Classroom Adjustments: Fragile X Syndrome

| **Speaker** | **Timecode** | **Content** |
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| Jack Pitts: | [00:00](https://www.rev.com/transcript-editor/Edit?token=YaiiGaown4QUGRGWvphFYfD0vlaeY9vQQeEyez_T3Gx3fZIXeE1Q-u4v8BDUWlEBOFjUaWMQdpHA98jrvpfzxRV4lXM&loadFrom=DocumentDeeplink&ts=0.47) | I never ever look at the condition. It's the individual. The student that I've worked with, with fragile X, is incredibly unique. He's so caring and loyal and funny. Some people would find it a dark sense of humour, which can be found to go with fragile X, but it makes him unique. And regardless of what's happening during the day, it can put a smile on your face and it's the most rewarding thing. |
| Serpil Senelmis: | [00:31](https://www.rev.com/transcript-editor/Edit?token=MS-dTUXh0_yb7Ozc6sy3ioLTFBFjn161n1iPeZcKBSDvvxd8wwC8uf2leRcqo7IO9owzfb-_wTpbIyxo9fPNtu8eWqU&loadFrom=DocumentDeeplink&ts=31.8) | That's specialist school teacher, Jack, talking about his student, Jimmy, who has fragile X syndrome. Hi, I'm Serpil Senelmis, and this podcast is part of an NCCD portal series. In this episode, we'll discuss some adjustments that can be made in the classroom to enable students with fragile X syndrome to participate on the same basis as their peers. You'll hear more from Jack and Jimmy, and I'll introduce you to his mom, Sarah, as well. |
| Serpil Senelmis: | [01:07](https://www.rev.com/transcript-editor/Edit?token=HSAA95XXcxVm0TC_eWquiUqqFSUUCScKVIfVXNYo9zqHJ--_Lmf50txj4Bw3HCqZ0eqsOqjT-_xVa2vpnirlS6yvK1Y&loadFrom=DocumentDeeplink&ts=67.62) | Beverly Kadish is an occupational therapist who specializes in fragile X syndrome. As she explains, it's a genetic condition. |
| Beverley Kadish: | [01:16](https://www.rev.com/transcript-editor/Edit?token=Z3hwi3AAePDxlJUXaptIKrctsyGZvjRvSyYBDUTK7Lx1EeI6czmyVEqx85dTeLqiLerI8oYc_ULVmHwnBZKPclX6UKI&loadFrom=DocumentDeeplink&ts=76.96) | Fragile X is the most common inherited cause of intellectual disability and autism. It's quite rare in girls. 1 in about 4,000 is affected, and 1 in 3,600 boys affected. There are quite a few physical characteristics in fragile X, mainly seen in the men and the boys. They often have a prominent forehead, large ears, a long face, high arched palate, double jointedness, soft skin and flat feet. But it's often not the physical characteristics we notice most, it's that sort of intellectual disability or the autistic features that are quite striking. It's often picked up by parents when they notice their children aren't learning to speak at the same pace as others. |
| Serpil Senelmis: | [02:00](https://www.rev.com/transcript-editor/Edit?token=fig5US2cSgzh-r3sPGeEXrA-Ac59SBbHAKLTWqMAzhRDMgZXZysBVO2-OUfMo06th5m1g1f7jRz2y-urBEKLrZjtn1A&loadFrom=DocumentDeeplink&ts=120.54) | Can you talk me through the broad spectrum? |
| Beverley Kadish: | [02:03](https://www.rev.com/transcript-editor/Edit?token=OTjpF4ynMbRxMHSaToJEwcukwRHmhWG3fDhAwv99fzbHbd8vK83ZYZ-kcxPjJesoGidw0ERc7UAQnQtpSsWTB7LLKRM&loadFrom=DocumentDeeplink&ts=123.43) | There is quite a broad spectrum, but there's also some common things with fragile X syndrome. There's a lot of obsessive compulsive disorders, sensory processing disorders, and language delays. I guess the most crippling of all is the anxiety they all experience. A true social anxiety. They really want to be friendly. They're very lovable, have a great sense of humour, but find it hard to actually engage with others. Then they certainly have great memories, and they can remember things that you didn't even think were relevant a long time ago. And they have a sequential learning style and great computer or technology skills, which in the stone age, stands them in good stead. |
| Serpil Senelmis: | [02:46](https://www.rev.com/transcript-editor/Edit?token=k5111HkVC9eZ110wUpGeh8S_BdbgY6xyYRV5ld6otOFEkXpAz-Wm1Okh4h8o1fukW7dSgsmUr-veAVtt-ty_kcD6h3M&loadFrom=DocumentDeeplink&ts=166.61) | What sort of learning challenges would a student with fragile X syndrome have in the classroom? |
| Beverley Kadish: | [02:53](https://www.rev.com/transcript-editor/Edit?token=WmhL7xIocu80NV3IRn_eV9clJ_ZszK2GtByePQLrgtm-fd2urnlrYU5f8UBEUPtJzKVd4LY9DBShIw5l0cG7l4hglGM&loadFrom=DocumentDeeplink&ts=173.25) | I guess the most challenging issue for them in the classroom is the big noise that exists in the classroom. They are very sensitive to sensory input. They have sensory processing difficulties on some level or another. They generally don't cope in noisy environments. They don't cope when people are in too close proximity to them and when there are a lot of social expectations. So, I guess they like a calm, quiet environment where everything is very simply presented, where they aren't overloaded on an auditory, a visual, a tactile, or even an olfactory level. Simple things like teachers wearing perfume to school can make a child with fragile X feel very unsettled and have difficulty coping with the day. |
