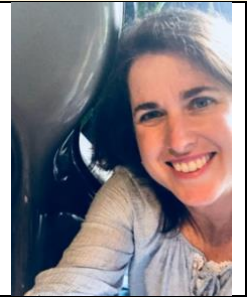


Think Tank: Social Brain

Skye Playsted



Nurturing Learners' Relationships and Confidence in the Speaking Skills Classroom

We know that people have social needs but, after many years in the classroom, I find I'm only just beginning to understand the importance of [social brain research](#) to teaching and learning. In this article, I'll discuss how social brain research is relevant to English language teaching. It's relevant to all areas of education, of course, but my focus will be on classes in which speaking skills are taught.

Psychologists have found that our brains spend a lot of time engaged in [mental processes involved in perceiving and interpreting social interactions](#). We even have a network in our brain that is devoted to watching others and determining their thoughts, moods, and intentions, a network that is active every moment it can be, a kind of default ([Lieberman, 2013](#)). It seems that the brain is built to "thrive...on interaction with others" ([Tokuhama-Espinosa, 2011](#), p. 452). [From the moment a baby is born](#), it needs social support in order to survive, and human social behaviour involves constantly reading others' facial expressions and tones of voice to interpret their intentions towards each other. Even our bodies are tuned in to our social needs; research has found that the same brain region makes us feel [social pain](#) (for example, when we are rejected or lose a loved one) as *physical* pain ([Jaremke et al., 2011](#)). Some researchers have suggested that our social needs are so important, that [Maslow's hierarchy of needs](#) should be inverted, because it's our *social* needs rather than our physiological needs which are the most basic for survival (Lieberman, 2013).

It's one thing to realise that the social brain is important for survival, but how does

Humans have a strong social need to connect, belong, and feel valued.

this translate into its importance for the classroom? Part of the answer to this lies in the brain's ability to adapt and learn as it encounters different experiences. This includes our experiences of relationships, and so [Cozolino \(2013\)](#) suggests that a

teacher's relationships in the classroom "shape the brains of [his or her] students" (p. 42). This is because these relationships are similar to the relationship between a parent and a child, and therefore activate changes to the brain that are similar to those caused by the [parent-child relationship](#). It also means that early relational

experiences (for example, of attachment to carers, of fear, anxiety, or stress) affect how we engage with learning later in life, because those early experiences trigger responses in the brain which affect memory, attention, and concentration. In addition, the [brain's structure changes throughout adolescence](#). Our social sensitivity



during this time skyrockets, as our brains become increasingly social and peer relationships dominate our lives. This affects learning and behaviour. Throughout adolescence, the regions in the brain which are activated during social and emotional processes undergo changes, as neural networks are reorganised to develop independence and “new attachments, behaviours, and goals” (Cozolino, 2013, p 34). You can read about adolescence and the brain in one of our [2018 Think Tanks](#).

So, how can we take advantage of the social brain, [what Lieberman calls our Superpower](#). I'll focus on the area of teaching speaking skills in the English language classroom, but I hope you'll consider your own teaching context and how similar principles might apply there. In particular, there are three points from Cozolino's work on social neuroscience and education which really stood out to me as applicable to the speaking skills classroom: 1) how to create a safe community in the classroom; 2) how to encourage risk taking to build confidence; and 3) how to be aware of the power of “emotional attunement” (Cozolino, 2013, p. 139) in the classroom.

Firstly, students in speaking classes need to feel that the class offers them a safe, encouraging community. Humans have a strong social need to “connect, belong, and feel valued” (Cozolino, 2013, p. 126). Anxiety about speaking in a second language is common, and TESOL studies have reported its effects for years (you can read about this in [Dewaele & Alfawzan's 2018 study](#) on enjoyment and anxiety factors in the language classroom, for example, or in earlier research on foreign language anxiety by [Horwitz et al., 1986](#)). Students who are feeling anxious or may have anxiety-

