



# Competency-Based Training and Assessment

Instructor Course Design

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**AIRBUS**



# FOREWORD

**Is CBTA instructor training necessary ?**



## Reasons for Change

**MANDATORY**





# Good Trainer: an International Consensus



## **Pilot Competencies**

Same to existing ones.

## **Management of Learning Environment**

Ensures that the instruction, Assessment and evaluation are conducted in a suitable and Safe environment.

## **Instruction**

Conducts training to develop the trainee's competencies

## **Interaction with Trainee**

Supports the trainees' learning and development.

## **Assessment & Evaluation**

Assesses the competencies of the trainee.





# Our Journey together...

The New Generation  
EBT Instructor Course  
The Airbus Course  
Assessment & Grading  
Course Structure  
Course Content  
Training Population  
Terminal Objective  
Course development



# Our Journey together...



Course development

Terminal Objective

Training Population

Course Content

Course Structure

Assessment & Grading

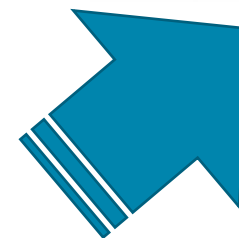
The Airbus Course

EBT Instructor Course

The New Generation



# CBTA Instructor Course Should be.... Competency-Based





# Make it Practical and Interactive

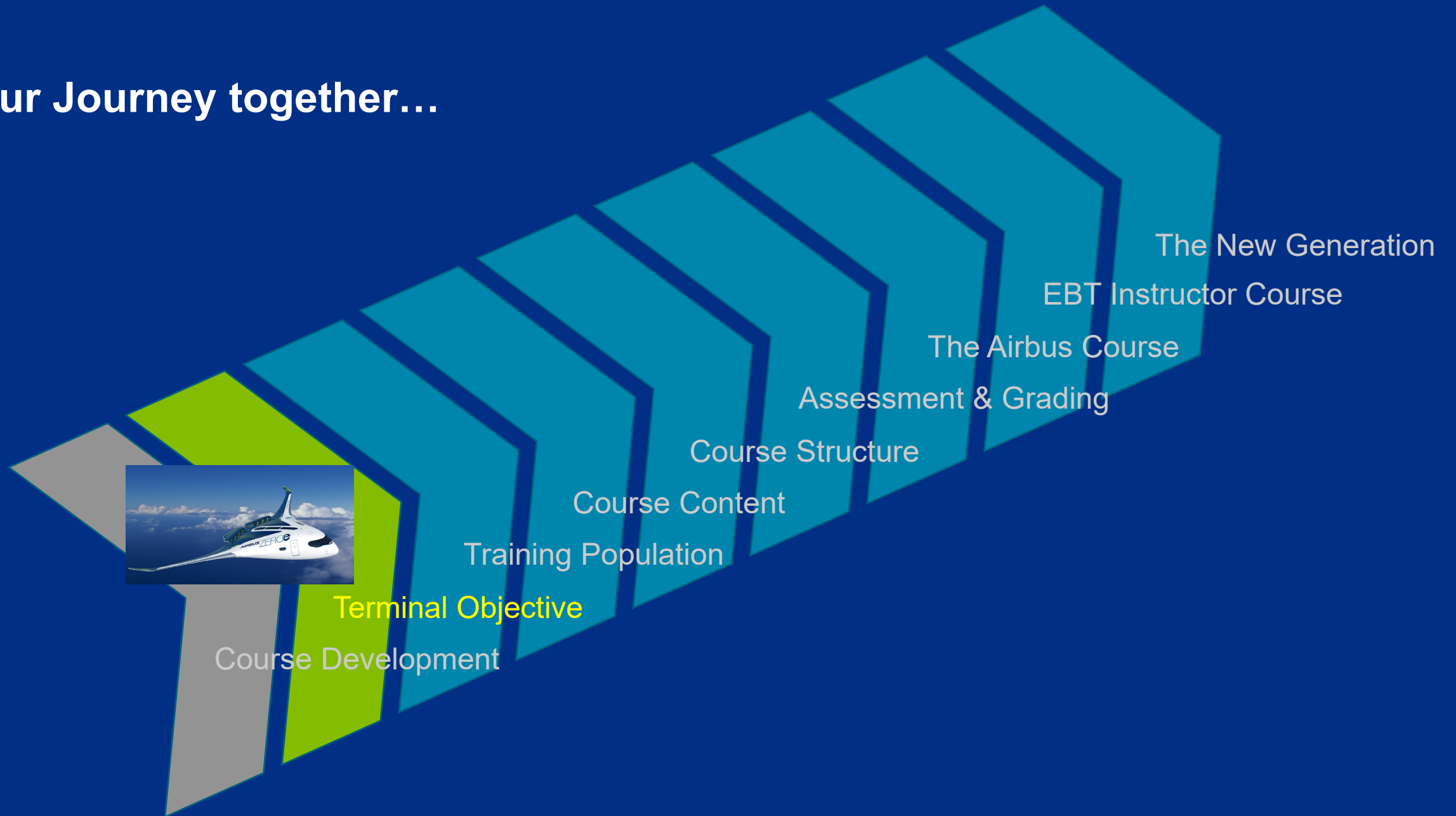


Practical



Interactive

# Our Journey together...







# We train to Develop Competence



## **Pilot Competencies**

Similar to existing ones.



## **Management of Learning Environment**

Ensures that the instruction, Assessment and evaluation are conducted in a suitable and Safe environment.



## **Instruction**

Conducts training to develop the trainee's competencies



## **Interaction with Trainee**

Supports the trainees' learning and development.



