

Lauren Glase
Artifact 2 – 1

Artifact 2 – 1
Learning Theories: Analysis & Application

- This artifact was developed in the class, Learning Principles during the Spring 2010 semester with Dr. Patricia Gordin.
- This was an activity on various learning theories and the analysis of learning theories in a lesson plan from Beacon Learning. It also includes a visual map comparing and contrasting two learning theories: motivation and behaviorism.
- This activity addresses Standard 2: Instructional Leadership from the Florida Educational Leadership Standards and the performance substandards that apply.
- I learned about the many learning theories that teachers can use when educating their students. I was also able to compare and contrast two of them to really get an in-depth look at those two theories. I was able to apply what I learned about the theories by dissecting a lesson plan from Beacon Learning to see what theories the teacher used and how the lesson positively affected the students.

Behaviorism

1. What one or two primary theorist(s)/researcher(s) are associated with this topic (include names, brief biographical information such as dates and country where major work was conducted)?

Ivan Pavlov – 1927, Russian scientist who discovered classical conditioning

John Watson – 1913-1924, U.S. psychologist who published “Psychology as the Behaviorist Sees It” and showed how conditioning applied to humans

B.F. Skinner – “Greatest behaviorist of the 20th century” U.S. psychologist introduced reinforcement to the stimulus → response model

Albert Bandura – Canadian psychologist, imitation learning, social learning theory, observation and imitation in learning

2. What are the outcomes of "learning," as it relates to this theory?

Students will repeat behaviors that are rewarded and stay away from those that receive negative reinforcement. Behavior can be conditioned overtime. Students can learn from others’ behavior and in a social context from imitating others.

3. What are the key terms and definitions?

Behaviorism: “study of learning in humans and animals as understood through the analysis of behavior rather than thought or feelings.”

Conditioning: synonym for learning; the “enduring change in behavior that results from events in an organism’s environment.”

Law of Effect: any behavior that is followed by rewards is more likely to be repeated than behavior that is not

Shaping: “actions of a trainer, or teacher to evoke more effective behavior over time.

Behavioral modification: “any systematic approach to teaching new behavior using the principles of operant conditioning.”

Positive reinforcement: rewarding good behavior

Negative reinforcement: removing aversive stimulus

Positive punishment: application of unpleasant experience

Negative punishment: remove privileges

4. What principles were tested and verified?

Pavlov tested classical conditioning by testing salivation in dogs when food was followed by footsteps of the owner. He confirmed that the dog began salivating at a neutral stimulus – the footsteps. One is learned (conditioned) – the footsteps, and the other isn't (unconditioned) – food. This showed that the fight or flight response can be evoked by neutral stimuli.

E.L. Thorndike proved the Law of Effect that any behavior that is followed by rewards is more likely to be repeated than behavior that is not. This was proved with the puzzle box and a cat when the cat began to lessen its random behavior to get out of the box because it started to figure out some movements were not helping while others were helping it escape. The cat narrowed down the random movements and began to learn to escape over time.

Watson tested conditioning on a baby (Little Albert) – He used loud noises that made the baby cry, which was unconditioned, but then added a white rat when the baby heard loud noises and it confirmed the conditioned learning because every time the baby saw the neutral stimulus (white rat) he associated it with the loud noises and began to cry even without the loud noises. This verified that we can be conditioned with neutral stimuli.

5. What are the mechanisms or events that result in learning (What steps would you take in the classroom to ensure that learning occurred)?

Reinforcing good behavior/study habits with positive reinforcement will cause repeated good behavior.
Ignoring/punishing bad behavior will diminish bad behavior.

With successive approximations at variable ratio schedule, we are more apt at getting the desired behavior. This is the most resistant to extinction of behavior.

To ensure learning, the teacher should try to associate typical negative neutral stimuli, such as math, with positive feelings, rather than negative feelings.

Students are able to imitate and learn from teachers, and others, so it is important for the teacher to be an example for the classroom and for the learning environment to be positive and open for everyone to share and learn from each other.

Cognitive Architecture

1. What one or two primary theorist(s)/researcher(s) are associated with this topic (include names, brief biographical information such as dates and country where major work was conducted)?

Gestalt psychologists – 20th century German psychologists wanted to know how mind actively perceives meaningful patterns by distinguishing objects and surroundings

Godden & Baddeley – 1975, psychologists that tested encoding specificity

Gordon Bower – 2001, psychologist, mood-congruent processing. encoding specificity and emotional context

2. What are the outcomes of "learning," as it relates to this theory?

The way the brain is structured allows us to understand how various devices and theories, such as, chunking, automaticity, encoding specificity, the serial position curve, etc., can help students advance their knowledge and learn the material.

Learning grows when meaningful connections are made between previous and new knowledge

Students are able to focus on comprehension and new knowledge/material when automaticity is mastered on previous learning

When learning is committed to long term memory, it is more easily retained and can be used in the future.

When physical context and emotions are appropriate, learning happens at an optimal level.

3. What are the key terms and definitions?

Sensory Registry – the first stop in the mind after information reaches our eyes, ears, fingertips, and other sensory organs

Short term memory – It is where you hold the content of your current thought. It is the cognitive function that corresponds with awareness, the locus of the consciousness.