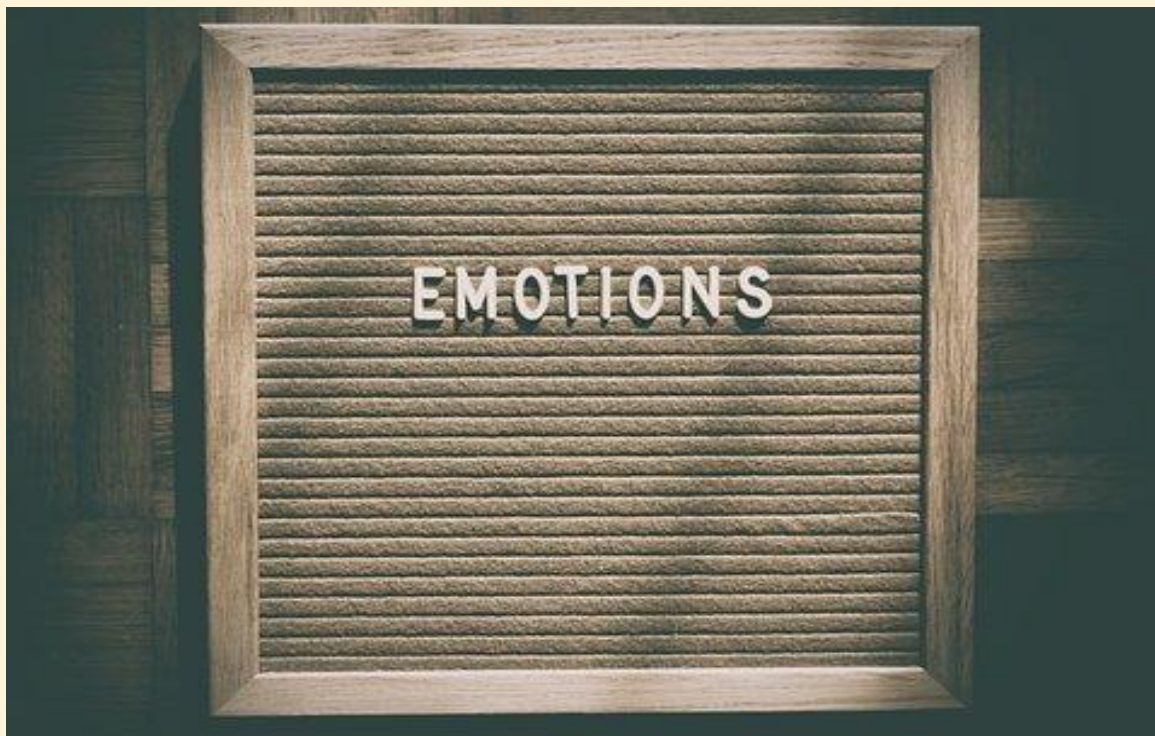
inducing tests looming need to be surrounded by positive, supportive relationships. Secure classroom relationships can minimise anxiety. Being in a supportive community has physical benefits that reduce anxiety, too: lower blood pressure, decreased stress hormones, and an increased production of immune-promoting cells (Cozolino, 2013). Think about how you structure your lessons and the routines you use to begin classes. A pair or whole-class speaking activity which encourages students to reflect on a positive event, memory, a learning goal they've achieved, or a fellow student's success can be a positive way to start lessons. Using sentence starters can scaffold this initially for less confident students or for students who are at beginning levels of English. Sometimes changing groups (as a rotational group speaking activity) can help students to develop a rapport with others in the class they don't know well and can break down relational barriers. Similarly, information gap activities with a "get to know you" focus or a class outing early in the term can encourage a sense of community.

Confidence is another area that affects students' willingness to take risks in speaking in a new language. Second language acquisition research has identified personal anxieties as a source of [stress when learning a new language](#) (Young, 1991). Stressed brains lose their [plasticity](#) and struggle to learn or remember. [Anxiety](#) activates the brain's amygdala (the part of the brain which triggers our "fight-or-flight" response) and this releases chemicals such as [cortisol](#), which inhibit the brain's ability to think and learn. You may have heard statistics claiming that the fear of speaking in public rates higher on most people's "fear lists" than the fear of dying! Lieberman (2013) explains that this is not so much to do with the act of speaking, but because "it hurts to be rejected" (p. 39). It's important to take this kind of social fear into account when we are helping students to learn a new language. We can help them by giving



clear instructions and making the expectations or guidelines for a speaking activity clear at the beginning of the task. If learners see themselves as poor achievers in English, it will take a teacher some time and “emotional nurturance” (Cozolino, 2013, p. 168) in the classroom to [build up students' confidence](#) and willingness to take risks in speaking English.

