How does test design influence training?

Washback effects of LPR tests

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supporting the use of English for aviation safety
www.icaea.aero

Washback effects

Test design

- Test task types
- Test task content
- Test task delivery methods

Washback

The effect *high stakes language tests* have on:

- language training and learning (teaching, training materials and learning styles); and
- perceptions, values, expectations and attitudes among students, teachers and organisations where the results of these tests serve a purpose and have consequences
- Tests can have positive or negative washback effects

Positive washback

- When the **design**, **content** and **delivery** of language tests promotes **meaningful** and **useful** language development in downstream training
- When the tests promote the development of good curriculum, teaching practices and positive learner and teacher attitudes

- **Tests designed to sufficiently reflect real-world pilot/ATC communication needs and have high authenticity tend to have positive washback effects**

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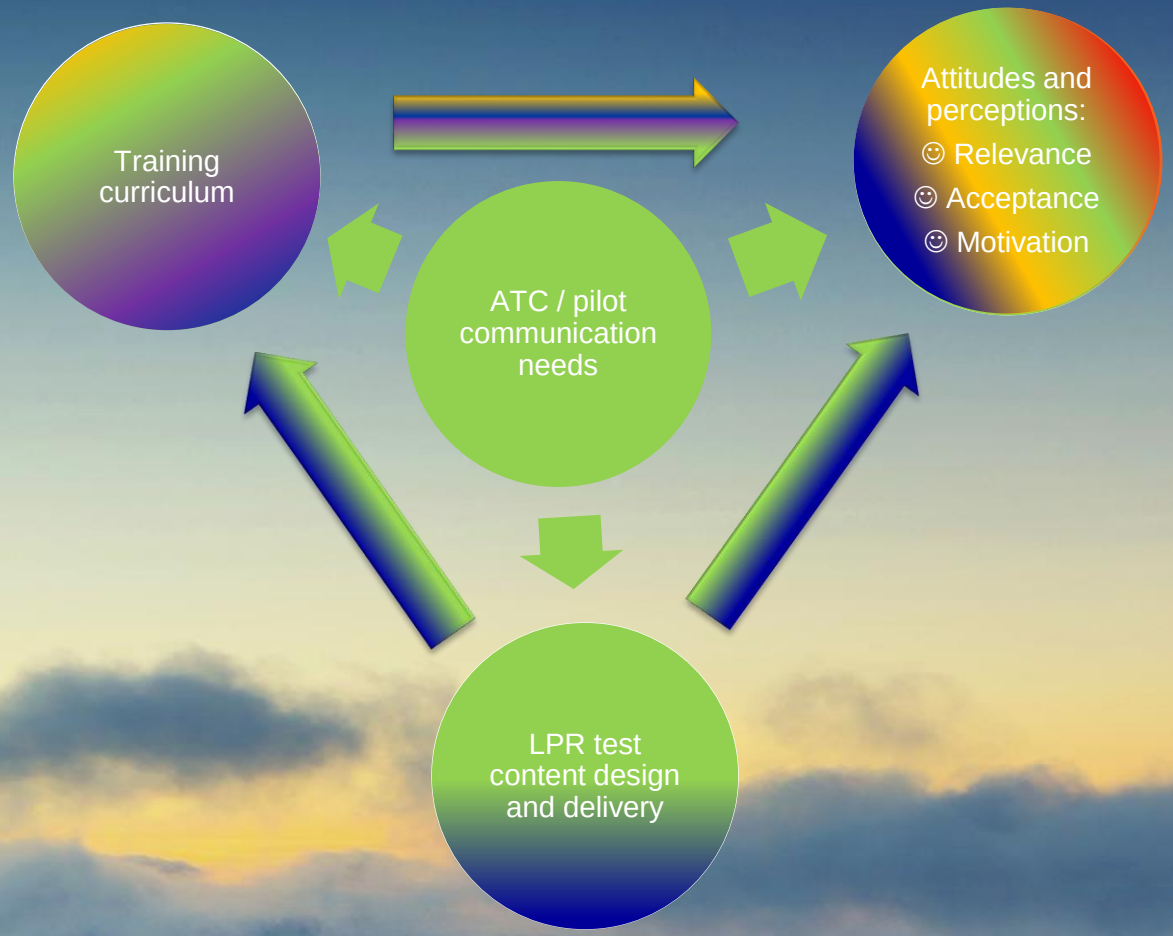
Desirable LPR washback scenario



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Signs of positive washback

- Test tasks, content and delivery reflect real-world language situations and needs: authenticity is high
- Training and curriculum are not focused on just test preparation
- Training tends to be ongoing
- Students and teachers value curriculum for application to real-world communication needs
- Curriculum may mirror aspects of test content, delivery or task types, BUT doing this still provides opportunities for meaningful language development

