Table 3.1. Piaget's developmental stages of learning applied to sexuality education

Stage	Mental age	Learning characteristics	Teaching examples as applied to sexuality education for those with intellectual disabilities
Sensorimotor	0–2 years	The person receives information about the world primarily through sensory and motor experiences.	Behavioral orientation uses basic reinforcers to encourage particular responses, to discourage others, and to shape prosocial behavior.
		The person responds primarily to intonation, rhythm, and context of language experience, not the abstract concepts that words represent.	Basis for teaching adult self-care skills such as toilet training, showering, and tooth brushing (Foxx & Azrin, 1973)
		The person is developmentally immature.	Uses menu of basic rewards, such as M&Ms, a cuddly toy, a whiff of a flower, a favorite musical tone or song, or a view of an attractive picture as reinforcers.
			Sexual self-stimulation (masturbation) is associated with pleasurable sensation but not erotic thoughts or fantasies (Planned Parenthood Federation of America & American Association of Sex Educators, Counselors, and Therapists, 2003).
Preoperational	2–7 years	The person begins to use symbols to represent objects and recognizes pictures as representing real-life objects.	Sexuality education relies on pictorial support for communicating information about sexual anatomy physiology.
			Teaching relies on concrete symbols and rules for specific behaviors, such as closing the door to the bathroom, labeling and expressing feelings, and discriminating private locations, private clothing, and private activities from public ones.
			Behavioral strategies such as task analysis are still important for learning support, especially when rehearsing new routines for modesty, using menstrual care equipment, expression of affection, anger management, sexual hygiene, and friendship skills.

(Walker-Hirsch, 2007)

Stage	Mental age	Learning characteristics	Teaching examples as applied to sexuality education for those with intellectual disabilities
Concrete Operations	7 to 11 years	The stage furthers the ability to order and classify objects and actions that are not abstract.	Teaching relies even more heavily on rehearsal and role play as vehicles for social learning, with extra practice on safe settings.
		The person categorizes objects and actions that can be seen or demonstrated.	The earlier strategies continue to strengthen understanding, especially in less concrete areas of sexuality education such as deciding what is right or wrong, assessing risks, evaluating the qualities of friendship, and the rules for dating.
			Social problem solving that is oriented toward independence is critical for this group. Using "social stories" expressed in verbal, written, and pictorial formats aids in self-efficacy.
			Opportunities for social and romantic relationships and mobility in the community begin to increase dramatically.
			Opportunities for "testing the rules" that exist among typically developing adolescents is an ongoing risk for this group until later in life when emotional maturity is more likely.
			Transition to the next stage can be a very high-risk time and can last for a longer period of time than expected.
Formal Thought	11 or 12 years and older	The stage encompasses the ability to deal with abstract, hypothetical reasoning processes.	The greater ability to use abstract reasoning skills within this stage create many more social and sexual opportunities.

(Walker-Hirsch, 2007)

Table 3.1. *(continued)*

Stage	Mental age	Learning characteristics	Teaching examples as applied to sexuality education for those with intellectual disabilities
		The person develops the ability to predict consequences and to plan for various possible outcomes.	Complex social problem-solving techniques are needed because social and sexual situations may be more complicated and the associated risks may be greater.
		These skills continue to be refined throughout life.	Those with disabilities that affect social and sexual understanding may continue to need ongoing education, counseling, and/or support that is targeted toward specific situations that may develop.

(Walker-Hirsch, 2007)

Learning Techniques

Table 3.2. Summary of learning techniques

Name of learning strength	Definition of learning strength	Example(s) of using learning strength in social-sexual skill building
Memory	Ability to store and retrieve previously experienced information, perceptions, and sensations	Developing a sight vocabulary memory for signs and symbols indicating public bathrooms; using and remembering adult words to describe the experiences of puberty
Attention	Ability to orient to relevant stimuli and exclude irrelevant, competing stimuli in a specific environment	Using lighted visuals such as video to learn and practice selecting the essential elements of a social situation; actively engaging in social problem solving through role playing, artistic expression, or physical learning experiences
Motivation and positive behavior support	Ability to initiate and continue an action after the immediate stimuli is withdrawn	Having the opportunity to experience success at using a new social skill in a natural environment, such as the school cafeteria or gym class
Learning transfer: generalizing behavior	Transfer of learning is the influence of prior learning on performance in similar situations at future times	Learning to take turns when answering in class is generalized when the person chooses to take turns during a board game at home
Paired associate learning	Using information or skills that are already known to teach new information and skills by associating the new with the familiar	Using colored circles to represent social boundaries is a way to learn to discriminate different degrees of closeness in relationships (CIRCLES®)
Incidental learning and inclusive education	Absorbing information that is not specifically taught, but is present in a learning situation	Absorbing cultural traditions, recognizing the voice of a familiar person, developing personal mannerisms, interpreting facial expressions and using them
Imitation, scripting, rehearsal, and role playing	Learning by observing others and then practicing and repeating their behaviors and modeling their actions	Imitating the language of a parent, teacher, or pop culture icon can lead to social acceptance (or ridicule)
Positive behavior support	Using positive behavior modification techniques, such as tangible rewards, social praise, task analysis, shaping, and other strategies to reduce undesirable behaviors and maintain prosocial ones	A token economy that rewards appropriate classroom attire with privileges or objects of desire; offering increased independence at the mall can be used as a reward for compliance with appropriate in-store behavior

(Walker-Hirsch, 2007)