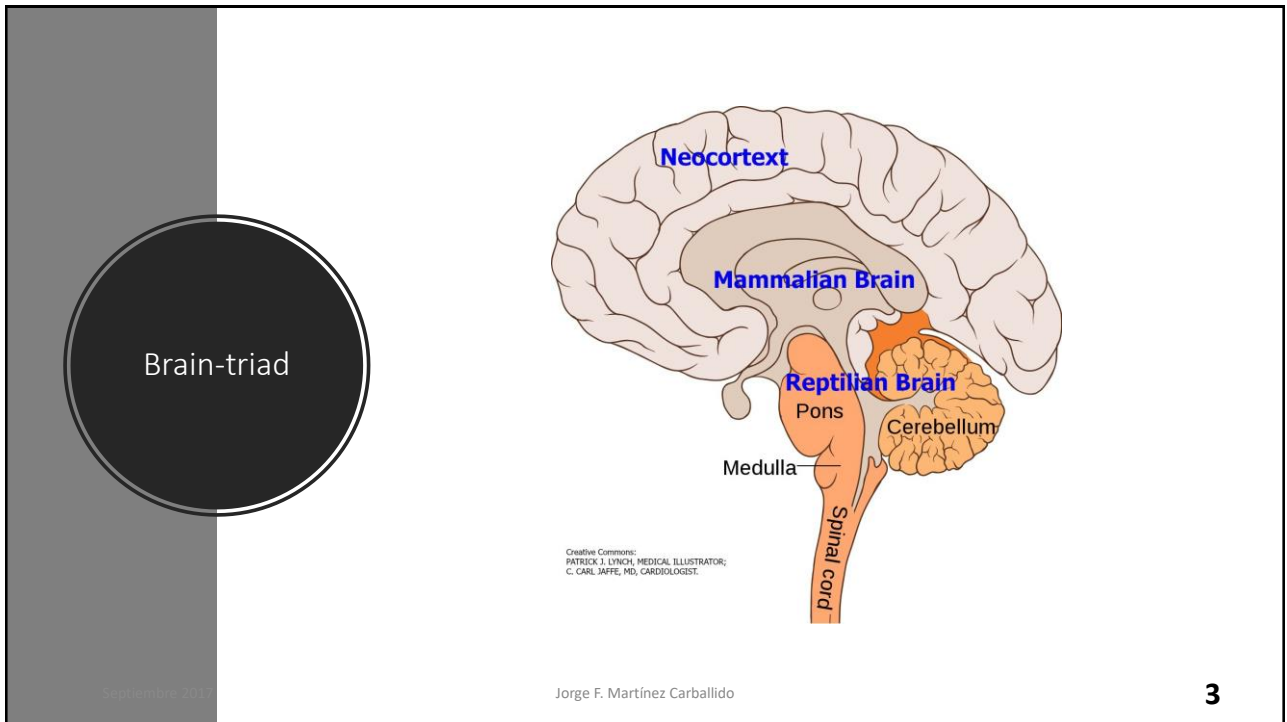


What it takes to be an ACE learner?

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What it takes to be an ACE learner

- Brain-Triad model (..3)
- Typical current education system (..7)
- Learning by purpose (..14)



Brain-triad based learning level 1

- **Instinctive** (emergency, reactions, muscular memory, thought process in deep memory)
 - Repetitions, traumatic experience
- **Emotive** (decisions)
 - Passion, will
- **Extensive** (learning, understanding, conceiving)
 - Exploring, searching, directing
 - Reflection (bend back)
 - Reading, writing
 - Listening, Speaking

Brain-triad based learning level 2

- **Instinctive** (emergency, reactions, muscular memory, thought process in deep memory)
 - Repetitions, traumatic experience
- **Emotive** (decisions)
 - Passion, will
- **Extensive** (learning, understanding, conceiving)
 - Exploring, searching, directing
 - Reflection (bend back)
 - Reading, writing
 - Listening, Speaking

