

Aula ZERO

Engenharia de
Computação/Software

Daniel de Souza Carvalho
@danielscarvalho

Como aprendemos?
Como você aprende?

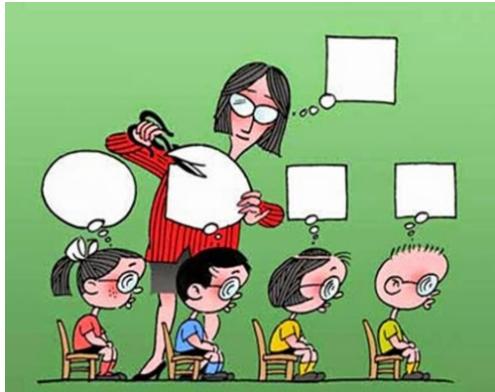
Reflexão...



Educação no Brasil

- Grécia
- Itália - Roma
- França
- Portugal
- Brasil

Educação para
NOBRES e CLERO



O que é uma sala de aula tradicional?

No modelo tradicional o professor é o elo entre os alunos e o conhecimento.

Os alunos têm pouco (ou nenhum) conhecimento quando entram na sala. Na sala de aula, eles adquirem todo o conhecimento, que normalmente é o conhecimento básico sobre algum assunto.

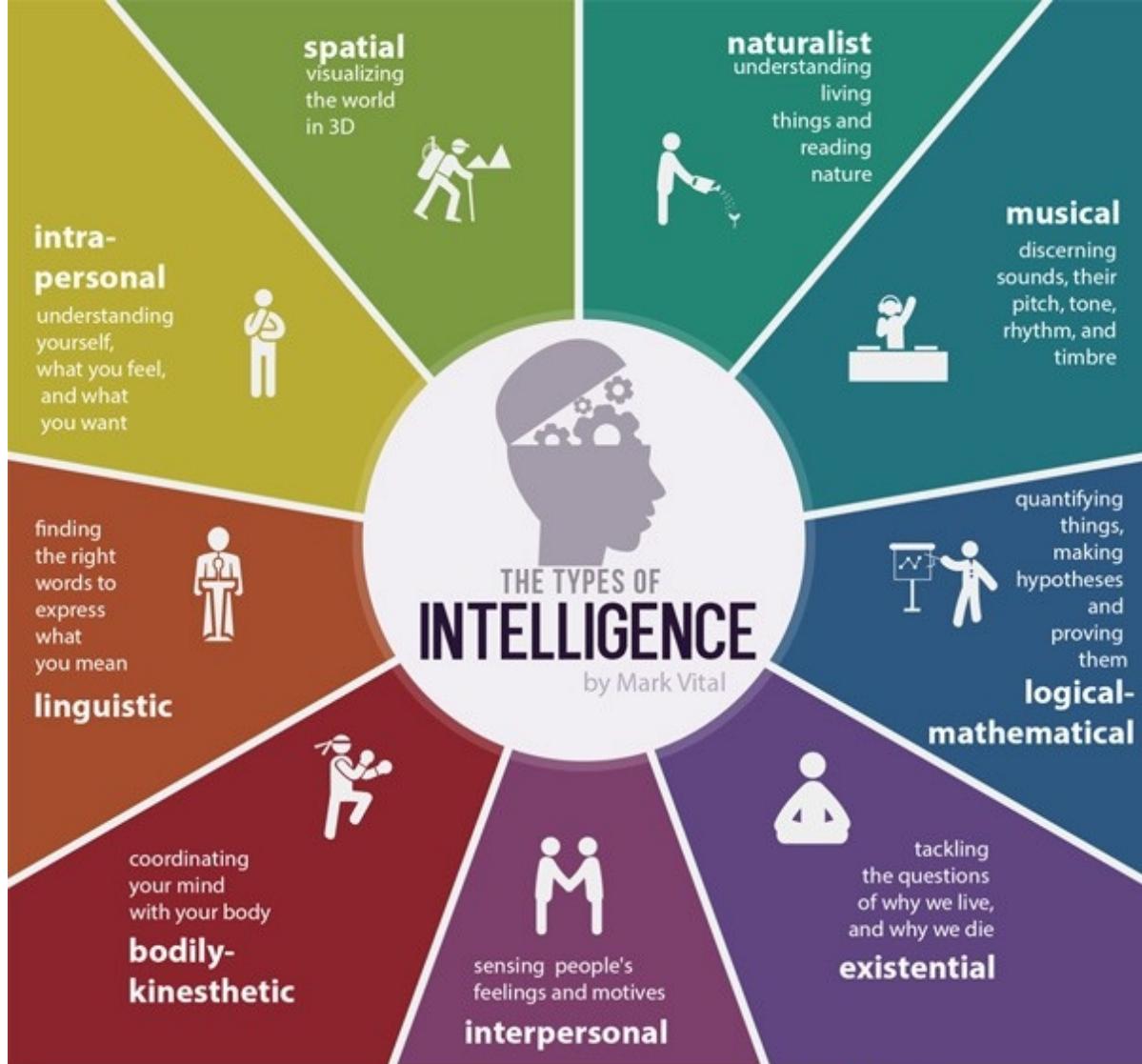
O sistema educacional prussiano foi o primeiro sistema público de ensino, no qual valores cívicos, éticos, línguas e matemática eram ensinados.

Sua finalidade era unificar a Prússia (Alemanha), e acabou se valendo para a manipulação da população através desse sistema de ensino.

