

AN Overview ICT Teaching Methods

2/27/2024 1

Curriculum

- **Written Curriculum**
 - A written curriculum is what is formally put down in writing and documented for teaching.
 - These materials can include an educator's instruction documents, films, text and other materials they need.
 - These materials come from the larger school district or the school itself.
 - Often, they contract or employ a curriculum specialist to develop a plan that meets specific goals and objectives.

2/27/2024 4

Curriculum

- curriculum typically refers to the knowledge and skills students are expected to learn, which includes:
 - the **learning standards** or **learning objectives** they are expected to meet;
 - the units and lessons that teachers teach;
 - the assignments and projects given to students;
 - the books, materials, videos, presentations, and readings used in a course;

2/27/2024 2

Curriculum

- **Taught Curriculum**
 - This type of curriculum refers to how teachers actually teach.
 - This is a less predictable and less standardized type of curriculum because how an educator delivers material can vary from one to the next.
 - It can also change based on the types of tools a teacher has at their disposal.

2/27/2024 5

Curriculum

- and the tests, assessments, and other methods used to evaluate student learning.
- An individual teacher's curriculum, for example, would be the specific learning standards, lessons, assignments, and materials used to organize and teach a particular course

2/27/2024 3

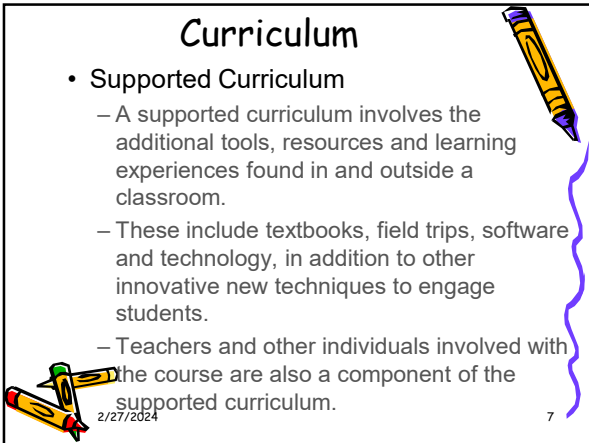
Curriculum

- This can include experiments, demonstrations and other types of engagement through group work and hands-on activities.
- Taught curriculum is extremely critical for students in special education or those who require another kind of specialized support.

2/27/2024 6

Curriculum

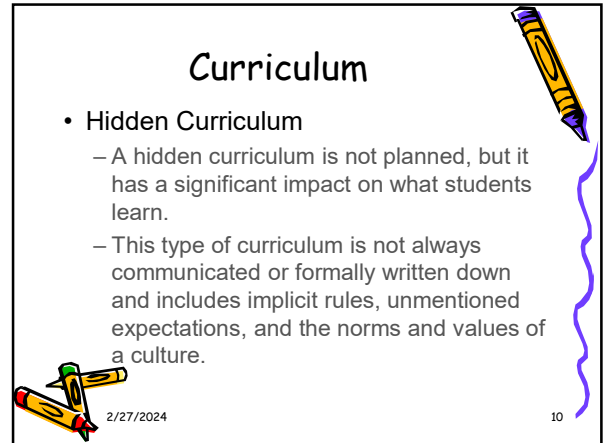
- **Supported Curriculum**
 - A supported curriculum involves the additional tools, resources and learning experiences found in and outside a classroom.
 - These include textbooks, field trips, software and technology, in addition to other innovative new techniques to engage students.
 - Teachers and other individuals involved with the course are also a component of the supported curriculum.



7

Curriculum

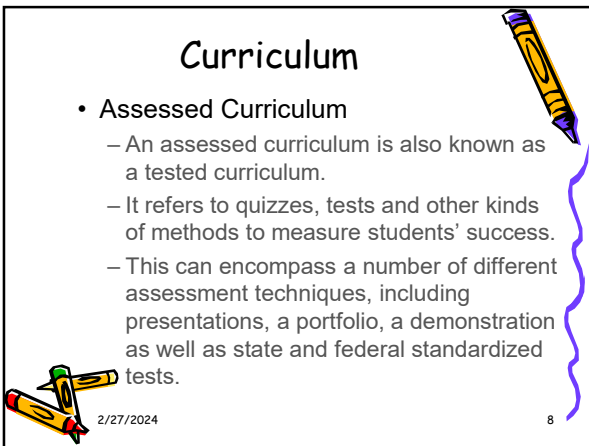
- **Hidden Curriculum**
 - A hidden curriculum is not planned, but it has a significant impact on what students learn.
 - This type of curriculum is not always communicated or formally written down and includes implicit rules, unmentioned expectations, and the norms and values of a culture.



