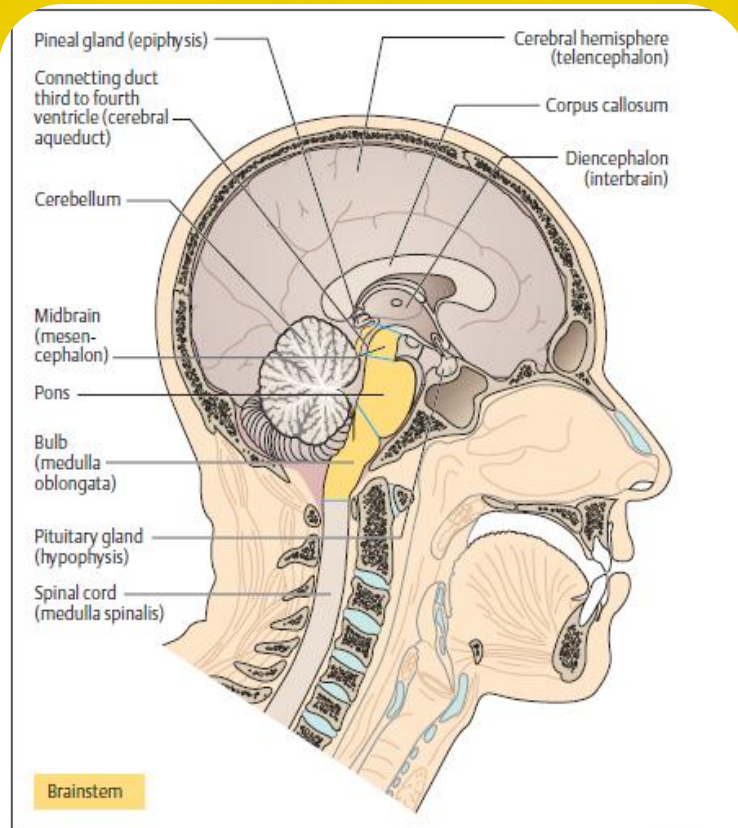# Learning Theories through the Ages

Fig. 13.4 **Organization of the brain.** Sagittal section through the head of an adult man; view of the left half from the medial side. The midbrain, pons, and medulla oblongata together form the brainstem

The **psychological community** began to **prove their theories with more scientific** methods than they did in the past which led to the acceptance of several different, and new "learning" theories being applied into the broader realms of education, business and even military training.

Observational Learning
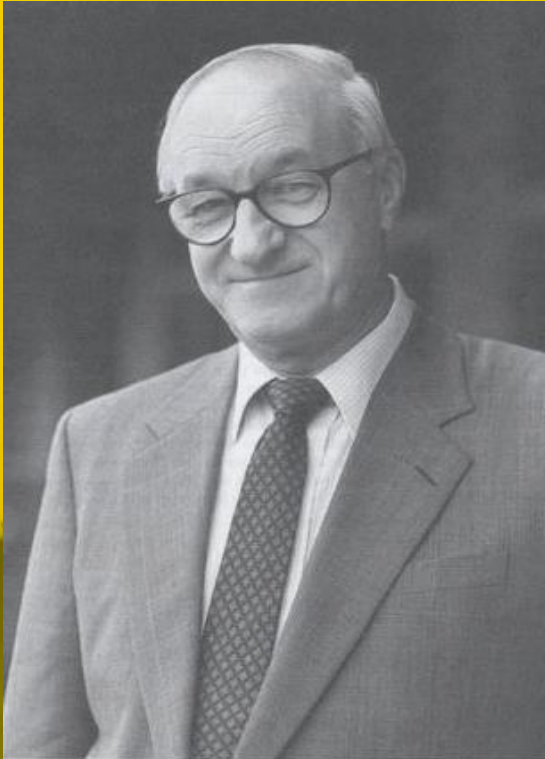
Albert Bandura

In the 1960's the foremost researchers were working on the behaviorist theories that were advocated by B. F. Skinner. Bandura wanted to understand human functioning, why children exhibited aggressive behaviors and how this worked within the classroom environment. The models at that time were strictly based on Skinner's "Principles of Learning" derived from his operant conditioning theory.

Bandura believed that analysis and experimental research would prove children to be much more complex than what was believed at the time.