Inteligências Múltiplas

(Multiple
Intelligences)

Howard Gardner



Frames of Mind: The Theory of Multiple Intelligences by Howard Gardner



Funders and Founders

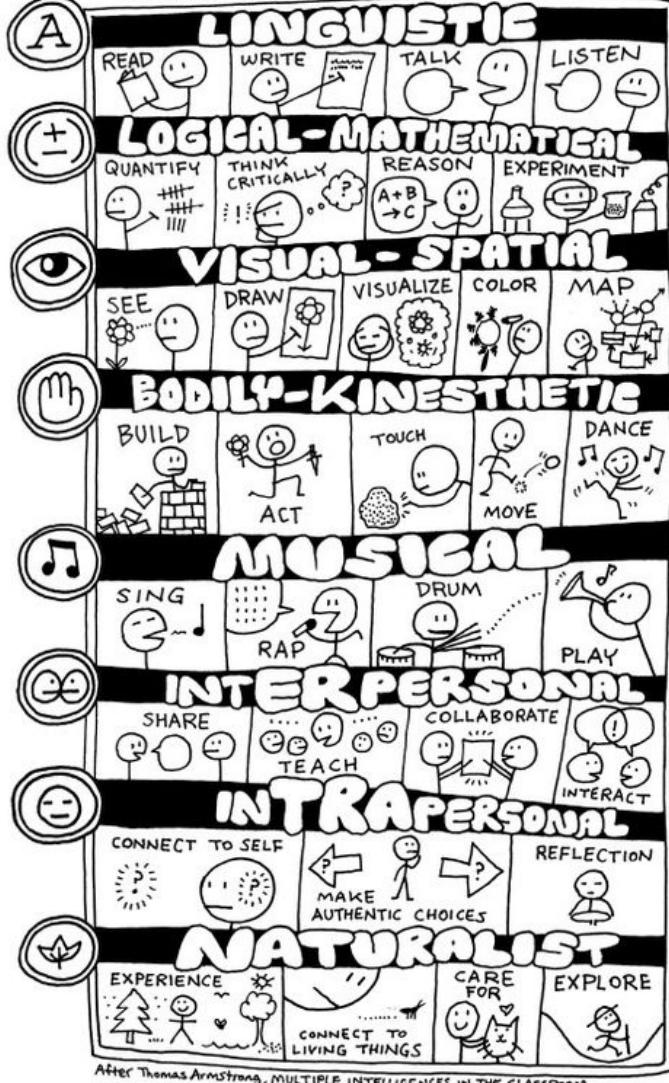
Inteligências Múltiplas

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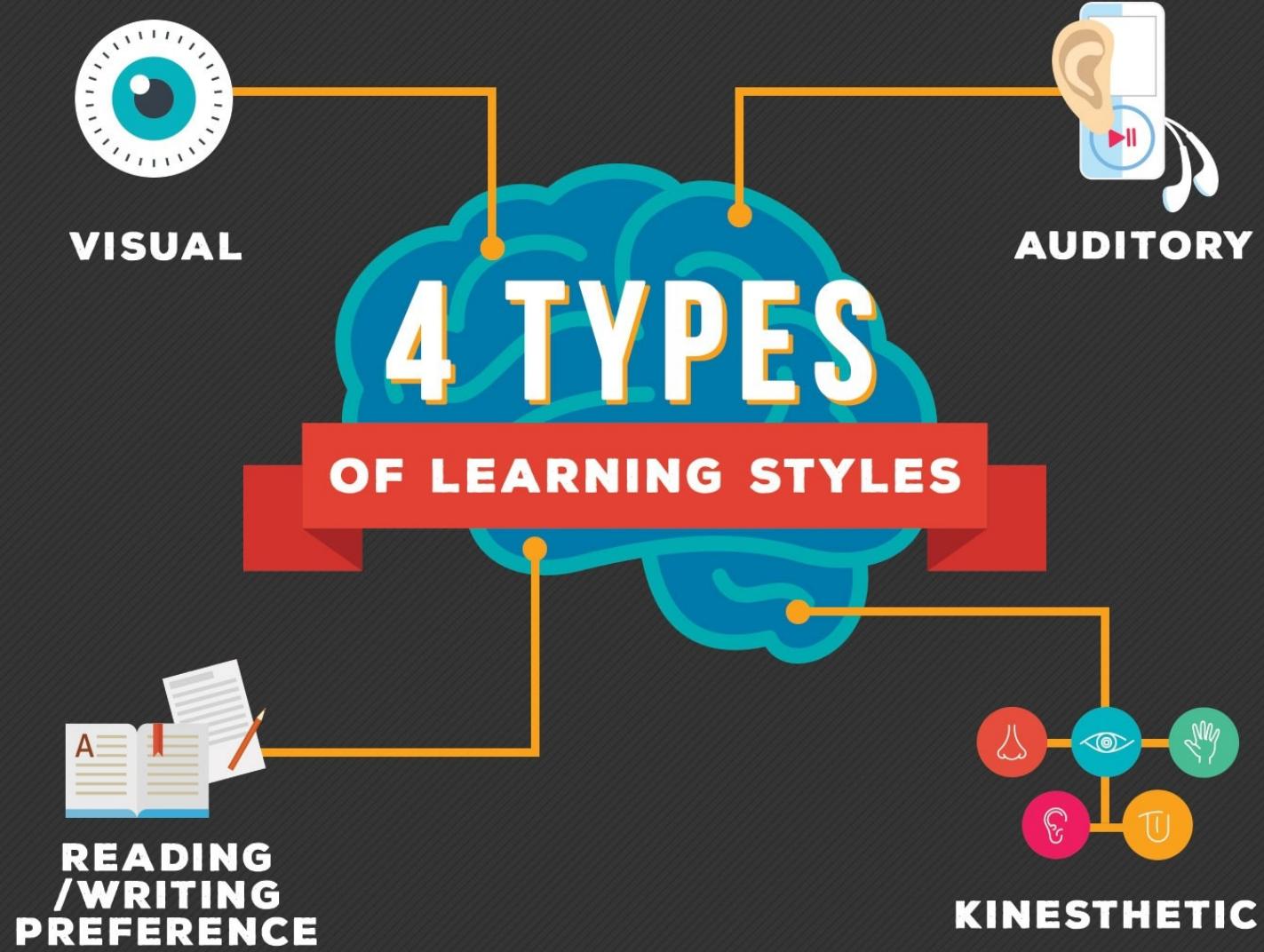
Howard Gardner