The third thing I had not considered before reading research on the social brain was the concept of “emotional attunement” (Cozolino, 2013, p. 139). Research has suggested that some neurons in the brain activate a mirroring of another person’s actions ([Di Pellegrino et al., 1992](#)). This is an ongoing area of study, and there have been different views put forward about the role of these “[mirror neurons](#).” You can read Curtis Kelly and Amanda Gillis-Furutaka's discussion about this in one of our previous [Think Tanks](#). Bearing that in mind, if the mirroring concept is true for physical actions (for example, we might automatically smile back at someone who



smiles at us), social brain research suggests that this can also apply to emotions ([Erith, 2007](#)). We imitate and predict emotional responses by tuning in to the emotions of those around us. In the same way that the brain’s motor networks are activated to tune in to what we see being *done* by someone else, its emotional networks tune in to what we see is being *felt* by another person, which Cozolino (2013) refers to as "emotional attunement" (p. 139).

It's important to consider our emotional influence as teachers...

It's important to consider our emotional influence as teachers of students who are already experiencing emotions like anxiety. If we express a positive, optimistic, and encouraging attitude towards them, our students' behaviour

and achievements can improve (Cozolino, 2013). On the other hand, our negative emotions can also affect students as they pick up emotionally on our fatigue, stress, or frustration. I realised the power of this when I was assessing a student in a one-to-one speaking task some time ago. The young woman was hesitant about speaking in English and was clearly anxious about being in a test situation. While I was aware of this, I was also under pressure to conduct several tests in a short period of time, so I was feeling rushed and not in a relaxed frame of mind. I'm sure I wasn't making a lot of eye contact with my student as I quickly looked through and marked questions rather than pausing to engage her in the interaction and give her time to answer. After a couple of questions, I realised how nervous she was and how distracted I was. I stopped my flurry of marking, took time to look at her and smile and encouraged her as she hesitantly began to answer the next question. She seemed to relax immediately and smiled back at me as I nodded, smiled, and encouraged her speaking attempts. She also began to speak with fewer hesitations and was more confident with English than she had appeared to be at the beginning of the test.



There is much to learn about the connections between social and cognitive areas in relation to language teaching and learning. Since our brains are primarily social, and relationships dominate, building students' confidence and reducing the effects of anxiety are important considerations for every class we teach, but especially for

classes where students are taking the risk to speak in a new language. By taking time to consider the powerful effects that emotions have on others, teachers of anxious learners can establish the calm, secure and positive environment that their students need to express themselves without fear. These are the classes that teach students much more than words to remember for a test. And it's these types of positive classroom experiences that help students discover what they *can* do in a new language, rather than reinforce what they may have believed they *couldn't*.

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References

- Cozolino, L. (2013). *The social neuroscience of education: Optimizing attachment and learning in the classroom*. New York, NY: Norton.
- Dewaele, J.-M., & Alfawzan, M. (2018). Does the effect of enjoyment outweigh that of anxiety in foreign language performance? *Studies in Second Language Learning and Teaching*, 8(1), 21-45.
- Di Pellegrino, G., Fadiga, L., Fogassi, L., Gallese, V., & Rizzolatti, G. (1992). Understanding motor events: A neurophysiological study. *Experimental Brain Research*, 91(1), 176-180.
- Frith, C. D. (2007). The social brain? *Philosophical Transactions of the Royal Society B*, 362, 671-678.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132.
- Jaremka, L. M., Gabriel, S., & Carvallo, M. (2011). What makes us feel the best also makes us feel the worst: The emotional impact of independent and interdependent experiences. *Self and Identity*, 10(1), 44-63.
- Lieberman, M. (2013). *Social*. Oxford, UK: Oxford University Press.
- Tokuhama-Espinosa, T. (2011). *Mind, brain, and education science: A comprehensive guide to the new brain-based teaching*. New York, NY: Norton.
- Young, D. J. (1991). Creating a low anxiety classroom environment: What does language anxiety research suggest? *The Modern Language Journal*, 75(4), 426-437.