The Bobo Doll Experiment

One adult male (model) and one adult female (model) aggressively attacked the doll under controlled conditions. Children that were exposed to this behavior displayed higher rates of imitative aggressive responses than those that were not exposed.

The Bobo Doll Experiment

TABLE 1
MEAN AGGRESSION SCORES FOR EXPERIMENTAL AND CONTROL SUBJECTS

| Response category	Experimental groups				Control groups
	Aggressive		Nonaggressive		
	F Model	M Model	F Model	M Model	
Imitative physical aggression					
Female subjects	5.5	7.2	2.5	0.0	1.2
Male subjects	12.4	25.8	0.2	1.5	2.0
Imitative verbal aggression					
Female subjects	13.7	2.0	0.3	0.0	0.7
Male subjects	4.3	12.7	1.1	0.0	1.7
Mallet aggression					
Female subjects	17.2	18.7	0.5	0.5	13.1
Male subjects	15.5	28.8	18.7	6.7	13.5
Punches Bobo doll					
Female subjects	6.3	16.5	5.8	4.3	11.7
Male subjects	18.9	11.9	15.6	14.8	15.7
Nonimitative aggression					
Female subjects	21.3	8.4	7.2	1.4	6.1
Male subjects	16.2	36.7	26.1	22.3	24.6
Aggressive gun play					
Female subjects	1.8	4.5	2.6	2.5	3.7
Male subjects	7.3	15.9	8.9	16.7	14.3

TABLE 2
SIGNIFICANCE OF THE DIFFERENCES BETWEEN EXPERIMENTAL AND CONTROL GROUPS IN THE EXPRESSION OF AGGRESSION

Response category	x^2_r	Q	p	Comparison of pairs of treatment conditions		
				Aggressive vs. Nonaggressive p	Aggressive vs. Control p	Nonaggressive vs. Control p
Imitative responses						
Physical aggression	27.17		<.001	<.001	<.001	.09
Verbal aggression	9.17		<.02	.004	.048	.09
Nonaggressive verbal responses		17.50	<.001	.004	.004	ns
Partial imitation						
Mallet aggression	11.06		<.01	.026	ns	.005
Sits on Bobo		13.44	<.01	.018	.059	ns
Nonimitative aggression						
Punches Bobo doll	2.87		ns			
Physical and verbal	8.96		<.02	.026	ns	ns
Aggressive gun play	2.75		ns			

"Subjects in the aggression condition reproduced a good deal of physical and verbal aggressive behavior resembling that of the models, and their mean scores differed markedly from those of subjects in the nonaggressive and control groups who exhibited virtually no imitative aggression (See Table 1)."

Social Foundations of Thought and Action: A Social-Cognitive Theory
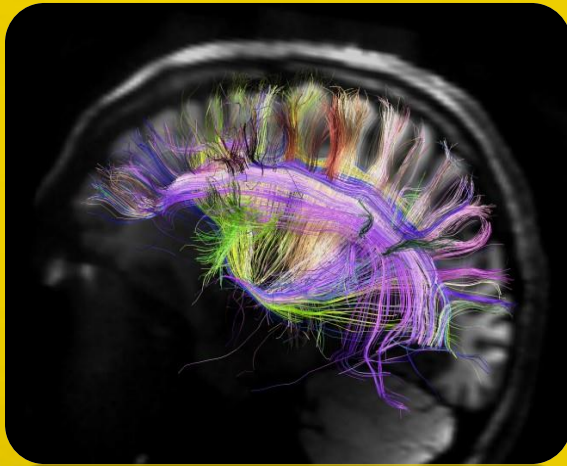
Albert Bandura's seminal work was his treatise "Social Foundations of Thought and Action: A Social-Cognitive Theory" in which he explained that in order to describe what he (and his colleagues) were observing, he was going to utilize the label "social cognitive theory" as opposed to *social learning*. The observations and deductions stemmed from several studies following his famous Bobo Doll experiment in which he (and his colleagues) examined the outliers and expanded into the cognitive processes which mediate learning while affecting language and conceptual learning. This also evolved to testing the processes of goal-setting, self-regulation and finally self-efficacy.