MULTIPLE INTELLIGENCES

A Field Guide, by Marek Bennett

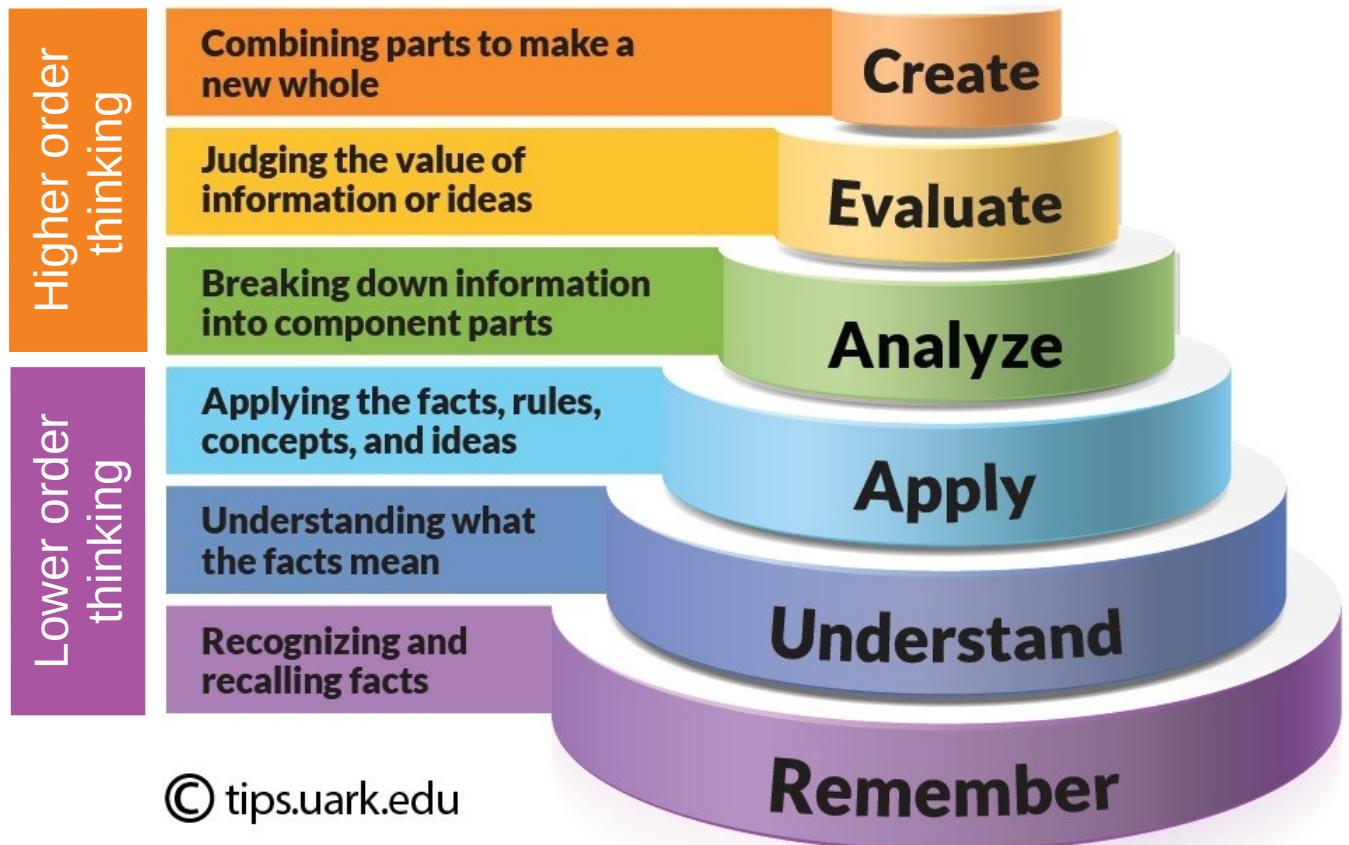


Estilos de Aprendizagem

