FABEC Training Seminar 2019

Modern e-learning technologies and methods

- Why digital tools and blended learning
- LMS – the backbone
- Animated videos
- RTF Training with ATSpeak
- E-Learning authoring tools
- Messages for managers
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skyguide AIM 1995 – 2016
› Operator & Supervisor
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Agenda

• Why digital tools and blended learning
• LMS – the backbone
• Animated videos
• RTF Training with ATSpeak
• E-Learning authoring tools
• Messages for managers
Objectives

1. Understand why skyguide invests in digital solutions

2. See examples of "What skyguide does"

3. Get an insight on "How skyguide does it"

4. Get some "messages for managers"
Why digital tools?

Flexibility

› Less instructor hours
› More learning hours for students
› Share knowledge with one mouse click
Why digital tools?

Sustainability
› Quality assured content
› Everybody gets exactly the same
Why digital tools?

Student engagement
› Self responsibility
› Active learning vs. "Death by PowerPoint"
› Classroom lessons can be used to work on cases and answer questions
Blended Learning

Source: www.vapa.nl
Managing blended learning processes
Learning Management System (LMS)
The most valuable functions

- Content Library
- "Robo Teacher" feedback
- Learning path "What's next"
Automated courses based on learning objectives
Role model: Language course by Langenscheidt

Source: Langenscheidt IQ
Role model – Learning to drive
App "iTheorie" by Swift Management AG
Learning path of an ATCO student

- Basic Course
- 1st Rating
- 2nd Rating
- Unit training
ATCO Courses

COURSES

ATCO FABEC Basic Course
Course used for the initial training of air traffic controllers
Registration Period: No Registration Possible

ATCO ADI - Aerodrome Control Instrument Rating
Content for ADI rating training of air traffic controllers
Registration Period: No Registration Possible

ATCO APS - Approach Control Surveillance Rating
Content for APS rating training of air traffic controllers
Registration Period: No Registration Possible

ATCO ACS - Area Control Surveillance Rating
Content for ACS rating training of air traffic controllers
Registration Period: No Registration Possible

ATCO APP - Approach Control Procedural Rating
Content for APP rating training of air traffic controllers
Registration Period: No Registration Possible

CONTENT

Class A19a
Workspace for students and instructors. It will be closed 1 month after the end of the course.
Registration Period: No Registration Possible

Class A19b
Workspace for students and instructors. It will be closed 1 month after the end of the course.
Registration Period: No Registration Possible

Class A19c
Workspace for students and instructors. It will be closed 1 month after the end of the course.
Registration Period: No Registration Possible

Course administration
Administrative instructions, forms etc.

ATMIM STC
Air Traffic Management Manual of the skyguide training center

About skyguide (INTRO & SBM)
Introduction and general information

ATLA Theory (ATLAB)
Learn about international rules of the air, airspace and flight planning

Aircraft Basics (ACFTB)
Learn about the basic principles of the theory of flight and aircraft characteristics and how these influence ATS operations
FABEC Basic course – subject ATLA

PDF files
- Student manual
- TEPO
- Location Indicators
- Handouts
- Flight plan topic

Assignments + Learning module

Weblinks

ATLA Theory (ATLAB)
Learn about international rules of the air, airspace and flight planning

CONTENT
- FABEC_BASIC_TEPO_ATLA_THEORY_V3.0
  pdf 65.1 KB 12 Sep 2019, 15:37
- FABEC_BASIC_ATLA Manual V3.0
  Manual for download
  pdf 12.9 MB Version 2 07 Aug 2019, 09:55
- Develop flight plan reading skills
  These instructions guide you through the learning process
- FPL and associated MSG
  Learn to decode and encode flight plans and associated messages
  Type: Learning Module IJAS
- ATCO Basic Location Indicators
  pdf 50.3 KB 08 Aug 2019, 12:16
- Useful links
- Handouts
  Instructor handouts to support student learning
Learning module – Flight plan

Purpose of flight plan

Watch the “Flight Plan Story” below to learn about the purpose and the use of flight plans.

Specified information provided to air traffic services units, relative to an intended flight or portion of flight.
Create content with the LMS

- FPL and associated MSG
  - Introduction
  - Flight plan functions and types
    - Purpose of flight plan
    - Requirement to file a flight plan in Switzerland
    - Different types of flight plan
  - Flight plan form
  - Associated MSG
  - History
LEARNING PROGRESS SETTINGS

Mode *

- **Learning Progress is Deactivated**
  The learning progress status will not be displayed.

- **Users Monitor and Set Status Themselves (Complete Module)**
  Users decide themselves if they have accomplished the learning module. Once they are done, they have to set their status to 'Completed' on the 'Info'-tab.

- **Users Monitor and Set Status per Chapter Themselves**
  Users decide themselves if they have accomplished a chapter of the learning module. After completing a chapter, users have to set this chapter’s status to ‘Completed’ on the ‘Info’-tab.
  Chapters can be selected as Progress-relevant on this screen after you have saved this setting.

