

The Birds and the Bees: Teaching Comprehensive Human Sexuality Education to Individuals with Intellectual and Developmental Disabilities

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Abstract

This article describes a framework for providing human sexuality instruction to individuals with Intellectual and Developmental Disabilities (IDD). There are two main components in this framework: (1) goals for healthy sexual development throughout the lifespan and (2) dimensions of sexuality instruction. For each dimension of instruction, this article will outline specific strategies and resources that can be used by special educators. By following the recommendations in this framework, special educators will be more confident in teaching human sexuality to their students with IDD.

The Birds and the Bees: Teaching Comprehensive Human Sexuality Education to Individuals with Intellectual and Developmental Disabilities

Mrs. Webb is an experienced seventh-grade special education teacher. Although her school offers human sexuality education, most of her students do not take the course. There have been concerns that the general sex education curriculum, which has not been adapted for children with intellectual disabilities, is inappropriate but Mrs. Webb knows that this information is important to her students. She has never taught human sexuality, but she has to deal with issues related to sexual expression every year. Mrs. Webb wants to be pro-active about implementing human sexuality education; however, she is not sure where to begin.

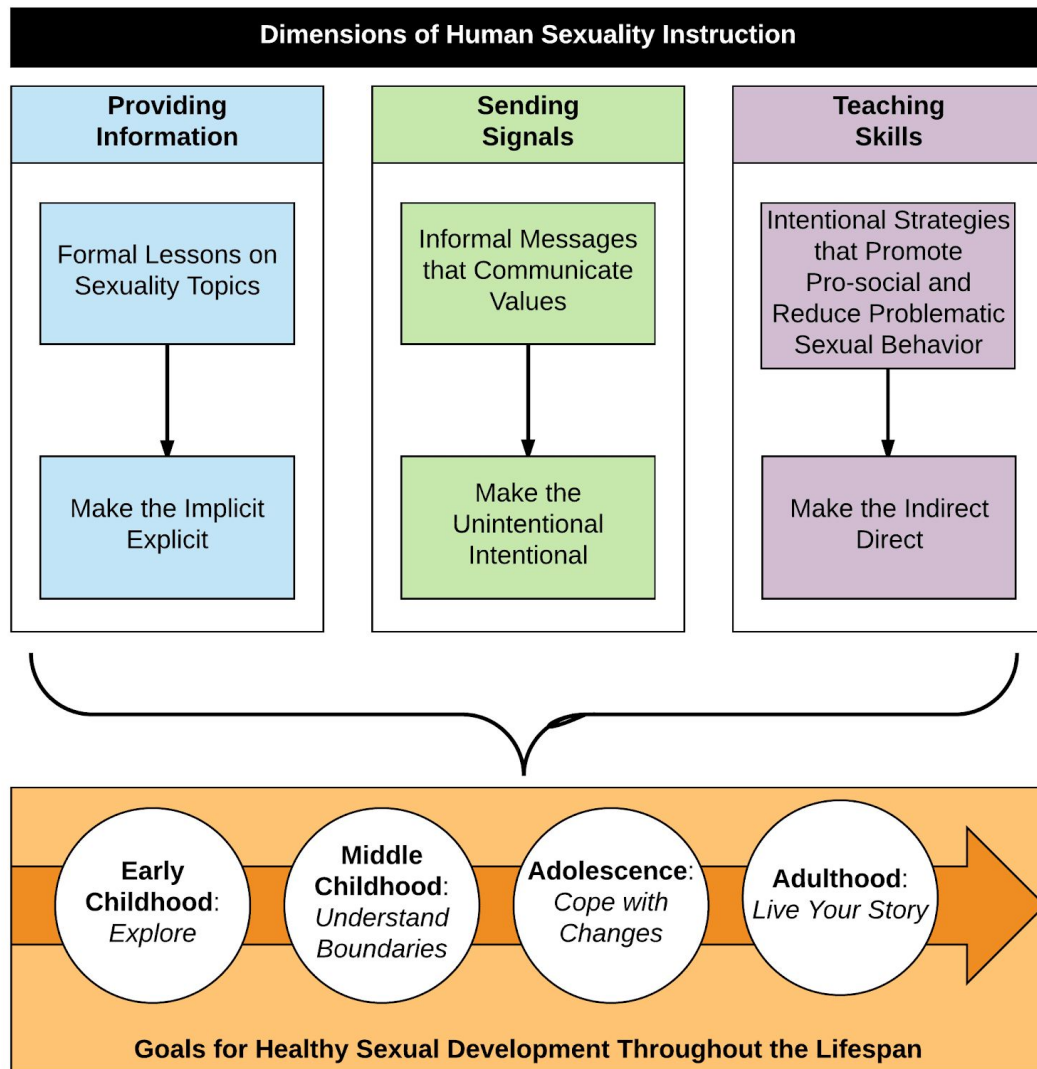
The United States has a long, complicated history with sex education with different stakeholders advocating dissimilar educational frameworks (Irvine, 2004). Although controversies remain in defining the boundaries of sex education, there is a movement both nationally and internationally coalescing around defining sex education comprehensively (Haberland & Rogow, 2015). The United Nations Fund for Population (UNFPA) provides operational guidance on how to define comprehensive sexuality education. Comprehensive sexuality education helps individuals to (1) acquire accurate information about sexual and reproductive health, (2) explore and nurture positive values and attitudes toward their sexual and reproductive health, (3) develop life skills that encourage sexual health and safety (UNFPA, 2014). The Sexuality Information and Education Council of the United States (SIECUS) and the American Academy of Pediatrics have position statements affirming that individuals with Intellectual and Developmental Disabilities (IDD) need comprehensive human sexuality education (SIECUS, n.d.; Murphy & Elias, 2006). The broad, holistic view of sex education by UNFPA reflects a comprehensive understanding of human sexuality (SIECUS, n.d.):