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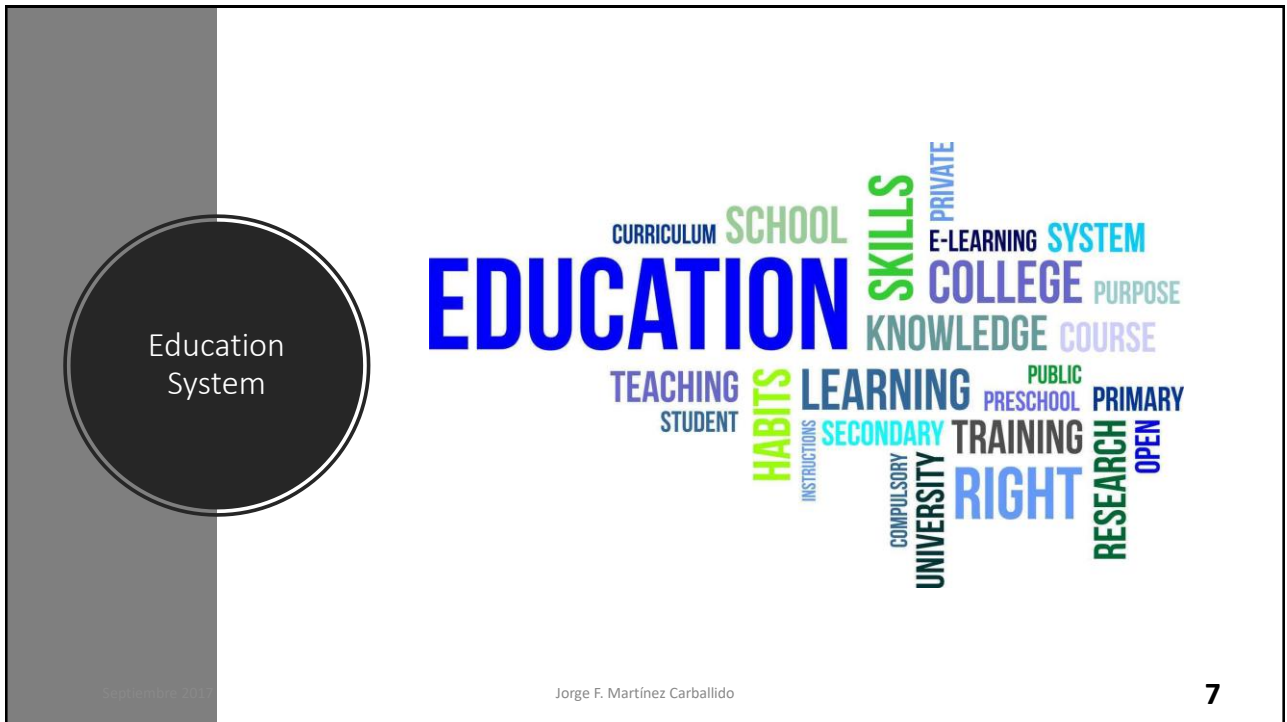
Brain-triad based learning level 3

- **Instinctive** (emergency, reactions, muscular memory, thought process in deep memory)
 - Repetitions, traumatic experience
- **Emotive** (decisions)
 - Passion, will
- **Extensive** (learning, understanding, conceiving)
 - Exploring, finding, searching, directing
 - Reflection (bend back)
 - Reading, writing
 - Listening, speaking

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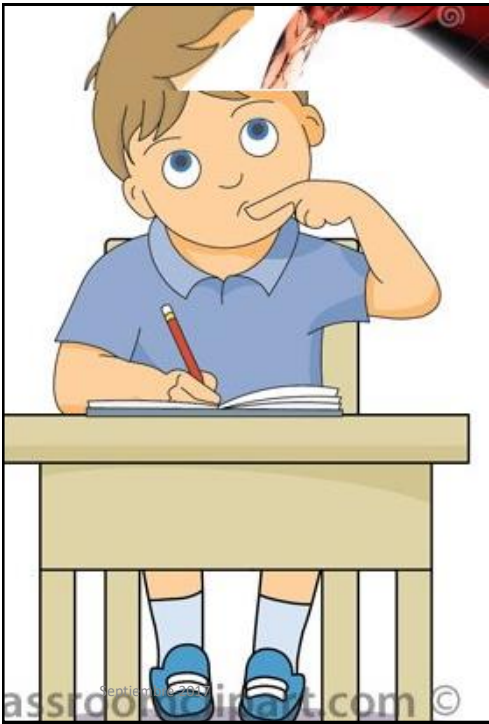
6



Education System

Organized set of schools (physical and human infrastructure)
with governing rules to serve education

- Main Participants
 - Government
 - Society
 - Teachers
 - Students



Roles performed

- Government as **Ruler and Sponsor**
- Society as **Sponsor**
- Teacher as **Instructor**
- Student as *attentive and systematic* **Observer**