| Serpil Senelmis: | [03:38](https://www.rev.com/transcript-editor/Edit?token=7ih7UZhtErRjWSxVMVvJonOZoG_0RQlII2kYC_O0FEvvHOTkDCC--IvyFTRnKVzvER6wd0qxiq0iHwXYgLaEo73gzKE&loadFrom=DocumentDeeplink&ts=218.5) | In a practical context, one of the biggest challenges in the classroom for students with fragile X syndrome is being able to comprehend what teachers are asking of them. Jack is a teacher at a specialist school and according to him, it's not what you say, but how you say it. |
| Jack Pitts: | [03:57](https://www.rev.com/transcript-editor/Edit?token=Kiykb3aszIXs1x_wofYuLZTpEuWeBQgdhsaGO2YfqldAoiztrqbs0mluDBO1hTKTu_gPdwTmE1U4kS6yrJTLmmHpoiw&loadFrom=DocumentDeeplink&ts=237.94) | There's language barriers there in regard to their understanding of what's being said of them, reading and writing difficulties. If a teacher has just written instructions on the board, the child is probably not going to understand what is being asked to them. Reading tasks. Often we find students with this condition have low reading skills, which impacts their ability to read and absorb knowledge being presented to them. Communication difficulties, the inability to express how they're feeling, what's affecting them, what's upsetting them, what's even making them happy and perhaps exhilarated within the classroom, taking them out of that optimal level of learning. They are some the challenges that I've come across. |
| Serpil Senelmis: | [04:39](https://www.rev.com/transcript-editor/Edit?token=-_uLL4z2Ja2nXYYj_2Fqt5wqfiS8ty6t-u2Vm9ii5Xr3O24S1mmPeJEOhGefG3EOrhZo9FQMOlVTdgLnZYuNDArqm8o&loadFrom=DocumentDeeplink&ts=279.78) | What kind of adjustments would you make in the classroom to help them to communicate with the teacher? |
| Jack Pitts: | [04:45](https://www.rev.com/transcript-editor/Edit?token=-6DmaqEKsnqAuj9LQEhynWn4sY-8xU1KbFh-Z-JMxqNAsrbFuhkQV2yP1husjn1kU2Zpbl9O4AtNIcZ2pmnWLBnfFag&loadFrom=DocumentDeeplink&ts=285.89) | Providing them with different forms of communication, using picture ... or we call them PECS in the classroom, to express a clear need. Someone with fragile X will be able to go and touch the PEC which says water, indicating that they need a drink of water or perhaps water is spelt around them. Something to do with water which identifies their need or concern. |
| Serpil Senelmis: | [05:08](https://www.rev.com/transcript-editor/Edit?token=Z8RS8_3pA6v6vKPJukf7xAwx-jq-Z4IWwnCeoz-KgV2VgaEfW4T2yUCoK9LC3vdZ6dDjrjSAaI6w5eHPiApySv2MWqY&loadFrom=DocumentDeeplink&ts=308.94) | Jack works closely with Jimmy, and as you heard at the start of this podcast episode, there's a joy in his voice when he talks about his student's achievements. |
| Jack Pitts: | [05:18](https://www.rev.com/transcript-editor/Edit?token=LBzHQMqPxIl3XrxzmCS09wGgCtgQ5cl4iXq_nffaLN3FqVlXPwBoI_N0N1TR2ZaONHDUFxHDUnJwa_W6wnMowEzUdGc&loadFrom=DocumentDeeplink&ts=318.9) | With Jimmy, I have to go back to the start before I can discuss the achievements. The boy we had five years ago, he would get to a point that he would vomit from anxiety. He would be so scared and stressed, and fret the whole time. We built a wonderful little relationship together. It started with him stealing my afternoon tea, I believe. I was coming from my first job to a second job, and I always had an orange, which you could eat on the go. It started with a piece, and by the end of our time together it would ... more often than not, Jimmy would eat my whole orange. |
| Serpil Senelmis: | [05:55](https://www.rev.com/transcript-editor/Edit?token=wO_sWYU8p3sGyoKWe5ryn47-_KNsqxGGYSlvVH1Qz4-rwNFyMFz4Dkfk_PgSBi9rF271LKbDHbRgkTlpyi6NbdW9cR8&loadFrom=DocumentDeeplink&ts=355.83) | That's lovely. |
| Jack Pitts: | [05:56](https://www.rev.com/transcript-editor/Edit?token=htzg-l9jshWaGly5kGe0ayowDzLKOIrlx3F5KXHvL2RgA9m6JKSOJHoYLGudWtjp9qUNcIki3youRt5MuSWxN2BFphg&loadFrom=DocumentDeeplink&ts=356.44) | Yes. Jimmy was identifying about three letters, and sometimes it would regress to none. At the end of the second year, he was achieving a 100%. |
| Jimmy: | [06:09](https://www.rev.com/transcript-editor/Edit?token=1vDorHVZ-qPjOoT3y1cBb1wkYUGSCEIEn4aE9tqW4lL3MIOFTIB95Jvdd9usuWzGfO98NgiU8VFBWiR196MAu_InMTY&loadFrom=DocumentDeeplink&ts=369.62) | Hi, I'm Jimmy. |
| Serpil Senelmis: | [06:12](https://www.rev.com/transcript-editor/Edit?token=tHGPqT2hap428QVGUFLXsCBGJbLhzNG1zl1f1RIkFBuNBBewO8szXouHFpZerWgGmL3Qjb4oGbb0JycGUrONVbz40fI&loadFrom=DocumentDeeplink&ts=372.37) | Do you like writing? |
| Jimmy: | [06:13](https://www.rev.com/transcript-editor/Edit?token=hSadLjj7iTs1okCa60DsfHwyBqmrq73Hk2QRREf5DPe9bKrjSRUhgr55ZAtOvdaqYxXEq0_gwxMjP-TpQ3RBt4dmdBM&loadFrom=DocumentDeeplink&ts=373.38) | I do, I really do, I do. Yes, I do. |
| Jack Pitts: | [06:15](https://www.rev.com/transcript-editor/Edit?token=QuBn5NnbyMG-2wPIm_awIGz5YyJS-NCDSiImJP4OyPQJe2nfKCDBqb23z9YKrz3Ypph-xx_YckHsSZxY7CB60EGUVsI&loadFrom=DocumentDeeplink&ts=375.27) | Do you like numeracy? |
| Jimmy: | [06:20](https://www.rev.com/transcript-editor/Edit?token=hs2EWCtLu_nNj1n3T9VF8xM3i8BUK1pRiMXQ52aikWYTZugfQDJ0Oi5D5uk_xDvWYJs45nT_1hWMf03NOFOkmsfXKvk&loadFrom=DocumentDeeplink&ts=380.08) | I do like numeracy. |