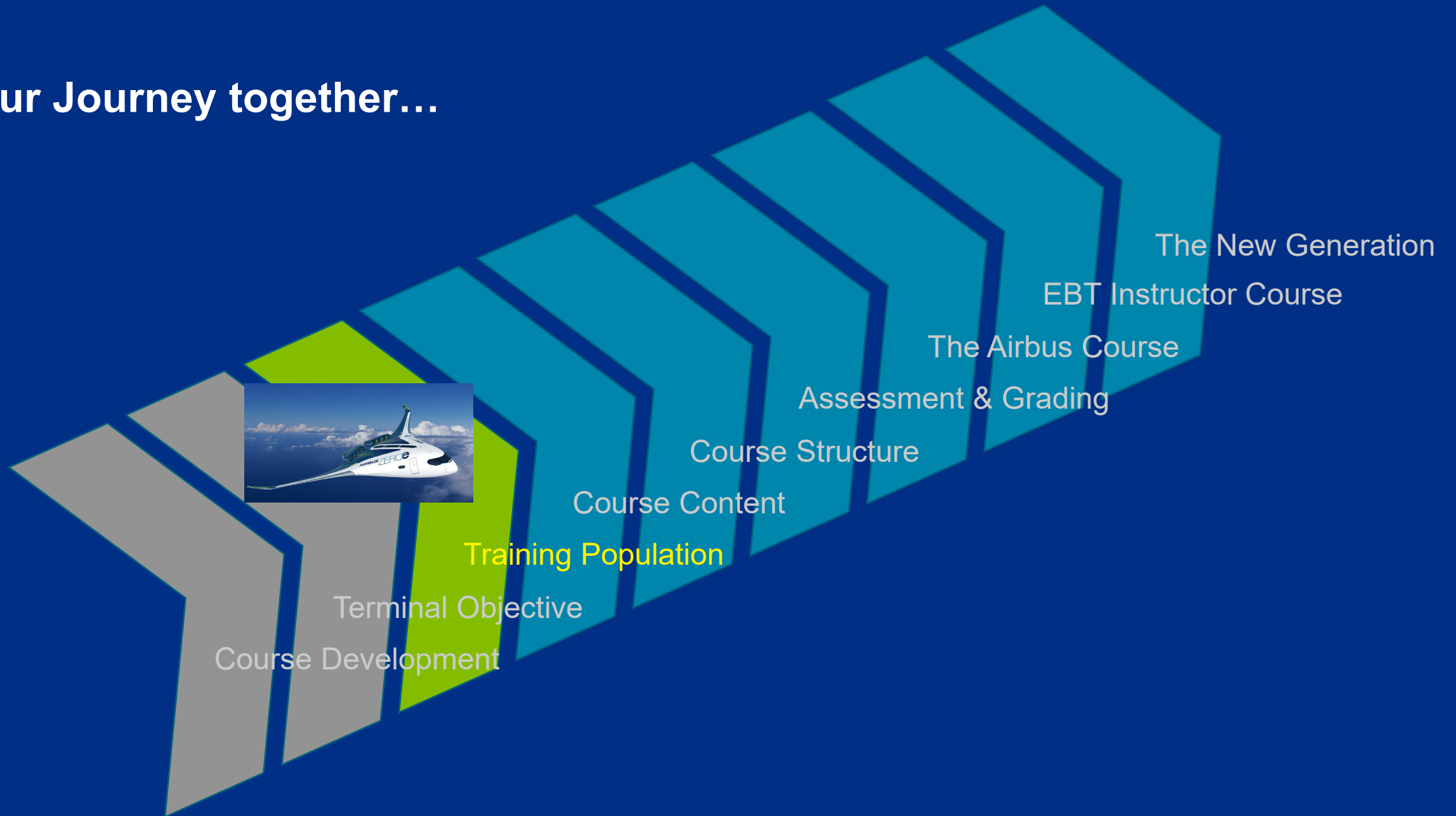
## **Assessment & Evaluation**

Assesses the competencies of the trainee.



At the end of the CBTA instructor training, the instructor applicant should be able to demonstrate effectively the 5 instructor competencies by (at least) **REGULARLY** demonstrating **MOST** of the Instructor Observable Behaviors (IOBs) associated to each instructor competency.

# Our Journey together...





# Population to be Trained is a function of...



Pre-requisites

Aptitude Testing (selection)



Future Job



# Aptitude Testing



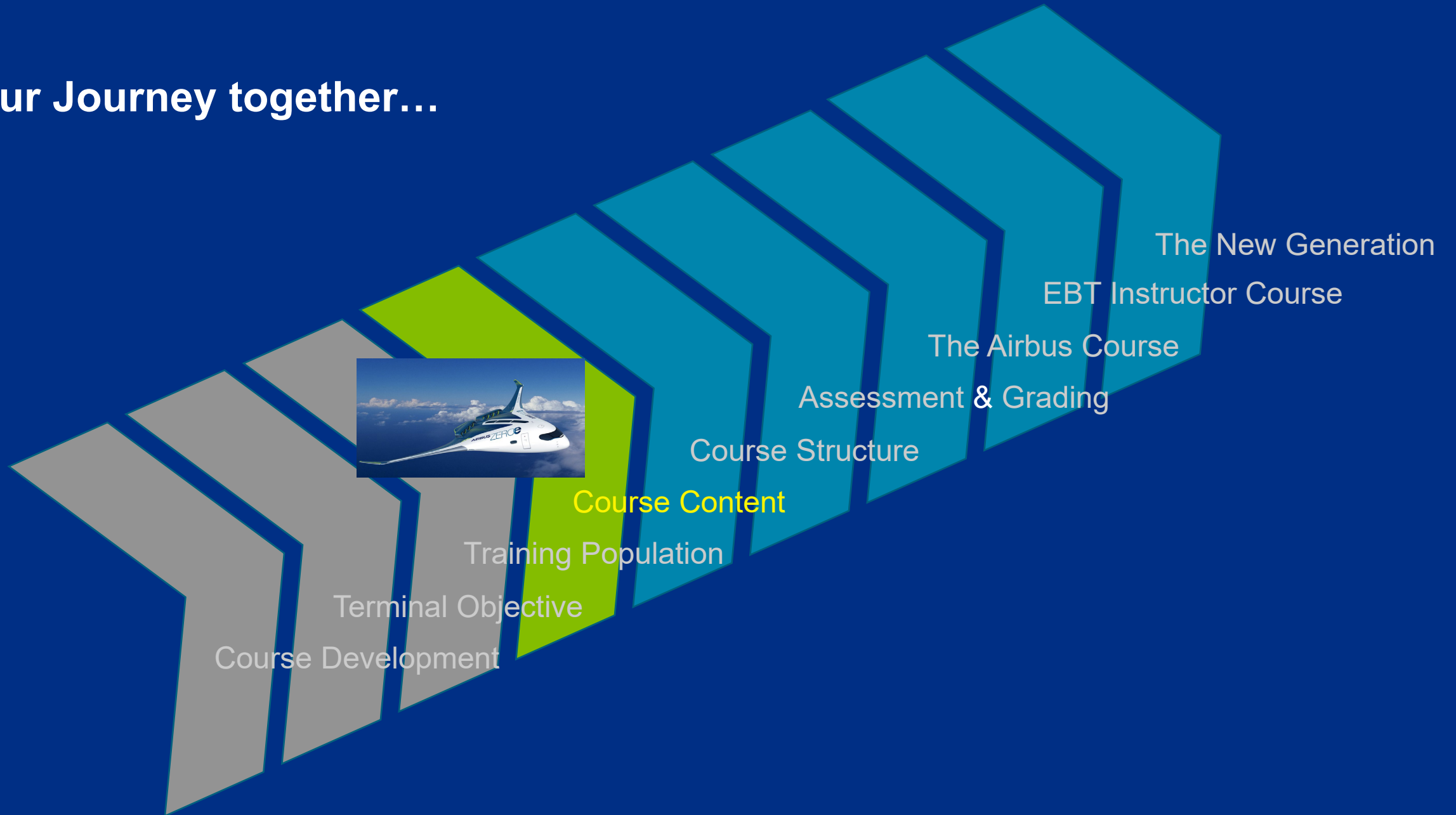
- Pilot Competencies**  
Similar to existing ones.
- Management of Learning Environment**  
Ensures that the instruction, Assessment and evaluation are conducted in a suitable and Safe environment.
- Instruction**  
Conducts training to develop the trainee's competencies
- Interaction with Trainee**  
Supports the trainees' learning and development.
- Assessment & Evaluation**  
Assesses the competencies of the trainee.



- The level of performance as a pilot
- The potential to support the trainee's learning
- The potential to become a role model
- The potential to pass instructor training



# Our Journey together...





# Course Aim



## **Pilot Competencies**

Similar to existing ones.



## **Management of Learning Environment**

Ensures that the instruction, Assessment and evaluation are conducted in a suitable and Safe environment.



## **Instruction**

Conducts training to develop the trainee's competencies



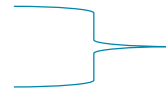
## **Interaction with Trainee**

Supports the trainees' learning and development.

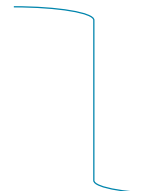


## **Assessment & Evaluation**

Assesses the competencies of the trainee.