Four Step Model

1. Attention or acquisition process
   - ✓ The individual notices something in the environment.

2. Retention process
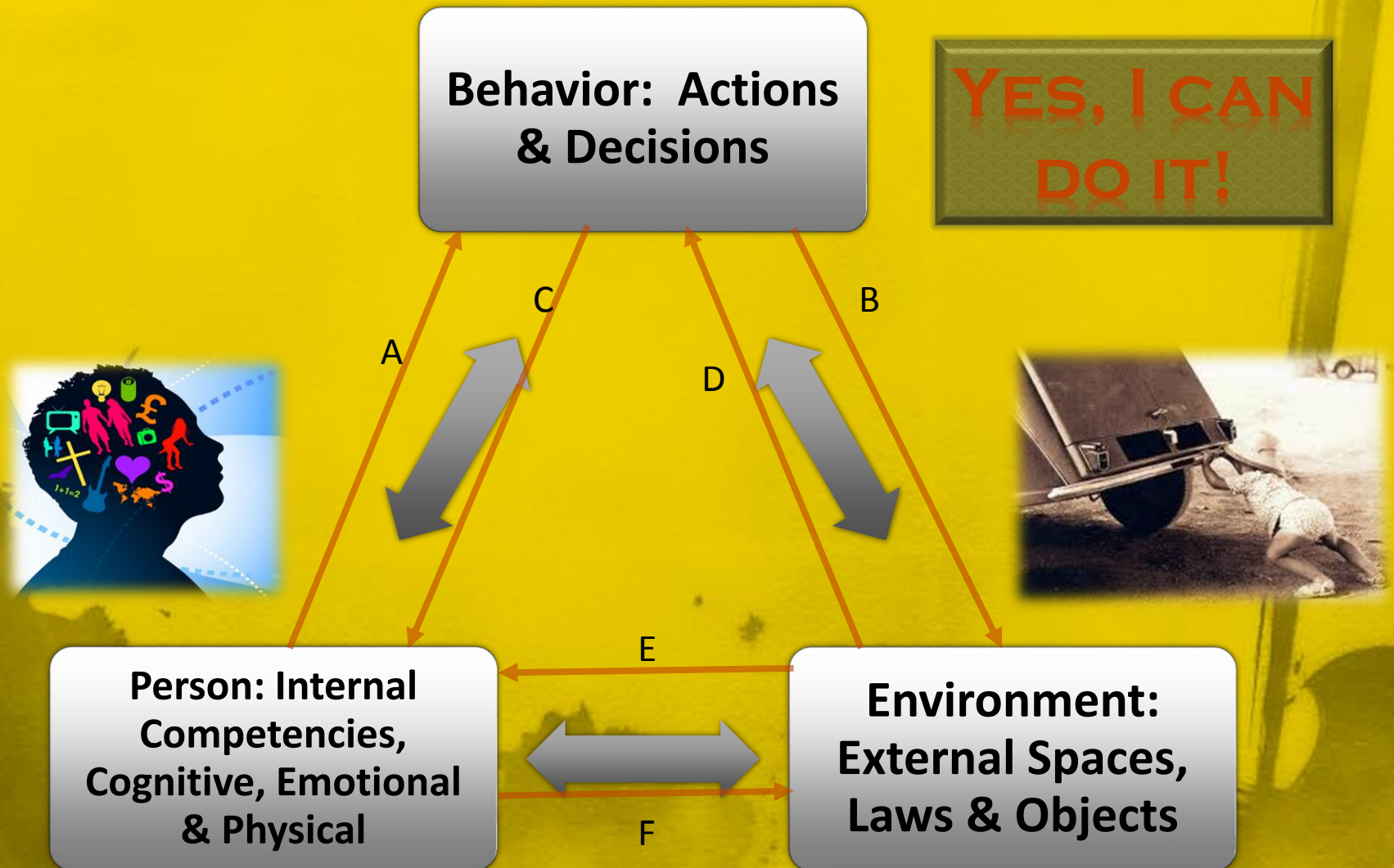   - ✓ The individual remembers what is noticed.

3. Reproduction process
   - ✓ The individual produces an action that is a copy of what was noticed.

4. Reinforcement and motivational process
   - ✓ The environment delivers a consequence that changes the probability the behavior will be emitted again (reinforcement and/or punishment).

Bandura's Triadic Reciprocal Determinism

Distinctive Features of the Social Cognitive Theory

✓ **Self Reflexive Capability:**

Humans are by their very nature self conscious and reflective. This feature allows them to examine their own thought processes. People gain understanding of themselves and the world around them through this process. They may alter and evaluate their own thinking to predict outcomes, judge results and make changes.