Working memory – Encompasses everything of short term memory, plus the role of doing work on information. It conveys short term information storage plus mental work – the real time workspace of the mind.

Long term memory – the large capacity memories are store here, the warehouse of the mind.

Dual encoding theory – recognizes language and mental imagery

as two dominant forms of knowledge used by the mind

Episodic memory – can include mental images that have a dynamic quality such as we experience them in movies. We can remember events and “replay” them in our head, but the mind is not a video camera, it is not always accurate.

Information processing model – looks at artificial information processing devices (computers) as metaphors for how the human mind is structured and functions. Three memory structures in the human cognitive systems: the sensory register, working memory, and long-term memory, are the foundation of the human cognitive system. In that order we experience and remember information presented by the environment.

Sensation – the brief recording of environmental stimuli in the sensory register

Perception – the cognitive act of imposing order on sensory data as it enters working memory

Attention – holding information in conscious awareness in working memory

Learning – moving information from temporary working memory to enduring long term memory

Remembering – moving information from long term memory back into working memory

Generation effect – if information is important enough to be learned, it should be used in some meaningful way because when new knowledge is meaningfully connected, understanding grows.

Chunking – the grouping of information into meaningful units

Automaticity – reduces the burden of your working memory so attention can be given to more important issues such as comprehension.

Serial Position curve – the U-shaped curve that shows ideas presented near the middle of a series are generally less memorable than those presented at the beginning and end

Encoding specificity – Learned material is linked to the context in which it is learned

4. What principles were tested and verified?

Gestalt principle of perception – when we see an object we

mentally separate it from our surroundings.

Phi Phenomenon – Our mind makes the simplest perceptions meaningful

Cocktail Party Phenomenon – attention on one subject in a busy, crowded environment is possible. Focus can be made or switched around to various things in an environment.

Encoding specificity was tested by having participants in an experiment learn a set of words while both on land and wearing scuba diving equipment underwater. When scuba divers learned the word list on land, they remembered that list best on land. But when a particular word list was learned underwater, the list was remembered best when the divers were back underwater.

Encoding specificity was tested with emotions, and Bower set up conditions that evoked different emotions in his subjects and gave them learning tasks while they were experiencing those emotions. The data confirmed that emotions were part of what students learned originally and when they experienced those same emotions later, their memory for the associated knowledge was enhanced.

5. What are the mechanisms or events that result in learning (What steps would you take in the classroom to ensure that learning occurred)?

Teachers should use chunking to help students learn. Breaking the information into smaller chunks of information will allow students to better process and store the knowledge. It is easier to remember that way.

Automaticity of knowledge and skills allows students to move past one thing and put their time into more important concepts such as comprehension. It is the teacher's job to help facilitate automaticity in learning, so students are able to comprehend or move beyond the beginning stages of learning.

Teachers should make sure they are planning their lessons according to the serial position curve where they are presenting the important points of the lecture at the beginning, and again at the end, because that is when the most information is retained.

Teachers should understand the principle of encoding specificity and its importance in students' ability to retain information in certain environments. The teacher could tell the students about this, and point out that it would be beneficial for them to study for their exams at a desk.

It is important for teachers to be mindful of students' emotions as emotions, just like context, affects students memory for knowledge. Trying to create a positive learning environment will, hopefully, deter negative feelings, and knowledge is better

remembered.

Teachers need to make sure to use the generation effect to make meaningful connections between knowledge, so understanding grows. Linking to prior knowledge also deepens the connection, and knowledge will grow.

Complex Cognition

1. What one or two primary theorist(s)/researcher(s) are associated with this topic (include names, brief biographical information such as dates and country where major work was conducted)?

Lee Vygotsky – 1866-1934, Russian psychologist cognitive modeling and higher order thinking

Benjamin Bloom – 1913-1996, educational psychologist Bloom's Taxonomy for Cognitive Domain – evaluation important

Langer – 1928-2013, mindfulness/mindfulness

2. What are the outcomes of "learning," as it relates to this theory?

Students are able to learn through cognitive modeling by using what they have seen/heard about how to solve a problem and solve a similar one in the future. Decreased self doubt gives the students increased confidence to tackle other problems.

Students learn through creativity and discovery of their world around them. If they are expressing themselves, they are learning.

Engaging in critical thinking and problem solving are important outcomes of learning in this theory.

3. What are the key terms and definitions?

Metacognition – when cognition is used to explore cognition. When we think about thinking, allows us to control our distractions

Problem solving – the pursuit of a goal when the path to that goal is uncertain

Problem space – all the possible options that could take you from your initial state to the goal state

Heuristics – rules of thumb that increase the likelihood of success

but don't guarantee it

Problem finding – imagining potential problems, and determining which problems are worthy of our efforts

Critical thinking – complex thinking where one evaluates ideas for their quality, especially judging whether they make sense

Coherence – whether ideas are internally consistent rather than contradictory

Correspondence – whether claims have data/facts backing them up

Inductive reasoning – moving upward from specific facts and experiences to a broader generalization

Insight – a special kind of inductive reasoning in which a meaningful pattern emerges very quickly

Discovery – the process of discovery proceeds from specific data to a larger, more explanatory pattern. It is the act of attaining new knowledge about the world – especially the natural world.