Human sexuality encompasses the sexual knowledge, beliefs, attitudes, values, and behaviors of individuals. Its various dimensions involve the anatomy, physiology, and biochemistry of the sexual response system; identity, orientation, roles, and personality; and thoughts, feelings, and relationships. Sexuality is influenced by ethical, spiritual, cultural, and moral concerns.

There are significant barriers to individuals with IDD receiving comprehensive sexuality education (Stinson, Christian, & Dotson, 2002). Although all states are involved at some level in providing sex education to public school children (National Conference of State Legislators, 2016), youth with IDD are often precluded from receiving comprehensive sexuality education. Special education teachers may not feel they are qualified to teach comprehensive sexuality education. A study of 494 Florida special education teachers reported that educators believed their training on sexuality topics was inadequate (Howard-Barr, Rienzo, Pigg, & James, 2005). Special education pre-service teachers receive little, if any, formal training on sexuality topics: May and Kundert (1996) studied special education training programs found 41% of their students

received no coursework on comprehensive sexuality education. Additionally, special educators may have difficulty obtaining appropriate resources for teaching sex education: resources that have empirical support and are aligned with educational standards (Travers, Whitby, Tincani, & Boutot, 2014). In the absence of adequate training and resources misconceptions about human sexuality and IDD persist, for example, that individuals with IDD are asexual: these biases are themselves barriers (Sinclair et al., 2015).

Figure 1. *Framework for providing human sexuality education to individuals with IDD*



There are several implications associated with poor or no sexuality education. Without adequate resources and training, when sex education is provided, personal values may dictate the information presented to individuals with IDD (Wilson & Frawley,

2016). A lack of intentional, accurate messages about sexuality can communicate that the sexual expression of individuals with IDD is deviant (Gomez, 2012). Additionally, when individuals with IDD are not supported proactively with sexual expression, it can lead to problematic sexual behavior (Stokes, Newton, & Kaur, 2007). Comprehensive human sexuality education is a useful strategy for both facilitating pro-social sexual behavior and reducing problematic sexual behavior (Curtiss & Ebata, 2016). Individuals with IDD are at risk for sexual violence, manipulation, and coercion and education can be a powerful self-protective tool (Bargner, Wacker, Macy, & Parish, 2009). Comprehensive sexuality education is important for addressing these concerns. Although it is often a challenge, some individuals with IDD do receive comprehensive sexuality education and are able to show increases in sexual knowledge (McDermott, Martin, Weinrich & Kelly, 1999).