Mainly a matter of selection



To be developed or reinforced



Course content  
should address KSA  
related to IOBs



# Management of the Learning Environment

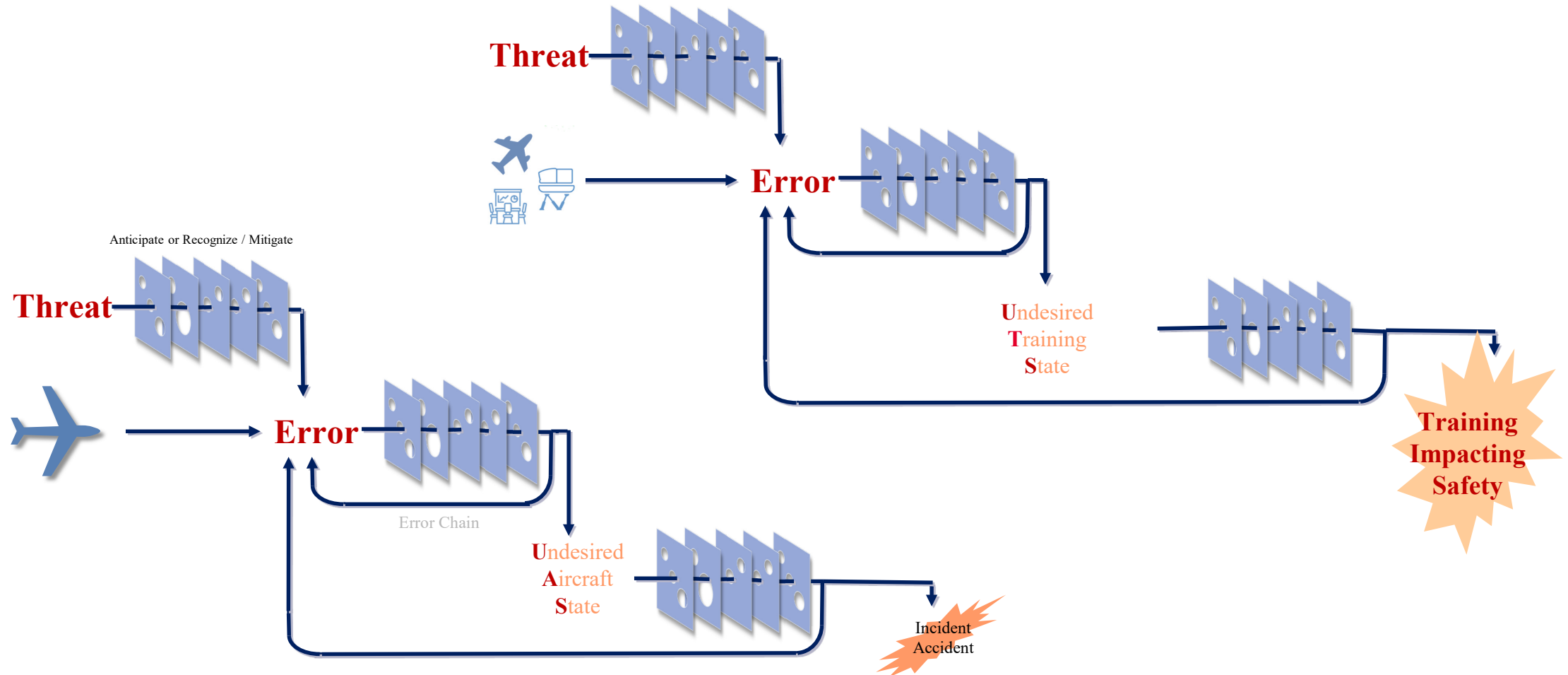


## IEC2

Management of the learning environment	
<b>Description:</b>	Ensures that the instruction, assessment and evaluation are conducted in a suitable and safe environment.
IOB 2.1	<b>Applies TEM in the context of instruction/evaluation</b>
IOB 2.2	Briefs on safety procedures for situations that are likely to develop during instruction/evaluation
IOB 2.3	<b>Intervenes appropriately, at the correct time and level</b> (e.g., progresses from verbal assistance to taking over control)
IOB 2.4	Resumes instruction/evaluation as practicable after any intervention
IOB 2.5	Plans and prepares training media, equipment and resources
IOB 2.6	Briefs on <b>training devices or aircraft limitations</b> that may influence training, when applicable
IOB 2.7	Creates and manages conditions (e.g., airspace, ATC, weather, time, etc.) to be suitable for the training objectives
IOB 2.8	<b>Adapts to changes</b> in the environment whilst minimizing training disruptions
IOB 2.9	Manages time, training media and equipment to ensure that training objectives are met



## IOB 2.1: Applies TEM in the context of instruction/evaluation







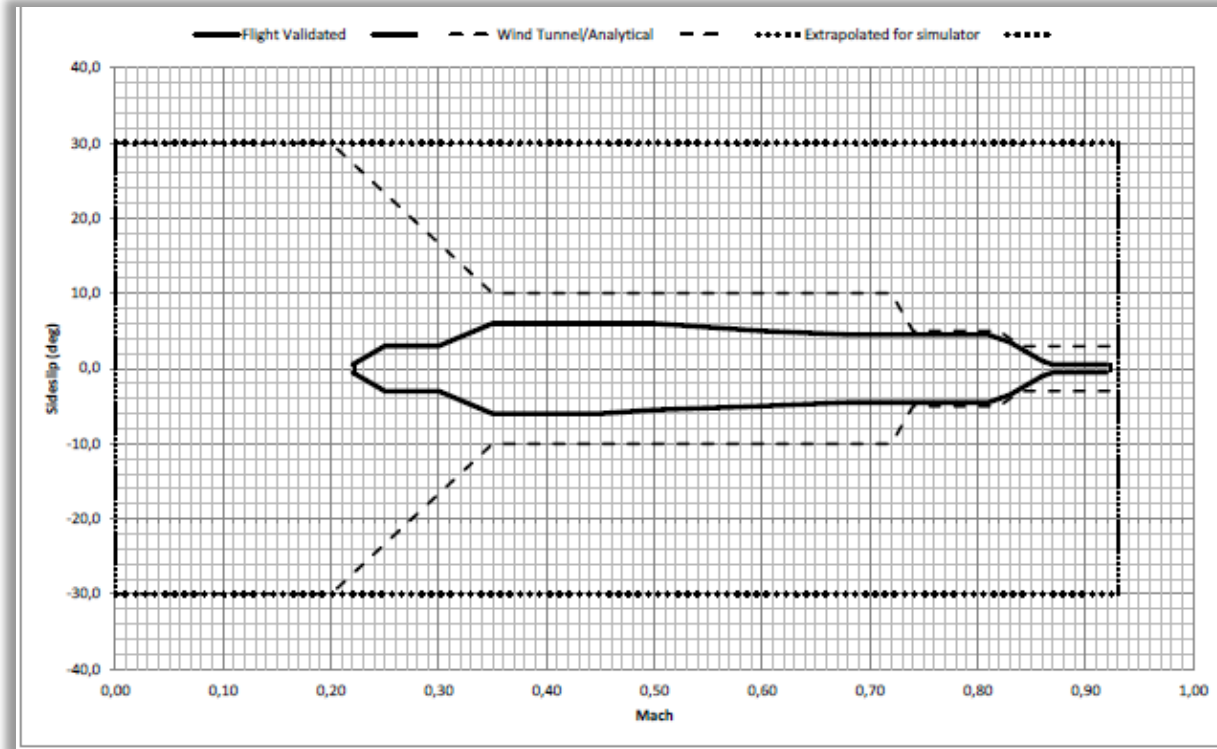
## IOB 2.3: Intervenes appropriately, at the correct time and level