Deductive reasoning – inference that proceeds downward from generalizations, theories, and principles to specific predictions or applications

Syllogism – a form of deductive reasoning that includes premises that lead naturally to a conclusion

Divergent production – a way of thinking about the uses of objects or the connections between ideas in ways that extend beyond, or even violate, their traditional associations, contributes to creativity

Reflection – the act of considering deeply the ideas that one engages, the evidence for those ideas, and their implications

Cognitive modeling – someone vocalizes their thought processes so that others can hear them and learn from them

4. What principles were tested and verified?

The Socratic Method was tested by Socrates when he asked his young philosophers a series of questions. He then led the young philosophers to conclude that they knew nothing. Socrates said they could proceed together toward understanding. Socrates proved that this type of “question all things we know” leads to critical thinking and understanding.

Inductive reasoning was used by Charles Darwin to prove that every single life form varied naturally and those that fit the characteristics of their local environments were better able to survive and reproduce.

Wolfgang Kohler studied insight in a chimpanzee named Sultan. He used bananas hanging from the top of the chimp's cage to see if the chimp could find nonobvious solutions to get the bananas. The chimp stacked boxes on top of each other to reach the bananas proving insight occurs.

Vygotsky's principle that higher order thinking comes from our social environment was most likely directly tested by Vygotsky, but our book gives the example of a child riding in the car with his parents and he listens to the conversation that ensues. The structure of the argumentation, the pros and cons, point, counterpoint, will internalize in the child and they will use those tools in future situations. Similarly, cognitive modeling is verified when teachers teach students how they go about problem solving, so the students will retain the way the teacher vocalized it, and use it in future problem solving situations.

5. What are the mechanisms or events that result in learning (What steps would you take in the classroom to ensure that learning occurred)?

Teachers can use cognitive modeling to vocalize their thought processes in problem solving so that the students can learn from them and use them in the future. The teacher should express their uncertainty with a problem so students know it is okay to feel that way as well. This will help with their self doubt.

Creating an open, supportive learning environment increases the likelihood of children expressing themselves and partaking in creativity

Teachers can encourage writing to exercise critical thinking.

Teaching heuristics can advance a student's progress toward subgoals and help students work through a problem considerably.

As a teacher, make one of the goals of the classroom improvement of problem-solving skills or critical thinking capability.

A very important lesson from this chapter is to align assessment to learning goals. It is not fair to test on something that doesn't mean anything or truly assess what the student has learned. So, it is imperative that teachers use assessment to support learning.

Teachers can create a learning environment that is okay with the discomfort of uncertainty and errors as this is most conducive to successful problem solving.

Motivation

1. What one or two primary theorist(s)/researcher(s) are associated with this topic (include names, brief biographical information such as dates and country where major work was conducted)?

Ernest Hilgard – 1950-1980, American psychologist

Abraham Maslow – 1940-1960, American psychologist considered the founder of humanistic psychology and conceptualized the “hierarchy of human needs.”

Albert Bandura – Canadian psychologist, renowned for his studies in social cognitive theory and self-efficacy

Jerome Bruner – 1966, will to learn, curiosity

2. What are the outcomes of "learning," as it relates to this theory?

A student who is properly motivated can better excel and further their learning as their schooling continues.

Motivation can not only inspire students to set goals for themselves, but also strive harder to realize or attain these goals.

With proper motivation, the student will have a strong willingness and desire to learn.

Another outcome is that the students will develop self-efficacy and rise to challenges that are presented to them.

3. What are the key terms and definitions?

Trilogy of Mind: the ancient understanding that human psyche consists of cognition, affect, and conation

Cognition: rational thought free of emotion wish or will

Affect: roughly equivalent to emotion, and includes temporary feeling states and more enduring moods

Conation: purposeful striving toward valued goals

Motivation: a sub-process of conation, motivation is all processes that precede a decision to pursue a particular goal

Volition: the second sub-process of conation, volition is all processes that follow a decision and guide action toward a particular goal

Intrinsic Motivation: the emotional associations that lead a person to engage in an activity for its own sake

Extrinsic Motivation: external motivation that leads a person to

engage in an activity for an outside reward

Self-actualization: the rare instance in which a person reaches his or her highest potential as a human being and has become the best possible “version” of himself or herself

Cognitive Dissonance: the unharmonious clash of our ideas with our experience, especially our own behavior

Self Efficacy: the self-assessment of one’s ability to perform specific tasks in specific situations

Triadic Reciprocity: a model by Bandura that shows the reciprocal influence of beliefs and behavior through three components: person, environment, and behavior

4. What principles were tested and verified?

Susan Harter tested the notion that intrinsic motivation is not developed as part of the educational process. This was verified as her data showed that for grades 3-8, average student intrinsic motivation decreased substantially. This decline could be caused by the widening use of extrinsic rewards in school.

Csikszentmihalyi found that flow, a zen-like state of consciousness with intense concentration on an activity, is experienced whenever there is a good match between the difficulty of the task and the ability of the performer. Flow results from an optimal level of challenge. A task that is too easy may result in boredom, and a task that is too hard can result in anxiety.