As special educators may feel unprepared to teach comprehensive sexuality education, this article describes a framework for providing comprehensive human sexuality education to individuals with IDD (Figure 1). There are two main components in this framework: (1) goals for healthy sexual development throughout the lifespan and (2) dimensions of sexuality instruction. For each dimension of instruction, this article will outline specific strategies and resources that can be used by special educators. By following the recommendations in this framework, special educators will be more confident in teaching human sexuality to their students with IDD.

Goals for Healthy Sexual Development Throughout the Lifespan

From early childhood through adulthood there are important goals for sexual development. Before adolescence, children cannot experience erotic feelings, but they are sexual in the broadest sense of the word. They are exploring their bodies and figuring out what they can do. They develop gender awareness and identity. In early childhood, the goal of healthy sexual development is that children are allowed to *explore* developmentally appropriate information about sexuality safely; their attitudes, values, and beliefs; and relationships and interpersonal skills (SIECUS, 1998). As children get older, they begin to take responsibility for their sexuality as they learn to *understand boundaries*. With adolescence comes all the changes associated with puberty and the beginning of erotic feelings. Adolescents must learn to *cope with changes* to continue on the path towards being a sexually responsible adult. In adulthood people with IDD *live their story*: they safely express their sexuality whatever that may mean for them (SIECUS, 2004). The goals are additive; exploring, understanding, and coping never stop as adults express their sexuality congruent with their values. Regardless, of the age of the child, special educators play a role in the development of healthy sexuality for their students.

After assessing the needs of her students and consulting the SIECUS guidelines for comprehensive human sexuality education, Mrs. Webb decides she will teach an eight-week unit with the following topics: an introduction to human sexuality, anatomy,

puberty, reproduction, crushes, body image, hygiene, and a closing session. Mrs. Webb knows that positive relationships with parents are critical (Epstein, 2001) so she sends a letter home to parents outlining the material that will be covered during the unit and how they can help to reinforce this information at home. For example, SIECUS (2004) defines puberty as “a universally experienced transition from childhood to adulthood that is characterized by physical and emotional changes.” Developmental messages for this topic include normalizing differences in how individuals experience puberty (SIECUS, 2004). To facilitate this conversation at home, Mrs. Webb suggests “conversation topics” for parents to discuss with their children such as sharing their own puberty stories by answering the questions “How did you know you had started puberty? How old were you? What were the best and worst things about puberty? Who did you go to for guidance when you were experiencing puberty?”

Providing Information: Formal Lessons on Sexuality Topics

Formal lessons on sexuality topics provide information on human sexuality in order to increase knowledge in a structured, intentional, and systematic manner. Fortunately, there are many resources for providing comprehensive sexuality education for individuals with IDD. Educators may still need to individualize instruction due to the wide range of individual differences among individuals with IDD. Table 1 provides a starting place for finding resources on teaching human sexuality across the lifespan. All of the resources on this list provide accurate information, comply with the National Sexuality Education Standards (Future of Sexuality Education Initiative, 2012), and many of them are free (Alberta Health Services, n.d.; Curtiss, 2013; Saltz, 2008; SIECUS, 1998; Vanderbilt Leadership Education in Neurodevelopmental Disabilities, 2013; YAI, n.d.).

Table 1. *Resources for providing information on sexuality topics by age range*

Age	Resource	Description	Example of Use
Early Childhood: <i>Explore</i>	Hape Anatomical Puzzles (available for purchase on Amazon)*	Wooden puzzles for anatomical boys, girls, and pregnant mothers.	Provide children with access to puzzles. Use anatomically correct language when playing with puzzles.
	Right from the Start (available from SIECUS.org)*	This is a set of guidelines for child care providers to help address age-appropriate sexuality issues which was developed by SIECUS.	Review guidelines and consider which instructional practices are in-line with guidelines and which may need to be modified.