Teaching and Learning

Practical Training

## IOB 2.6: Briefs on training devices or aircraft limitations



Outside Training Envelope



**Negative Training**



## IOB 2.8: Adapts to changes in the environment whilst minimizing training disruptions



Threat Identification

Practical Adaptation Methods

Protection of training objectives

Additional training if required



# Instruction



## IEC 3

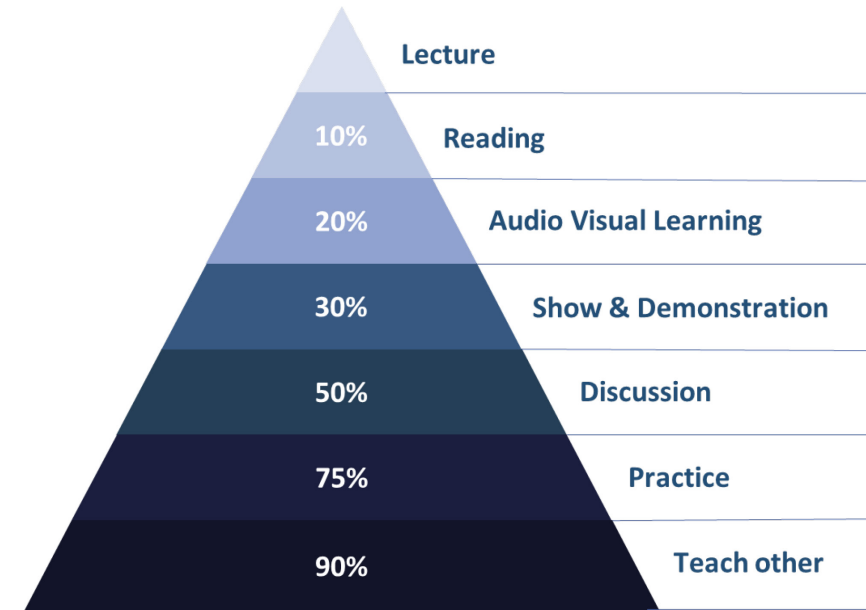
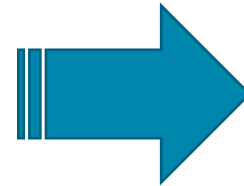
Instruction	
Description:	Conducts training to develop the trainee's competencies.
IOB 3.1	References approved sources (operations, technical, and training manuals, standards and regulations)
IOB 3.2	States clearly the objectives and clarifies roles for the training
IOB 3.3	Follows the approved training program
IOB 3.4	<b>Applies instructional methods as appropriate</b> (e.g., explanation, demonstration, facilitation, discover with assistance, discover without assistance)
IOB 3.5	Sustains operational relevance and realism
IOB 3.6	Adapts the amount of instructor inputs to ensure that the training objectives are met
IOB 3.7	Adapts to situations that might disrupt a planned sequence of events
IOB 3.8	Continuously assesses trainee's competencies
IOB 3.9	Encourages the trainee to self-assess
IOB 3.10	Allows trainee to self-correct in a timely manner
IOB 3.11	<b>Applies trainee-centred feedback techniques</b> (e.g., facilitation, etc.)
IOB 3.12	<b>Provides positive reinforcement</b>





## IOB 3.4: Applies instructional methods as appropriate

	Teaching Method
Instructor	Tell, Explain, Remind
Instructor	Show, Demonstrate
Instructor	Facilitate
Trainee	Discover with assistance
Trainee	Discover without assistance



Retention rate in % by different ways of learning



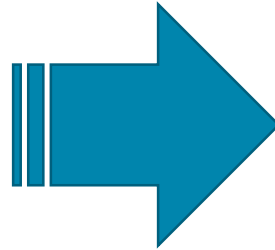
IOB 3.11: Applies trainee-centered feedback techniques (e.g., facilitation, etc.)

## Facilitation: “They Figure it out !”





## IOB 3.12: Provides positive reinforcement



# Interaction with Trainees



## IEC 4

Interaction with the trainees	
<b>Description:</b>	Supports the trainees' learning and development And Demonstrates exemplary behaviour (role model)
	<b>Supports the trainees' learning and development</b>
IOB 4.1	Shows <b>respect</b> for the trainees (e.g., for culture, language, experience)
IOB 4.2	Shows patience and <b>empathy</b> (e.g., by actively <b>listening</b> , reading <b>non-verbal messages</b> and encouraging dialogue)
IOB 4.3	Manages trainees' barriers to learning
IOB 4.4	Encourages engagement and mutual support
IOB 4.5	<b>Coaches</b> the trainees
	<b>Demonstrates exemplary behaviour (role model)</b>
IOB 4.6	Supports the goal and training policies of the Operator/ATO and Authority
IOB 4.7	Shows <b>integrity</b> (e.g., honesty and professional principles)
IOB 4.8	Demonstrates acceptable personal conduct, acceptable social practices, content expertise, <b>a model for professional and interpersonal behaviour</b>
IOB 4.9	Actively seeks and <b>accepts feedback</b> to improve own performance



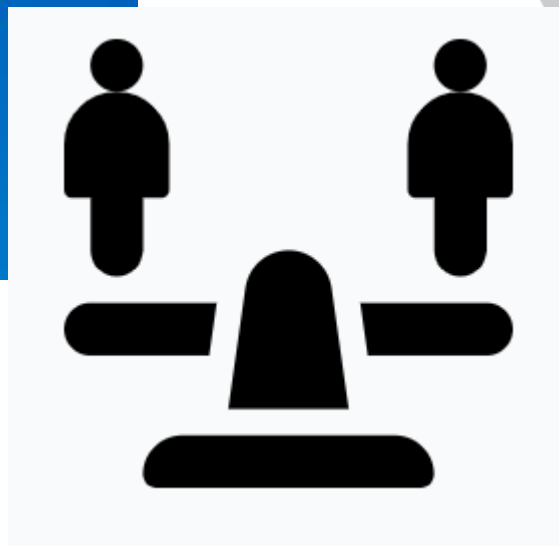
## IOB 4.1 & 4.2: Respect, Patience and Empathy



Behavior is a choice



Showing Empathy



Treating people as equal





## IOB 4.1 & 4.2: Respect, Patience and Empathy



Behavior



Body language



## IOB 4.5: Coaches the Trainees





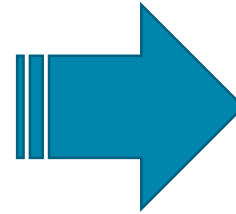


## IOB 4.7 & 4.8: Integrity and Role Model





## IOB 4.9: Seeks and Accepts Feed-back



# Assessment and Evaluation



## IEC 5

Assessment and Evaluation	
<b>Description:</b>	Assesses the competencies of the trainee and Contributes to continuous training system improvement
	<b>Assesses the competencies of the trainee</b>
IOB 5.1	Complies with Operator/ATOs and Authority requirements
IOB 5.2	Ensures that the trainee understands the assessment process
IOB 5.3	Applies the competency standards and conditions
IOB 5.4	<b>Assesses trainee's competencies</b>
IOB 5.5	<b>Performs grading</b>
IOB 5.6	<b>Provides recommendations based on the outcome of the assessment</b>
IOB 5.7	Makes decisions based on the outcome of the summative assessment
IOB 5.8	<b>Provides clear feedback to the trainee</b>
	<b>Contributes to continuous training system improvement</b>
IOB 5.9	Reports strengths and weaknesses of the training system (e.g., training environment, curriculum, assessment/evaluation) including feedback from trainees
IOB 5.10	Suggests improvements for the training system
IOB 5.11	produces reports using appropriate forms and media