| Serpil Senelmis: | [06:21](https://www.rev.com/transcript-editor/Edit?token=l1yGV8tVqAs5aCcRhLTPa42_RjkeVXI7iwLelaAoyJE1oAv0gIW6252NXSSFWfNhQm_g2vp4LLOrpbccBFQHTxu6G90&loadFrom=DocumentDeeplink&ts=381.42) | You like numeracy? |
| Jimmy: | [06:22](https://www.rev.com/transcript-editor/Edit?token=zmJ8ernnfPEPNmF56OBOlH0ovssm-aSnyhnyFFsqgOYy2PYcmiIonUqucYN-E0CPCLnmWuGx-XIaAcQdhSLkJWxurJE&loadFrom=DocumentDeeplink&ts=382.47) | Numeracy, is it? |
| Sarah: | [06:34](https://www.rev.com/transcript-editor/Edit?token=5TM4w5LgW-W_gMt6xQnkCv1Ob-yOewqJy6pQBgdsu5jnPdxezCMWarRmjLOH95O1_01w-yrWBMXp7e4HptwGPaTwluM&loadFrom=DocumentDeeplink&ts=394.71) | Hi, my name is Sarah, and my son Jimmy, has fragile X syndrome. He's super sensitive. Things, changes in routine, things that you and I might think ... sensory things don't really bother us, are really hard for Jimmy. Bright lights, noise, overcrowding, just not knowing what's going to happen next is really tricky for Jimmy. We always try our best to make sure that we can preempt what's going to happen, but obviously you can't always do that. |
| Serpil Senelmis: | [07:02](https://www.rev.com/transcript-editor/Edit?token=9jvPjnsSQwXAC5TwgJy_uXWn23bfUdIDlfrr0HXo9PbgI0ga3FiqJVGj5YZK2VvVftrAfsXLBq8dFTN6qK9UsQwSU4s&loadFrom=DocumentDeeplink&ts=422.55) | What are some of the challenges then, that fragile X syndrome creates for him in the classroom context? |
| Sarah: | [07:08](https://www.rev.com/transcript-editor/Edit?token=hm2DVTR-7bMy6PA11t02Qh1GF4C2RlaDZ7XLXQmcV5vP8Ld66A6R8hKdZqthHTMV-dX19zGbfECkHzgQMpO--ZtiL2s&loadFrom=DocumentDeeplink&ts=428.65) | Jim really struggles academically. He is 11 years old and he's still at the stage just starting to learn to write his name and things like that. He's starting to look at some sight words and remember sight words, but things that aren't just rote learning are really, really tricky. Anything that's abstract learning for Jimmy is pretty much out of the question. School is a really tough place for him. It's great socially, but academically it's a really tough place for him. Five plus five for Jimmy means nothing, but saying hello and giving a high five means a lot. For him, it's all about the social and definitely not academic. |
| Serpil Senelmis: | [07:44](https://www.rev.com/transcript-editor/Edit?token=RMyV-QeWwLrMks8wUSMXNYIjaQJjW-p3gAUKHPbAFREQRQAR6nzkI0bLaoP9elFPNeg-sjAD40JB-TInR4ydyXy812g&loadFrom=DocumentDeeplink&ts=464.17) | When it comes to making adjustments in the classroom to support students with fragile X syndrome, Beverly highlights the importance of routine and visual supports. |
| Beverley Kadish: | [07:55](https://www.rev.com/transcript-editor/Edit?token=1YLado3q2adfkewb-sTabwPEE-3Ok4ZB-be_-0rtEj98vf9tpb8XR5LYpnc6yWgskz-Ivd-UOl0txXSj8HZSJGJnieE&loadFrom=DocumentDeeplink&ts=475.54) | I think the first thing that children really benefit from is visual scheduling. They have a very high level of anxiety and they manage visual information a lot better than verbal information. |
| Jack Pitts: | [08:05](https://www.rev.com/transcript-editor/Edit?token=OASYSZpq5JOpeBnmCtfg-ksMZJWupslkwQSkTr8NzLOI-Pr7BvFQALnmMgSNeqC2uLXw4K0cZ-DW8M17gVLCymL-oqY&loadFrom=DocumentDeeplink&ts=485.93) | If a child with fragile X understands what is expected of them, what is happening at different stages throughout the day, it's shown to reduce anxiety and stress. In the classroom, we use a visual schedule every day, which entails the child's day. This is done through writing and supported with visual pictures, showing the students what subjects, what areas of learning, when's lunch, when can we go out and kick the footie, when would be the best time to go to the toilet. This is further supported with the teacher running through these activities with all students during a morning circle learning experience, which is every morning. |
| Sarah: | [08:49](https://www.rev.com/transcript-editor/Edit?token=EXygCAOEErI4GYk1X3pKw5d5LMgFXikIhzgbBFlHmDZtLrNE3yyoLxvGN-Yeo8lziGz1HdCkD_p0tQiCUSY_eAhkllo&loadFrom=DocumentDeeplink&ts=529.12) | And if there's a routine, and things are done in a routine way, the same structure everyday, they really find that a lot easier. Task schedules also help them with understanding what is expected in a task. Because they're called Gestalt learners, so they learn as a whole, they like to see the whole process. If they are doing a cutting task, they need to know exactly what's involved. First they need to colour in, then they need to cut, then they need to stick it in. If we can have pictures showing them these things, they then don't go into sensory overload by the teacher giving lots and lots of verbal instructions. Things are visually presented and then they can keep referring back to them as well. |
| Serpil Senelmis: | [09:28](https://www.rev.com/transcript-editor/Edit?token=M4FnAfx1SYVAEovyIL9uwTLuxChp05oexOwDre79m_LlNgTf3-rpiP0m-rohrPdr_dH33FEvVypwa7sVAFyPd4O5nyY&loadFrom=DocumentDeeplink&ts=568.92) | So, the visual cues compliment the verbal cues, and the instructions are broken down into step-by-step chunks. |
