

# A culture shift: transforming learning at CERN

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## INTRODUCTION

**Learning is a key pillar of CERN:** to accomplish its mission, CERN needs a highly qualified and motivated personnel, whose knowledge and skills are continuously developed to match the evolving needs of the organization.



The CERN Learning and Development (LD) Group is the focal point for learning at CERN. It supports learning in its broadest sense and offers a variety of learning opportunities:

- Diverse learning methodologies
- Six learning 'portfolios'



## How do we learn most effectively?

Learning not only happens in a classroom. This type of 'formal' learning is just one element of development, most of our learning happens through on-the-job experiences and social interactions:



Formal Learning  
10%



Social Learning  
20%



Experiential Learning  
70%

**The challenge:** at CERN about 17,000 people seek development and training every year. How can we ensure effective and efficient learning for such a large and heterogeneous population? This can only be achieved by expanding learning beyond its traditional methods and today's digital transformation offers enormous opportunities in this direction.

## LEARNING MANAGEMENT SYSTEM



### The Learning Hub is CERN's digital learning platform.

Introduced in 2018, it revolutionized learning at CERN by:

- Centralizing all learning activities (including 'Safety' training)
- Providing easy access to learning in its broadest sense



30,000 users  
>400 courses available  
>100,000 enrollments per year

### The Learning Hub allows CERN learners to independently:

- Manage their enrollment to classroom courses;
- Take on-line courses and on-line exams;
- Browse learning materials;
- Keep up-to-date on other learning opportunities (schools, lectures,...);
- Track their learning history;
- (For managers) check the learning activity of their team;

## E-LEARNING AT CERN



### E-learnings are integrated in the CERN learning offer:

- Created in-house: 16 online courses in the LD portfolio
- Commercial e-learnings: Udemy for CERN platform

### Udemy for CERN

Introduced at CERN in 2019, Udemy is a large online learning platform:

- > 3000 online courses on a wide-variety of topics;
- Business model: yearly license per user
- Accessible by CERN learners upon hierarchical/financial approval and motivated by a specific developmental need.

### What it brings to CERN:

- A broader learning offer
- Continuously up-to-date portfolio on latest technologies
- Low cost compared to classroom courses
- Self-paced and bite-size learning

### How is it used at CERN:

- 140 licenses requested in 6 months
- Highest demand for IT courses
- Access for one-off 'ad-hoc' courses (learners not accessing for longer term, continuous learning)

## NEW TECHNOLOGIES TO ENRICH LEARNING OPPORTUNITIES AT CERN

Optimisation of resources

Effective and timely learning

Addressing individual learning preferences

## ONLINE FEEDBACK TOOL FOR MANAGERS



### CERN 180 Feedback

Real-time feedback for managers using a performance management platform:

- integrated as part of the leadership programme for new supervisors at CERN;
- questions based on CERN leadership competencies;
- feedback received from manager and direct reports, followed by a 1:1 individual debrief with a coach.

### What it brings to CERN:

- Easily-accessible web-based tool and mobile app to give feedback and view automatically generated reports;
- Allows confidentiality in giving and receiving feedback.

### Our goals at CERN:

- Creating an environment whereby our people managers develop self-awareness on leadership effectiveness and learn about their strengths and areas for developments;
- Encourage more balanced evaluations;
- Have increased transparency and encourage a feedback culture.

## E-LIBRARY



### Bookboon eLibrary

E-books easily downloadable from a centralized platform.

### What it brings to CERN

- Provides easy access to 'just-in-time' learning to ALL via a CERN branded platform ;
- Short and precise eBooks on a wide-range of topics focusing on personal and professional development;
- Low cost option (yearly license per user);
- Offers a 'blended' approach to traditional classroom learning.

### Available at CERN since 2018

~ 9,700 e-books downloaded

## OUTLOOK

Technology offers a tremendous opportunity to expand learning beyond the traditional classroom courses. More agile and flexible learning solutions, available 'just-in-time' and in 'bite-size' chunks is proving an effective way forward to develop and train our community of learners. The CERN LD group has focused its efforts on enriching its learning offer and methodologies by adopting new digital solutions that have been received enthusiastically by its community. However, this is just the beginning of a journey towards a cultural shift. To exploit the full learning potential brought about by the digital revolution, learners must embrace responsibility for their own learning and take advantage of the opportunities on offer to them. The main challenges ahead will be sustaining this wave of innovation and fully integrating it into the learning culture of the organization.