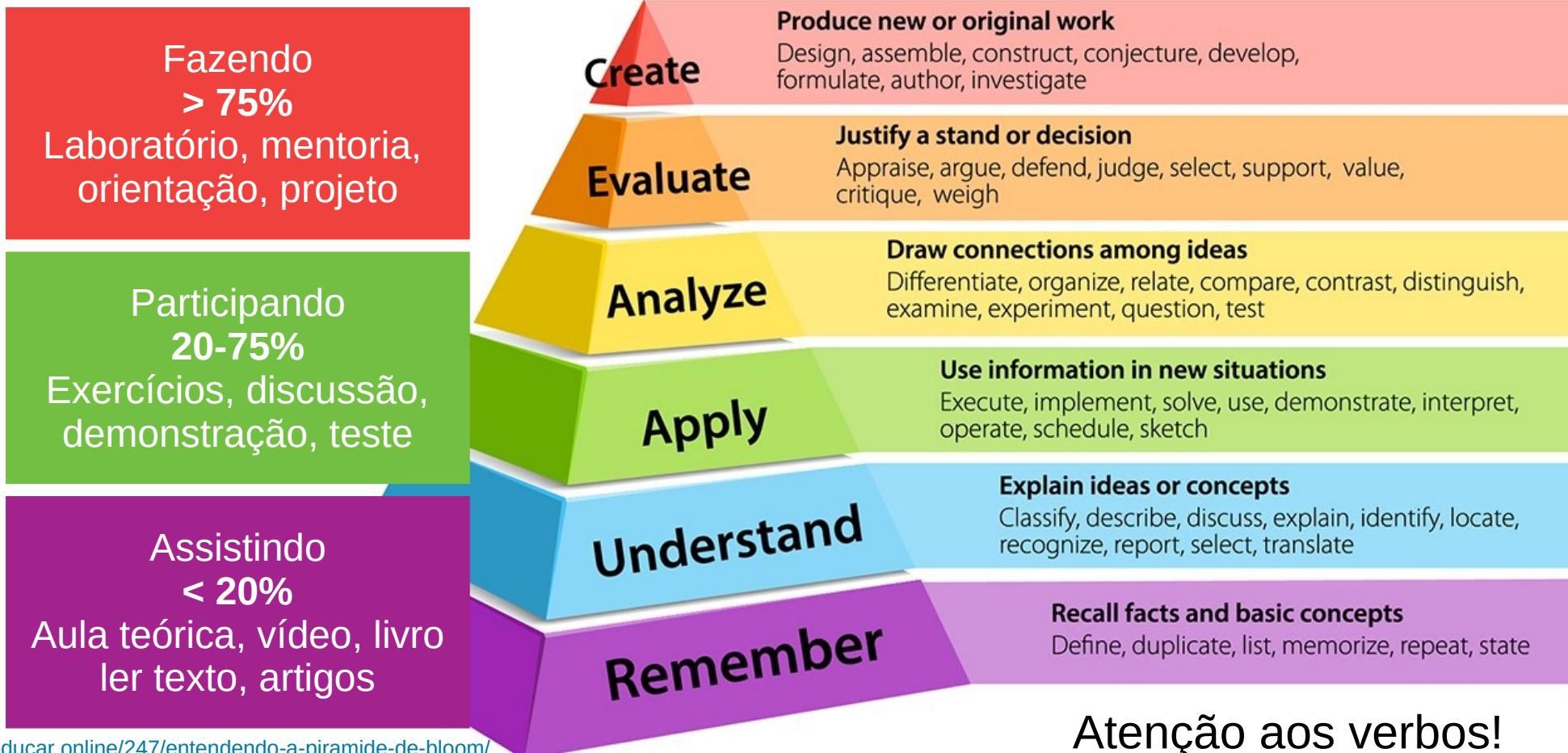


Taxonomia de Bloom

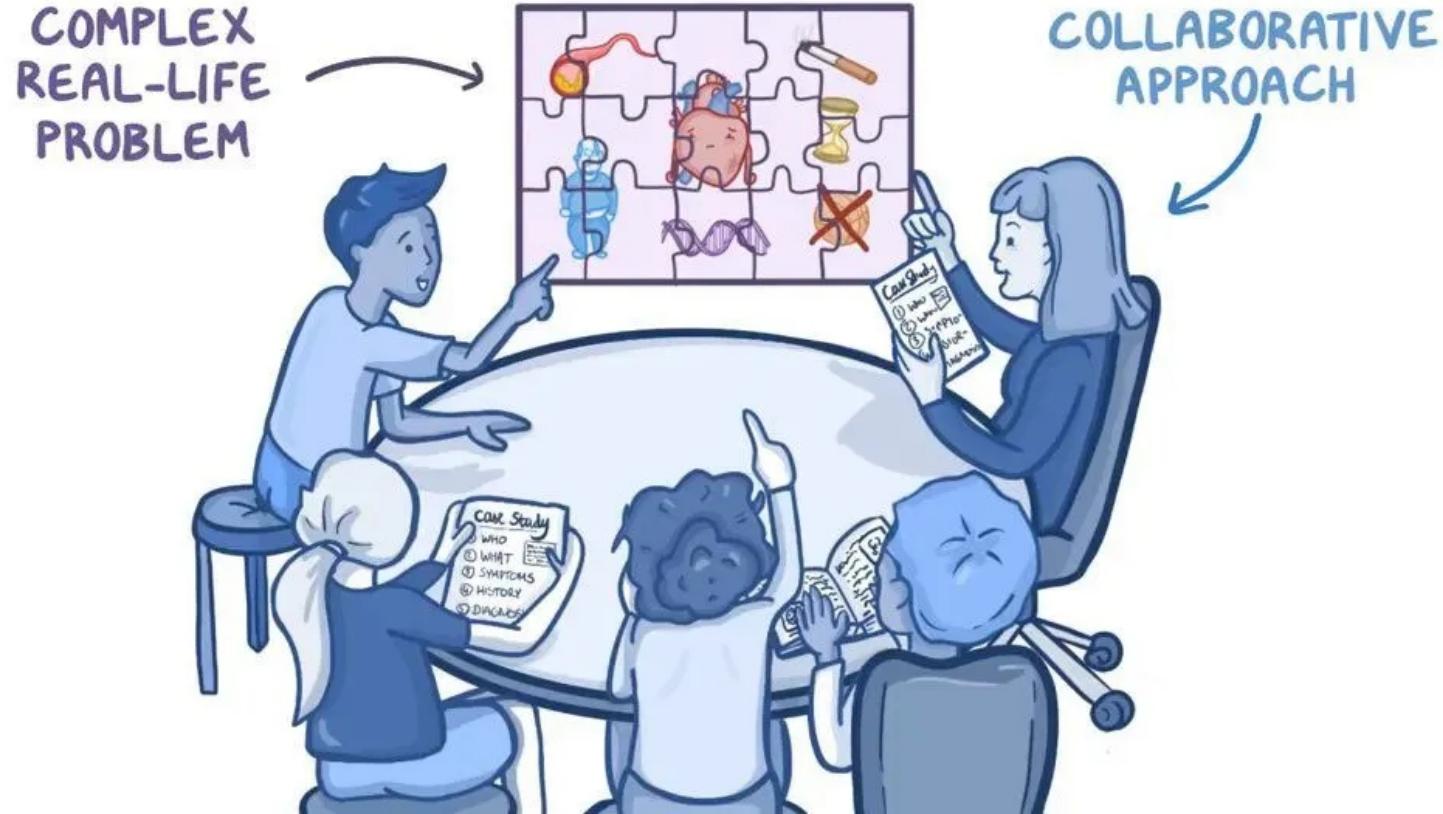
The cognitive domain
(knowledge-based)
levels