| Sarah: | [09:36](https://www.rev.com/transcript-editor/Edit?token=kNnBOSU3CtSV8HNi6pYP70VIK9nGW-xxvNnY7zypfSRhxEGv7KoRbnza4zzvoS-JlkG8Rdidsk6B-F31D4JM2JawSSU&loadFrom=DocumentDeeplink&ts=576.75) | Step-by-step chunks are the best way to present instructions, although they like to see the whole and the end product as well. For instance, when they're learning to read, they don't learn well to read phonetically. So, sounding out the letters. They are much better at learning sight words and chunking things, which is a real strength that they have. |
| Sarah: | [09:56](https://www.rev.com/transcript-editor/Edit?token=JmKjW-0aMvuo-aXP2NsJGnvbVNjFpqmv46vYZLqk9AZnAHxu4_U_CcUFWqKKM2VFseUPheY-naimtuYfiKOIZtQgK3w&loadFrom=DocumentDeeplink&ts=596.61) | Jimmy being Jimmy I think has always been taken us by surprise in the milestones. And each one ... we never thought that he would walk, and then eventually at two and a half, he walked. I was like, oh my goodness, here he is. I suppose our biggest one now is I always think, oh, I don't know whether he'll read. Then the other day, he just ... there was a word and he knew what it was. His sight words are pretty good. So, I suppose it's all those little things that I'm like, yeah, I think that he will get there and he will make all these little milestones. It's just in Jimmy time, and we've always called it Jimmy time. |
| Jack Pitts: | [10:27](https://www.rev.com/transcript-editor/Edit?token=wEEZt59kwPIRl209Ojbpja8-XGBM2Oqpn-wdzE_5-w6EBvsbIrd-cRrLeuAOhWvuMNA2D8JfJ82z8JutgySWG9Gf0EI&loadFrom=DocumentDeeplink&ts=627.41) | For someone with fragile X, I would give clear, one step instructions for every step of that learning experience, running through those with the student as we go, perhaps even crossing them off as they are completed. |
| Serpil Senelmis: | [10:41](https://www.rev.com/transcript-editor/Edit?token=Z27M5_CkKb586adWWRns9eS82s9OX0DiqBpwa2hZ9HnCZzQENoxkCTMMP0a5Q9YSkIzU0ADA2toMWDV0E3Q8cx4VyqY&loadFrom=DocumentDeeplink&ts=641.2) | So, it's a good idea for teachers to adjust their style when delivering instructions in the classroom. |
| Beverley Kadish: | [10:47](https://www.rev.com/transcript-editor/Edit?token=8SkcAZttq_PqW2DlDJC8abYQ7nhiH5RYeWm1ChSFL0LSrCVggTC4k2_eaDBdpT4UBM1XTDkLbuChXSHetCJlb3FT58k&loadFrom=DocumentDeeplink&ts=647.97) | I think they have to firstly recognize that children with fragile X syndrome take longer to process instruction, so they have to give them extra response time and not rush them through the task. Another thing that's quite beneficial is using indirect questioning. They really don't respond well when they're under pressure and somebody's asking them a direct question. So if they can give one thing at a time, that makes it a lot easier for the student. And then also if they can write down key words so that they can visually see what the focus of that lesson is and perhaps even before the lesson starts, just have key words for that lesson on the board that the student can look at, get a little bit familiar with, and then that will sort of set them up. |
| Jack Pitts: | [11:30](https://www.rev.com/transcript-editor/Edit?token=7B5xvlM1xm71ozx5i7lkGLXZu64K5mHuDbBV3EXFm7v4VwM1c043XmkTbLgknTktDf-U_TM4JV94nZVzzvzmc1Jw-3E&loadFrom=DocumentDeeplink&ts=690.66) | The number one thing I have found is repetition, repetition, repetition. We use a sign in book every day, and that student every day of the year or write their name, write their name, write their name. To assist this, we use verbal and visual pathways to assist the student in writing. If the need is there, co-active writing, where you ask the student to hop on, and they will hop on your hand whilst you are guiding the pencil, giving them the feel of where it goes, speaking through each letter. So, J, down and around, I, down and a dot. Modified pencils to assist their fine motor skills. We have stoppers at the end of our pencils which are thicker, allowing for a greater surface area with your pointer fingers. |
| Beverley Kadish: | [12:18](https://www.rev.com/transcript-editor/Edit?token=uyk6RU-DJkuX7Xi98Wipgyw91Cqkrh7DJGum78jM8i66S4d17R7YxoLDXZdqzKiqbD8Bueg5TJ31lB-eH0WnK6J8wDQ&loadFrom=DocumentDeeplink&ts=738.45) | We try and give everybody basic handwriting skills to be able to write your name, fill in a form and that type of thing. But I think with technology available, computers and iPads are such an effective way to communicate now. There's things like voice to text where the child doesn't actually have to do any fine motor task, but yet they can get all that information down. It also offers the chance to write a paragraph and then go back and edit it by using technology. And because they're often not good at sequential tasks, this really makes things look a lot neater for them. A lot of the children don't actually have great hand function, per se, and they actually might need a modified mouse, which is not quite as sensitive as the usual mouse, to allow them to navigate and move around on the computer. |