# IOB 5.4 & 5.5: Assesses and Grades the Trainees

## 9 Pilot Competencies



## Competency-framework

## Grading system

Training Type									
Pilot Training	Session type		Trainee's details						
			Customer						
			Lastname						
			Firstname						
			Position						
Session date				Course Number					
				Course Type					
				From/To					
Competencies	1	2	3	4	5	N/O	Need extra training		
Application of procedures									
Communication									
Flight path management - Automation									
Flight path management - Manual									
Knowledge									
Leadership and teamwork									
Problem solving and decision making									
Situation awareness									
Workload management									
Free text									
<div>Validate</div> <div>Save without validation</div> <div>Unprotect</div>									
<p>I confirm that all the required manoeuvres and exercises for this session are either completed or listed in the free text box.</p> <p>I confirm that the reporting has been presented to the trainee and validated in his/her presence</p> <p>Note : Any missing/unsatisfied exercise will be notified to the next instructor</p>									



# IOB 5.4 & 5.5: Assesses and Grades the Trainees

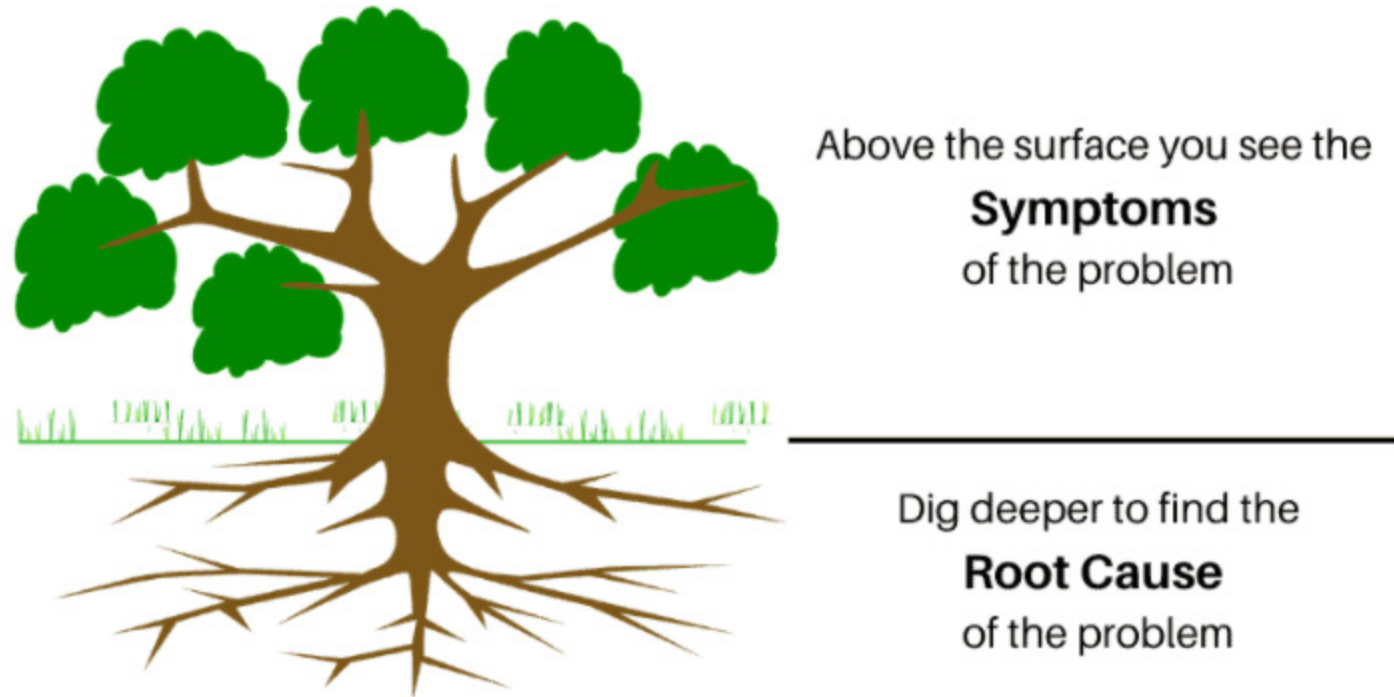
## 9 Pilot Competencies







## IOB 5.6 & 5.8: Provides Feed-back and Recommendations



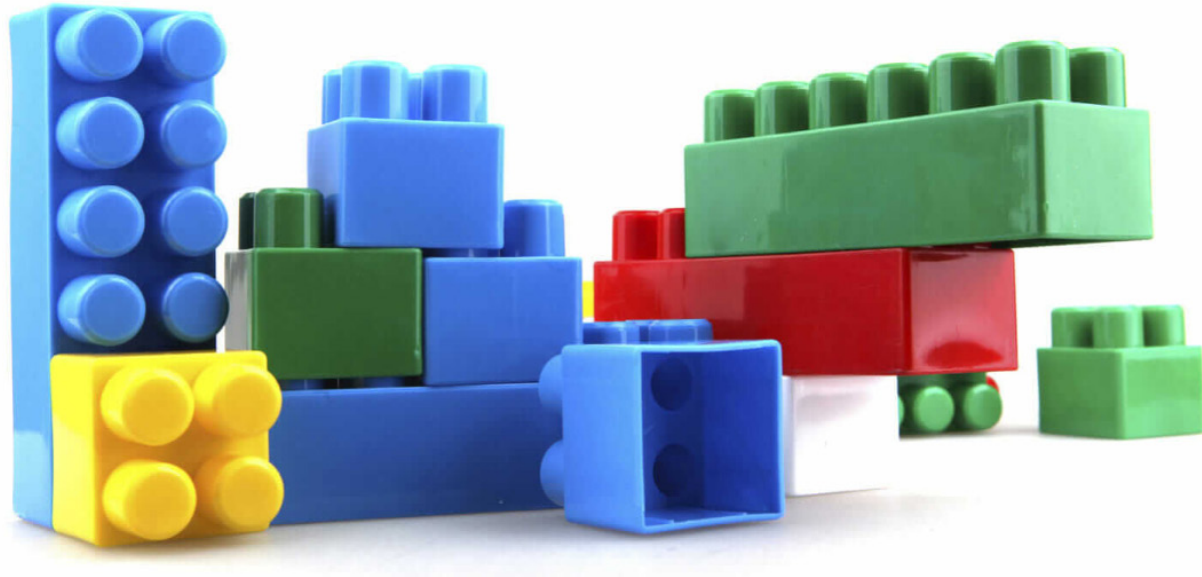
# Our Journey together...





