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PROBLEM OF ENGAGEMENT



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This is the kind of situation that happens when students are not engaged with the language they are learning. They might be tired, demotivated or not understanding the content etcetera, but for whatever reason, what we as teachers try to teach sometimes goes in one ear and out the other. Their brains are simply not switched on, not being used, not being activated. Oftentimes student motivation is so low and their affective filter so high that nothing gets through. Learning is complete once a new concept is noticed, understood, and transferred from short-term to long-term memory. However, students don't have a chance of this if they aren't engaged with their learning.

Traditionally, languages have been learned through books and audio. This gives the student plenty of target language input, but then how is that language being used? Connections are being made in the brain's neural networks that are fairly limited. The brain is not really being used to its full potential, as students are not engaging with the language as profoundly as they could. What needs to happen is deeper thinking. Students need to interact with the language in ways they normally wouldn't by simply reading a textbook or listening to a teacher or audio script.

Mirror neurons, first discovered by Giacomo Rizzolatti , Giuseppe Di Pellegrino, Luciano Fadiga, Leonardo Fogassi, and Vittorio Gallese, is a phenomenon which describes the process of the same system of neurons firing in the brain of both subjects when one subject sees another performing an action.



Monkey A

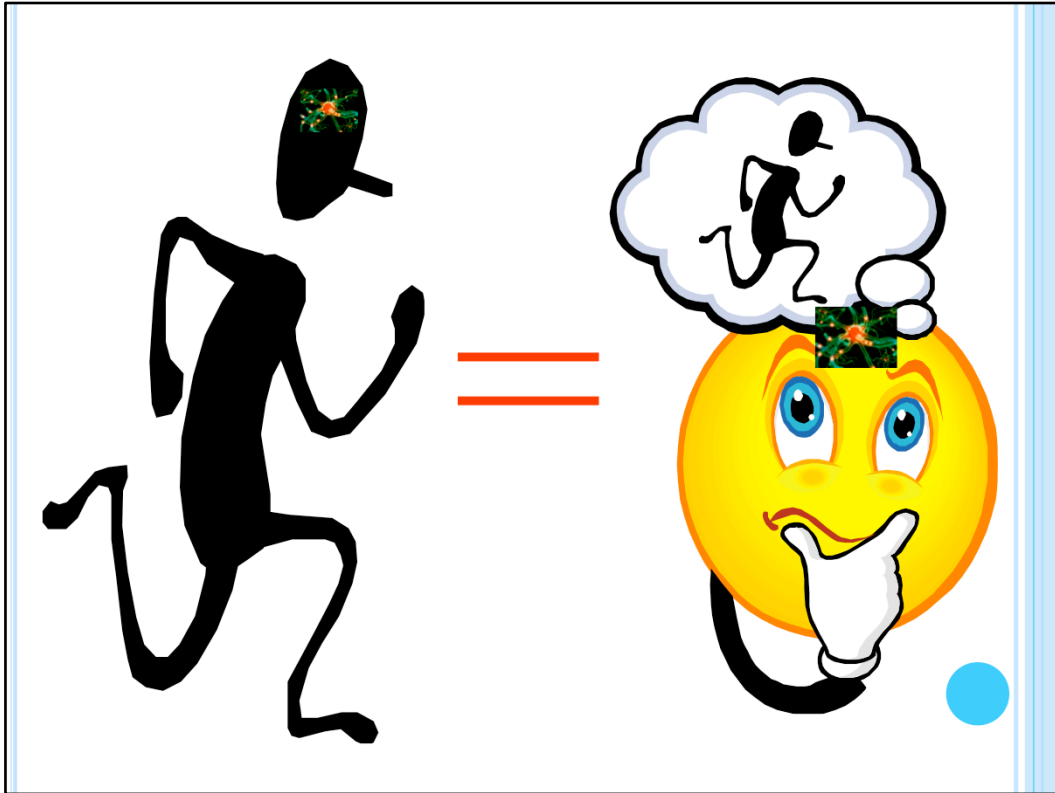


Monkey B

MONKEY DO, MONKEY SEE (AND ACTIVATE)

Image courtesy of http://upload.wikimedia.org/wikipedia/en/4/43/Monkey-Brain_Books.png





A study showed that whether we actually DO something or just THINK about doing something, the same area of our brain lights up with neural activity. In the Netherlands, an experiment was done on auditory empathy. It was discovered that when a person hears a sound associated with an action, such as kissing, the act of listening to that sound activates the same area in the pre-motor cortex as if the person were actually kissing someone. Brain scans showed that the hearing the kissing sounds activated the areas of the pre-motor cortex that control mouth movements associated with kissing.