<p>Middle Childhood: Explore and Learn <i>Boundaries</i></p>	<p>Amazing You!: Getting Smart About Your Private Parts (available for purchase on Amazon)*</p>	<p>Picture book designed for young children. Anatomically correct images.</p>	<p>Read the book with a child. Normalize that each person's body is a little bit different.</p>
	<p>Healthy Bodies (available at vkc.mc.vanderbilt.edu/healthybodies)</p>	<p>Free online tool kit developed by Vanderbilt Leadership Education in Neurodevelopmental Disabilities. Also available in Spanish.</p>	<p>Incorporate lesson plans into health related instruction.</p>
<p>Adolescence: Explore, Learn Boundaries, and <i>Cope with Changes</i></p>	<p>Teaching Sexual Health (available at teachingsexualhealth.ca)</p>	<p>Free online lesson plans developed by Alberta Health Services. Can filter for lesson plans for students with differing needs. Range from middle childhood through high school. Also available in French.</p>	<p>Select lessons for individual or small group sex education.</p>
	<p>The Birds and the Bees (available at ASDsexED.org)</p>	<p>Free online lesson plans for middle school, high school, and young adults which were developed by The Autism Program of Illinois.</p>	<p>Follow curriculum or select lessons for individual or small group education.</p>
<p>Adulthood: Explore, Learn Boundaries, Cope with Changes, and <i>Live Your Story</i></p>	<p>Sexuality Education for People with Developmental Disabilities (available for purchase at disabilityworkshops.com)</p>	<p>This 20 lesson curriculum was originally developed for community providers but also has a school based modification. Developed by Planned Parenthood of Northern New England with Green Mountain Self-Advocates.</p>	<p>Follow curriculum or select lessons for small group education. Include a self-advocate as a co-facilitator.</p>
	<p>YAI Relationship Series</p>	<p>This is a video based curriculum which comes with instructional</p>	<p>These videos are ideal for one-on-one instruction, but can</p>

(available for purchase from yai.org/trainingstore)	materials and facilitators guide.	also be used to supplement small group education.
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Note: * These materials were not developed specifically for youth with IDD

When considering human sexuality from a broad, comprehensive perspective, there are many topics that fall under the umbrella of comprehensive sexuality education. SIECUS (2004) provides guidelines for comprehensive human sexuality education that are available online. The guidelines cover 39 different topics which fall under six broad concepts: human development, relationships, personal skills, sexual behavior, sexual health, and society and culture. For each topic, SIECUS identifies developmentally appropriate content. The developmental content is an important resource for special educators as they can use the progression of information for each topic to help target their instruction to meet individual developmental needs. Although useful, 39 topics may not be feasible for all educators. A survey of 43 practitioners who received training on comprehensive human sexuality education affirmed each of the SIECUS topics as being relevant to individuals with IDD; however, the following areas were rated the highest: communication, sexual abuse, help-seeking behavior, decision making, contraception, values, sexually transmitted diseases, assertiveness, love, and romantic relationships (Curtiss & Ebata, 2016). These topics can help guide special educators on where to focus their resources. There is no sexuality topic that is inherently inappropriate for individuals with IDD; however, information must be truthful, direct, and relevant. Additionally, Sinclair and colleagues (2017) recommend five stages for implementing a comprehensive sexuality education curriculum: connect with school boards and district personnel, connect with school administrators, plan for instruction with general education teachers, engage families and caregivers in planning, and engage students in planning and instruction. These stages provide a strategy for including stakeholders in selecting content.

Make the Implicit Explicit

Because human sexuality is a taboo topic, the language used to express sexual information is often vague and relies on implicit deductions to explain sexuality topics. The implicit messages make learning about human sexuality difficult for all students, but especially those with IDD. That knowledge about human sexuality is often informally and implicitly transmitted may be one of the reasons individuals with IDD have been found to demonstrate less knowledge about sex and sexuality (Sinclair et al., 2015). Special educators are in an excellent position of supporting with meaningful instruction on sexuality topics because they often have the role of working with content teachers to differentiate instruction (Sinclair et al., 2017). Furthermore, many of the strategies special educators use to effectively differentiate in other academic contexts can be


applied to comprehensive sexuality education (Sinclair et al., 2017). For example, Figure 2 shows how a checklist worksheet can be modified to a pictorial sorting activity for younger students or non-readers. The following strategies have been reported in studies that found increases in sexual knowledge: the use of anatomically detailed dolls and drawings (Lunsky & Benson, 2000); individualized instruction (Dukes & McGuire, 2009); prolonged engagement (Lindsay et al., 1992); direct instruction design (Wells et al., 2012); and directed conversations (McDermott et al., 1999).

Figure 2. *Changes that happen during puberty from ASDsexED.org in checklist and sorting task*


Directions: First decide if this change has already happened or will happen to you and check the box. Next decide if that change will make you feel nervous or excited. If this is the case, check that box.