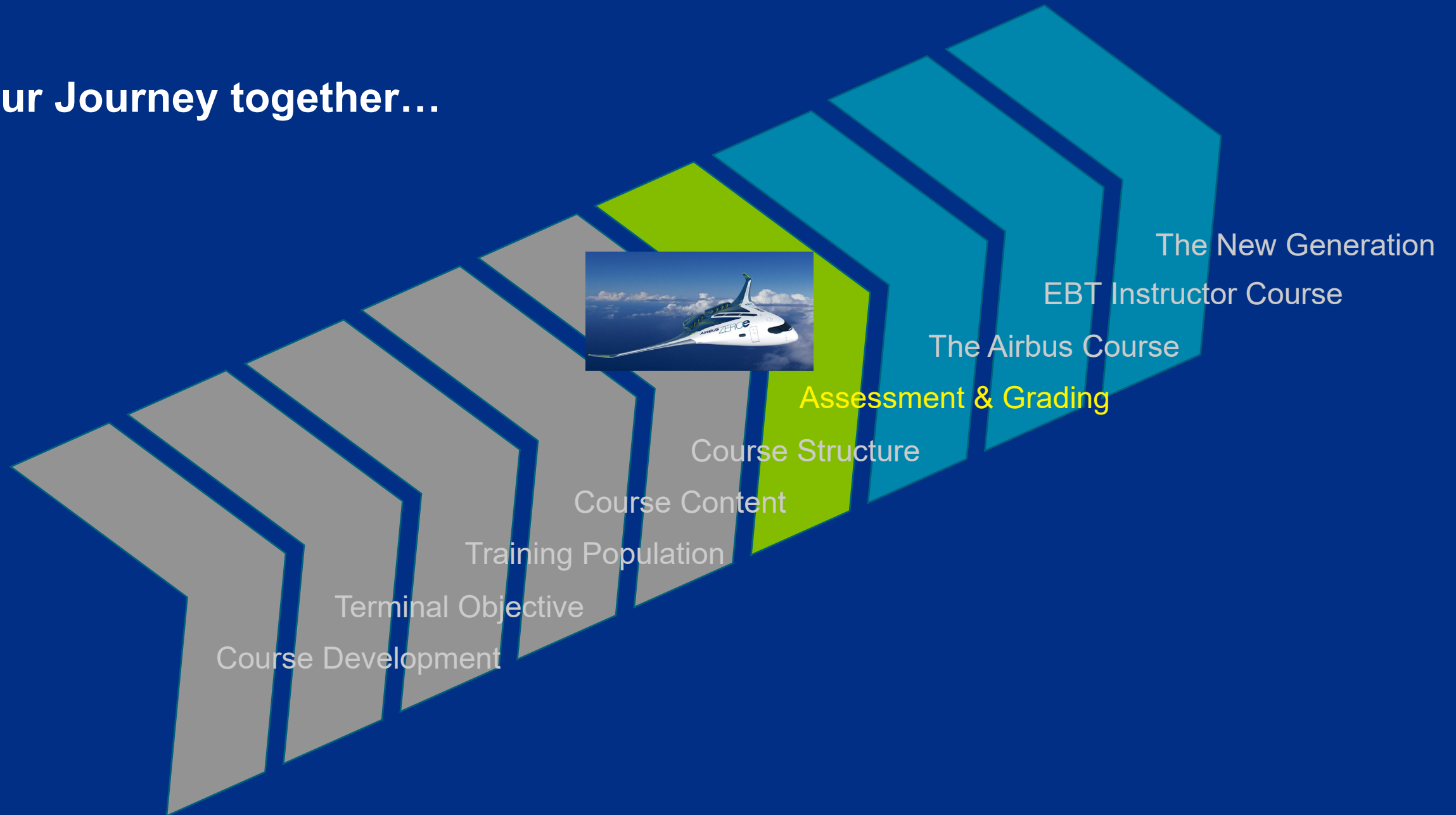


# Make it Modular and Progressive !!!



Step-by-step development of IECs...