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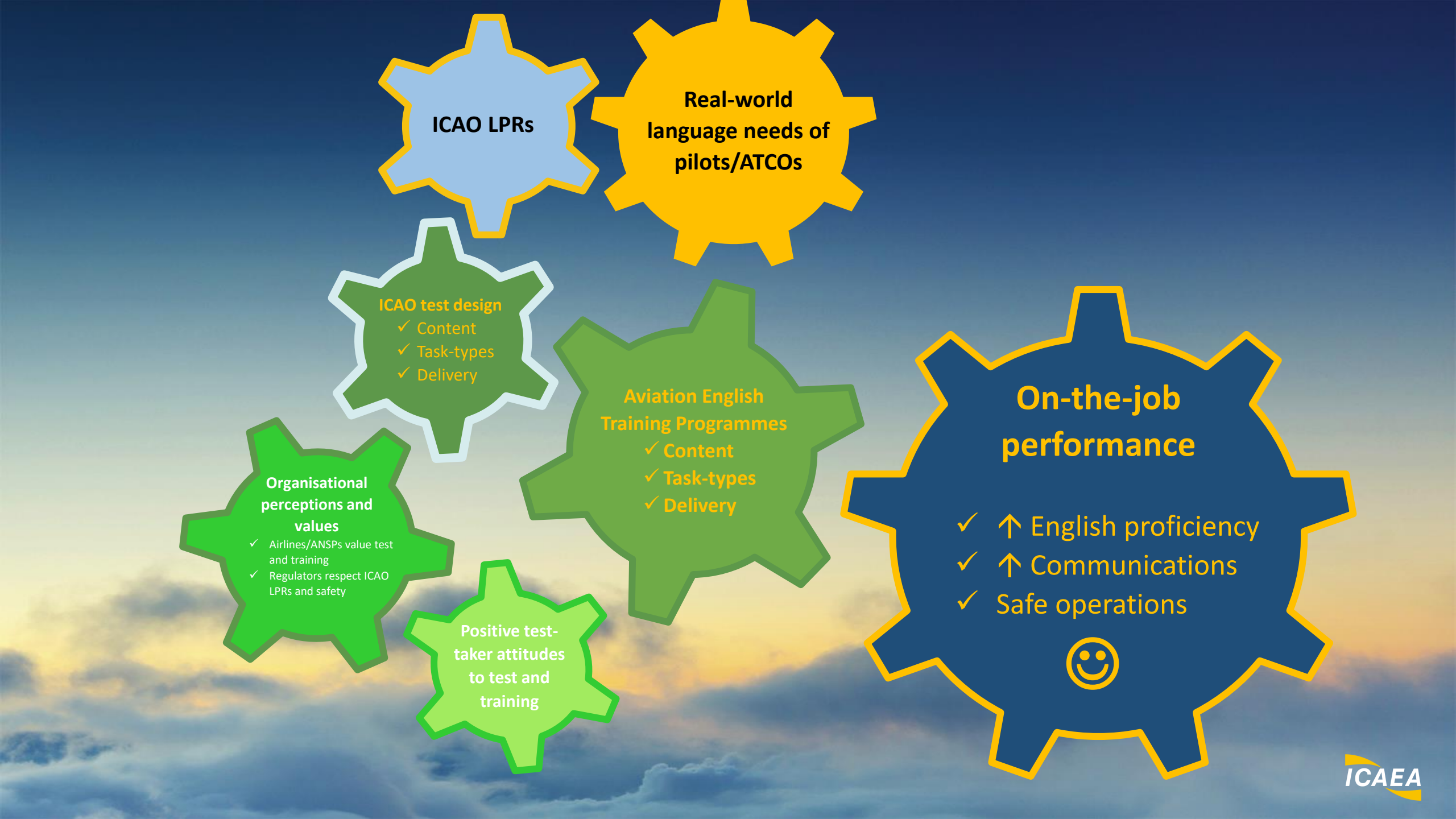
Other language skills:
Reading
Writing
Other skills & knowledge
Memory
Life experiences and knowledge
Computer literacy
Time management
Understanding poor quality RTF recordings
Language knowledge:
Structure
Vocabulary
Sounds in English
Discourse
Air-ground communication skills and knowledge:
Structure
Vocabulary
Pronunciation
Fluency
Discourse management
Aviation technical knowledge
Procedures
Equipment
Systems
Places
Communication skills:
Pronunciation
Fluency
Comprehension
Discourse management
Aviation job knowledge & experience