10

Curriculum

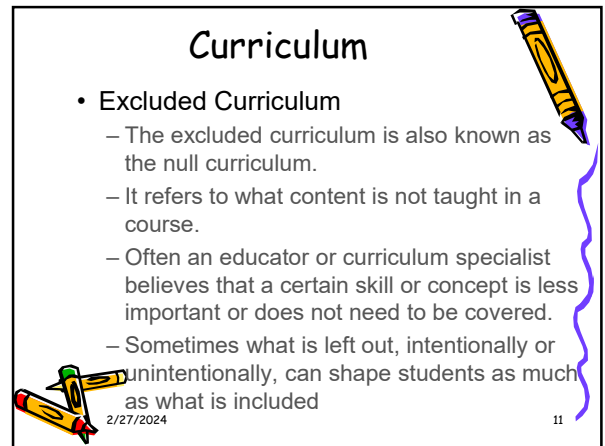
- **Assessed Curriculum**
 - An assessed curriculum is also known as a tested curriculum.
 - It refers to quizzes, tests and other kinds of methods to measure students' success.
 - This can encompass a number of different assessment techniques, including presentations, a portfolio, a demonstration as well as state and federal standardized tests.



8

Curriculum

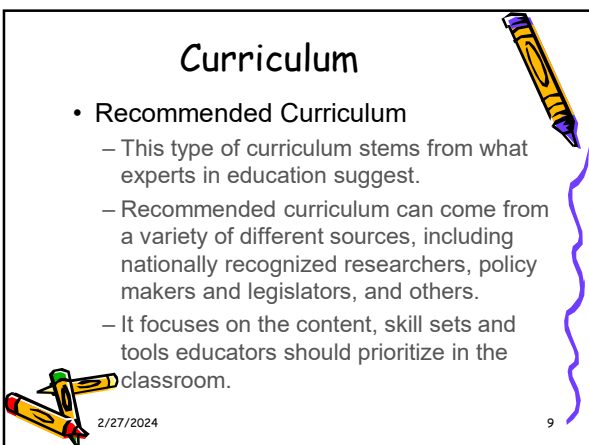
- **Excluded Curriculum**
 - The excluded curriculum is also known as the null curriculum.
 - It refers to what content is not taught in a course.
 - Often an educator or curriculum specialist believes that a certain skill or concept is less important or does not need to be covered.
 - Sometimes what is left out, intentionally or unintentionally, can shape students as much as what is included



11

Curriculum

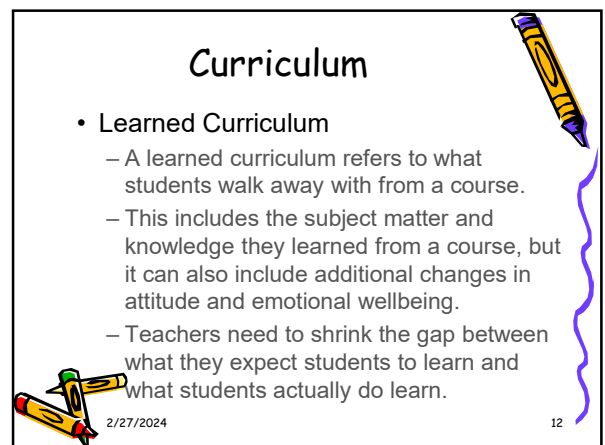
- **Recommended Curriculum**
 - This type of curriculum stems from what experts in education suggest.
 - Recommended curriculum can come from a variety of different sources, including nationally recognized researchers, policy makers and legislators, and others.
 - It focuses on the content, skill sets and tools educators should prioritize in the classroom.