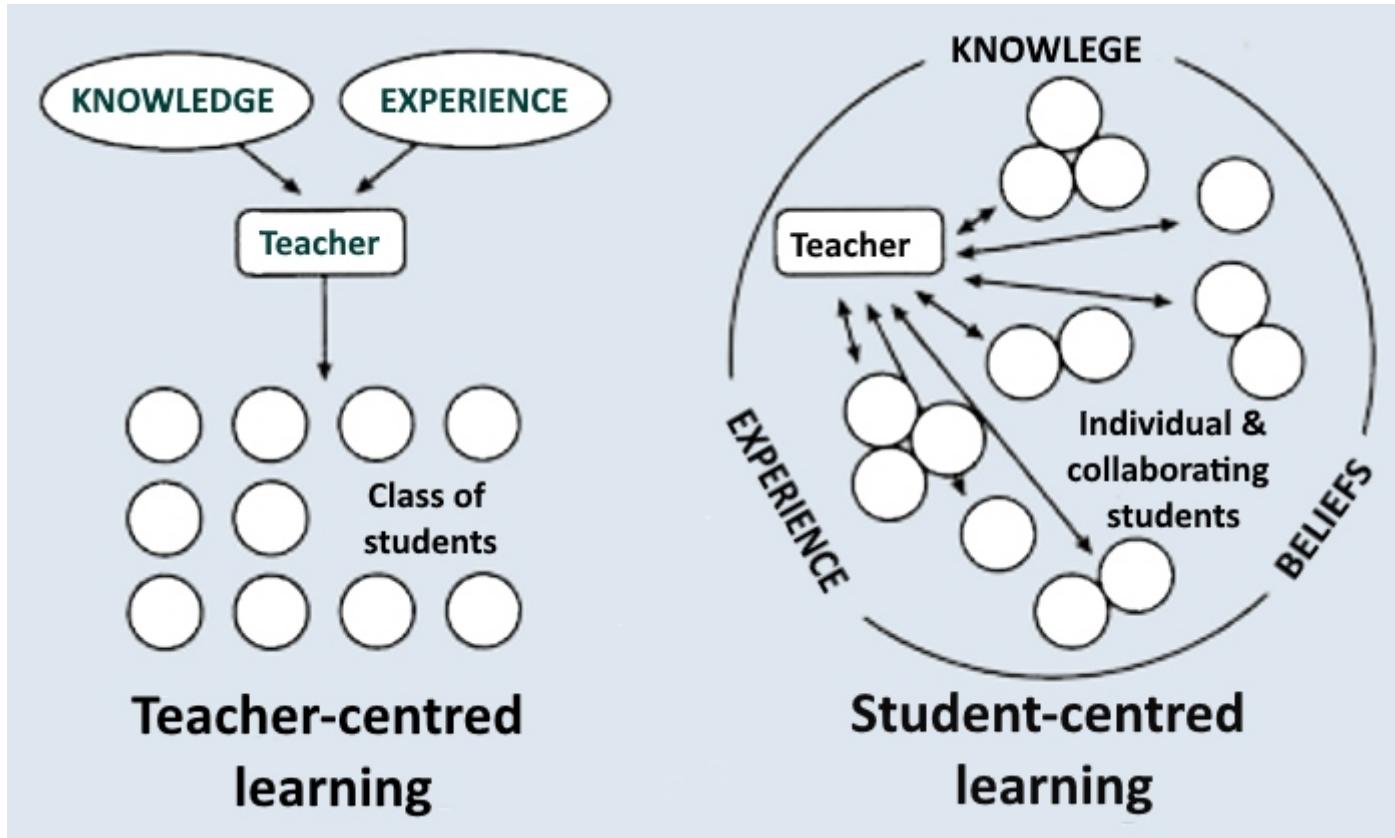
Taxonomia de Bloom



PROBLEM- BASED LEARNING (PBL)



Educação Centrada no Aluno



Construtivismo...

Both were constructivists.

Both Piaget and Vygotsky believed that individuals actively construct their own knowledge and understanding; Vygotsky stressed the importance of the social interaction in which an individual participates; Piaget stressed the inner motivation to balance new information with existing knowledge and understanding.

Vygotsky

Social Constructivism

Children learn through being active.

Learning is a socially mediated activity.

Emphasis placed on the role of the teacher or 'more knowledgeable other' as a 'scaffolder'.

The teacher is a facilitator who provides the challenges that the child needs for achieving more.

Development is fostered by collaboration (in the Zone of Proximal Development), and not strictly age related.

Development is an internalisation of social experience; children can be taught concepts that are just beyond their level of development with appropriate support.