✓ **Self Regulatory Capability:**

As people age they begin to develop "personal" standards and regulate their behavior through what motivates them by virtue of the consequences to themselves and how they view this as a positive or negative.

Humans facilitate environmental conditions and create incentives for their own efforts as they contribute to what motivates them and their own actions. This is based on a what sense of self-worth the individual has and what level of satisfaction they may place on attaining their goal.

Distinctive Features of the Social Cognitive Theory

✓ **Symbolizing Capability:**

"Through symbols people process and transform transient experiences into internal models that serve as guides for future actions." Humans can alter and adapt to their environment by their capacity to utilize symbols by giving them meaning and understanding their experiences.

✓ **Forethought Capability:**

Humans motivate themselves through the effective use of forethought. It guides their actions as they anticipate what they may achieve through the exercise of certain behaviors. If present conditions seem adverse they may avoid the immediate influence or distraction if this will help in attaining their end goal.

Perceived Self-Efficacy

Self-efficacy is the degree to which individuals believe in their abilities to perform certain actions or tasks, not necessarily correlating to one's actual abilities.

Q- What is self-efficacy?

A - "Self efficacy is the belief in one's capabilities to organize and execute the sources of action required to manage prospective situations." ~ Albert Bandura (1986)

Bandura stressed the importance of self-efficacy by stating in effect that:

SKILLS + EFFICACY BELIEFS = EFFECTIVE FUNCTIONING

Sources of Self-Efficacy Appraisals

1) <u>Actual Performance</u>: Achieving success repeatedly builds one's self efficacy. Repeatedly failing decreases one's sense of self-efficacy.

2) <u>Verbal Persuasion</u>: Following social messages received from others, such as telling us that they believe we *can* perform the task; we believe that we can.

3) <u>Vicarious Experience</u>: A secondary effect, felt through the observation of others like us succeeding at a task; we believe we can as well.

4) <u>Physiological Cues</u>: When we feel fatigued or very tense, we believe a task has become to difficult for us to accomplish.

Self Efficacy in School

Good performance and grades

Strengthens self efficacy

Difficult tasks are a challenge

Poor performance and grades

Weakens self efficacy

Difficult tasks are a threat

Set high goals

Risk of giving up

Self Efficacy at Work

Past Accomplishments

Performance of Others

Emotional State

Self-Efficacy

HIGH

Set goals

Preserve practice

Creatively solve

problems

Visualize success

Learn from failure

LOW

Avoid difficult tasks

Think of excuses

for failing

Develop low aspirations

Quit

Blame setbacks on

lack of ability or luck

Self-Efficacy

- Through the regulation of one's behavior, you observe your actions and evaluate your own performance.

- The affects of self-efficacy appraisals act as a means of motivation.

- It would be best to have too high an estimation of one's abilities than too low.

- Low self-efficacy may lead to depression and/or unnecessary doubt.
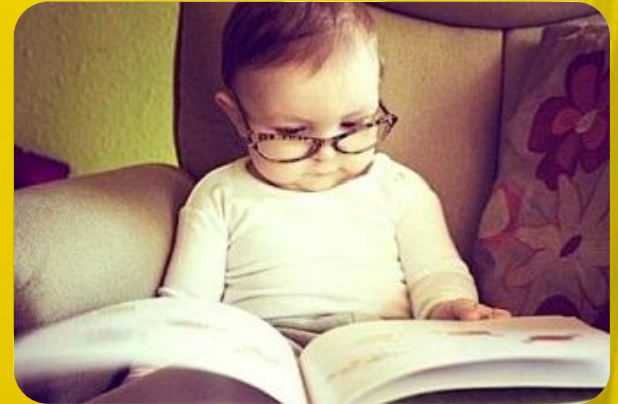
Self-Efficacy

"We must seek to cultivate the frankness in the child. This is an unassuming confidence in himself, the possession of which places him in a position to exhibit his talents in a becoming manner. This self-confidence is to be distinguished from insolence, which is really indifference to the judgment of others." ~ Immanuel Kant, *Thoughts on Education*

"People's level of motivation, affective states, and actions are based more on what they *believe* than on what is objectively the case."