Puberty Change	Already Happened Y/N	Will Happen Y/N	I feel nervous about this	I feel excited about this
Grow taller				
Has strong feelings				
Gets acne (pimples)				
Hair grows on face				
Hair gets oily				
Hair grows on underarms				
Hair grows on genitals (pubic hair)				
Gets body odor				
Penis grows				
Has an erection (hard penis)				
Mood swings				
"Like" someone				
More independent				


shoulders get broader



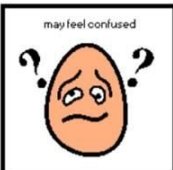
voice gets deeper




breasts grow




may feel confused



begins to get hair on face & legs



has wet dreams (sexual arousal/organsim during sleep)



When preparing for the puberty lesson, Mrs. Webb reviews several lesson plans for teaching about puberty. She compares them to the SIECUS guidelines for Comprehensive Sexuality Education and the National Sexuality Education Standards. Both sets of standards suggest that children should be able to explain physical, social, and emotional changes that occur during puberty as well as variations between individuals, especially between males and females. First, she has her students do a sorting task where they are provided with a series of changes that happen during puberty with each change on a separate note card. She instructed students to sort the changes into three piles with a partner: changes that happen to just people with penises, changes that happen to just people with uteruses, and changes that happen to everybody. For the next activity in this lesson, Mrs. Webb reviews the changes that they had previously discussed and asked the students to do a new sorting task on their own. This time, they sort the changes into three piles: this change has already happened to me, this change will happen to me, this change will never happen to me. For the next lesson, using the

same changes and the same type of sorting activity, Mrs. Webb asks the students if they are excited about the change, anxious about the change, or have no feeling about the change. Together, these three activities illustrate differences in the experience of puberty, the emotional aspect of puberty, and that puberty consists of a series of changes. Mrs. Webb is using repetition and spacing (Riches et al., 2005) to help her students be able to identify the changes associated with puberty.

Sending Signals: Informal Messages that Communicate Values

Although providing information through formal lessons is an important aspect of comprehensive human sexuality education, most of the messages sent about human sexuality are informal. The second dimension of human sexuality instruction is sending signals. Facial expressions, wording, tone, what is talked about, and what is *not* talked about all teach human sexuality. Despite informal signals being the most common way of communicating about sexuality, these messages are often unintentional and reflect educators’ values about sexual expression and disability. In a study of special education teachers, their values about human sexuality predicted their instructional practices (Howard-Barr et al., 2005). Curtiss and Ebata (2016) found negative correlations between both knowledge seeking and collaborating when practitioners endorsed traditional values about comprehensive sexuality education.

Make the Unintentional Intentional

Informal communication can be used in intentional ways to affirm sexual expression. Simple changes in wording can communicate vastly different messages about sexuality (see Table 2 for examples). It is important to use informal communication intentionally to normalize and validate sexual thoughts and feelings. That means that educators have to stay calm when dealing with sexual expression. Maintaining a neutral tone can be especially difficult as sexual expression can often happen at inopportune times and places; however, having already established appropriate avenues for discussing human sexuality, like formal comprehensive sexuality education, can provide opportunities for redirection. Both formal lessons and informal messages contribute to the ability to teach the skills related to healthy human sexuality.

Table 2. *How language communicates sexual values*

Age	Situation	Response that Communicates Shame about Sexual Expression	Response that Communicates Affirmation of Sexual Expression
Early Childhood: <i>Explore</i>	Young child finds her vulva when using the restroom...	“That’s yucky. Don’t touch.”	“That’s your vulva. It’s special.”
Middle Childhood: <i>Explore and Learn Boundaries</i>	Child stimulates genitals during class...	“Bad touch. Safe hands.”	“At home in your room.”