| Serpil Senelmis: | [13:07](https://www.rev.com/transcript-editor/Edit?token=tvtyWl6leVRlw5c7N7NWr_2yQ4hNkYCP0AJV83KwtNwx_u8mr4Q0k6CxZ3SC_Uny2uolbO-TtI9VgfC_eTMDdDZtFgY&loadFrom=DocumentDeeplink&ts=787.72) | But another low tech approach is to give students an opportunity to explore handwriting off the page. It's something that specialist teacher Jack really enjoys too. |
| Jack Pitts: | [13:20](https://www.rev.com/transcript-editor/Edit?token=s8l68HcKtwOR0ZlW-haUAKmW1ekwQCiB5cb3Rvg6B2plrozaIbvTpt_Kgyu_skTW5m8qXri9AFmvWluVVsLxwuivRlk&loadFrom=DocumentDeeplink&ts=800.23) | In your teaching, that's where you can be creative. That's where you can use sensory tactile things to improve fine motor skills, such as ... one of my favourite ones was the shaving cream, and writing in the shaving cream. Sometimes maybe even a whipped cream that you can eat it afterwards. |
| Serpil Senelmis: | [13:34](https://www.rev.com/transcript-editor/Edit?token=A2Tmi3T-2AiXGrMeXawGhodSUr9atUxRueMV5TXM5yCIlZRWEg23mFhH-Fp7LaEB4J1FnSMECIz4Hk5p2y7wY1ndcd8&loadFrom=DocumentDeeplink&ts=814.1) | That sounds like a tasty exercise. On a more global level, adjustments to the classroom environment, seating plan and learning resources can be beneficial for students with fragile X syndrome. Beverly suggests starting by reducing the level of noise. |
| Beverley Kadish: | [13:52](https://www.rev.com/transcript-editor/Edit?token=OnbSh5ccOHbMgchD7moM_Pm4m40CCMNBOyln15zwxdKZS18GK4zF0e5D_5a5PbFvgiZnmNqwRa5ALGICfIOgpFcEGu0&loadFrom=DocumentDeeplink&ts=832.07) | Those noise cancelling headphones are very beneficial. Just blocking out all the extra noises that are going on in the environment. Stripping the walls of too much of visual information. Also, being careful when they're presenting a worksheet, that there's not too much information on that worksheet, perhaps blocking some of it out. Placement of the student in the classrooms is another important factor. We want them away from noisy things like air conditioners, heaters, doors, if there's traffic, open windows. And also generally, the middle of the classroom is not a good idea because they have too many other children around them, but rather side of the classroom, either the front or the back depending on where the door, heating, etc., is. |
| Serpil Senelmis: | [14:34](https://www.rev.com/transcript-editor/Edit?token=0j_ciWCXF78pwMuvQJd-tDZsmUbf9H4gbBtVUoBEgAUcxQiCpynt5DR1UBtEVQUPECPkULzbXqXaxxEsZkxXfGXQfUo&loadFrom=DocumentDeeplink&ts=874.36) | These environmental adjustments can also play a big role in reducing anxiety, which is one of the major challenges for students with fragile X syndrome. Beverly also has some particular strategies to keep anxiety at bay. |
| Beverley Kadish: | [14:50](https://www.rev.com/transcript-editor/Edit?token=dooqwh3irlxL8aYyGIdrgjAnuW7bzagnwM0B3uFzKdJ_1vH0hCVvpUilZau00HtLeXCRaw39Cv_qWG0kkKWMWJbqUIw&loadFrom=DocumentDeeplink&ts=890.34) | I think the first is eye contact. We all love to make eye contact and we are very social people, but they find our contact really uncomfortable and they often have gaze avoidance. They could turn their whole head or their whole body away, which isn't an indication they don't want to interact or talk to the teacher, but they just find it really challenging. So if you can just not insist on eye contact, that will already put them a little bit more at ease. Once they start to feel more familiar with the teacher and with other people in the classroom, they often increase their level of eye contact. |
| Serpil Senelmis: | [15:23](https://www.rev.com/transcript-editor/Edit?token=pmDFDPknDqe8PRGQ8Y6G1VOP5eP3OMQZgnnoaX5ly6XbUGDi4CvZu-DUUbI0qy9n2_itFCz2iWwswgJoYnOe520LFJ4&loadFrom=DocumentDeeplink&ts=923.9) | Another effective adjustment is to empower students with fragile X syndrome to regulate their anxiety by taking a break. |
| Beverley Kadish: | [15:33](https://www.rev.com/transcript-editor/Edit?token=3mIiSskyfoxoq7BYcIKU1zHEU4d8_i0pFfV_CjF_r4Gq6k4-zHooHMNHKAH2ry1aJF7BkChVf3ZTu2AvOBmbOFDMry8&loadFrom=DocumentDeeplink&ts=933.7) | With the anxiety, it's a great skill to be able to teach the children with fragile X to recognize when they need a break and to actually give the most suitable withdrawal area. This could just be a quiet corner, a small tent, a large box, somewhere where the child can go to actually just calm down and regulate themselves, and just get their anxiety back on track. Because we have to remember that anxiety is also physiological process, so their heart rate is speeding up, they're starting to sweat, and they're actually starting to feel anxious and panicky. One cannot function at their best when they're feeling this way. So, we just also need to make it very clear that this withdrawal area is not a punishment at all. |
| Serpil Senelmis: | [16:16](https://www.rev.com/transcript-editor/Edit?token=qihnJggMcN0aS6mFSxoOIgYdCxnIL89A8ebvI0XEjZn3TALuVHSR-JbQIPA2dmE7_pHFkp_dJCH46NMOM26npXrbu9Q&loadFrom=DocumentDeeplink&ts=976.06) | You have breaks in the classroom when you're tired? |
