# Instructions for Using This Template

## Category

#### Title

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# Instructions for Using This Template

- 1. Go to File > Make a Copy. Do not edit the template.
- 2. Rename the File (yourlastname\_digital\_learning\_workshop)
- Type appropriate information below the pre-set headings. Information starting on the abstract page count toward the 2-page limit (single-spaced and font as given). Page 1 is only for organizational purposes.
- 4. When complete, go to File > Download as PDF to upload to EasyChair.

# Category

- Data-Driven Course Design
- ✓ MOOC Success Stories
- ✓ Blended/Hybrid Learning
- □ Applications of the Science of Learning (in Online and Blended/Hybrid Learning)
- ✓ Innovative Use of Digital Learning Environments (such as interesting uses of MOOCs, etc.)

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#### Title

Using MOOC for hybrid learning in lifelong learning context and business model experiment.

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## Abstract

Generating revenues from MOOC, free by essence, is an issue that most universities are trying to address for the last years [1]. Using MOOCs in hybrid mode [2], mixing online activities and physical workshops, is a way to focus on skill improvement that fits lifelong learning needs. Flexibility brought by anywhere anytime access to online learning material, combined with hands-on activity and peer learning through in person workshops, creates added value that can generates revenues in a lifelong learning context. Enabling replication of the workshops in numerous physical spaces at the same time gives way to scaling of hybrid learning, as it is already the case for online learning with MOOCs. Scaling implies decreasing cost per learner and opportunity to set up new business models for hybrid learning.

#### Introduction

Since 2017, Institut Mines Telecom (IMT), a network of French graduate engineering schools is using MOOCs in hybrid format, mixing online learning and physical workshops, to address lifelong learning audience.

Early deployments were addressing unemployed persons, and were mainly supported by public funds. In 2018, considering that results of early experiments showed good results in terms of skills acquisition, satisfaction and employability (see result section), IMT decided to extend this method to new domains, and target a larger audience including companies and professionals. First results show that hybrid learning, based on MOOCs, answers the needs of professionals in terms of:

- Flexibility and autonomy: online content is accessible anytime and anywhere.
- Applied skills acquisition assessed during workshops.
- Peer learning, motivation with online and workshops learners community.

IMT is addressing domains such as digital manufacturing and telecommunications (optical fiber deployment, Internet of Things) where the training demand is strong and there is an obvious added value of hands-on training. However hybrid learning is adapted to most domains, as long as there is a theoretical part which can be learned online and some practice in workshops, applying a "flipped classroom-like" approach [3].

Cost and price of the training can be an issue: while "standard" face to face training usually requires the work of one or 2 persons and limited cost in production (e.g., slides), hybrid training implying MOOCs requires a team to address activities such as online content production (often costly due to videos), hosting and online content management on platforms, coaching learners remotely, educational engineering, team coordination, online and workshop activities synchronisation, etc.

MOOCs are perceived as "free" which does not mean that they do not cost a lot nor that they do not have value. A paradox to be taken into account when marketing a training for companies and professionals.

# Scaling hybrid training

One of the early IMT hybrid training program based on MOOCs, addresses the digital manufacturing domain. A specific model is applied to deliver this training: IMT provides the MOOCs and workshop material and relies on FabLabs (physicals spaces dedicated to digital manufacturing activity [4]) to deliver the workshops. FabLabs are present all over the world, so this hybrid program could be deployed at large scale. This enable costs mutualization on a large amount of learners, especially for online content production and management.

One of the challenges is to ensure quality of the training delivered by FabLabs in the name of IMT.

### Results

#### Unemployed audience

In 18 months, 550 applications were received for 80 selected candidates.

67 learners were certified (84%), 9 had to stop training while they found at a job (11% considered as "positive exits") and 4 dropped out of training (5%).

6 months after the training, 66% of them are no longer looking for a job (permanent contract, fixed-term contract or creation of activity) and 66% of them declare that the training was useful in their job search.

Learners are 95% satisfied with the training.

#### Enterprise and professional audience

Targeting this audience with hybrid learning based on MOOCs is more recent and there is a lack of perspective. However, first results are very encouraging.

In 6 months, 30 persons have been trained and 93% certified (28).

Learners are 95% satisfied and feedback is extremely positive, regarding both skill acquisition and modality of the training (mixing online and hands on).

For both audiences, observation shows learning individualization: learners are progressing at different pace, at different time frames, with different learning strategies. Some are very scholarly and check every content in a linear manner, taking notes. Others pick up some sections, go to the evaluation part, come back to some content, etc.

They do appreciate to learn as a group, exchange with professional peers and practice together in hands-on workshops.

One of the challenges is to get the group to progress more or less at the same speed, learners going fast are asked to help learners progressing more slowly or are fed with additional material. A community is built during the training (some of the learning programs last for 4 months with 1 day per week of learner effort: 50% on line and 50% in workshops), that keeps living far beyond the end of the training.

# References

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