# Our Journey together...





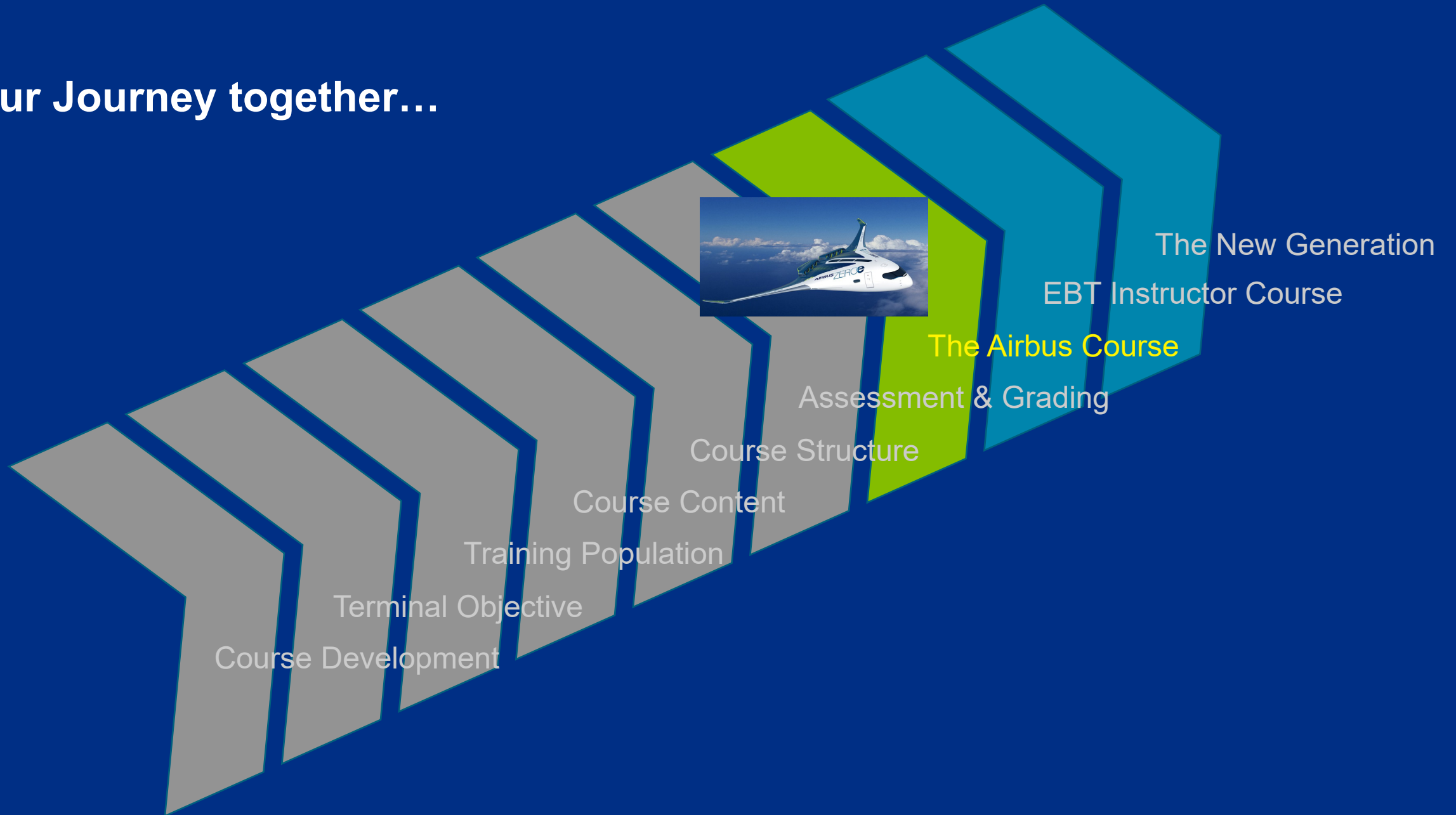
# Continuous Instructor Assessment



## Based on Instructor Competencies

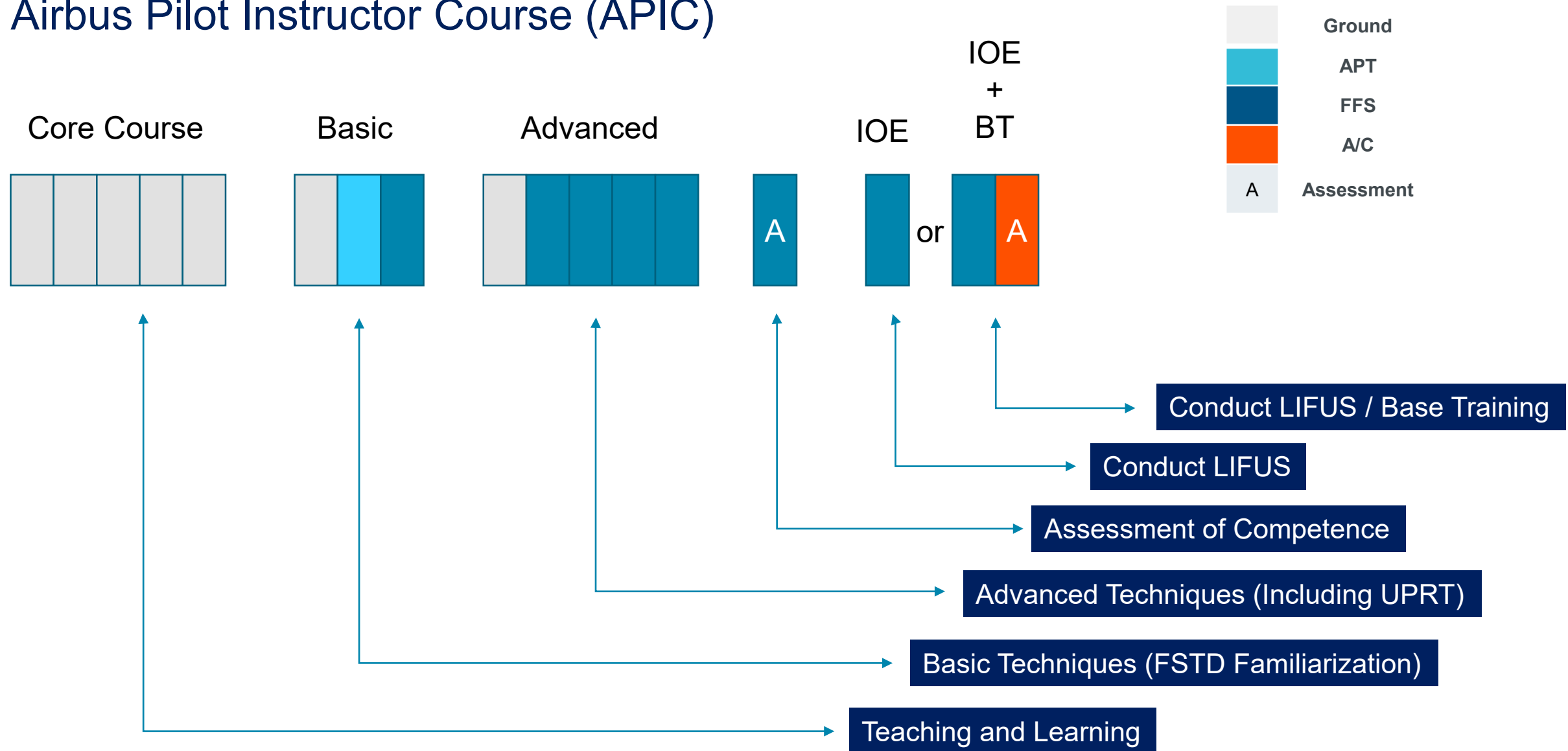
## Formative and Summative

# Our Journey together...

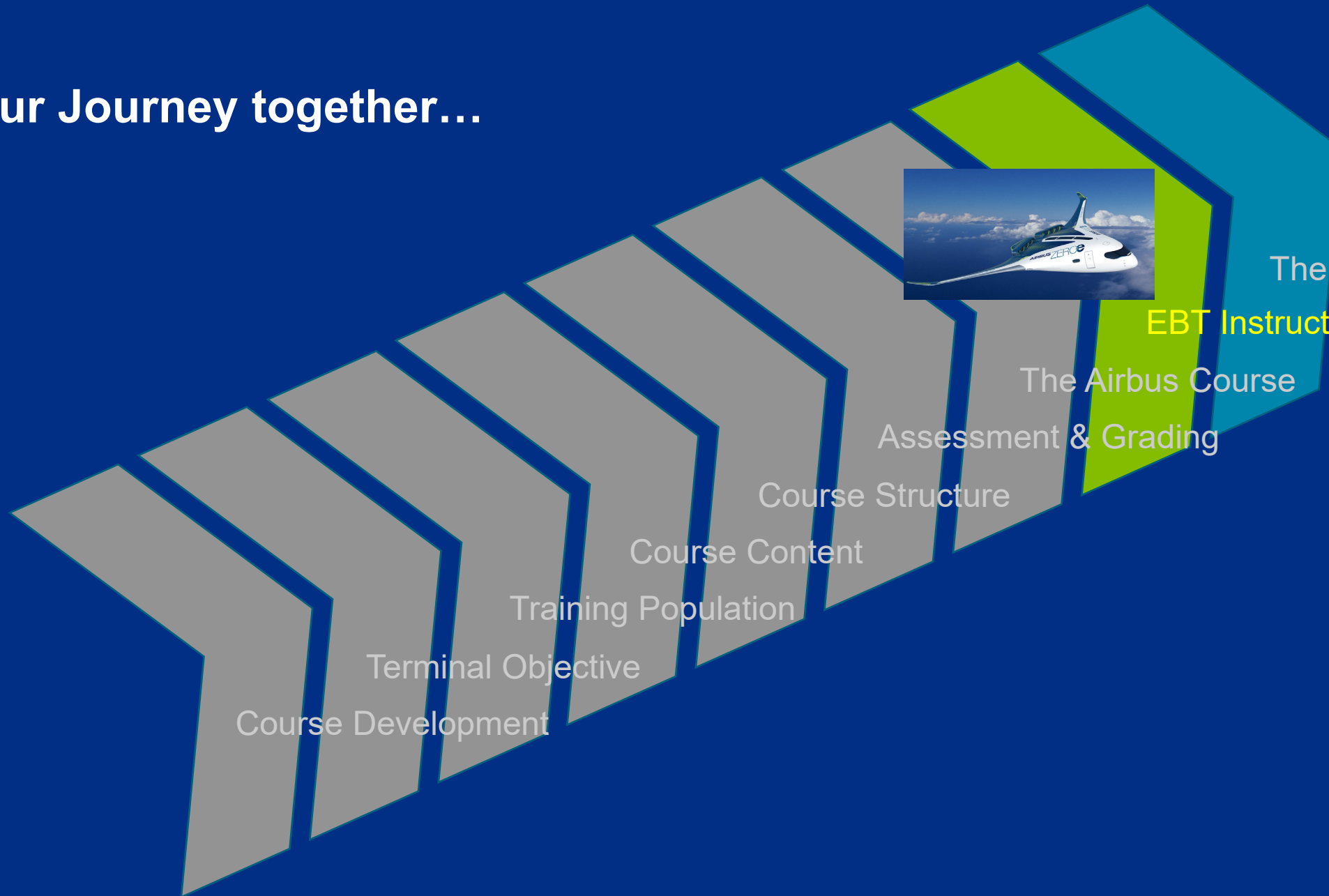




# Airbus Pilot Instructor Course (APIC)



# Our Journey together...



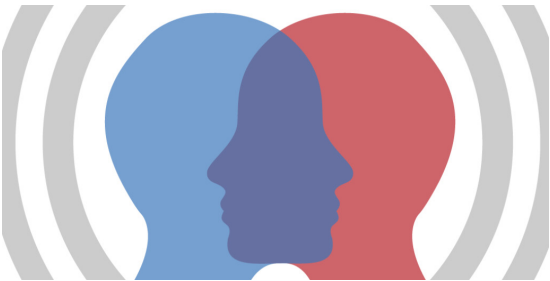


# EBT is ... CBTA



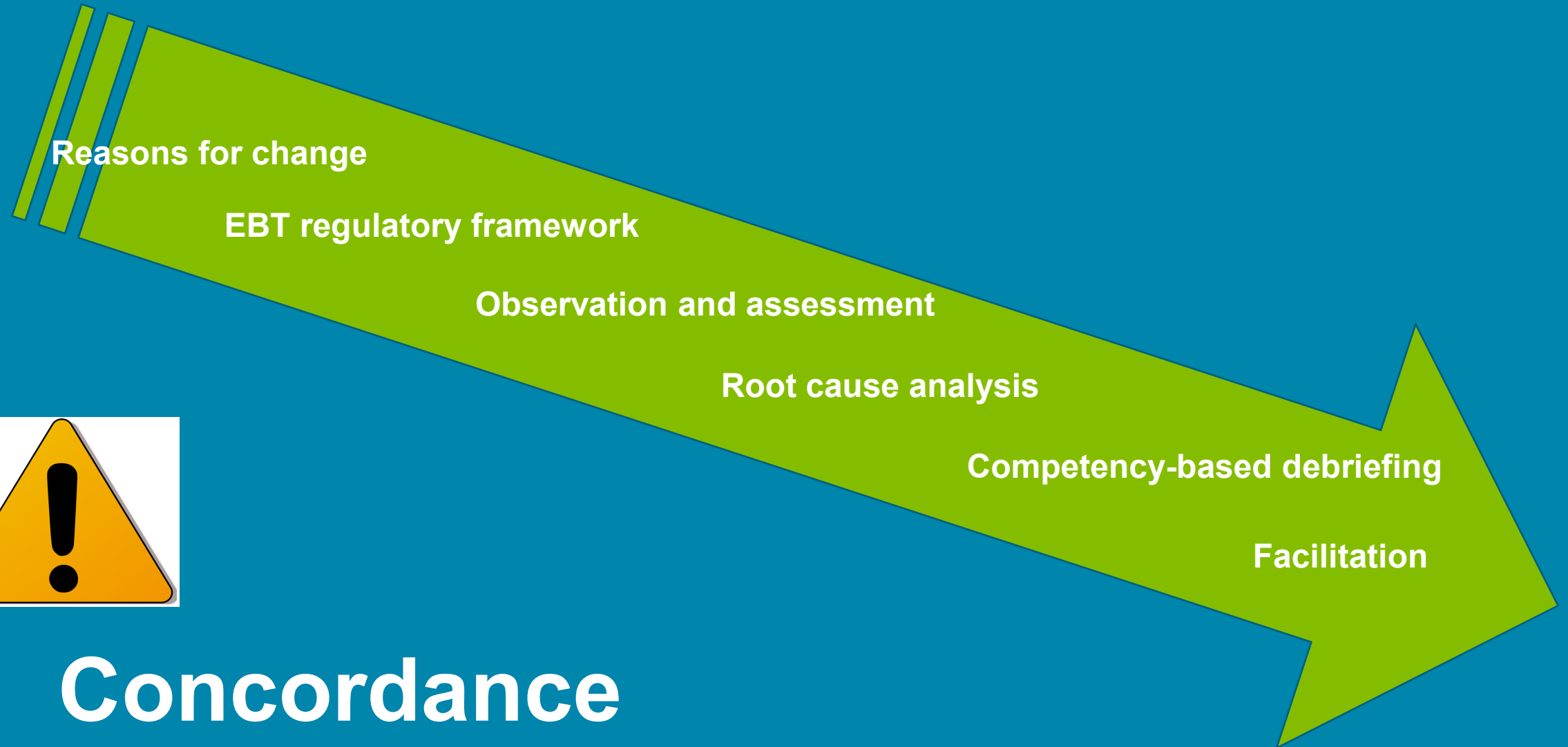
