



**Education
Ambassadors**
FEBS Education Committee



EDUCATIONAL CONSIDERATIONS FOR TRAINING (Webinar)

December 7th, 2022 / Wednesday / 12:30-17:30 pm CET (=Tunisia) Time

12:30-12:35	Welcome and opening	Ferhan Sagin & Hatem Fakhfakh
12:35-12:45	ATSB Introduction	Hatem Fakhfakh
12:45-13:05	FEBS-Congresses, Fellowships, Advanced courses, Journals and more...	Jerka Dumic
13:05-13:15	Discussion and Q & A about FEBS	Jerka Dumic & Ferhan Sagin
13:15-13:45	Why and how should you develop and improve your educator skills?: Tips for both junior & senior scientists	Ferhan Sagin
13:45-14:05	Principles of learning for training design	Hatem Fakhfakh
14:05-14:15	COFFEE BREAK	
14:15-14:45	Integrative online tools for learning and teaching biochemistry	Nino Sincic
14:45-15:15	Integration of virtual laboratories in learning of biochemistry	Angel Herraез
15:15-15:30	Discussion and Q & A	Nino Sincic & Angel Herraез
15:30-15:45	COFFEE BREAK	
15:45-17:15	Workshop (young researchers): How to keep a good lab book	Jason Perret (& Nino Sincic)
17:15-17:30	Q & A and closing	Ferhan Sagin & Hatem Fakhfakh

<https://us06web.zoom.us/j/86969190827?pwd=MVozd3hBQR2bXh1cFJKL3JOYW1xZz09>



Principles of learning for Training design

Hatem FAKHFAKH

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 Researcher at the laboratory LGMIB, Faculty of Sciences of Tunis
 Vice President of the Tunisian Association of Biological Sciences (ATSB)
 ATSB FEBS Ambassador
 GBRMC network trainer on Biorisk Management (BRM), SANDIA Labs, USA
 IFBA certified on BRM



Key Messages

Training involves transferring knowledge, skills, and abilities to an identified person to create desired behaviors and actions in that person.

The training design cycle provides steps for assuring that training is developed in a standardized and strategic manner.

Managers and instructors should be involved in analyzing the current situation and the desired outcomes to assure that training is targeted to meet objectives.



Objectives



“what the institute gets out of the training”



“what the instructor wants to get out of the training”.

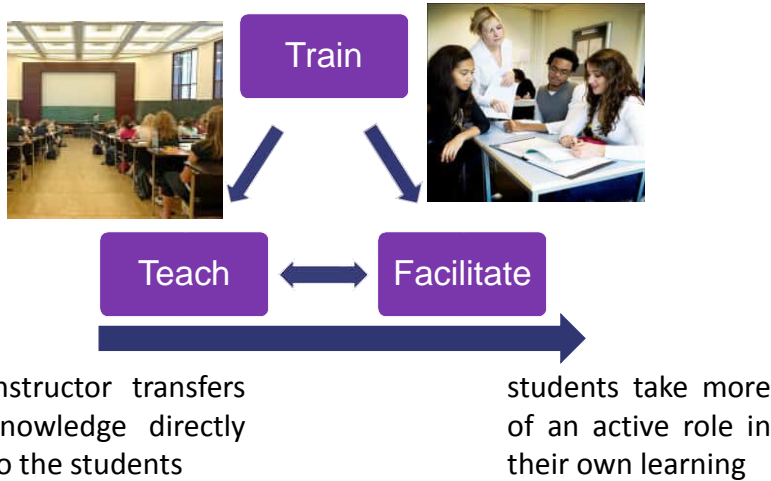


“what the student will be able to “know, feel and do” after the course





Facilitate vs Teach



Three “Models”

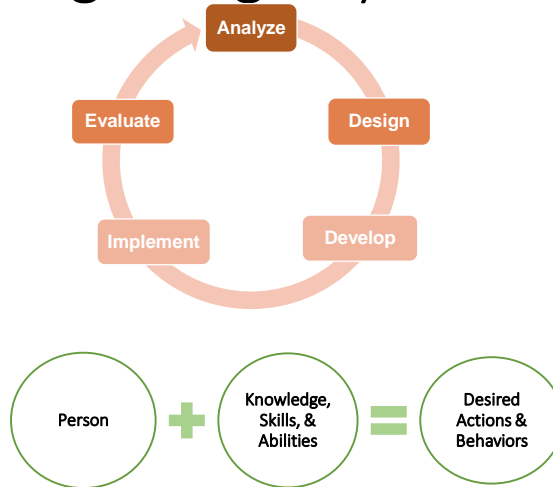
ADDIE – training design cycle

Jensen Model for Brain-Based Teaching

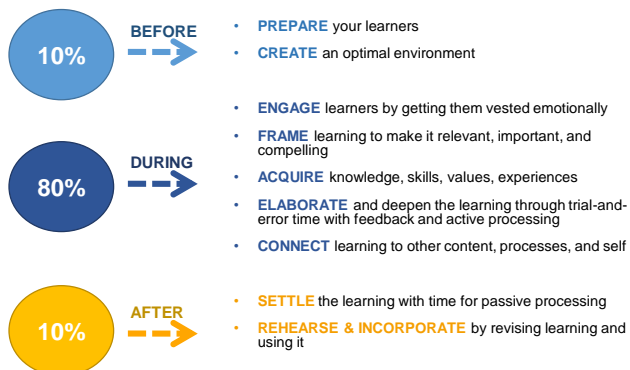
Principles of Learning



Training Design Cycle: ADDIE



Jensen Model for Brain-Based Teaching





Principles of Learning

Readiness	• Recency
Exercise	• Intensity
Effect	• Freedom
Primacy	• Requirement



CONNECT THE MODELS

Jensen Model for Brain-Based Teaching

- **ENGAGE** learners by getting them vested emotionally
- **FRAME** learning to make it relevant, important, and compelling
- **ACQUIRE** knowledge, skills, values, experiences
- **ELABORATE** and deepen the learning through trial-and-error time with feedback and active processing
- **CONNECT** learning to other content, processes, and self

Jensen, Eric. 2005. *Teaching with the Brain in mind*, 2nd edition. Association for Supervision and Curriculum Development (ASCD): Alexandria, Virginia.

1. Engage – readiness, effect, requirement
2. Frame – effect, intensity
3. Acquire – readiness, requirement, primacy, recency, exercise
4. Elaborate – freedom, intensity, exercise
5. Connect – readiness, requirement, freedom



Key Messages

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Know–Feel–Do

“People will forget what you say.

People will forget what you do.

But people will never forget the way you made them feel.”

Maya Angelou