- **Status is Determined from Number of Visits**
  A user's status will be automatically set to 'Completed' after this user has visited the learning module more than a specified number of times. Users will be informed about their number of visits to the learning module and to what percentage they have met the set requirements.

- **Minimally Required Amount of Time Spent on Learning Module**
  The status will be automatically set according to time a user spends working with the learning module. The status is assigned once users exceed the minimally required Typical Learning Time.
  The Typical Learning Time can be specified in the 'Metadata'-tab.

- **Minimally Required Amount of Time Spent per Chapter**
  The status will be automatically set according to time a user spends working on the chapters. The status ‘Completed’ is assigned once users exceed the minimally required Typical Learning Time for all progress-relevant chapters.
  The Typical Learning Time per chapter can be set on this screen after you have saved this setting.

- **Answering All Questions Correctly**
  Users who answered all questions correctly will automatically be assigned with the status ‘Completed’. Please use this setting only if there actually are questions in the learning module.

- **Visiting All Pages**
  The status ‘Completed’ is automatically assigned to a user once this user visited all pages of the learning module.
The use of animated video

› Conserve and share your **best explanations**
› The 2 - 5 minutes that "light the bulbs" in the students minds
› Every instructor has them for his lessons
› Combine video with other (existing) material
PowToon Demonstration

› Video about UFA's ATSpeak
› Screen recordings from the iPad app
The making of animated videos

Script
- Scenes
- Voice Over
- Visuals

Voice over
- Do it yourself
- Buy from a professional

Animations
- Work with headset
- Voice over gives the timing
The script

<table>
<thead>
<tr>
<th>Scene</th>
<th>Voice Over</th>
<th>Conversation in Viewer’s head</th>
<th>Visuals</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skyguide Intro and Jingle</td>
<td>Dear colleagues, Welcome to this video about the e-learning system ATSpeak. It's built for Air Traffic Control phraseology, skills and language training.</td>
<td>That's what ATSpeak - Does</td>
<td>Skyguide intro Logo ATSpeak – UFA</td>
<td>6 seconds</td>
</tr>
<tr>
<td>Welcome &amp; Topic ATSpeak</td>
<td>ATSpeak allows a significant reduction of instructor hours and an increased quality for the student at the same time.</td>
<td>There's in economic benefit</td>
<td>Instructor – Watch – Arrow down Student – Quality – Arrow up</td>
<td>22 Words</td>
</tr>
<tr>
<td>Why ATSpeak</td>
<td>Before ATSpeak we used to deliver the radiotelephony training in 46 classroom lessons with up to 4 instructors. With ATSpeak the RTF training is now a blended learning program. The blue boxes represent instructor led sessions and the green boxes are self-study sequences. As you can see there are only 6 hours of instructor led teaching left. The other 41 hours are self-study and practicing using the application. A big advantage of ATSpeak is, that every student</td>
<td>Less instructor time</td>
<td>Classroom – 4 instructors in front of the whiteboard</td>
<td>109 Words</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Same amount or more student time</td>
<td>Two students on PC – Feedback &quot;Correct&quot; &quot;Try again&quot;</td>
<td>45 seconds</td>
</tr>
</tbody>
</table>
The voice over
Animations - Visuals
eLearning Authoring Software | Full-featured & User-friendly

The best eLearning authoring software at an unbeatable price. Try TalentLMS for as long as...

Voted Best Authoring Tool | No Coding, No Installation

Get your course live today, use templates, add branding. Publish to cloud or LMS

- Elucidat. Elucidat is a cloud-based, responsive authoring tool that's designed to help ambitious teams create high quality elearning at scale. ...
- Adobe Captivate. ...
- Articulate Storyline. ...
- Articulate Rise. ...
- Gomo. ...
- Lectora Inspire and Lectora Online. ...
- Adapt. ...
- DominKnow ONE.

More items... • Jan 1, 2019

9 Elearning Authoring Tools: Comparison and Review - Elucidat
https://www.elucidat.com › blog › elearning-authoring-tools
Bad News Communication

- Based on a scenario
- Takes about 10 minutes
- 20 different paths with 3 ways to win

You’ve been the assessor of trainee Joe’s final check. See the summary of your notes and prepare yourself for the conversation with Joe.
"E-Learning messages" to managers

Content is King - Usability is Queen
"E-Learning messages" for managers

**Can expect**
1. More flexibility
2. Less instructor hours
3. Quality assurance
4. Build community

**Must expect**
1. Investments
2. Need a development process
3. Admin challenges
4. "Blood, sweat and tears"

**Do NOT expect**
1. Classroom and instructor to become redundant
2. Much shorter courses
3. It happens "over night"
"E-Learning messages" for managers

1. Let's build up e-learning skills IN OUR OPS units and involve our experts
2. Let's allocate instructor time for development
3. Let's conserve and share our best explanations using video
4. Let's share our contents with our FABEC partners