Maslow proposed that that certain needs, specifically those that a physiological, are fundamental. These needs assume a priority of guiding behavior that is referred to as the “hierarchy of needs.” The most basic needs are biological or physiological needs, followed by safety needs, social needs, self-esteem needs, and self-actualization needs. Maslow points out that the self-actualized person is the best possible “version” of himself or herself.

Bandura explored how an individual’s self-efficacy affects their ability to perform specific action. He points out that high perception of self-efficacy can help us persist when we face tough challenges. While, poor self-efficacy can lead to self-imposed mental limitations. He found that four sources were crucial in their influence of self-efficacy: enactive attainments, vicarious experience, verbal persuasion, and physiological state. Self-efficacy directly influences performance.

Bruner observed infant behavior and found sensory exploration is essential for normal intellectual development. Curiosity changes as

we get older, but understanding this curiosity can help us understand students and how they learn.

5. What are the mechanisms or events that result in learning (What steps would you take in the classroom to ensure that learning occurred)?

Building a student's self-efficacy directly influences performance and is, therefore, a valuable asset to the student. Challenging the student, acknowledging effort, and reinforcing ability are good ways to build self-efficacy and promote learning.

Teachers can help promote intrinsic motivation in students, as it is a powerful learning tool. A student who is driven and motivated to learn will put forth more effort. Intrinsic motivation can be developed through interesting lesson plans that keep students involved and attentive.

Teachers can implement flow in the classroom as a helpful tool to furthering learning. Closely matching a task or activity to a student's ability will help create situations of flow.

Encouraging students to set near-term specific goals is also a good tool to ensure learning. Setting goals will help the students develop habits that lead to attainment of goals, while achieving a certain level of satisfaction.

Cognitive Development

1. What one or two primary theorist(s)/researcher(s) are associated with this topic (include names, brief biographical information such as dates and country where major work was conducted)?

Jean-Jacques Rousseau – Swiss philosopher child-centered approach to education

Jean Piaget – 20th century, Swiss psychologist – stage theory of child development

Jerome Bruner – 1964, American

Kieran Egan – 1996, Canadian philosopher

Lee Vygotsky – 1978, Russian psychologist

2. What are the outcomes of "learning," as it relates to this theory?

Students are able to build their cognitive toolbox with behaviors and types of problem solving they see in their social environment for later use.

Students are able to use their creativity and express themselves which results in more interest in the subject and a better understanding of themselves

Working within groups, and the assistance of teachers through instructional scaffolding, allows the student to increase their knowledge and skills in a specific area. Students are able to learn more than they thought they could alone.

3. What are the key terms and definitions?

Socioeconomic status – the social class of the family, which has an effect on the child's learning

Child-centered education – the most desirable teaching strategies give the child some freedom to explore, choose activities, pursue interests, and interact freely with adults and peers

Epistemology – how the child knows what he/she knows

Piaget's Sensorimotor stage – (Ages 0-2) - Children rely on senses (sight, smell, touch, etc.) to understand the world around them. They lack the understanding of object permanence, so if a toy is hidden, for example, they don't think it exists because they can't see it.

Piaget's Preoperational stage – (Ages 2-7) - Children gain object permanence understanding and skilled use of language, but egocentrism is a limitation. Children cannot see others' perspectives, so they don't take them into account when making

decisions.

Piaget's Concrete operational stage – (Ages 7-11) - Children understand conservation and can separate dimensions of stability during change. They are also able to make classifications and there is a growing capacity to decentrate where one can use multiple perspectives to make judgments.

Piaget's Formal operational stage – (Ages 11-Adult) - The person is able to understand abstractions more sophisticatedly and scientific reasoning is a part of their cognitive toolbox. This stage is crucial for people to reach, according to Piaget, because complex subject matter such as math and science are not able to be mastered without entering this stage.

Descalage – sometimes young children reason in ways that are characteristic of adolescents or adults on some tasks, but perform in childlike ways on other tasks.

Scaffolding – the skilled assistance lent by teachers, parents, or other skilled adults

Zone of proximal development – individuals often exhibit higher levels of skill through the assistance, encouragement, and coaching of other people. Social influences interacting with psychological elevate performance capability to a more advanced level.

Internalization of higher order thought – the behaviors and thought processes of those in a person's social environment allows the individual to store that in their cognitive toolbox for later internal thoughts or future social situations.

Automaticity – Automatic recall of the material learned, it doesn't take working memory to do it. This allows the learner to focus on other, more complex concepts such as comprehension of material.

Prodigies – individuals who exhibit very high levels of proficiency that stand far above the typical performance of peers.

4. What principles were tested and verified?

Socioeconomic status predicts many important social and psychological outcomes such as cognitive abilities, academic achievement and social learning.

Piaget tested children's cognitive abilities and turned them into stages of what they are able to do and what their limitations are.

Egan tested infant and children's experiences to objects, and the environment around them, to come up with five stages that characterize both the developing mind, and the sequence of dominant epistemologies in the history of the Western culture.

Bloom tested child prodigies and found important factors that contributed to children that exhibited high levels of proficiency. These included initial aptitude, large investment of time, family involvement, and best teachers and coaches.

Vygotsky tested the difference between those acting alone and those with assistance and found there is a zone of proximal development where when just enough assistance and challenge is given to a student, they can achieve more than when they act alone.

