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SCHOOL OF THEOLOGY AND MINISTRY CONTINUING EDUCATION

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# Transcript Segment, Part 2 "Adolescent Growth and Development"

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So when we're talking about adolescence, we're talking about a really steep and challenging learning curve to move from the instrumental vision of the world that children do to the more complicated relational engagement that we're expecting of adults. How did we do it? Well, first of all, I think it's helpful to pay attention to what is it that allows the human person to make this change-- the brain-- a rough sketch.

#### [LAUGHTER]

The brain develops from the brain stem, up and around, forward to the front of the brain. I did that drawing. Isn't it good? Yeah, okay. The first thing that develops is the brain stem. And this develops in utero so it controls-- well, eventually, respiration, but heartbeat and some really very basic things.

After we're born, our decision-functioning for much of our life works out of the amygdala, which is in the center of the brain. It's also the place where emotion is modulated, if that's a word we can use for emotions. And through childhood, that's where most of our decisions are made. They're quick, they're reactive, they're helpful, if you are in danger, that you respond really quickly to something. But they're not very thoughtful.

As we develop through adolescence-- and the change starts just before puberty-- there is a traumatic new growth of brain cells that happen in the frontal cortex, okay? And so the human brain actually gains in mass around the age 10, 11. It starts earlier for girls than it does for boys by about a year. And what the brain is doing is getting ready-- getting ready for a tremendous growth spurt that's happening in there. We often focus on the growth spurt that's happening in this. It's in here that's in fact more dramatic-- what's happening in the brain.

So what it's going to take over the next number of years is that new brain cells are grown and then they're going to start being drawn into use. And one of the important things that happens, hopefully, is that-- let's see if my thing works here. You probably can't there. Is that the thinking process moves-- or the decision-making process moves from the amygdala forward to the frontal cortex.

So the frontal cortex is also known as the CEO of the brain. It's the one that's good at making decisions. It's good at changing its mind. It's good at thinking things through. This comes on board through adolescence and doesn't come to full maturity to the adult brain until about the mid-twenties. So we have at least 10 years, closer to probably 15 years, of our brain changing, moving from a child's brain to the ready-adult brain. And over the course of that time, the brain is getting rewired, repurposed, and organized in new ways.

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Another significant growth-- and this isn't-- I'm just highlighting a few of the more important ones-- is also the cerebellum. The cerebellum kind of adds to-- the cerebellum has always been there, but if it gets used during this time of life, it actually helps the rest of the brain organize better. So the brain is going through dramatic changes which then allows for the young person to mature in a really helpful way.

What becomes of this? What does it mean? You gain the ability to look beyond the immediate and the concrete. Truly, you can begin to think in terms of ideas. You can begin to appreciate both history and time future. You begin to recognize values and their inconsistency and you get a bigger sense of ideas and interconnecting concepts. So what the brain suddenly allows the human person to do is ideate. To think of big ideas. To recognize things beyond themselves.

And I often call it "seeing the invisible." So the child is more drawn and limited to the concrete. The adolescent brain begins to comprehend in the area of ideas, and eventually, complex ideas. So they're primed over that time to start asking big questions.

What is life all about? What are we all doing here? What should I be doing here? And as they begin to recognize it, ready to be part of something larger than themselves.

So in terms of cognition, in terms of ideas, this becomes an important thing. What else does it mean? Well the brain's new capacity also allows the ability to see myself. Self-consciousness arises. It wasn't there before.

So while the child was unconscious that they were the center of attention in the room, the adolescent becomes strangely conscious that they are probably the center of attention, and think, of course, everybody is looking at them, because they are suddenly looking at them. They see themselves seeing. They see themselves thinking. They see themselves feeling. And they think everybody sees what they see. So it's a time of our life when we feel particularly naked in front of everybody. You know?

The plus of that is that self-consciousness creates the capacity for self-awareness. And that is when you say, "Yes, I know I came in the room and I know I have an impact on these people. They're probably not all watching me, but I have to take responsibility for the fact that I'm here," and so on and so forth. That's a brief explanation of self-awareness.

So the brain gains the capacity to become self-aware, which then allows them to begin to question about who are they and how do they fit into the world, which is something we call "identity." They begin to wonder, who am I going to affiliate with? Who am I going to hang with? Who are my people? Where do they fit?

They begin to also have the capacity to share a deep inner life. They begin to realize they have one and they begin to provoke it and grow it, and then they begin to want to share it with other people. And in that, they begin to also imagine that other people have a perspective, too. If I have this deep inner life, then maybe you do, too.

Now we all know this. We don't grant it immediately to everybody. We think most everybody else is shallow bores. But then we say, "But the people I like, they're deep and meaningful." So it takes a while to extend this graciousness to other people. Which in turn creates the capacity for them to empathize, eventually.

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See, these are growing and refining capacities that need to be developed over time. So while they're prepared, as I was noting a moment ago, they are primed to start thinking in bigger questions and bigger ideas and bigger concepts, I'm saying now, they're also primed to engage in relationships for the exact same reason. I have a niece and a nephew who recognize themselves in pictures. [CHUCKLE]

So who am I? Does anybody care who I am, besides me? I hope I care. All right? And there's a ready willingness to be part of something bigger. Okay, I'll stop embarrassing them and move on to the next slide, which is going to be embarrassing to me. Okay.

It's like the child-- I couldn't find a child, I'll use me-- so it's like the child who has been in this boat, in a sense, that someone else has been driving around, and they look out and they realize, huh, there's a world out there and people are starting to expect things of me. And what's interesting in adolescence-- we've been there, but we see it also in the adolescents we work with-- they usually feel it before they can name it. And they feel it in the sense of people's expectations and they get frustrated and angry because they know it's there, even though they don't even know why.

And I'd suggest to you, they're suddenly seeing people's expectations. Feeling it. You know, a parent could have been saying to their son or daughter for years, "Would you please pick up your stuff," but they're suddenly hearing it and realizing, hey, why are you on my case? I'm like, "I've been on your case for five years." But suddenly, they're seeing it and feeling it and upset about not knowing how to respond to it. So as they look out of the edge of the boat and begin to see the world, it becomes an opportunity to make new sense in a new way, but it also becomes a time of extraordinary anxiety for the very same reason. Okay?

Now having said that all of that is possible, none of it is inevitable. Sometimes, you just get older and remain instrumental in your thinking. Sometimes, you just get older and think you're the center of the world. Unfortunately, then you just get more savvy at it. How do I manipulate the world to serve my purposes? How do I never take the blame for anything? How do I use people for what I need to get ahead?

I'm not interested in helping people grow like that, and I wouldn't expect you are either, so I'm saying, what is it you do to help people grow and mature? They'll age on their own. How do you help them grow and mature?