TPR METHOD (TOTAL PHYSICAL RESPONSE)

The teacher says “Jump” and jumps at the same time.

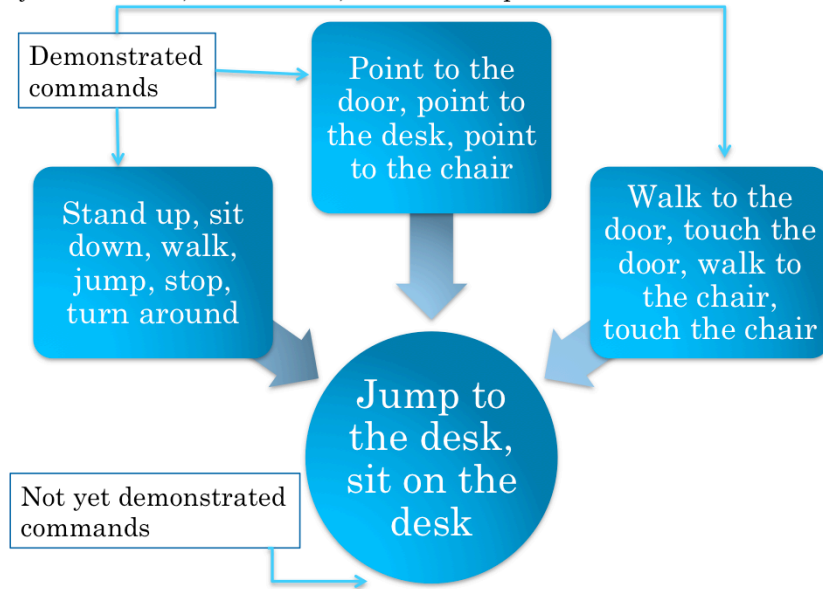
The students observe the teacher’s action, hear the lexical pair of the action, and then imitate the action.



In this method, the role of the teacher is to be the director of all student behavior, and the students are imitators. The first phase of instruction is modeling. The teacher speaks and acts at the same time, thereby giving the students both a linguistic AND physical example of the target language. The observers (the students) are given an opportunity to imitate the action represented by the target language. These examples of the target language are single and multi-word imperatives, such as "Jump, stand up, sit down, walk, point to the chair, walk to the door, touch the door, and so on". The students are not required to speak, but when they are ready of their own accord, they can go ahead and speak.

TPR METHOD (TOTAL PHYSICAL RESPONSE)

It is very easy to see how possible it is to develop understanding by combining physical actions, observation, and aural input.



Later, the teacher, or another student, is able to just give the commands verbally without providing the physical action example, and the students are able to carry out the action without seeing the teacher actually do it him or herself. I think this demonstration of ability and understanding of the target language is achieved by strengthening the neural connections between the target language and the physical action itself. Students are able to hear the lexical representation of the action, see the physical action itself, do the action, and eventually say it.

ONE MORE TPR METHOD BENEFIT...

- It reduces students' affective filter, so this sort of thing doesn't happen as much...

“During fear, sadness or anger, neural activity is evident in the lower brain, and the reflective, cognitive brain (pre-frontal cortex) does not receive the sensory input of important items, such as the content of the day's lesson.”

Willis, J. (2010). The current impact of neuroscience on teaching and learning. *Mind, brain and education: Neuroscience implications for the classroom*, 45-68.



THE VERB-BEHAVIOR LINK




This describes the phenomenon that in adults, speaking action words activates the same brain structures as actually carrying out the actions themselves. Could it be that the reverse is true too? That carrying out actions that target language verbs represent in the classroom could help by activating the same brain structures and creating a stronger connection?