5. What are the mechanisms or events that result in learning (What steps would you take in the classroom to ensure that learning occurred)?

It is important to understand where students are in the stages of development to better understand what they are able to comprehend and what their limitations are. If students have successfully moved to a new stage by exhibiting those actions that are required at that stage, they are developing properly.

Teaching within the zone of proximal development is important for advancing the competence of the child. So, teacher assistance and group work can help challenge students to success. Instructional scaffolding is another way to assist the child just enough so they are able to excel at the subject on their own. Also, this group work will allow students to see how others solve problems and they are able to internalize the tools for future use.

Allowing the child to explore and express their creativity is important in the learning process and there should be time in the classroom to express that side.

Automaticity in reading is important so students are able to concentrate on comprehending what the text is saying. Testing reading comprehension would be a way to see how the child has developed, and if they are on the right path.

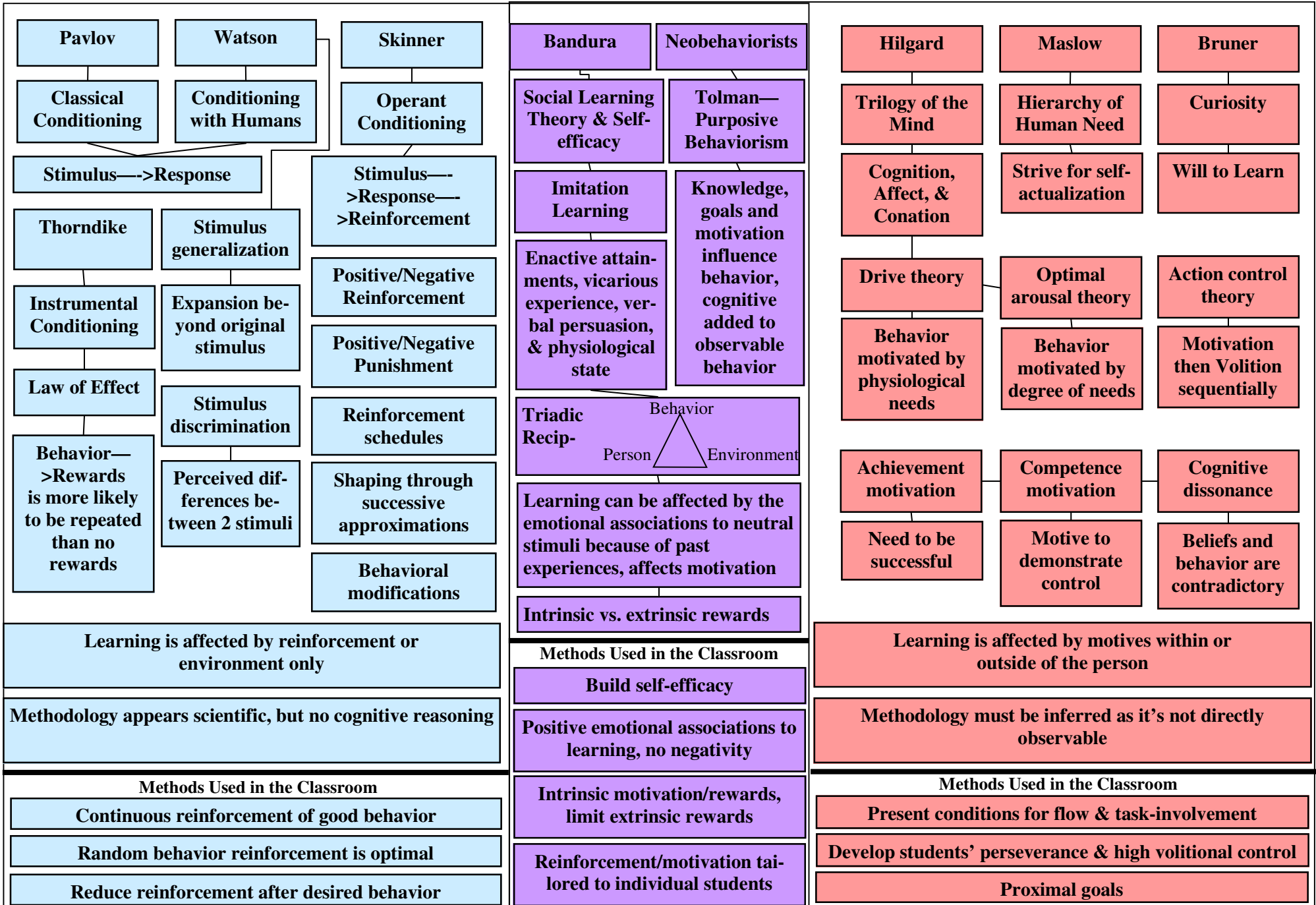
Behaviorism

Learning through behavior, experiences and observing rather than thoughts or feelings

Similarities/ Shared Ideas/ Challenges to strict behaviorism

Motivation

Learning through motives and desires of behavior and the mind



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3.31.10

Analysis & Application of Learning Theories: Part C**Beacon Lesson Plan Library****All About Me - A Poem**

Beth Hilton

Description

Students create a free verse poem about themselves. This lesson can be used to introduce students to one another at the beginning of the school year, or during the school year when studying famous Americans.