| Jimmy: | [16:17](https://www.rev.com/transcript-editor/Edit?token=PgqV99QI2ndxXwYFBi_h9axQ4bSsMonj2hmrrcxcIcQtdv5_UxFburTJ3yoFWGYRbfDlegT5VIJTp_GrlVtWKZJXMaE&loadFrom=DocumentDeeplink&ts=977.6) | I do. I'm tired. |
| Serpil Senelmis: | [16:20](https://www.rev.com/transcript-editor/Edit?token=HWNBlOGe_oFSIq1v3XE19F508HPcwsiVwYCZuAzIaYygP5VPw_Clk9ZBFmb0XAd3wgZoMtvUtXxe-MIQ3yaWxaFXr5g&loadFrom=DocumentDeeplink&ts=980.55) | What do you do when you have a break? |
| Jack Pitts: | [16:24](https://www.rev.com/transcript-editor/Edit?token=3LffdL-YZjs7L02z3cP4VXiC5fVUpYHKO_h6h0IL7R7Iq1rf4Iv1PBi0OoghH9E-GoeJ4w9s8nebLegQ1XFjtajbNZc&loadFrom=DocumentDeeplink&ts=984.16) | Ask the student to identify with how they're feeling. There's no such thing as a bad emotion. If someone is sad or angry or frustrated, as a teacher, we don't see that as a bad thing. We also have a carpeted area where we've got nice big comfy cushions where a student can lay down into. That might be as simple as having a lay down and having a nap. Screaming into the cushion, building a fort, anything that they need to do with those cushions to calm down. In a specialist school setting, there are education support staff who can take that student to a preferred activity which will help them regulate their behaviour. For example, the trampoline, the library, just a lap at the school, anything like that to assist the student to return to an optimal state of learning. |
| Serpil Senelmis: | [17:09](https://www.rev.com/transcript-editor/Edit?token=-uyXAa7UP5557V_lzRuBHFgr8MhI7f9kbKlUpW0kmyaotEl0kHLnNwotyTBVeR_FFlyYuXoHTa37E2fu1RRzI4Lv2WY&loadFrom=DocumentDeeplink&ts=1029.17) | Would you give the student the choice? |
| Jack Pitts: | [17:11](https://www.rev.com/transcript-editor/Edit?token=e_zq28zbPE0oV1wdvKfGmElC9yikHLe-e3wY2mKrVgvq3EGdj6HOI2akoLE1lTuYZT7U6u47eOw8uDOzqiry0qAJrWo&loadFrom=DocumentDeeplink&ts=1031.56) | I would always give the student a choice. There will obviously become stages where it's not possible for this to happen, and that's where your behaviour management strategies will have to be put into place. |
| Serpil Senelmis: | [17:27](https://www.rev.com/transcript-editor/Edit?token=dnf2fuhs9Bk7aR4sAJzsAIOaY4loQflWm2imNmG-IAX5gGwASOSFbXDCxB2sSrk7Jy5-RCWUPHgnVEnWZX5BieNnnF8&loadFrom=DocumentDeeplink&ts=1047.41) | Jimmy will often ask the classroom aid for help. |
| Jimmy: | [17:32](https://www.rev.com/transcript-editor/Edit?token=D3WNnJ_QGGunutv9iUf_6pnwpJCT68mWlJu2Qg9V0kBBDEG_zm4UmJs5jUCVebIAJ1PQO5R1sF2LZnhX3n8uXiX1J4k&loadFrom=DocumentDeeplink&ts=1052.64) | I need help. I need help, Lisa. |
| Serpil Senelmis: | [17:33](https://www.rev.com/transcript-editor/Edit?token=CoXzZw4c0ARdPEYZHR2-wBy7GdeCKIxIfta8IkP2aggrwWBS199X5PZm6yhDN9nU6Se6jC_PozR2K-PLIz5DS2DnKlc&loadFrom=DocumentDeeplink&ts=1053.05) | You'd say, "I need help Lisa." |
| Jimmy: | [17:34](https://www.rev.com/transcript-editor/Edit?token=u1AlSbwlN60humifRZTXacjrSDuL0Y_k3ghBLW5Mkymfs1am7Wy2GcXBhFJvp-5aNt_Ogx0ieOQuJMI3eOi-NjY-dY4&loadFrom=DocumentDeeplink&ts=1054.48) | I need help, Lisa. |
| Serpil Senelmis: | [17:35](https://www.rev.com/transcript-editor/Edit?token=4KcC2jKIZjRwC0tvzrTMdbg5Dt516wBp2hlrwtOVNCZ6Zxp-isgfFghqnFK0wr-SI1t4Ie5soyN0LWO9za5EXvGYDuo&loadFrom=DocumentDeeplink&ts=1055.84) | Do you put your hand up? |
| Jimmy: | [17:36](https://www.rev.com/transcript-editor/Edit?token=WRtBXXY-pDtR0jsTSgGHD8-wRruXAwbuly7iRz2TBjOISmWGAwJo2gr-c2W3ypWuG6RtJKT8KSqaivR1GvtzDhnrMAA&loadFrom=DocumentDeeplink&ts=1056.58) | I do put my hand up, I do. |
| Serpil Senelmis: | [17:39](https://www.rev.com/transcript-editor/Edit?token=lxQWvRDb3undiF0R0UqYmN3ag69qHzb-r6RdfSfDFeLGia2vie0lbbPg_XMtHROSSEfivRfXVmnrst3WWy_ik66Vylc&loadFrom=DocumentDeeplink&ts=1059.41) | What do you ask for help for? |
| Jimmy: | [17:42](https://www.rev.com/transcript-editor/Edit?token=HkhY1kJsghtL1BHMCQ41KDVXe3_q2VsmDSdlB9gUbGw2Jy_2h-OlB6tNzX4mzDnICH_P5qMZ1zerGHTBJECnsVcAHZs&loadFrom=DocumentDeeplink&ts=1062) | I say, help, help. Help me. |
| Beverley Kadish: | [17:53](https://www.rev.com/transcript-editor/Edit?token=eOSF3VYx0BFnDfohRYh9BDhqVcjx4-n6VzF2h9PHNmY79XTtHegg5mzueE0u3lrJoWZ4MSUqn-mmfJ3TBuGD2wvVpzE&loadFrom=DocumentDeeplink&ts=1073) | That's where we would also love to have sensory tools to help them to regulate. So, those noise cancelling headphones, some beautiful textures, bubble wands, maybe some gentle music on an iPod. Those are things they can all just help reduce anxiety, and we usually say set a time limit when they go into that withdrawal area so that they know they've got a few minutes to reduce the anxiety level and then they can come back to the classroom. If you think what a bean bag is really providing, it's giving someone a feeling like they're being hugged. It's that pressure that surrounds them, and pressure is really a great calming tool for anybody with fragile X. |