ICAO LPRs
Real-world language needs of pilots/ATCOs
ICAO test design
✓ Content
✓ Task-types
✓ Delivery
Aviation English Training Programmes
✓ Content
✓ Task-types
✓ Delivery
Organisational perceptions and values
✓ Airlines/ANSPs value test and training
✓ Regulators respect ICAO LPRs and safety
Positive test-taker attitudes to test and training
On-the-job performance
✓ ↑ English proficiency
✓ ↑ Communications
✓ Safe operations
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Negative washback

- When the **design**, **content** and **delivery** of (flawed) language tests influences downstream training so that minimal meaningful or useful language development occurs
- When tests promote the development of ineffective curriculum, teaching practices and negative learner and teacher attitudes

- **Tests not well designed because they do not sufficiently reflect real-world pilot/ATC communication needs and have low authenticity tend to have negative washback effects**

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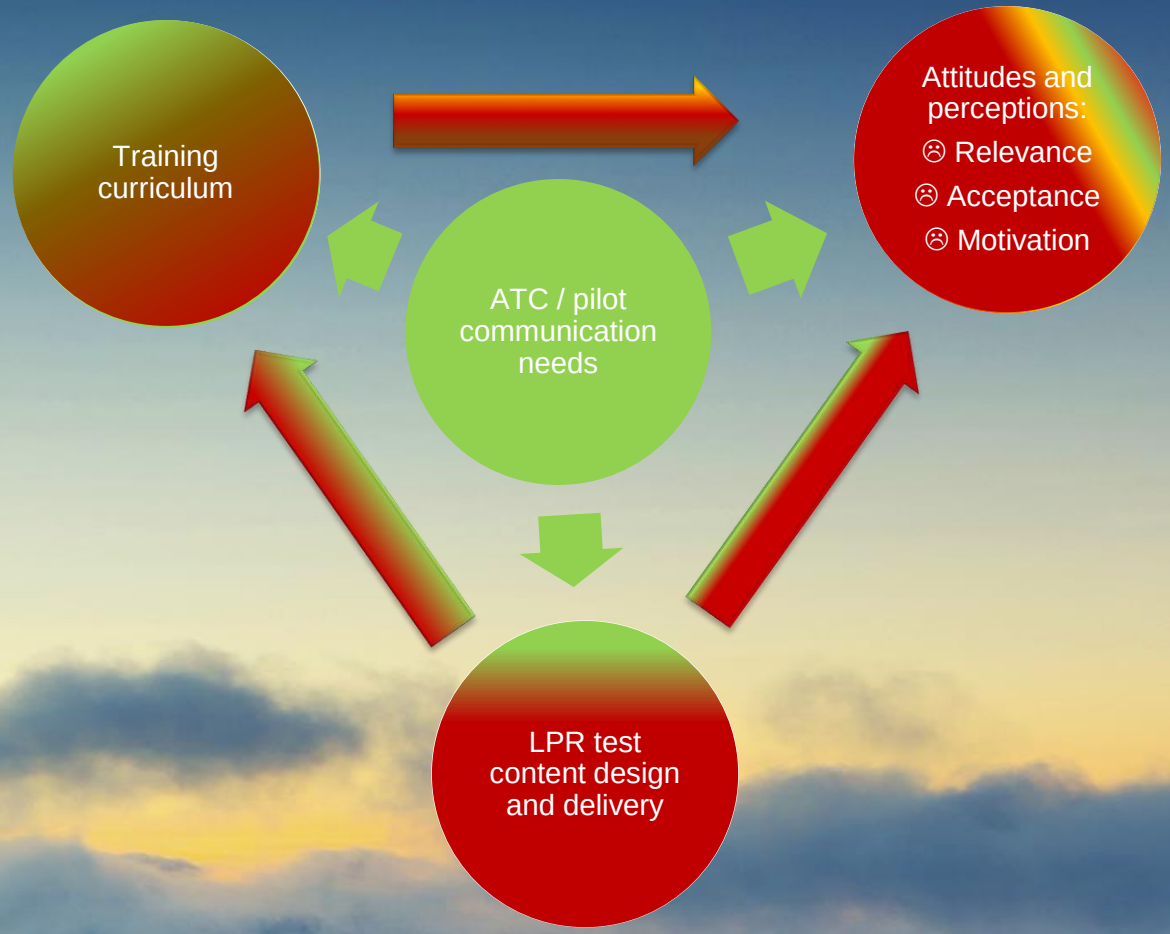
Undesirable LPR washback scenario



Signs of negative washback

- Test tasks and content do not reflect real-world language needs; have low authenticity
- Training and curriculum focus on test preparation
- Test takers may achieve a required level on the test but show little gains in proficiency
- Training is mostly only in the lead up to testing
- The curriculum and training focuses on simulating (flawed) test tasks
- The curriculum is strongly influenced by the (flawed) test tasks
- Students and teachers are not motivated