Standards**Florida Sunshine State Standards**

LA.B.1.2.2.3.8

The student revises draft to further develop a piece of writing by adding, deleting, and rearranging ideas and details.

LA.B.1.2.3.3.6

The student uses creative writing strategies appropriate to the format (for example, using appropriate voice; using descriptive language to clarify ideas and create vivid images; using elements of style, such as appropriate tone).

Florida Process Standards

Information Managers

01 Florida students locate, comprehend, interpret, evaluate, maintain, and apply information, concepts, and ideas found in literature, the arts, symbols, recordings, video and other graphic displays, and computer files in order to perform tasks and/or for enjoyment.

Effective Communicators

02 Florida students communicate in English and other languages using information, concepts, prose, symbols, reports, audio and video recordings, speeches, graphic displays, and computer-based programs.

Materials

- All About Me worksheet (See Attached File)
- Transparency of the Biopoem template (See Attached File)
- Writing paper and pens or pencils
- Polaroid or digital camera

Preparations

1. Download the All About Me worksheet and the Biopoem template from the attached file. Copy the worksheet for students and make a transparency of the template.
2. Gather materials.

Procedures

1. Begin the lesson by telling students that they are going to learn something new about each one of their classmates.
2. Have students complete the All About Me brainstorming worksheet. (See Attached File) Encourage students to list as many things for each item as they can think of.
3. Explain to students that they are going to create a poem about themselves using the information from the worksheet.
4. Show students the template of the Biopoem. (See Attached File)
5. Model the activity by creating a Biopoem about you or a well-known person, using the Biopoem template. The words in parenthesis are not included in the final poem.
6. Have students look at their lists from the All About Me worksheet. Encourage students to look for things that others probably do not know about them. Have students create their own Biopoem in the template format.
7. When the students have completed their poems, explain to them that they are now going to make their poems come alive. Using the Biopoem that you modeled before, have students brainstorm descriptive words that make the images more vivid. For example, instead of brown hair, use chocolatey-brown hair and instead of lover of ice cream, use lover of ice cream that cools you to your toes.
8. Model the rewriting of your poem, after it has been edited, making the necessary deletions, additions and changes to make the poem come alive.
9. Discuss with the students how the use of descriptive language makes the poem more interesting.
10. Have the students rewrite their poems using their descriptive language to make the poems come to life.
11. Have students share their Biopoems with their classmates.
12. Take photographs of each student and add photographs to poems to create a bulletin board titled All About Me or Famous Young Americans.

Assessments

As the students work, circulate and offer feedback. Assessment is on an individual basis and each student is expected to provide their own poem. The following is a guideline for assessment:

COMMENDABLE

The student revises the draft to further develop the poem by adding, deleting, and rearranging ideas and details. The student uses three or more creative writing strategies such as descriptive language in final poem. Poem is vivid and descriptive.

ACCEPTABLE

The student revises the draft. The student uses one or two examples of descriptive language in final poem.

REDO

The student fails to revise the draft, or the student fails to use creative writing strategies such as descriptive language in final poem.
-The student revises poem to include descriptive language.

Extensions

1. Students can create Biopoems about well-known persons or characters.
2. Students can be given additional time to complete the activity.

Attached Files

[This file contains the All About Me worksheet and the Biopoem template.](#) File Extension: pdf

ALL ABOUT ME

Physical traits (brown eyes, brown hair, tall, skinny, etc.)

_____	_____	_____
_____	_____	_____

Related to (family members)

_____	_____	_____
_____	_____	_____

Lover of (chocolate, candy, popcorn, playing, reading, drawing)

_____	_____	_____
_____	_____	_____

Who feels (happy, fortunate, sad, smart, etc.)

_____	_____	_____
_____	_____	_____

Who needs (love, money, candy, sleep, food, etc.)

_____	_____	_____
_____	_____	_____

Who fears (snakes, spiders, the dark, etc.)

_____	_____	_____
_____	_____	_____

Who gives (love, friendship, time, etc.)

_____	_____	_____
_____	_____	_____

Who would like to see (name of person, place, or thing)

_____	_____	_____
_____	_____	_____

BIOPOEM

Line 1. (First Name)

Line 2. (Physical traits)

Line 3. Related to...

Line 4. Lover of...(list 3 things)

Line 5. Who feels... (list 3 things)

Line 6. Who needs... (list 3 things)

Line 7. Who fears...(list 3 things)

Line 8. Who gives...(list 3 things)

Line 9. Who would like to see... (list 3 things)

Line 10. Resident of...

Line 11. (Last Name)

Grade 3-5, Language Arts

This lesson uses students' creativity and encourages self reflection to create a literary work. The teacher helps guide students through the exercise by modeling the way. Each member of the class then shares his or her poem, and the students are able to express themselves. The strategies used in this lesson utilize many different learning theories and positive teaching methods.

Progressive Education

This lesson is not a traditional, assessment-heavy activity, it leans toward a more progressive approach. As teachers, we need to understand the importance of freedom and exploration in education. This viewpoint acknowledges the progressive education philosophy, and each student as an individual learner, with different needs and interests. Jean Jacques Rousseau (1712-1778) pioneered the child-centered education movement where students are able to play, ask, experiment, and share their thoughts and feelings in the classroom. This lesson cultivates this philosophy by having the students reflect on their own lives and share their thoughts with their classmates as seen in *Procedure #11*.