Albert Bandura

WE WHO CUT MERE STONES MUST ALWAYS BE ENVISIONING CATHEDRALS

Engraved by an anonymous stonecutter on a stone in the Cathedral at Chartres

Professor Bandura has written the following on the distinction between self-efficacy and confidence.

"It should be noted that the construct of self-efficacy differs from the colloquial term "confidence." Confidence is a nondescript term that refers to strength of belief but does not necessarily specify what the certainty is about. I can be supremely confident that I will fail at an endeavor. Perceived self-efficacy refers to belief in one's agentive capabilities, that one can produce given levels of attainment. A self -efficacy assessment, therefore, includes both an affirmation of a capability level and the strength of that belief. Confidence is a catchword rather than a construct embedded in a theoretical system. Advances in a field are best achieved by constructs that fully reflect the phenomena of interest and are rooted in a theory that specifies their determinants, mediating processes, and multiple effects. Theory-based constructs pay dividends in understanding and operational guidance. The terms used to characterize personal agency, therefore, represent more than merely lexical preferences."

See *Self-Efficacy: The Exercise of Control*, 1997, p. 382

An activity to help develop self-efficacy in a learner

Didactically, the intent of the activity is to:

1) Have the learner to monitor his/her personal thoughts, observations, expectations and motivations for the class.

2) The instructor will provide guidance, examples, direction and appropriate technology to improve the self-efficacy of the learner, and

3) The instructor will provide time and opportunities for the learner to experience successful self reflection and learning as a result of appropriate action.

Self-Efficacy Activity

Historically, student journals were frequently suggested but many believed these were too personal, poorly applied and could not be effectively evaluated by the instructor. Online journals can be utilized in a multi-purpose fashion. There are many programs in place that utilize the features of a journal that can be tasked and tied to the coursework. Students can use this place write and reflect about what they have learned each day. The instructor can periodically provide students with time to review their digital journals and reflect on the progress they have made. If the student utilizes the feature they can be awarded badges of progress as they realize the goals they set for themselves in their studies and tasks.

Self-Efficacy Activity

Electronic or digital student portfolios are increasingly used for students to monitor their progress and may assist them to become reflective evaluators of their own work. Students should upload a sample of their work each week from various and/or alternating subjects. Periodic reviews should be done to monitor and reflect on the progress made. If there happens to be a lack of progress or a strong rise in interest or grades correlations to what was or has occurred should be analyzed from the students journal to assist in self assessment. For example; what should be encouraged or what should be avoided.

E-PORTFOLIO LEARNING

Plan

Collect

Assess

Connect

Reflect

PORTFOLIO

Tamara Malloff 2010

Effective evaluation of the self-efficacy activity

1) Did the instructors plan, prepare and demonstrate the journal (portfolio) activity to the students?

2) Were the students motivated to participate in the online journal (portfolio) and aware of the objectives?

3) Did the instructors keep abreast of the students activity, clarify expectations if necessary and establish an environment for the task?

4) Did the instructors reward persistence, goals met, observe behavior in order to facilitate learning, adjust lessons and activities as necessary?

An example of a digital portfolio
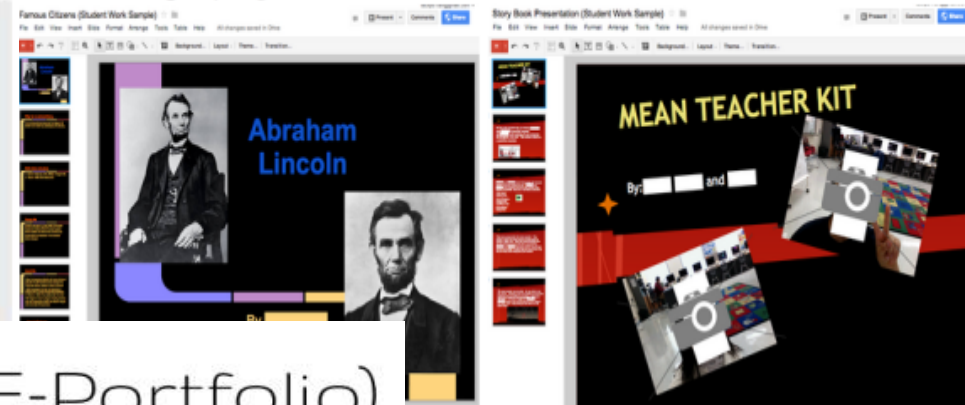
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