### **Learning Process**

**Conceptual:** How did you learn to differentiate characteristics of different literary styles? How did you learn to recognize national historical facts? What types of experiences have you had related to learning this type of content?

Attitudinal: How did you learn to obey traffic laws? How have your learned to behave during a work meeting? What types of learning experiences have you had related to this type of content?

**Procedural:** How did you learn to write an essay, article, or research paper? How did you learn to change a tire? What experiences have you had related to learning this type of content?

# A New Culture of Learning in STEM Education

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Students need an effective and open relationship

- Teachers
- Advisors
- Mentors
- Customer service staff
- Administrators

They have no obligation to attend an educational institution.

They have made their own decision to continue learning and, therefore, motivation is not usually a problem.

They tend to look for learning opportunities to be able to face changes in their lives.

They want to put their knowledge into actions.

They bring along background knowledge and practical experiences.

They wish to be treated with respect

They do not need much monitoring

They expect instructors to share their knowledge and skills with them

**Active learners** 

For this generation,

information technology is not a tool and is part of their life, and are comfortable in virtual environment.

continuous interactivity is part of their life and a key element in their way of learning and communicating

multitasking is a norm, welcome it by responding promptly to their emails [if used]

credible resources are important in building knowledge



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MANILU /	Authority
Educator's role and his/her relationships	Order
	Patience
Learning as a vital and lifelong process Necessary qualities of effective learning and	Character
	Empathy
	Learning
strategies for promoting these	Pleasure
qualities in the	Imagination
learning environment	Ethics

Pleasant learning experiences

Unpleasant learning experiences

Occasionally, learning is a rewarding experience because it satisfies the specific need of doing something unknown and/or satisfies the desire to manage new knowledge. This voluntary learning is usually centered on the interests or subjects unexplored during formal education, but many people also choose courses at university based on what really fascinates them.



Enthusiasm	Description	ldeas to strengthen it
Pleasure	Enthusiasm begins with people's own interests. The students' favorite topics must lead the way.	<ul> <li>Ask about what you are learning and think about what you already know</li> </ul>
Imagination		<ul> <li>Look for the meaning of everything you learn.</li> </ul>
Curiosity		





Enthusiasm	Description	Ideas to strengthen it
Pleasure	Imagination turns every inert and passive thing into something creative and active. Although imagination takes place in a disorganized fashion and with no rules, you can encourage and exercise it.	<ul> <li>Imagine how to apply what you have already learned to new situations.</li> <li>Imagine yourself within a different context.</li> </ul>
Imagination		
Curiosity		





#### Description

Developing an appropriate character implies hard work on the part of the educator to recognize those personality traits and that own experience that will help enrich the students' ability to grasp knowledge.

The educator should be authentic and show himself as he/she is.

Besides, an effective educator talks to his/her students and allows them to get closer to him/her, without crossing the line. Lack of humanity drifts the students apart, and makes them lose interest in seeking knowledge.

#### Attitudes to strengthen them

- Not assuming roles that disguise your own personality.
- Knowing yourself, accepting your personal characteristics and working on them to improve the teaching process.
- Sharing mistakes, doubts, and concerns with your students.
- Getting closer to each student and showing interest in their doubts and concerns.
- Nourishing patience. Answering every question and clearing any doubt with respect.

## Who are we teaching?

 How close are you to being a digital learner? Which skills have you mastered and which ones do you need to develop?

 Do you apply these skills to your teaching practice? How? If you do not master one/some skill(s), how might you strengthen them?