The assessment of the activity is not strict, and there isn't a stringent rubric to follow. It looks at the students as individuals and makes sure they followed directions, participated, reflected, and created a thoughtful poem.

Multiple Intelligences Theory

Students should be treated as individuals with different interests, needs, and learning styles; therefore, traditional modes of learning are not sufficient. According to Howard Gardner, teachers should explore alternative teaching methods to reach the most students. His multiple intelligences theory promotes diversification of instruction and a variety of activities that allow students to be stimulated and excited about learning. It keeps them intrigued, actively participating and involved. This activity is not lecture-heavy, thus creating an atmosphere that can awaken other intelligences, rather than traditional one dimensional intelligence. This can be seen in *Procedure #2 and #3*.

Emotional Intelligence/Ideas linked by meaning

Emotional intelligence is the ability to read and respond to others' emotions as well as reflect on your own emotions. This can be seen in *Procedure #2 and #11* when students dig deep inside themselves to come up with answers to the questions about themselves, and when they share their inner thoughts and feelings with their classmates through the poem. The act of writing can be an emotional release – getting internal thoughts and feelings down on paper and out in the universe. “Good teachers find ways to infuse students experience with positive feelings that can become generalized to learning” (Martinez, 2001, p.186).

New knowledge should meaningfully connect to previously attained knowledge. According to Martinez (2001), “When connections are rich and the new knowledge integrates with prior knowledge to produce a coherent picture, the result is understanding” (p.74). In this case, the lesson builds strong connections by having students write about something they are interested in and it is a fun activity. The activity builds upon students previously learned knowledge as seen in the *Florida Standards Information Managers*.

“Educators want their students to enjoy learning and to feel drawn to the subject of study, whether it is literature, physics, computer science, architecture, ancient history, art or any other domain” (p.156). In this lesson, students are able to write

about something they are passionate about. They are able to reflect within themselves to come up with things they like, dislike, interests, etc. to create a positive writing experience. The teacher ties this in with learning descriptive words and writing skills. “Research has shown that when new information evokes emotions, that information is much more likely to be remembered” (Martinez, 2001, p.155). In *Procedure #1 and #2* the teacher gains students attention, and they are focused on the task at hand. The lesson teaches students descriptive word use and writing skills, so because they are writing on a topic that interests them, they will stay focused. This allows students to form a stronger connection and creates a better tendency to be recalled at a later time. “Positive emotions in particular help students form associations with prior knowledge, contributing to deep understanding rather than supervision learning (Bower, 1994)” (Martinez, 2001, p.155).

Creativity

The students use creativity when taking ordinary facts about themselves and turning them into a literary piece. They are learning about descriptive wording, which breeds creativity. *Lab 1.2.3.3.6* describes the use of creativity of students in this lesson. According to Martinez (2001), “When a creative mind is also a knowledgeable mind, wonderful things can happen” (p.140). This lesson infuses creativity and knowledge to create a lesson that will hopefully inspire the students and spark their interest in writing

One practice that encourages creativity is brainstorming, as seen in *Procedure #2 and #7*. While brainstorming is typically a group process, in this activity the brainstorming aspect of the lesson is the act of each students coming up with lots of ideas for their poem. This means throwing out any idea to make their poem more descriptive and to come up with answers to the questions about themselves. However, the teacher modeling some descriptive words for the class to understand what she is looking for helps stimulate the node-link structure of the brain. Priming is also seen in *Procedure #7* where the teacher assists in brainstorming with the students to help them come up with their own descriptive words.

Concrete Operational Stage

According to Jean Piaget, these students (grades 3-5) would be in the concrete operational stage (7 to 11 years old). During this stage, the child begins to recognize the differences and similarities of people, objects, and events. “Classifying people is far more complicated and a fair understanding of human beings means appreciating that they differ among many dimensions” (p.201). This stage also introduces students to the growing capacity to decentrate, which allows the student to adopt various perspectives, a sense of others’ perspectives, and distinguish classmates as individuals with their own opinions, feelings, experiences, etc. This helps encourage students to embrace the diversity of others. “Decentration also indicates an ability to adopt the perspectives of other people. This opens the child’s mind to wonder about the opinions of others” (p.201). While this can be negative if taken to the extreme of peer pressure, it is also an indicator that the child is becoming aware of the concerns of others and less self-centered.

Writing is an important part of life and needs to be taught effectively starting at a young age. The concrete operational stage is usually the time students are honing this valuable life skill. “Writing is widely considered to be an essential component of literacy and a key goal of education” (Martinez, 2001, p.215). In *Procedure #10*, students are instructed to revise and rewrite their poems. The teacher models the rewriting of her poem in *Procedure #8*. Revising written work is essential to creating a coherent and interesting literary piece and can be seen in *Lab 1.2.2.3.8*. “For example, researchers have determined that expert writers both generate more ideas and revise their writing more extensively than do novice writers” (p.215).

Social Learning Theory

Listening to classmates share their poems will help the students learn to actively listen and engage in conversation.