CLASSROOM ACTIVITIES

1. CHARADES

One person or team chooses a card with a word or phrase in the target language on it and acts it out. The other person or team observes the action and tries to guess what it is (in the TL of course!)

For example...

1. How does this activity make use of mirror neurons?
 2. How does it help students remember the target language?
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When the person or team who are acting out the word or phrase are observed by the person or team who needs to guess what it is, mirror neurons come into play. The guesser pictures the same thing in his own mind, and tries to think of what it could be. The brain, by the virtue of working hard and enjoying itself, is strengthening its neural networks. The observer is not only observing the actors, but it is also visualizing the action in his mind's eye, and at the same time trying to find the appropriate word in the target language to represent that action.

2. AUDIO STIMULI

- Play a sound, ask students to describe the situation to their partner
- Play a sound, ask students to work along or with a partner, and tell a story that begins or ends with the sound, or has it in the middle somewhere.
- Use sounds from the internet or apps like Fun Sounds or MegaSFX



These apps are available to download and install for free on smart phones, and they also have paid versions with more sounds and no ads. You can also find sound bytes on the internet, or record sounds all on your own. Most phones have a voice recorder installed, or you can download an app, or purchase a cheap digital voice recorder online.

2. AUDIO STIMULI

1. How does this activity make use of mirror neurons?
2. How does it help students remember the target language?



Q1. Similar to the auditory empathy experiment in the Netherlands, these kinds of activities make students engage with the sound and use their power of imagination to think what is happening. They create a picture, or movie, in their minds of what is happening.

Q2. When students connect such deep thinking with the target language, they are bound to remember it better.

3. VISUAL STIMULI

- Play a short video clip (long enough to provide context, not so long as to be overwhelming) without the audio.
- Students can create stories or dialogues to go along with the clips. They can add information about the situation, place, characters, and relationships.



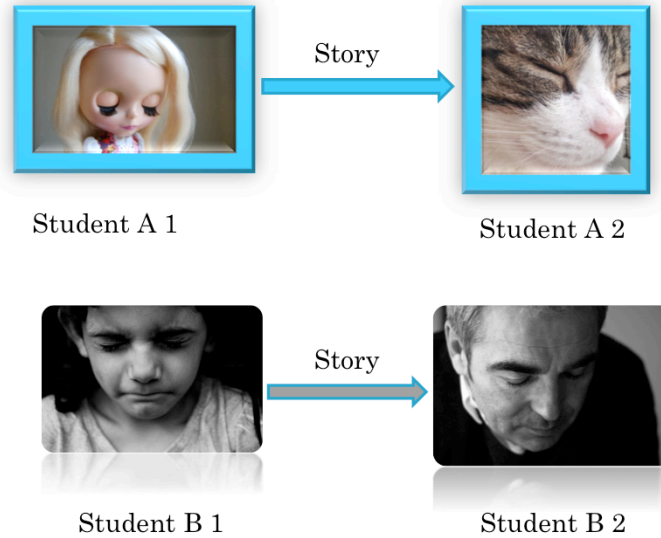
3. VISUAL STIMULI

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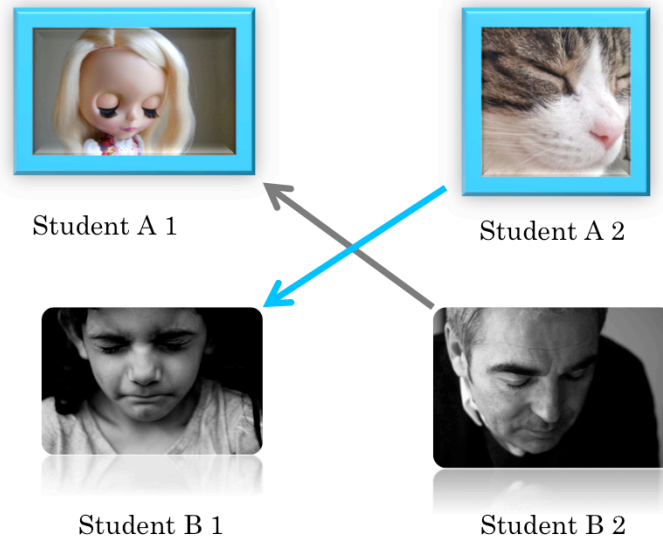
1. The students are seeing actions, body language and facial expressions, and are therefore able to predict in their minds what is happening.
2. This kind of activity requires deep thinking, not the superficial kind of “This is a pen” sort of language where students repeat after the teacher. By thinking more deeply and engaging with the task at hand, neural connections are strengthened and language can be more concretely embedded in the students’ minds.