<p>Adolescence: Explore, Learn Boundaries, and <i>Cope with Changes</i></p>	<p>Adolescent gets an erection during class...</p>	<p>Ignore it.</p>	<p>Explain in private, "It's normal to get sexy feelings. Sometimes when you get sexy feelings your penis will get bigger. When this happens at school take deep breaths until it goes away."</p>
<p>Adulthood: Explore, Learn Boundaries, Cope with Changes, and <i>Live Your Story</i></p>	<p>A young adult seems to have a crush on another student...</p>	<p>Separate the individuals.</p>	<p>"Do you think that is someone you would like to go on a date with?"</p>

Throughout the sex education unit, Mrs. Webb uses reflective practice (Amulya, 2004) to understand her own biases and assumptions regarding human sexuality topics and how she could be unintentionally sending these messages to her students. Reflective practice is the process of learning through reflection to understand a person's perspective through examining struggles, dilemmas, uncertainty, and breakthroughs (Amulya, 2004). During the puberty unit, Mrs. Webb realizes that she often assumes her students are having negative emotions associated with puberty and does not address that students may be excited or proud of the changes in her body. She recalls a situation last year when one of her students started menstruating. The student loved carrying her purse on the days she was having her period as this is where she stored her feminine hygiene products. Mrs. Webb had told the student that she needed to be more private but realized that she might have unintentionally sent the message that the student should be ashamed of menstruation. Mrs. Webb makes an intentional effort to adjust both her formal instruction and the signals she sends to validate the full range of emotions associated with puberty. For example, in the puberty lesson, she made sure to address the emotional aspect in a way that presented the full range of emotions. In her incidental interactions with students, she challenges herself to validate anxiety, fear, and embarrassment as well as pride, excitement, and anticipation.

Teaching Skills: Intentional Strategies that Promote Pro-social and Reduce Problematic Sexual Behavior

In addition to formal lessons that provide information and informal messages that communicate values, youth with IDD need to be taught skills that promote pro-social (e.g., flirting, dating, consent) and reduce problematic (e.g., stalking, staring, harassing) sexual behavior. Teaching skills refer to how educators use routines, intervention strategies, reinforcement, practice, and environmental changes to affect behavior. Many

of the same strategies used to teach skills unrelated to sexuality may also be effective teaching skills related to sexuality topics such as modeling, guided practice, reinforcement, and corrective feedback (Schaafsma et al., 2015). A stage based behavior change model can help educators understand how to match an instructional strategy based on the needs of the individuals (Prochaska et al., 1994).

There are five stages of behavior change: pre-contemplation, contemplation, preparation, action, and maintenance. Table 3 (at the end of the manuscript) outlines the stages of the behavior change along with the goal of the educator, strategies that could be used, and examples of both promoting and reducing behavior around sexuality. Each of the suggested strategies in Table 3 is drawn from Wong and colleagues (2015) evidenced-based practices for individuals with autism spectrum disorder (ASD) and Schaafsma and colleagues (2015) effective methods for teaching comprehensive sexuality education to individuals with IDD. In this model, *pre-contemplation* is the stage where the individual has not yet considered changing behavior or is unaware that they need to make a change. *Contemplation* is the stage where the individual has started thinking about changing their behavior, but they are still continuing with the behavior. They have no commitment to changing their behavior yet. *Preparation* is when they are committed to change and learning how to take action to make a behavior change. They are continuing with their behavior at this time. *Action* is when the individual makes a behavior change. *Maintenance* is sustaining the behavior change. Individuals can progress through the stages and also regress to a previous stage as behavior change is a complex process. When an instructional strategy is ineffective it is often because there is a mismatch between the strategy and the individuals stage of behavior change. For example, the educator is using a preparation strategy like targeted reinforcement, but the student is in the pre-contemplation phase.

Make the Indirect Direct




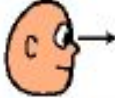


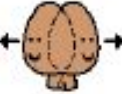








Topics of sexuality are generally taboo and it can be difficult to address them directly. Educators may want to avoid the sexual function of the behavior because it is uncomfortable. Like other behaviors, if the function of the behavior is not addressed then it is unlikely that the behavior will change. For example, consider one of Mrs. Webb's students who is excessively staring at another student:

Mrs. Webb has noticed that one of her students is excessively staring at another student. She believes her student has a crush, but thinks that he may be unaware of his staring (pre-contemplation phase). Mrs. Webb makes time to have a discussion with that student. Although her class has not reached the "crush" unit in their human sexuality class, "getting crushes" was one of the changes associated with puberty she included in the sorting activities. She meets with her student and refers back to the activity. Mrs. Webb normalizes having a crush and discusses several pro-social things individuals with crushes can do such as thinking about the person a lot, trying to learn more about the person, and joining in with activities. They also talk about things that might make

someone feel uncomfortable like staring, following someone around, or talking to the person too much. Her student seems to understand but his staring continues (contemplation phase). Mrs. Webb gives him a visual (Figure 3) to help him understand how staring makes someone feel and what he can do to change his behavior. She uses the visual to prompt him when she notices him staring (preparation phase). Eventually, he starts using the strategies on the visual independently (action phase). By this time, the class has gotten to the "crush" unit so he also being supported with understanding and managing crushes (maintenance phase).