Albert Bandura's social learning theory is shown in this lesson by the students learning from the teacher's example (*Procedure #5 and #8*) and from the students learning from hearing their fellow classmates' stories (*Procedure #11*). "Modeling is an important mode of learning in Bandura's social cognitive theory when students choose ambitions and capable peers as models for their own behavior, they will enlarge their visions about what they are capable of doing" (p.176). The teacher can also make a big impact on the students by modeling the activity such as the instructions call for in *Procedure #5 and #8*. "The human capacity for imitation was compelling to psychologist Albert Bandura. He believed that firsthand experiences were not always necessary for learning to occur. He understood that human beings are highly capable of observing behavior of other people and imitating that behavior – and of not imitating behavior that leads to disagreeable consequences" (p. 28). By the teacher demonstrating a good poem, this shows the students what type of poem gets positive remarks and what won't work. The sharing of poems with other classmates allows students to see how other students think and behave. Working with and learning from others helps us become better communicators as seen in the *Florida Process Standards – Effective Communicators*.

Self Esteem, Self-Efficacy, & Self Worth

A teacher can use this lesson to help build students' self esteem, self-efficacy, and self worth. By using a topic that allows the student to look inside themselves and explore their experiences, students are able to recognize their strengths and weaknesses, and what motivates them. This is an exercise that can be used to encourage pride in oneself, which can increase self esteem. They also use this discovery of themselves, and the encouragement of others, to increase their self-efficacy. "As teachers take steps to build students' self-efficacy beliefs – whether through enactive attainments, vicarious experiences, verbal persuasion, or physiological state – those beliefs will help students to become more effective learners" (p.178). This lesson allows students to express their perspective with others and gain insight on other students' perspectives. It encourages the students to be open and honest.

The self-worth theory can help explain why students act the way they do in a social setting. A student's perspective of oneself and his or her worth is a strong motivator. "Self-worth theory is quite powerful in explaining the choices we make (Covington, 1984). We want to be seen as able, as competent. The desire to enhance feelings of self-worth leads us to select and pursue goals and activities that will likely result in success. We avoid other goals and activities if they are likely to expose our inabilities and so threaten self worth" (p.172). In *Procedure #2* students complete the "All About Me" brainstorming worksheet which asks them to list things they like, dislike, fear, etc. This internal reflection will bring out issues that affect self worth. By listing things they like, what they enjoy, and what makes them happy, they see the positives of their life and may increase their self worth. By listing those things that they dislike or fear, they are acknowledging their setbacks, and this awareness can help them work to change those things. This also gives the teacher insight into each of their students. This could help the teacher address their fears or beliefs about themselves that might be hurting them in the learning environment, and hopefully help the student improve in those areas.

I believe *Procedure #12* also helps cultivate a students' feeling of self worth. Showcasing the students' work with their picture next to it, makes them feel special and important. Entitling the board, "Famous Young Americans", makes it sound like they are important people in this world, which they are. Allowing them to see that will hopefully increase their self esteem, self-efficacy and self-worth.

Cognitive Modeling Theory

This lesson also pulls from Vygotsky's theory of cognitive modeling. This technique is seen in *Procedure #5, #7, and #8*. The teacher models the activity and walks students through the thought process. Vygotsky recognized the power of language on cognition. "Cognitive modeling is a great tool for teachers to use, it can also be used by students to vocalize their cognitions and for other students to consider and appropriate for their own thinking. Whenever individual students

express their best justification for group processes in education” (p.148). Scaffolding is used by the teacher to elevate the child’s learning by beginning to show them how to do the activity, then taking away the hints and letting them figure it out themselves. The teacher presents instruction at a challenge level that is compatible with the students’ zone of proximal development. “It recognizes that individuals often exhibit higher levels of skill through the assistance, encouragement, and coaching of other people. Social influences interact with psychological capability and elevate performance to a more advanced level” (p.210).

The higher level thinking gained in this exercise can then be used by the students in future activities. This process is called the internalization of higher-order thought. This concept, that emerged from Vygotsky’s theory, shows the power of group sharing and cognitive modeling in advancing the thinking of students. “It also clarifies one of the ways that a teacher can advance the thinking of her students – namely, by making her own cognitive skills more observable to students” (p.212).

Heuristics

The teacher uses heuristics to help students work through this activity. Specifically, this lesson uses domain-specific heuristics for writing. These include writing about what you know, being organized, and being clear. The students are writing about themselves, the teacher is keeping them on topic and staying organized throughout the whole process, and the teacher is clear about the instructions by verbalizing and modeling the activity. Over time, the students will incorporate these heuristics into their writing habits. Subgoalting is another heuristic the teacher uses by breaking down the poem creation into more manageable parts. The students begin by brainstorming, filling out a thought-provoking questionnaire, creating more descriptive wording, and writing a poem. The lesson is very clear and the teacher moves step by step through the process, so at the end the students have a piece they can be proud of.

This lesson appreciates the importance of freedom and exploration in education and supports the concept of progressive education. It also understands the need for structure and for breaking up the activity into manageable parts for the students. The use of creativity, reflection inside oneself, strong emotional connections to knowledge, and the sharing of experiences creates an effective activity for these students to engage in and learn descriptive words and writing skills. I would use this lesson if I were teaching elementary students, as I believe in all of the concepts and theories that are presented.

References

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