9

Curriculum


- **Learned Curriculum**
 - A learned curriculum refers to what students walk away with from a course.
 - This includes the subject matter and knowledge they learned from a course, but it can also include additional changes in attitude and emotional wellbeing.
 - Teachers need to shrink the gap between what they expect students to learn and what students actually do learn.



12

Constructivism

- Constructivism is an important learning theory that educators use to help their students learn.
- Constructivism is based on the idea that people actively construct or make their own knowledge, and that reality is determined by your experiences as a learner.




2/27/2024

13

Constructivism

- Their background and previous knowledge impacts how they are able to learn.
- Educators are able to use constructivist learning theory to help their students understand their previous knowledge.
- It is important to understand learning theories and how they impact you and your students




2/27/2024

16

Constructivism

- Basically, learners use their previous knowledge as a foundation and build on it with new things that they learn.
- So everyone's individual experiences make their learning unique to them.




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14

Principles of constructivism.

- There are many specific elements and principles of constructivism that shape the way the theory works and applies to students.
- The following are the different principles of constructivism and how they make up the whole theory.




2/27/2024

17

Constructivism

- Constructivism is crucial to understand as an educator because it influences the way all of your students learn.
- Teachers and instructors that understand the constructivist learning theory understand that their students bring their own unique experiences to the classroom every day.




2/27/2024

15

Principles of constructivism

- Knowledge is constructed.
 - This is the basic principle, meaning that knowledge is built upon other knowledge.
 - Students take pieces and put them together in their own unique way, building something different than what another student will build.
 - The student's previous knowledge, experiences, beliefs, and insights are all important foundations for their continued learning.

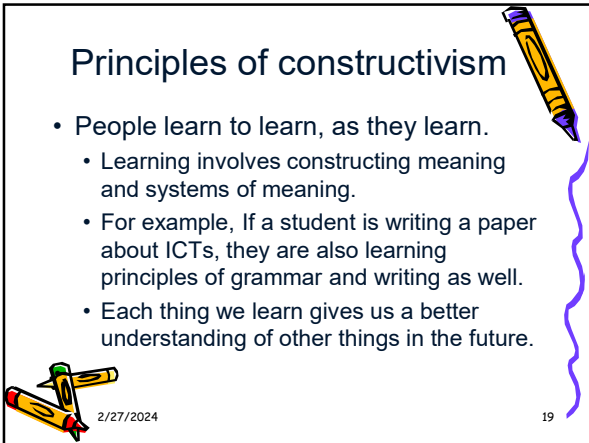


2/27/2024

18

Principles of constructivism

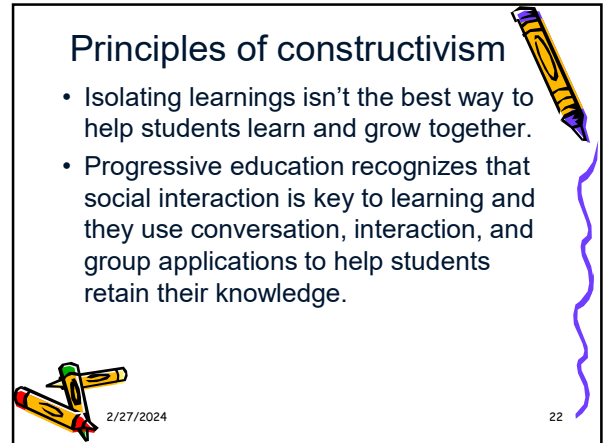
- People learn to learn, as they learn.
 - Learning involves constructing meaning and systems of meaning.
 - For example, If a student is writing a paper about ICTs, they are also learning principles of grammar and writing as well.
 - Each thing we learn gives us a better understanding of other things in the future.