'What the child can do with an adult today, they can do alone tomorrow.'

Piaget

Cognitive Constructivism

Children learn through being active.

Children operate as 'lone scientists'.

If a child is shown how to do something rather than being encouraged to discover it for themselves, understanding may actually be inhibited.

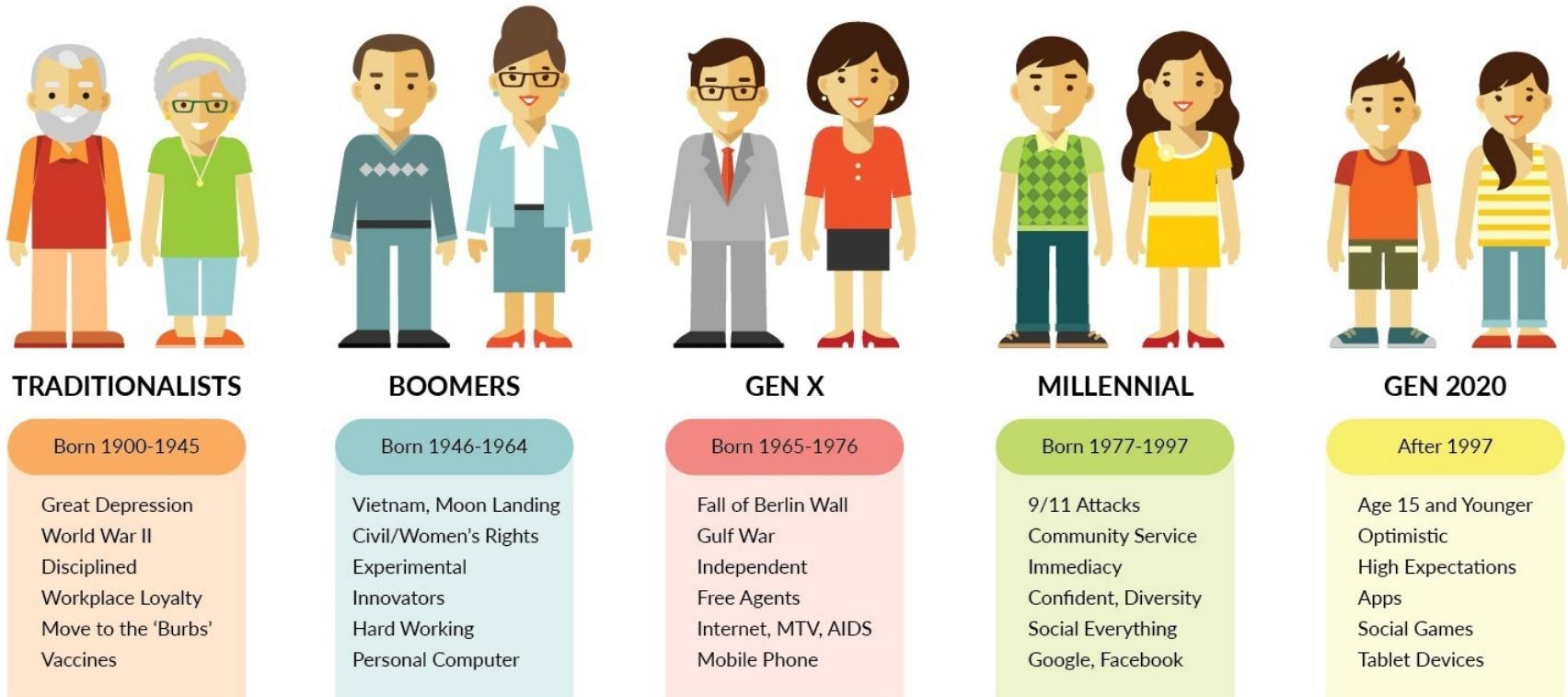
The teacher is the provider of 'artefacts' needed for the child to work with and learn from.

Cognitive growth has a biological, age related, developmental basis.

Children are unable to extend their cognitive capabilities beyond their stage of development. There is no point in teaching a concept that is beyond their current stage of development.

