# **12** NEUROSCIENCE PRINCIPLES IN ACTION



#### 1. LEARNING CHANGES THE BRAIN



Tell students that intelligence is malleable



Make a point of noticing stimuli quality



Secure full literacy



Foster early second language learning

#### 2. HOW WE LEARN IS UNIQUE



Uncover students '
interests



Personalize teaching



Use adaptive platforms



Facilitate meaning making

#### 3. SOCIAL INTERACTION IS CONDUCIVE TO LEARNING



Foster collaborative learning



Keep high expectations



Develop dialogic classes



Encourage teacher-student relationships

## **4.** TECHNOLOGY USE INFLUENCES INFORMATION PROCESSING AND STORAGE



Offer support and guidance. Use technology to tap into learning



Develop deep reading



Enlarge motivation for reading



Foster authorship

#### 5. EMOTION STEERS LEARNING



Care for relationships with students



Develop socioemotional abilities



Create positive classroom environment



Make a point of noticing negative emotions

#### 6. MOTIVATION SETS THE BRAIN INTO LEARNING MODE



Foster intrinsic motivation



Stimulate a growth mindset



Make room for choice



Arouse curiosity

#### 7. ATTENTION IS THE GATEWAY FOR LEARNING



Be receptive



Foster engagement



Secure contexts conducive to learning



Adjust time of exposure

#### 8. THE BRAIN DOES NOT MULTITASK



Amplify awareness



Stimulate technology breaks



Map out priorities



Assess motivation degree

## **9.** LEARNING REQUIRES ELABORATION AND TIME TO GET CONSOLIDATED IN MEMORY



Boost repetition with variation



Foster elaboration



Give the brain time



Use active learning

## **10.** SELF-REGULATION AND METACOGNITION BOOST LEARNING



Develop autonomy



metacognition



Enable visible thinking



Promote self-evaluation

## **11.** WHEN THE BODY TAKES PART, LEARNING BECOMES MORE EFFECTIVE



Promote hands-on learning



Foster concrete learning



Develop whole body activities



Stimulate handwriting

### **12.** CREATIVITY REORGANIZES MULTIPLE NEURONAL CONNECTIONS AND EXERCISES THE LEARNING BRAIN



Ignite imagination



Foster interdisciplinarity



Combine practice with theory



Acknowledge individual talents