2/27/2024 19

Principles of constructivism

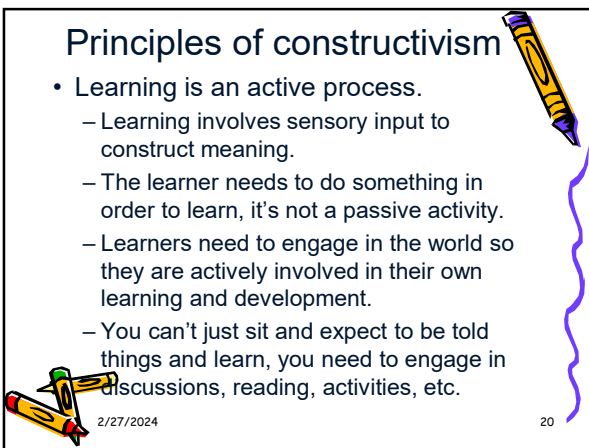
- Isolating learnings isn't the best way to help students learn and grow together.
- Progressive education recognizes that social interaction is key to learning and they use conversation, interaction, and group applications to help students retain their knowledge.



2/27/2024 22

Principles of constructivism

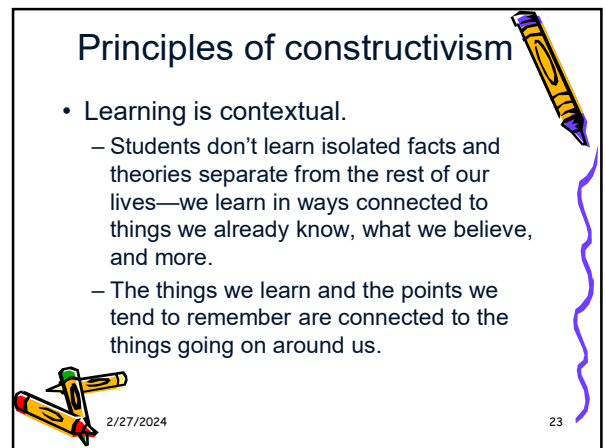
- Learning is an active process.
 - Learning involves sensory input to construct meaning.
 - The learner needs to do something in order to learn, it's not a passive activity.
 - Learners need to engage in the world so they are actively involved in their own learning and development.
 - You can't just sit and expect to be told things and learn, you need to engage in discussions, reading, activities, etc.



2/27/2024 20

Principles of constructivism

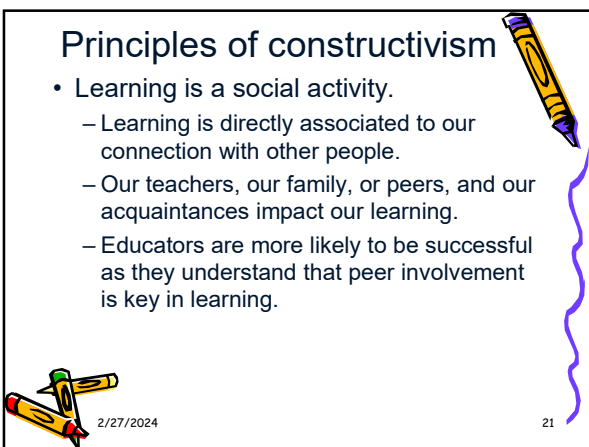
- Learning is contextual.
 - Students don't learn isolated facts and theories separate from the rest of our lives—we learn in ways connected to things we already know, what we believe, and more.
 - The things we learn and the points we tend to remember are connected to the things going on around us.



2/27/2024 23

Principles of constructivism

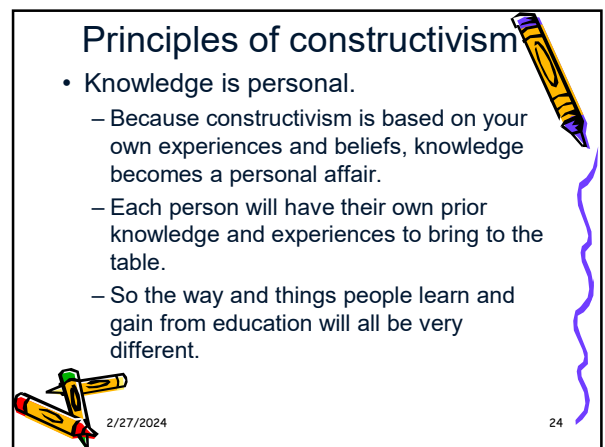
- Learning is a social activity.
 - Learning is directly associated to our connection with other people.
 - Our teachers, our family, or peers, and our acquaintances impact our learning.
 - Educators are more likely to be successful as they understand that peer involvement is key in learning.