| Serpil Senelmis: | [18:30](https://www.rev.com/transcript-editor/Edit?token=4JXmfI-QYDclupoZ5bSWV4CzQefzy0C-kIbLA7C3zZRfg-bOzJ5g0nKFlhGeV1IPWbWrRbAnw860U1SSvXrHBBOzYHY&loadFrom=DocumentDeeplink&ts=1110.8) | Of course, there are many times when students with fragile X syndrome struggle to regulate their anxiety, even with a breakout area. Pediatric OT, Beverly, explains that modelling calm behaviour can be effective in these circumstances. |
| Beverley Kadish: | [18:48](https://www.rev.com/transcript-editor/Edit?token=LsmiEOf3eBo3mXLWYD4rAaVafM0t07ldfaPI4XzXLhY6uxRMCqdXznvI8yJ3EhN2ALbw14SaW6R-ST3fiH_sFbLCv9Q&loadFrom=DocumentDeeplink&ts=1128.29) | They are going to be impulsive, and they just need to be slowed down, spoken to quietly, and often people use co-regulation. You sort of use your calmness, your state of being, to try and bring their child down into a calmer state as well. And if they see other children behaving badly, unfortunately, they're kind of mimic that behaviour too. It's really important that they see calm, good behaviour happening. |
| Serpil Senelmis: | [19:11](https://www.rev.com/transcript-editor/Edit?token=4kRo7ahNOZ3lOi7h3AFdwUNkrpFq4WtfhoMbwSE_SO3v1rldjiT6FM8i_B-wT2lnYZX_6VglHOLeJQgi0x0eb-qvSeM&loadFrom=DocumentDeeplink&ts=1151.58) | Beverley talks about how one student reduced his anxiety around the school by using familiar and comforting objects. |
| Beverley Kadish: | [19:20](https://www.rev.com/transcript-editor/Edit?token=LM1CS1tg4vh42sVifwy6syeNkdK6NfOv3qwori69b6ZaeZQjHk_VMOAvMkDszle4NSrJp7KOn9wWUkK_oISQlUuGjiY&loadFrom=DocumentDeeplink&ts=1160.19) | When he has to transition either from one room to another, like going to art or music or the library, he actually takes an object with him. So if he was going to sport, he might carry a beanbag with him. The focus then becomes on that bean bag and not on moving from one place to another. |
| Jack Pitts: | [19:36](https://www.rev.com/transcript-editor/Edit?token=XOfBXvMCkcpWmfIYgMLWhc_SXh1h11kB8TMrrWa2fZ3vxCMe_miP9O0K6TcSnkzJYW7ZuWWf7JyKw1w1ZtBYxQ-NYC8&loadFrom=DocumentDeeplink&ts=1176.86) | Also, having things present in the classroom that would ease that anxiety; an interactive video on the whiteboard upon entering every day. The student I knew in particular loved the beach, so having waves splashing gently onto a nice golden sand every morning brought him in straight away, and then he went straight to his books within five minutes. That anxiety about his upcoming day no longer existed. |
| Serpil Senelmis: | [20:05](https://www.rev.com/transcript-editor/Edit?token=pgMgsAM0m4TIjthfB9e_hMdY9vgGzA8Ui2spW-XdVgkxnFFaTlMeJAhjMXwwf7tWDbIG3TO32JhBBw16mjEfAf0Ppdw&loadFrom=DocumentDeeplink&ts=1205.56) | While we were sitting in Jack's classroom, we could see that in addition to his strong teaching relationship with Jimmy, Jack had a very clear line of communication with Jimmy's mom, Sarah. |
| Jack Pitts: | [20:17](https://www.rev.com/transcript-editor/Edit?token=3uD1iyFqDAlITsOxuhyjJC6KSIWL4YqimrXKCz1cwVRnXKxJbnS0edegPnQMcbImPtwuT3wkbtnE9QbV45vSmZhtTFU&loadFrom=DocumentDeeplink&ts=1217.65) | During your parent-teacher interviews, we call them SSGs at this school, it's really important to discuss triggers. What brings on these undesired behaviours with the student? What brings on their anxiety? What brings on their unease? But then at the same time, identifying what makes this student happy, what makes them comfortable, what makes them safe in their learning environment? Parents are the greatest source of knowledge that a teacher can utilize, and it's incredibly important to have those conversations. |
| Beverley Kadish: | [20:49](https://www.rev.com/transcript-editor/Edit?token=bX4KHk4kx1Vz8Dq24Wn2YWu8VMxziOtM6jYF0oYSuwou_uGEb3No7fQNSnGF8In_D1M0tw7LfDUjlEIrf8r30-8bBTI&loadFrom=DocumentDeeplink&ts=1249.28) | I always think the most important thing is to prepare the teacher before that fragile X student even comes to the school. So, to have meetings before the student comes to the school, just explaining fragile X is not that common. What does fragile X mean? How is it going to affect the student and how they're different from everybody else. If they can meet the teacher before they attend the school, tell them what their particular strengths and weaknesses are and what the sensory triggers are for the student, the teacher can be so much better prepared. I would recommend that parents and teachers have a parent support group meeting at least once a term where they can really review and in depth discuss and work out what's working, what's not working, and what needs to be changed. Because these children are also very dynamic, things don't stay the same. |
| Serpil Senelmis: | [21:36](https://www.rev.com/transcript-editor/Edit?token=CzYVXnKvuqBrmEw4GybjvSW1eu5YeSPNR3vSSTYkiKcL9__5zQc3kPeJDYoj79Ri9CDecgqfwQUAVxyiz9HDBxqaFTI&loadFrom=DocumentDeeplink&ts=1296.63) | Then speaking of changes and transitions, the biggest transition is likely to be from primary school to high school. How do you prepare a student with fragile X syndrome for that big milestone? |