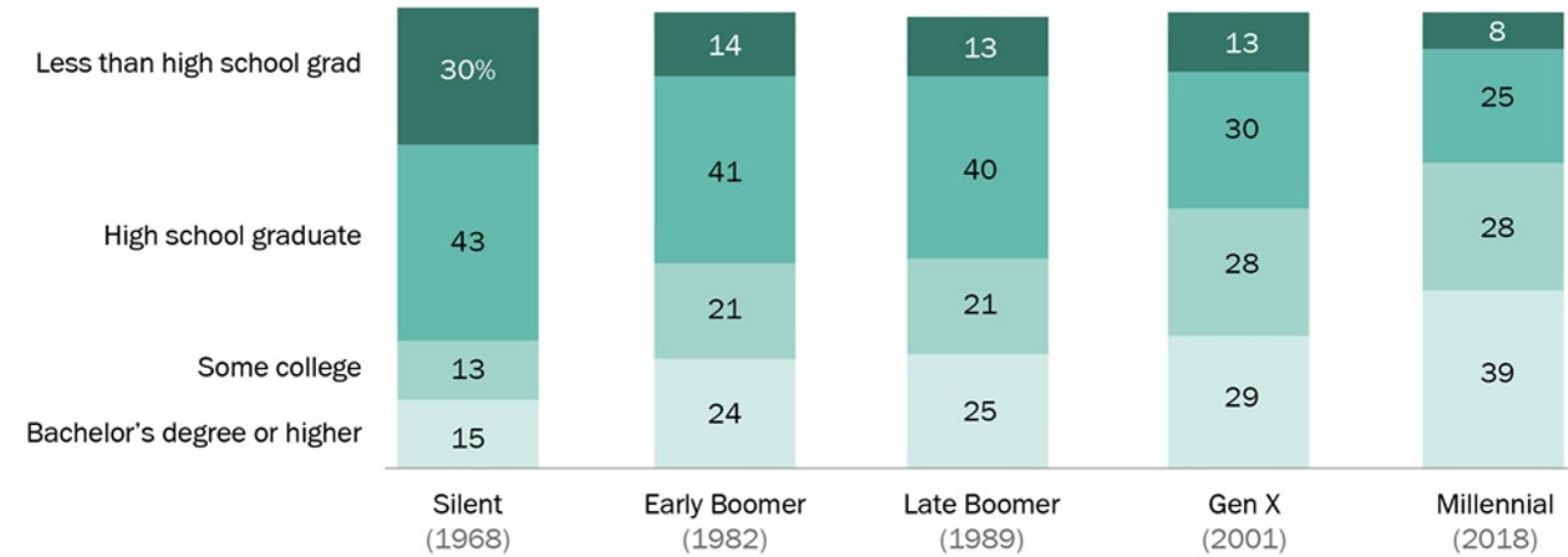
Gerações

Five Generations Working Side by Side in 2020



Millennials are better educated than prior generations

Educational attainment of 25- to 37-year-olds (%)



Note: Figures may not add to 100% due to rounding. “High school graduate” includes those who have a high school diploma or its equivalent, such as a GED certificate. “Some college” includes those with an associate degree and those who attended college but did not obtain a degree. The educational attainment question was changed in 1992. For Boomers and Silents, “high school graduate” includes those who completed 12th grade (regardless of diploma status) and “bachelor’s degree or higher” includes those who completed at least four years of college (regardless of degree status).

Source: Pew Research Center analysis of 1968, 1982, 1989, 2001 and 2018 Current Population Survey Annual Social and Economic Supplements (IPUMS).

PEW RESEARCH CENTER

Testes online...



STUDENTS PARENTS COUNSELORS

What's Your Learning Style? 20 Questions

1. What kind of book would you like to read for fun?

- A book with lots of pictures in it
- A book with lots of words in it
- A book with word searches or crossword puzzles

Question 1 of 20

Career Planning

Preparing for School

Paying for School

Self-Assessments

What Kind of Student Are You?

► What's Your Learning Style?

Which Study Habits Can You Improve?

How Strong Is Your Character?

<http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml>



Home / Multiple Intelligences Test



2,546,351 tests taken

Multiple Intelligences Test

Identify and Understand Your Top Intelligences



Our [Multiple Intelligences](#) test is **FREE** with **No Registration**. We won't even ask for your email. Your personalized results will detail each of your intelligences. Check additional boxes below for expanded results. [Learn More](#)

I want results for my... Personality Type Multiple Intelligences Learning Styles Brain Hemispheres

Your test is estimated to take **9 minutes** based on your selections. Choose the answers you identify with most. Go with your first instinct rather than thinking too hard. This is a self-discovery tool so there are **no wrong answers**.

096

I can't imagine my life without music.

Never Rarely Often Always

0 of 80 questions completed.

<https://personalitymax.com/multiple-intelligences-test/>

Descubra com aprender

THE FEYNMAN TECHNIQUE



Richard Feynman
(American Physicist)

STEP 1 - Pick and study a topic

STEP 2 - Explain the topic to someone, like a child, who is unfamiliar with the topic... and at their level of understanding. Use simple language.

STEP 3 - Identify any gaps in your understanding

STEP 4 - Return to the literature to understand better

vishal@safalniveshak.com

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HOW TO MOTIVATE YOURSELF TO STUDY

1. Break your large tasks down into manageable chunks and pick only a few to do each study session so you don't get overwhelmed
2. Tidy your workspace and collect all the resources you will need during the study session
3. Study with friends (if they aren't distracting)
4. Remind yourself of your long-term goals
5. Listen to motivating music (ideally instrumental)
6. Try studying in a new place such as the library, a cafe or outside in a park or garden
7. Physically write down the tasks that you want to complete on a piece of paper and tick them off when you complete them
8. Try to eliminate any distractions in your study space, particularly your phone
9. Take plenty of breaks at natural stopping points while studying (eg. when you finish a chapter)
10. Try a fun new study method, such as making a colourful poster on the topic
11. Establish a comfortable environment where you can still concentrate on studying
12. Write down achievable SMART goals for the study session so you have targets to reach
13. Write down some quotes that inspire you and put them up in your study space
14. Set a timer and just start, telling yourself that you only have to study for that amount of time
15. Reward yourself for successfully studying

Mastering Time Management:

Book - The Art of Laziness

1. Plan your day.
2. Write everything you want to achieve in a day.
3. Write your goals on a physical paper.
4. Follow the 80/20 Rule. 20% of your work will bring you 80% of your results.
5. Stop Multitasking. Switching tasks significantly reduces your productivity.
6. Focus on one task at a time.
7. Remove all distractions from your environment.
8. When tired, take a nap.
9. Learn to say no. You will never have enough time if you say yes to everything.
10. Delegate all the non-important tasks.
11. Don't wait for the perfect time. Do It Now.
12. Anything that can be done in under five minutes should be done now.
13. Do the task that you hate first.
14. Set deadlines; the task will never be finished without deadlines.
15. Stop focusing on things that don't help you achieve your goals.
16. Don't be a perfectionist when it's not required.
17. Schedule a time when you're going to check your email.
18. Avoid all unnecessary meetings.
19. Avoid negative people at all costs.
20. Do what you love.