Figure 3. Paul's Looking Guide from ASDsexED.org

My Looking Guide

Rating	Looks Like	How They Feel	What I Can Do
5	stare or use a gesture 	scared or offended 	apologize 
4	look for a few moments 	frustrated or insulted 	show you made a mistake 
3	look a few times 	a little nervous or embarrassed 	smile or blush 
2	look one blink 	a little confused 	try talking to the person 
1	look out of the corner of my eye 	don't notice 	go back to what I'm doing 

Using Comprehensive Sexuality Education to Promote Sexual Safety

Sexual abuse is an important facet for comprehensive human sexuality education. For the general population, the lifetime rate of victimization is estimated to be 27% for women and 16% for men (Finkelhor et al., 1990). Due to impairments related to communication and social isolation, children with disabilities are at greater risk. It is estimated that they are 1.7 times more likely to experience sexual abuse (Crosse, Kaye, & Ratnofsky, 1993). Sexual perpetrators rely on a culture of shame, guilt, and secrecy around sexuality in order to prevent disclosure. Only 38% of child victims disclose that they have been sexually abused (London, Bruck, Ceci, & Shuman, 2003), and youth with IDD have additional barriers to disclosure such as a reliance on caregivers and a lack of sexual knowledge (Ammerman, Van Hasslet, Hersen, McGonigle, & Lubesky, 1989).

Providing information, sending signals, and teaching skills are all critical for sexuality instruction to promote sexual safety. Formal lessons that give information about the names of body parts, sexual rights, and physical intimacy are important for promoting sexual safety. There are specific curricula providing information on sexual safety such as "We Can Stop Abuse" (Laesch & Pacey, 2004), "ESCAPE-NOW" (Khemka & Hickson, 2015), and "Living Safer Lives" (Johnson et al., 2002). Perpetrators of sexual violence often use sophisticated strategies of coercion and manipulation in order to gain and keep access to victims that limit the ability of victims to prevent and stop the cycle of abuse. Thus, the formal instruction that teaches individuals with IDD to resist sexual assault has limited potential for ending sexual violence but can increase disclosure especially as part of comprehensive human sexuality education (Bager et al., 2009).

Often, the informal messages sent about sexuality reinforce the culture of secrecy about sexual abuse. By intentionally sending the message that it is safe to talk about topics of sexuality, the stage is set for disclosure. There are messages that can be sent that specifically reinforce sexual safety. The Texas Center for the Judiciary funded a resource guide for responding to abuse against children with disabilities which offers several suggestions for safety planning (SafePlace, 2014). These strategies are meant to be incorporated into everyday informal interactions.

1. Name the full range of emotions and give permission to express them (e.g., "It is okay to be sad. I am here with you.").
2. Practice consent (e.g., ask before you touch a child).
3. Set up opportunities for children to say "No."
4. Respond to peer-based harassment.

Young people can also be taught safety planning skills. A safety plan is a set of specific steps a person can take if they feel unsafe. A safety plan includes deciding on who they can call for help, making sure they have the phone number available, and practicing the call. It can consist of roleplaying how to say "no" and how to leave a situation. Bowen's (2000) "Taking Care of Me" curriculum offers a systemized way to

create and practice safety plans. The Waisman Center has also created a comprehensive training guide for safety awareness and planning: S.A.F.E. (Hafner, 2005).

Conclusion

From early childhood through adulthood, special educators play an essential role in the healthy sexual development of individuals with IDD. Their expertise in providing instruction makes them, in many cases, to be the most effective team member in this role. Human sexuality instruction is multidimensional. It encompasses providing information, sending signals, and teaching skills. Formal lessons on sexuality topics make the implicit assumptions regarding human sexuality explicit. Informal messages communicate values about sexuality whether or not they are intentional. Direct instruction around pro-social sexual behavior can address and prevent problematic sexual behavior. This framework can be a useful guide for providing human sexuality instruction.