2/27/2024 21

Principles of constructivism

- Knowledge is personal.
 - Because constructivism is based on your own experiences and beliefs, knowledge becomes a personal affair.
 - Each person will have their own prior knowledge and experiences to bring to the table.
 - So the way and things people learn and gain from education will all be very different.



2/27/2024 24

Principles of constructivism

- Learning exists in the mind.
 - Hands-on experiences and physical actions are necessary for learning, but those elements aren't enough.
 - Engaging the mind is key to successful learning.
 - Learning needs to involve activities for the minds, not just our hands.
 - Mental experiences are needed for retaining knowledge.



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25

Types of constructivism

- Cognitive constructivism comes from the work of Jean Piaget and his research on cognitive development in children.



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28

Principles of constructivism

- Motivation is key to learning.
 - Students are unable to learn if they are unmotivated.
 - Educators need to have ways to engage and motivate learners to activate their minds and help them be excited about education.
 - Without motivation, it's difficult for learners to reach into their past experience and make connections for new learning.



2/27/2024

26

Types of constructivism

- Social.
 - Social constructivism focuses on the collaborative nature of learning.
 - Knowledge develops from how people interact with each other, their culture, and society at large.
 - Students rely on others to help create their building blocks, and learning from others helps them construct their own knowledge and reality.



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29

Types of constructivism.

- Cognitive.
 - Cognitive constructivism focuses on the idea that learning should be related to the learner's stage of cognitive development.
 - These methods work to help students in learning new information by connecting it to things they already know, enabling them to make modifications in their existing intelligence to accommodate the new information.



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27

Types of constructivism

- Social constructivism comes from Lev Vygotsky, and is closely connected to cognitive constructivism with the added element of societal and peer influence.



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30

Types of constructivism

- Radical.
 - Radical constructivism is very different from cognitive and social constructivism.
 - It focuses on the idea that learners and the knowledge they construct tell us nothing real, only help us function in our environment.
 - The overall idea is that knowledge is invented, not discovered.



2/27/2024

31

Constructivism in education

- Teachers are more facilitators of learning than actual instructors.
- Teachers must work to understand the preexisting conceptions and understanding of students, then work to incorporate knowledge within those areas.
- Teachers will also need to adjust their teaching to match the learner's level of understanding



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34

Types of constructivism

- The things we bring to the table make it impossible for us to have truth, only interpretations of knowledge.
- This theory was developed by Ernst von Glasersfeld in 1974.



2/27/2024

32

Constructivism in education

- Constructivist classrooms focus on student questions and interests,
- they build on what students already know,
- they focus on interactive learning and are student-centered,
- teachers have a dialogue with students to help them construct their own knowledge,



2/27/2024

35

Constructivism in education.

- It's important to understand how teachers can apply constructivism inside their classroom to create a unique learning environment for students.
- In constructivist classrooms, the teacher has a role to create a collaborative environment where students are actively involved in their own learning..



2/27/2024

33

Constructivism in education

- they root in negotiation, and students work primarily in groups.
- Constructivist classrooms often have teachers who do small group work, collaborative and interactive activities, and open dialogues about what students need in order to find success.



2/27/2024

36

Constructivism in education

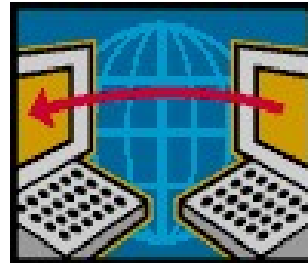
- Constructivist classrooms rely on four key areas to be successful:
 - Shared knowledge between teachers and students.
 - Shared authority between teachers and students.
 - Teachers act as a guide or facilitator.
 - Learning groups consist of small numbers of students.



2/27/2024

37

Questions



2/27/2024

40

Disadvantages of constructivist methods.

- The biggest criticism of constructivist learning is its lack of structure.
- Some students need highly structured and organized learning environments to thrive, and
- constructivist learning focuses on a more laid-back method to help students engage in their own learning.



2/27/2024

38

Disadvantages of constructivist methods

- Grading is often removed from constructivist classrooms and places more value on student progress, which can lead to students falling behind and not meeting standardized grading requirements.



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39