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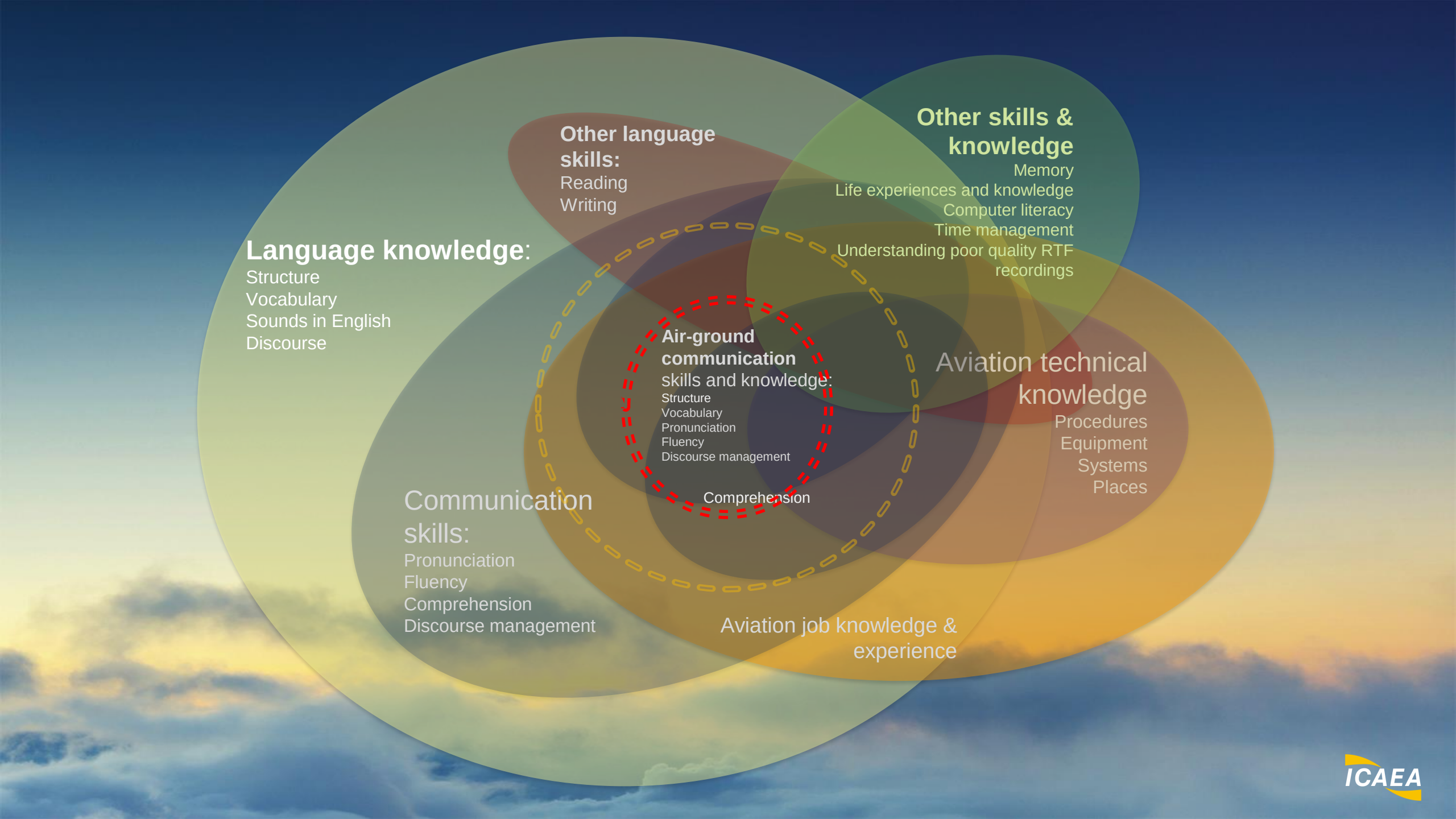
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× Delivery
On-the-job performance
× ↓ English proficiency
× ↓ Communications
× Unsafe operations
Organisational perceptions and values
× Airlines/ANSPs do not value test or training
× Regulators unaware of ICAO LPRs and safety
Negative test-taker attitudes to test and training
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- Tests designed to sufficiently reflect real-world communication needs and have high authenticity tend to have positive washback effects

- Tests not well designed because they do not sufficiently reflect real-world communication needs and have low authenticity tend to have negative washback effects

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Do poor tests always lead to negative washback?

- Washback is influenced by
  - 1. The test
  - 2. The teacher and curriculum developer: expert instructors can avoid allowing teaching to be influenced by a flawed test
- Flawed tests will negatively influence policy, values and attitudes (individuals and organisations)