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Table 3. *Stage-based behavior change*

Stage	Goal of Instruction	Potential Strategies	Example: Promoting Prosocial Behavior	Example: Reducing Problematic Behavior
<p>Pre-contemplation: Unaware of the Change</p>	<p>Awareness</p>	<ul style="list-style-type: none"> ● Cognitive behavioral intervention ● Video modeling ● Visual supports ● Discussion 	<p>Laura is in middle school. She sometimes notices boys and thinks they are cute, but she does not consider talking to them. She does spend a lot of her time thinking about boys. She will look at them and giggle. Her teacher notices that she has a crush. To help facilitate discussion, Laura and her teacher create of list of pros and cons of talking to a boy she thinks is cute.</p>	<p>Paul has a crush on girl at school. He has changed the way he walks to class so that he can pass by her in the hall. He has been getting to school early and staying late so he can make sure to see her on her way to and from school. He tends to look at her intensely we he sees her and it makes her uncomfortable. Paul’s teacher uses a video modeling curriculum specifically developed for individuals having difficulty understanding social signals called Mike’s Crush (Nowell, 2011).</p>
<p>Contemplation: Aware but No Commitment to Changing Yet</p>	<p>Planning</p>	<ul style="list-style-type: none"> ● Cognitive behavioral interventions ● Visual supports 	<p>Laura knows she could talk to a boy she likes, but she is not sure that she wants to yet. Her teacher writes her a “Choose Your Own Adventure” visual story to help her imagine different scenarios and how she might react.</p>	<p>Paul knows that his crush feels uncomfortable, but does not understand why staring is a problem as he is not doing anything to hurt her. Paul’s teacher makes him a 5-point scale visual support to help him understand how his crush feels and Paul’s behavior choices (see Figure 3 below). They create an action plan (which is a cognitive behavioral strategy) for how Paul will go from class to class.</p>

<p>Preparation: Learning How to Take Action to Make the Change</p>	<p>Practice</p>	<ul style="list-style-type: none"> ● Role-play ● Video modeling ● Scripting ● Reinforcement ● Prompting ● Antecedent-based intervention and redirection ● Guided practice 	<p>Laura decides she does want to talk to a boy she thinks is really cute. She and her teacher come up with a script of what she wants to say and they practice the script.</p>	<p>Paul is disappointed that he will not get to see his crush as often, but he wants her to like him back. He does not want to scare her. He wants to start taking a new way to class but he feels the temptation to follow her. Paul’s teacher prompts Paul which route he will take between classes. Paul’s teacher gives him the option of walking on his own or with a peer. At the end of the day, if Paul follows his route he gets to post a selfie on his Instagram account (one of his favorite reinforcers).</p>
<p>Action: Changing Behavior</p>	<p>The instructor does not have a direct role in the action phase. It is the responsibility of the individual to take action.</p>	<ul style="list-style-type: none"> ● Feedback ● Social skills training ● Functional communication training 	<p>Laura talks to the boy she has a crush on. They do have a brief conversation, but Laura feels really embarrassed. Laura’s teacher tells her that feeling embarrassed is very normal and that she did a good job. She talks to Laura’s parents about starting some formal human sexuality education so Laura understands the changes that are happening in her body and with her feelings.</p>	<p>Paul no longer follows his crush between classes or stares at her intensely when he sees her. Paul’s teacher has been working with him to learn how to initiate conversations with people he likes.</p>
<p>Maintenance: Sustaining Change or New Skill</p>	<p>Independence</p>	<ul style="list-style-type: none"> ● Continue Preparation 	<p>Laura decides she does not like to talk to boys. Instead of entering the maintenance phase, she returns</p>	<p>Paul still thinks about his crush a lot and misses seeing her. Sometimes he is afraid he cannot</p>

		Strategies as Needed <ul style="list-style-type: none">● Self-management	to the contemplation phase. Laura's teacher affirms her choice.	control the urge to see her. Paul and his teacher come up with a plan for what he will do when he has those feelings. Paul will write her letters, but keep those letters in safe space at home. He will not put her name on them. Writing the letters helps with Paul's feelings.
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