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Knowledge Level

- Recall & Reproduce
- Understand
- Conceive

Subject Covering

- Depth
- Breadth
- Delivery method

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Purposes

Typical

Common base knowledge

Finland

Prepare for life

Extracurricular choice, intrinsic motivation

South Korea

If you study hard enough, you can be smart enough

No excuse for failure. Grit and hard, hard, hard work

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Quotes about education

The aim of public education is not to spread enlightenment at all; *it is simply to reduce as many individuals as possible to the **same safe level**, to breed a standard citizenry, to **put down dissent and originality**.*

- H.L. Mencken

I suppose it is because nearly all children go to school nowadays, and **have things arranged for them**, that they seem so desolately unable to produce their own ideas. – *Agatha Christie*

Our educational system is like an automobile which has **strong rear lights**, brightly illuminating the past. But **looking forward things are barely discernible**. – *Hermann Oberth*

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Quotes about education

The main goal of education is to create men and women who are **capable of doing new things**, not simply repeating what other generations have done.- *Jean Piaget*

Without pain, there would be no suffering, without suffering we would never learn from our mistakes. **To make it right, pain and suffering is the key to all windows**, without it, there is no way of life. –*Angelina Jolie*

I never teach my pupils. I only attempt to **provide the conditions in which they can learn**. – *Albert Einstein*



Learning purposes			
Learning By	Recall & Reproduction	Understand	Conceive
Teaching			
Couching			
Experimenting			

Learning with purpose

Recall &
Reproduction

Understand

Conceive

		Learning purposes		
Phase	Learning By	Recall & Reproduction	Understand	Conceive
	Teaching			
	Couching			
	Experimenting			

Knowledge and its structure

Recall and Reproduction

Prepare content for students to Recall & Reproduce

- Class
- Textbook
- Homework

Teacher and students

Prepare content for learners to understand

Teacher and learners

- How and for what is to be used
- Components and their interaction rules and limitations
- Low level components

Teaching

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Applied Knowledge

Knowledge of Interest

Supporting Knowledge

Understand

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Tactics to improve learning performance by understanding

Couch-Learner

interactions/intra-actions

- For what
- How
- Primitives/Foundations

Learner improvement

- Meaning
- Points of improvement
- Depth-Width Focus
- Effective work
- Emotionally fit

Couching

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Knowledge

Knowledge Gap

Knowledge

Knowledge extend

Knowledge

Conceive

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The diagram consists of two downward-pointing chevrons. The top chevron is orange and labeled 'Conversations-Discussions'. To its right is a rounded rectangle containing three bullet points: 'Questions to Deepen understanding', 'Questions to Widen understanding', and 'Questions that are not simply answered by a Yes or No'. The bottom chevron is grey and labeled '++Learner to Learner'. To its right is a rounded rectangle containing four bullet points: 'Explore to extend', 'Synthesize to build', 'Imagine to create', and 'Reflect to correct'.

Conversations-Discussions

- Questions to Deepen understanding
- Questions to Widen understanding
- Questions that are not simply answered by a Yes or No

++Learner to Learner

- Explore to extend
- Synthesize to build
- Imagine to create
- Reflect to correct

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Experimenting

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Agile, Correct, and Effective Learner

- No body learns for you. You can learn from others.
- Choosing what to learn is of upmost importance while learning to learn.
- No pain, no gain.

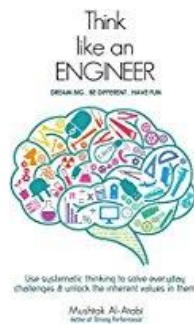
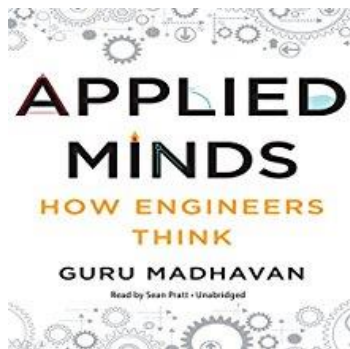
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Thanks for coming

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Further reading



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Credits

<http://drjanelewis.com/wp-content/uploads/2015/12/triune-brain-model.jpeg>

<http://cdn.publishyourarticles.net/wp-content/uploads/2015/06/Education-system.jpg>

https://classroomclipart.com/images/gallery/Clipart/School/boy_working_at_desk.jpg

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