Above the surface you see the  
**Symptoms**  
of the problem

Dig deeper to find the  
**Root Cause**  
of the problem





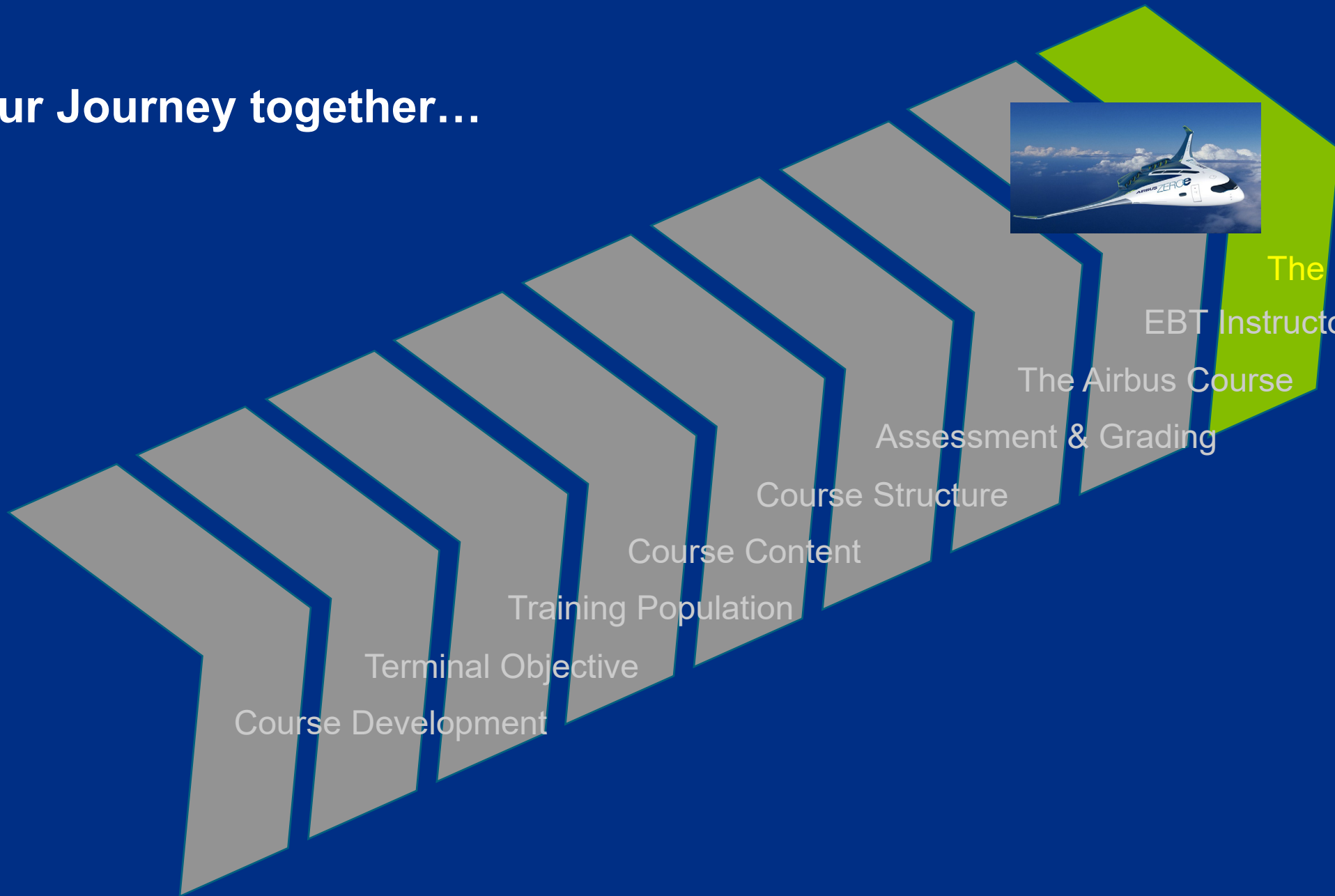
## EBT Special Emphasis



# Concordance



# Our Journey together...



The New Generation

EBT Instructor Course

The Airbus Course

Assessment & Grading

Course Structure

Course Content

Training Population

Terminal Objective

Course Development

# Facing the New Generation



Thank You.....