4. CLOSED EYES STORY CHAINS



In this activity, divide the class into pairs. Two pairs (A and B) will mix later on. All students must close their eyes. AS1 and BS1 will tell AS2 and BS2 a story, preferably a memory that has significant meaning to them, as most of us know that emotion drives learning. AS2 and BS2 listen to the story with their eyes closed and try to imagine the story as it is told.

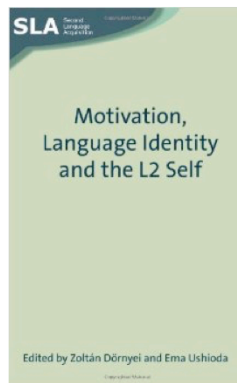
4. CLOSED EYES STORY CHAINS




Then, the students swap pairs, and this time, AS2 tells BS1 the story he heard, and BS2 tells AS1 the story she heard.

This uses the students' imagination and memory well. They practice listening and speaking, and also by quickly repeating the story, it can help with memory.

L2-Self Motivation




5. L2-SELF MOTIVATION ACTIVITY

- Ask students to close their eyes and imagine themselves at the end of semester, the end of the year, the end of university, in 5 and 10 years' time, and imagine all the ideal parts of their lives.
 - Who are they? What do they do? What's their income? What are their abilities? What are their lives like in general?
 - What level of English ability do they want? What are their realistic goals, and what are their ideal goals? How does English fit into their lives?
 - Ask them to write down those goals, and check them periodically throughout the semester and the year.
 - Ask the students to use those goals that they pictured in their minds to motivate them to improve their English.
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FINAL NOTES

- Affective factors:
 - Age
 - Language ability
 - First language
 - Culture
 - Educational context
 - Finance and equipment

Please keep at it, and adjust things for your own learners. Keep thinking and challenging yourself and your learners, and make them really use their brains!



Obviously, the level of success you and your students will have using these activities will vary. A lot of it depends on the language ability of the students. Other factors that could come into play would be age, because of cultural awareness and that of the world around them, also the first language culture and heritage of the students as well. For example, a student who has never seen a baseball game might be confused and get stuck right at the beginning of the baseball clip visual stimulus activity. A student who has never visited the beach might have difficulty imagining and relaying a story about the time his partner went on a beach holiday with his family. That is one of the benefits, I suppose, of teaching in the EFL context, as opposed to the ESL context, as in the vast majority of cases, the students share the same language and culture, as well as similar life experiences that shape how they see the world. I found out from my own experiences in the classroom that even though I had these great ideas, what worked amazingly for one class didn't work as well for another. Also, activities that worked in my mind actually required a bit of adjusting in the class room. For example, the dialogue between the man and the woman actually came from a 2 minute YouTube clip from The Pink Panther movie. I thought 2 minutes was perfect, but it completely overwhelmed my students, and I realized I had to take baby steps with them.

Another obstacle could be the technological side of things. You might not have access to a lot of technology in your classrooms, such as class sets of computers or tablets. I think many schools at least have one TV and DVD player in the department, and all you need to do is show a video clip with the sound turned off, and loop it yourself. Regarding sounds, smart phones are everywhere these days, and you can easily download apps that have funny sounds. You can also record things with voice recorder apps to get your own inventory of sounds. You can purchase simple digital voice recorders for around \$US20.

No doubt if you actually try these activities, they will work well for some of you and not for others. I encourage you to keep at it, adjust things for your learners, as you know your own students better than I do, and to keep trying to come up with new activities or new ways of doing old activities that excite, engage and challenge your learners, and above all, make their neurons come alive with action!