



Co-funded by
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Project autoEFa

autoEFa Toolkit



1 Toolkit background

The foundation for the AutoEFa Toolkit was developed based on the *Study on Labour Market Requirements* and the analysis of trainees' preferences within the MOOC developed by SPIN360.

Study conclusions

The survey results offer meaningful guidance for shaping the autoEFa MOOC to align with learners' expectations and habits.

- **The majority of respondents showed a clear preference for video-based content with subtitles** (44.7%) and interactive presentations (31.8%), emphasizing the importance of engaging, multimodal content. A significant portion (67.31%) also expressed that the ability to download materials for offline use is very important, suggesting that flexibility and accessibility are key to user satisfaction.
- Regarding module length, most learners favoured a **mix of short (5–10 min) and long (20–30 min) formats** (52.56%), reflecting diverse learning styles and time availability. Quizzes, gamified content, and discussion forums ranked highest among preferred interactive features, while more advanced tools like VR/AR were less favoured.
- In terms of content consumption habits, the majority (44.67%) preferred to study using a computer and nearly a third (28.52%) preferred the use of mobile phones. **Notably, over 80% would benefit from audio versions** of the modules either regularly or occasionally, reinforcing the need for content format variety.
- A key finding relates to the preferred pace of learning: 46.11% of learners favoured a hybrid model that blends a structured weekly schedule with the ability to learn at their own rhythm, while 41.11% preferred a fully self-paced approach. This indicates a clear preference for flexibility and learner autonomy in course progression.
- Students also showed strong support for visual aids, with nearly 96% rating them as extremely or moderately useful, particularly in technical subjects. Finally, while learners value live sessions and group discussions, most prefer them only occasionally (66.7%), highlighting the need for a balance between structured and self-paced learning options.

1.1 Purpose of the toolkit

The AutoEFa Toolkit provides recommendations and practical guidelines on how to design engaging and interactive educational content for the AutoEFa MOOC, following the principles of *edutainment*. It aims to meet the needs of the target audience identified



in the study and to support the creation of an attractive, learner-centred, and flexible online learning experience.

The toolkit covers a wide range of materials, including:

- PDF texts (theoretical and reference materials)
- PPT presentations (for lectures and visual support)
- Video explanations (introducing or summarising selected topics)
- Interviews / Podcasts (discussions on relevant or emerging themes)
- Recordings of webinars and events (to be integrated into lectures)
- Interactive tests, quizzes, and gamified content (through the learning platform – also used for verification of knowledge acquisition)

2 AutoEfa Toolkit recommendations

Drawing on the conclusions of the study presented in Chapter 1 and the analysis of current trends in interactive education, the following methods for creating interactive materials were selected:

1. **Introduction to the main topic (video)** – Each partner prepares a short 5-minute introductory video, filmed in a professional or educational setting (office, classroom, or meeting room).
2. **Core learning materials (video)** – Each partner creates 20-minute video presentations recorded via MS PowerPoint or MS Teams, focused on a single topic.
3. **Interview / Podcast (audio)** - Each partner records a discussion of up to 30 minutes on a topic of interest or expertise.
4. **AI Avatar learning videos** – Short AutoEfa learning videos (5–10 minutes) using AI-generated avatars for explaining selected concepts.
5. **Short demonstration videos** - Dynamic 2–5 minute videos from automotive environments, universities, or laboratories, presenting real-life professional discussions or demonstrations. These may also be shared on social media (LinkedIn, Facebook) to enhance dissemination.



2.1 Equipment and Tools

Type of Material	Required Tools / Platforms	Notes
PDF / DOC / PPT	Official AutoEFa template (available on Google Drive); MS PowerPoint, web cam	PPT presentations can be recorded directly from your PC during delivery. Inspiration: Articulate 360
Video / Interview / Podcast	Camera or smartphone, tripod, external microphone	Ensure good lighting and clear audio quality.
Interactive Tests and Quizzes	Learning platform: skills-hub.eu	Used for verification of studied materials.
AI Avatar Tutorials	AI video creation tools https://app.heygen.com/ https://www.synthesia.io	For short, concept-focused learning modules.

Avatar video examples:

<https://app.heygen.com/videos/5073a958fe32480a8b21aa8963b04dc2>

<https://app.heygen.com/videos/17b86ee029e1423fa73c647e422f472a>

<https://app.heygen.com/videos/53a26950b0a442468d5b37ac0a6d1363>

<https://app.heygen.com/videos/747fc857418e4370b1816e8d0292bdeb>

2.2 Implementation notes

Each partner is encouraged to adapt the recommended formats to their institutional context while maintaining consistency in visual identity and structure. Materials should follow the AutoEFa branding guidelines and prioritise accessibility (subtitles, downloadable formats, and multimodal options). Where possible, interactivity and learner feedback should be integrated to foster engagement and self-assessment.



2.3 Pedagogical Principles for Interactive Content

To enhance the quality, engagement, and educational impact of the AutoEFa MOOC, the following pedagogical and methodological recommendations should be considered when designing interactive materials.

2.3.1 Apply the Microlearning Concept

- Content should be divided into short, self-contained learning units (5–10 minutes each), with every unit addressing a specific question or objective.
- Each video or activity should clearly answer one key question (e.g., “How to...?” or “Why does...?”), allowing learners to study in small portions and improving retention.

2.3.2 Ensure Active Engagement

Learners should not remain passive recipients of information. Include small interactive elements such as:

- short reflection questions after videos
- clickable scenarios or “choose your path” activities
- micro decision-making exercises (“*What would you do in this situation?*”)

2.3.3 Provide Immediate Feedback

Learners should receive feedback instantly after completing quizzes or decision-making tasks.

Immediate feedback strengthens motivation and helps learners correct misconceptions early.

2.4 Multimodal Learning Approach

Combine various content formats to support different learning styles:

- **Video + text** – for visual and reading-oriented learners,
- **Audio (podcasts)** – for auditory learners,
- **Infographics or diagrams** – for quick understanding of processes and relationships,
- **Animated or AI Avatar videos** – for simplifying complex topics.

Each format should complement, not duplicate, the others. For instance, text summarises, video demonstrates, and infographics visualise key points.



2.5 Gamification and Motivation

Encourage engagement through visible progress indicators, such as:

2.5.1 Micro-Achievements and Rewards

- unlocking content after module completion,
- badges or small challenges that apply learned concepts in practice.

2.5.2 Social Interaction

Promote discussion and exchange among learners by:

- posting short discussion prompts after each module (*“How does this apply in your context?”*),
- optionally using leaderboards or shared results to boost motivation.

2.6 Instructional Design: Clarity and Flow

2.6.1 Consistent Lesson Structure

Every module should follow a clear, repeatable structure:

Introduction → Explanation → Example → Practice → Summary → Quiz

This helps learners quickly understand what to expect in each unit.

2.7 Accessibility and Inclusiveness

2.7.1 Language and Subtitles

- Always include English subtitles in case your content is in national language; additional language versions can be generated automatically and proofread.
- DOCX/PDF/PPT study materials will always be in the national language + English version
- Keep text on slides concise — ideally no more than 6–8 words per line.

2.7.2 Offline Access

- Offer downloadable versions (PDF, MP4, audio) for learners with limited internet access.
- Provide text transcripts of videos for improved accessibility and searchability