Mastering Time Management

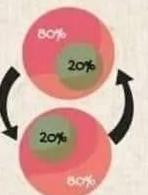
Will McTigue ©

Use Your Time Like A Top Performer

Prioritize Your To-Do List

1

80% of value comes from 20% of your tasks—focus on 3 high-value tasks everyday.



2 Warren Buffet's 5/25

Make a list of 25 tasks—now focus on the 5 most important tasks, ignore the rest.



3 The Eisenhower Matrix

Categorize tasks based on urgency and importance—eliminate that's neither urgent nor important.

| | Urgent | Not Urgent |
|---------------|------------|-------------|
| Important | Do it Now! | Decide When |
| Not Important | Delegate | Delete |

Schedule Your Deep Work Sessions

1

Audit Your Time and Energy

Divide your day into 1-hour blocks and track energy and focus—identify your peak performance hours after 2 weeks.



2 Use Time Blocking

Allocate tasks to time blocks—schedule your hardest tasks during your peak hours.



3 Batch Similar Tasks

Batch similar tasks to boost efficiency—block 2-3 days a week for meetings only.

2 Ways to Get Things Done

Eat The Frog

Tackle your hardest task first thing in the morning.

Identify and eliminate your biggest productivity obstacle first.

1

The Pomodoro Technique

Work for 25 minutes and take a quick 5-minute break

After 3 Pomodoro take a longer break—15 to 40 minutes.

2

6 Tips To Get Things Done



Quit Multitasking

Focus on one task at a time for the best outcomes.



Use Checklists

Mark things on your list to boost your motivation.



Set Deadlines

Create a sense of urgency to finish tasks faster.



Learn to Delegate

Delegate tasks to someone who can do them 70% as well as you.



Take Breaks

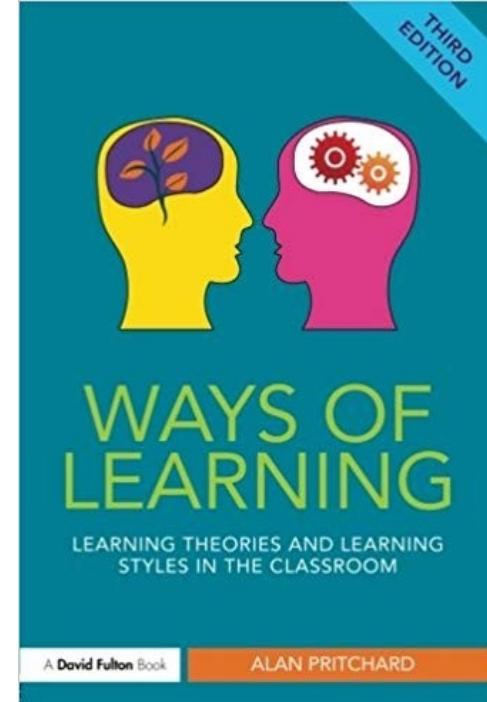
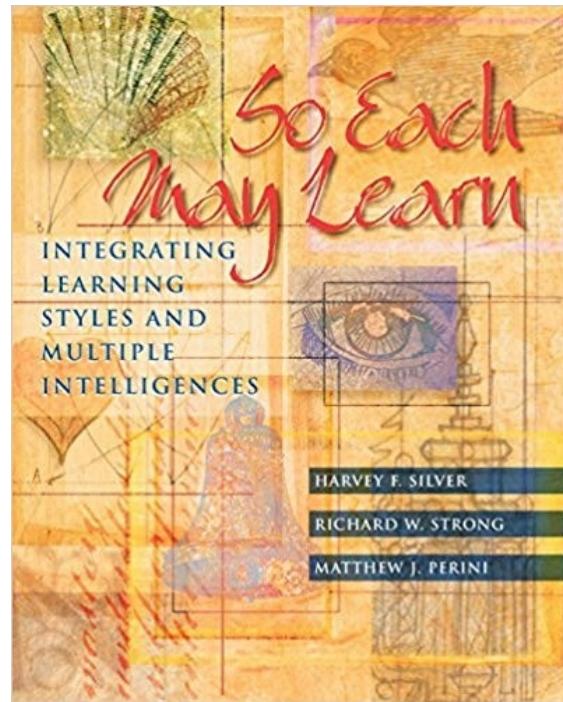
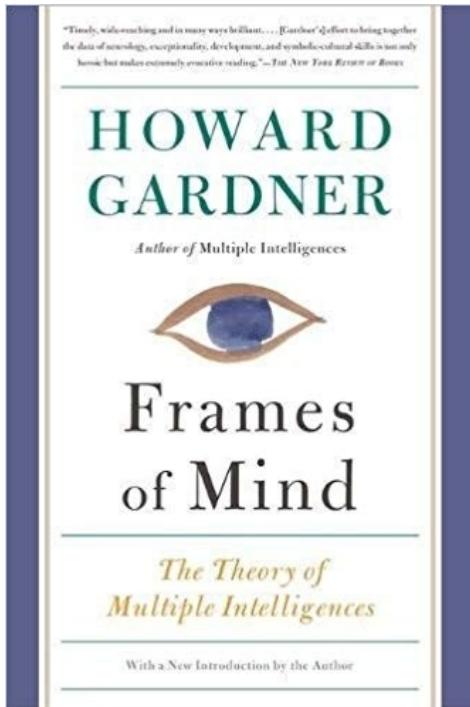
Proper rest is just as important as working hard.



Find What Works For You.

Try out methods until you find what works best.

Referências



Discussão...



<https://www.facebook.com/reel/998058498626444>



<https://www.instagram.com/p/C-Arb6RRI4C/>