| Beverley Kadish: | [21:47](https://www.rev.com/transcript-editor/Edit?token=geV-yzGbGDUt6F9yI4YNot60s_Md8ZxPky0Ba-fREPrbYw-CY_JKmJs9H32XEFcr6ZV4KH3mG51t3wAVKn_VQzFSBMY&loadFrom=DocumentDeeplink&ts=1307.83) | It's a long process of preparation. I would say takes at least a term before they go to high school to actually prepare them. They need to go to the environment they're going to be in. They need to become familiar with the different rooms. We need to work at different seating positions in each individual classroom. Things like finding their locker can often become overwhelming, and the placement of their particular lock is also really important so they're not caught up in the chaos of a corridor where everybody's trying to get their books and their bags and things out of a locker. |
| Sarah: | [22:16](https://www.rev.com/transcript-editor/Edit?token=XbqHbE6lWi7ZhiGlI0JfdZaRlutqrISvRXqgG7t7Mapf9mDETJRh9dordHBH2TemmtznGv_F6LoMBKRAFOeg-oHSxVI&loadFrom=DocumentDeeplink&ts=1336.58) | It is always about relationships, so each year is going to be tricky. Each year comes with new teachers, new peers and all the rest of it. So, it's taking that time to learn to love Jimmy. He's pretty lovable, but he can be tricky. And then if that time isn't spent forming the relationship, then the bond's not there and I'm not sure how far he will progress. |
| Serpil Senelmis: | [22:44](https://www.rev.com/transcript-editor/Edit?token=RLaK9mDdBDMeyBu0p-uRvjZYKqCy0Etigk_YgNg2Dczjz7P8PT7fOqHUjcywFDzLI5vZRCLpNi1yhBgNw6osqFLdTdw&loadFrom=DocumentDeeplink&ts=1364.58) | So, just recapping. Some of the most effective adjustments for students with fragile X syndrome are routines, visual supports and management of sensory stimuli. In addition to patience and repetition, specialist schoolteacher Jack's advice is to remember that even the best intentioned adjustments won't have 100% success rate. |
| Jack Pitts: | [23:08](https://www.rev.com/transcript-editor/Edit?token=jTeUvbl8mpwmU1zu4zFm11sdjVe2XYYtAUN-btZU1cm84hh59f5cWpwTHd0b2uEM96hCJMHe70-f6IuVe8RkFRMBVj4&loadFrom=DocumentDeeplink&ts=1388.93) | Sometimes it can be a learning on the fly. What works one day might not work another day. What you think will work with this student might completely not work. It's being adaptive. It's about reflective practice on your teaching. It's reflecting on your lessons, identifying what worked well, what didn't work. Was the learning objective met? Did the student achieve their success criteria? From that, that's how you adapt and you continuously grow as a teacher, and to cater for those individuals. One of the biggest hurdles for students with fragile X is dealing with their emotions and anxiety. As a teacher, take the time to talk to former teachers and to parents, discuss triggers and discuss the students' hobbies and interests. If you can provide these hobbies and interests within your learning experiences, you're going to have a positive time with that student. |
| Serpil Senelmis: | [24:06](https://www.rev.com/transcript-editor/Edit?token=lzP_v7pgkfYAw0xY8G0wDQi-Y75cNE1aktpn9GYa-7j6I_HEhPireGAz9dSK3MpRPnNX-vWXkLQMAhXdnz0G_x9Zo7Y&loadFrom=DocumentDeeplink&ts=1446.47) | And a final thought, Jimmy's mom, Sarah, emphasizes the importance of working closely with the student's parents. |
| Sarah: | [24:14](https://www.rev.com/transcript-editor/Edit?token=PsMOtI0bY_umzgDD1dDYyYLZCbH4NMkY9zNdIy1_8Hg9uBYV6iN6L1hWM2DwObtk5bWeAIh_Uvvv69l4ySDXh6Mb7iQ&loadFrom=DocumentDeeplink&ts=1454.85) | I think my advice as a parent would be listen to the parent, because the parent will always tell you as much as they can about their child and give you maybe some little hints as to what may or may not work. But the other thing I would always say is just spend some time with the child, get to know the child, and maybe don't worry about the title of the fragile X too much. Find out about the child first and what makes them smile, and then go from there. |
| Serpil Senelmis: | [24:48](https://www.rev.com/transcript-editor/Edit?token=0v76yH8Ui3IKQeZNEGBwux37dVZSZ6mxfA74rCJAQclG-j8JbYyMbSNZEHViRUDdWnfIEoq9o6TRK2TaG3yFriwz1Zo&loadFrom=DocumentDeeplink&ts=1488.79) | This podcast is part of a series that highlights adjustments that can be made in the classroom to enable students with disability to access and participate in education on the same basis as their peers. You can find all episodes on the NCCD portal. I'm Serpil Senelmis, thanks for listening. |
| Speaker 7: | [25:16](https://www.rev.com/transcript-editor/Edit?token=2MfbVQ2EV_hKYnzBRxFo1nnhIjOUSp3xpcSm9Rh20fUfci2BR7qzY5ZcG95ZRgBa-Y1ysB_cRqT_B0QeBpQkXMyjJc4&loadFrom=DocumentDeeplink&ts=1516.67) | This podcast is supported by the Australian Government Department of Education for the Nationally Consistent Collection of Data on School Students with Disability, or NCCD portal. Copyright 2019, Education Services Australia Limited, unless otherwise indicated. Licensed under Creative Commons attribution 4.0, unless otherwise indicated. |