



ICAO

GLOBAL AVIATION TRAINING

TRAINAIR PLUS™

Conclusions of the Third Regional Standardization Meeting for Course Developers and Instructors (CDI/STD) – ICAE- ICAO, Brazil 2014

GAT Office

- ICAO Regional Course Developers and Instructors Standardization (CDI/STD) Meeting
- Centro de Estudios de Ciencias Aeronáuticas (CEA)



Panel 1: Training Needs Analysis

How to enhance performance effectiveness through competency based training needs analysis?

- 1. Creation of two new roles should be considered in the instructional field and the TRAINAIR PLUS programme, defining the corresponding JD and K/S/A for the job:**
 - a. Competencies analyser
 - b. Training needs analyser: to ensure continuous analysis of the training needs aligned with the short and long term strategy of the organizations.
- 2. Establish the appropriate environment and conditions for integration between training centers and other stakeholders of the aeronautical industry.**
- 3. Incorporate in the training needs analysis, methodologies of self-evaluation, evaluation and feedback.**
- 4. Define global KPI to identify performance improvements derived from the training. Three possible KPIs could be:**
 - a. Satisfaction of the individual in the workplace;
 - b. Task accomplishment; and
 - c. Improvement in the performance and products of enterprises.



Panel 2: Design and Development

How to overcome challenges in the process of design and development of competency based training?

Challenges	Recommendations
One set of Test Items for each Progress Test and Mastery Test	Develop a bank of questions that provide more than one (1) version of each Progress or Mastery test. Also create more than one PowerPoint presentation for each lesson.
Possibility of test information communicated to potential participants	Encourage students who already completed the test not to divulge the answers to others because tests provide feedback on what each student actually learned
Exam results are not used to their full potentials as evaluation tools	Exam results should be used to highlight strengths or weaknesses in the course and identify elements in need of improvement, e.g. validity/reliability of test items, quality of instruction, learning environment, etc.
Some objectives are not stated clearly or aligned to the test items	State objectives clearly aligning them with the exams considering all conditions
Some objectives and test items do not include the various levels of learning	Improve the structure of the objectives and test items so that students are required to demonstrate different levels of learning. Using different learning taxonomy as a guide, e.g. Bloom's taxonomy



Panel 3: Validation, Implementation and Evaluation

How to overcome challenges in the process of validation, implementation and evaluation of competency based training?

1. Establish a method to evaluate the courses based on feedback from the participants in the field, defining an appropriate timeframe.
2. The needs analysis and evaluation of STPs should focus on solving problems clearly linked to performance in the workplace separating the organizational problems of recruitment or organizational environment.
3. Integrate implementation activities and the evaluation system of quality management in order to establish procedures, criteria, and clear indicators to better control and identify the behaviour and impact of training due to establishing metrics.
4. Review STP validation standards with the purpose of not affecting training programs under four modules by the approval criteria of 80%.
5. Reconsider the minimum duration of the modules in order to provide enough duration to contain and support all elements of monitoring and performance testing, i.e. in a module that is less than eight hours, it is complicated to assess whether the student acquires the competency required.



Panel 4: Qualification of Instructors

How to implement the ICAO Instructor Competency Framework at a global level?

1. Making instructors aware of the importance of their job, by promoting culture exchange / best practices (through annual instructors congress; digital forum, exchange program between schools and countries etc.)
2. Standardization - including a process with detailed criteria of selection and evaluation of instructors.
3. The trainer of trainers should have academic training (university degree) in Education (through national regulation).
4. Creation and publication of indicators as well as instructors ranking, which evidence return on investment when adopting the instructor's competency framework.
5. Motivate worldwide implementation of the ICAO TIC Program at cost-price through the NAAs



Panel 5: Best Practices in Training Delivery

How to choose the most effective training technique(s) to meet training objectives?

1. Improve training for course developers regarding the selection of the best instructional techniques for each target population and instructors in their application.
2. Establish an appropriate use of TIC courses, coupled with traditional teaching techniques, highlighting the objectives, content (theoretical - practical), environmental instructional conditions, human factors in classroom courses, e-learning and b-learning.
3. Take advantage of information obtained per course which was properly "treated" statistically for feeding back methods and instructional practices.
4. Make an online forum on best practices in TRAINAIR PLUS instruction, research, development and innovation, instructional techniques and assessment tools.
5. For teaching strategies to achieve the goals, there needs to be facilitators who can do and want to do.



Panel 6: Continuous Improvement of Instructors

How to continuously improve instructors' performance?

1. Establish, implement and continuously monitor an instructor's requirement of being up-to-date in his/her corresponding area of knowledge, according to changes in the aviation environment and maintaining the corresponding records.
2. Regulate at the corresponding level, the requirement for periodic updating of the instructional competencies of aeronautical instructors.
3. Implement processes for systematic evaluation of the instructors' performance, complemented by motivational mechanisms and recognition of teaching as well as feedback and improvement actions.
4. Promote and recognize the set of attitudes of teachers oriented to long-lasting learning, as a reference model for the students regarding the creativity skills, research and innovation.



List of Moderators and Speakers (1)

Panel 1 – Training Needs Analysis

Moderator: **Diego Martinez**, Manager TRAINAIR PLUS Programme

Speakers: **Rolando Tomayo**, TRAINAIR Instructor / Developer, Dominican Civil Aviation Institute
Aline Becerril Vega, Chief of Technical Specialised Training and TRAINAIR PLUS, Centro Internacional de Instrucción de Aeropuertos Y Servicios Auxiliares, Ingeniero Roberto Kobeh González

Panel 2 – Design and Development

Moderator: **Coral McLaren**, Principal, Jamaica Civil Aviation Authority Training Institute (CAATI)

Speakers: **Paulo Cesar Da Silva Anciães**, Course Developer & Instructor of Section Development Courses TRAINAIR Plus, ICEA, Airspace Control Institute

Panel 3 – Validation, Implementation and Evaluation

Moderator: **Joselyn Zarate**, Director Académico, Corporacion Educativa Indoamericana

Speakers: **Armando Jordi Viera**, Head of CDU, Academia Superior de Ciencias Aeronáuticas (ASCA) Dominican Republic



List of Moderators and Speakers (2)

Panel 4 – Qualification of Instructors

Moderator: **Paula Vieira de Almeida**, Business Development Manager, JAA Training Organisation

Speakers: **Malcolm de. Peiza**, Manager, Civil Aviation Training Centre (CATC), Trinidad & Tobago Civil Aviation Authority

Rocio Andrade Cardenas, Technical Specialist in Aviation Training - Escuela Técnica de Aviación Civil (ETAC) -International Training- TRAINAIR Plus

Panel 5 – Best Practices in Training Delivery

Moderator: **Jose Riveros**, Training Officer, TRAINAIR PLUS Programme

Speakers: **Maria Regina Valiente Gaona**, Academic Director, Instituto Nacional de Aeronáutica Civil (INAC), Paraguay

Laura Rodriguez Hunter, Director, Punta del Este Flight School

Panel 6 – Continuous Improvement of Instructors

Moderator: **Mario Martinez**, Director of Instituto Centroamericano de Capacitación Aeronáutica (ICCAE) de COCESNA

Speakers: **Leonardo Orejuela Barreda**, Chief of Academic Area, The Peruvian Corporation of Commercial Airports and Aviation Inc (CORPAC S.A. Peru)



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Thank you