



NEWSLETTER

LCAMP CONFERENCE 2024 - SPECIAL EDITION

LCAMP CONFERENCE 2024

14 - 15 MAY

 **Aalen, Germany**



Welcome to the LCAMP Newsletter!






In this issue, the LCAMP team is presenting the results of the first Annual Conference which took place on 14-15 May in Aalen, Germany. More than 140 participants from 14 countries in Europe and beyond gathered to explore the Learning Factories for Advanced Manufacturing in Education. Furthermore, project partners introduced the main findings of the project so far through three breakout sessions on the future LCAMP Alliance, the Jobs and Skills Observatory and the Collaborative Learning Factories.

SAVE THE DATE: Second LCAMP Conference will be held from 13-15 May 2025 in Sweden!

LCAMP-ers thank all the speakers and participants who joined us in Germany!

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LCAMP is working to provide the skills for the future of Industry 4.0, as the project aims to become the European reference platform for knowledge generation and exchange, collaboration and service provision for VET/HVET centres and companies working in the Advanced Manufacturing sector.



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LCAMP CONFERENCE 2024

LEARNING FACTORIES FOR ADVANCED MANUFACTURING IN EDUCATION



The first LCAMP Conference 2024 - Learning Factories for Advanced Manufacturing in Education took place on 14-15 May 2024 in Aalen, Germany. The event gathered more than 140 participants coming from 14 countries in Europe and beyond (US, Canada and Latina America).

Participants explored the practical implementation of Learning Factories in Vocational Education and Training (VET) and High-VET education, discussed the introduction of industry 4.0 technologies in education, showcased real-world examples from around the globe, provided opportunities to join the future LCAMP alliance for fostering international collaboration, facilitated engaging visits to two cutting-edge manufacturing companies, and offered networking opportunities for schools interested in technology and advanced manufacturing education.

On the opening day, participants benefited from keynote sessions addressing trends and challenges in advanced manufacturing education, panel discussions involving experts from academia and industry, and breakout sessions. The conference was followed by visits to leading-edge manufacturing companies BOSCH REXROTH and FESTO in the Baden Württemberg region.

The first day of the Conference was closed with the announcement of the 2025 edition which will take place in Sweden. If you want further information please contact us to at info@lcamp.eu.

Save the Date: LCAMP Conference
13-15 May 2025
Sweden



**Watch the LCAMP Annual
Conference after-movie**



LCAMP CONFERENCE 2024

LEARNING FACTORIES FOR ADVANCED MANUFACTURING IN EDUCATION



Institutional opening

Mr Rikardo Lamadrid Intxaurreaga greeted the more than 140 participants who joined from 14 countries across the world. He was followed by the official welcome from Prof. Dr.-Ing. Dr. Rainer Przywara.



Building a strong International Advanced Manufacturing Alliance

Mr Rikardo Lamadrid Intxaurreaga, on behalf of the Basque Country Government and as LCAMP Project Coordinator, expressed that he believes that international cooperation in VET in the field of Advanced Manufacturing is essential to be innovative and to develop excellent solutions for the upcoming challenges.

The Basque Country has developed the Sixth VET Strategic Plan which looks into strategic areas, objectives, lines of work and indicators for the VET Centres to follow. Mr Lamadrid added that the VET Centres are integrated into the regional ecosystems and actively collaborating with Research Institutions, Companies, Universities and Local and Regional Authorities. Therefore, the development of a Centre of Vocational Excellence, such as LCAMP, will help them to go one step further and connect with other similar European and International centres.



Mr Lamadrid highlighted the importance of the FIRST LCAMP Conference by saying to the participants that they were making history and that this was “the first step on a path that will make us the pinnacle of international cooperation in advanced manufacturing.”

Vocational Education and Training in Germany has deep roots

Prof. Dr.-Ing. Dr. Rainer Przywara introduced the participants to Vocational Education and training in Germany. He explained how the German Dual system is supporting to reduce of young employment rates in comparison to other European countries.

“Professional competencies will change faster in the future, thus a high number of custom-fit workforce needs to be provided by the vocational training system” he said following Cedefop's scenarios.


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Overview of LCAMP

Mr Jon Labaka Intxauspe on behalf of the LCAMP - Learner Centric Advanced Manufacturing Platform for Centres of Vocational Excellence (CoVEs) consortium offered an overview of the project. Mr Labaka explained that the project is gathering more than 20 full partners (VET providers Industrial Associations and Local and Regional Authorities) coming from Europe, Canada and Türkiye. He explained that LCAMP aims to support regional Advanced Manufacturing Centres of Vocational Excellence (CoVE) to become more resilient, innovative and better equipped to train, upskill and reskill young and adult students to successfully face the digital and green transitions. He then highlighted the main activities of the project ([available on the website](#)).



Mr Labaka closed his presentation by saying that the highlight of this project is the collaboration to go further in VET innovation and excellence.

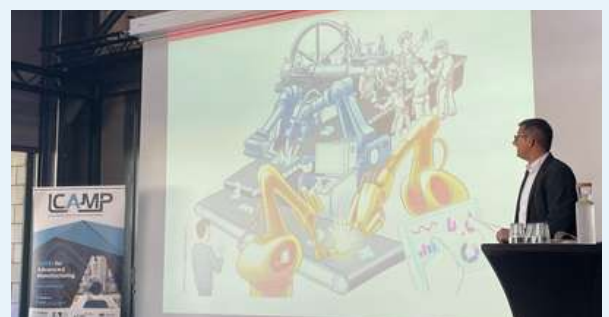
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Industry 4.0 in German VET: mapping didactical approaches for Learning Factories in Baden-Württemberg

Mr Tobias Barthruff, from the Ministry of Culture, Youth and Sports in Baden-Württemberg, stressed that within the region they “want to consolidate the learning factories 4.0 in vocational schools, expand categorically and position them even more strongly in continuing education.” In Baden-Württemberg, there are 253 public vocational schools and 111 in Mechanical and Engineering, within those there are 48 learning factories in the present school year. Mr Barthruff added that thanks to the Learning Factories VET schools are more involved in commercial professions, they increase the regional learning site and further develop teacher training.

FESTO DIDACTIC

From theory to practice: Mr Goran Mialinov (FESTO Didactic) explained how their company is training the future workforce to remain competitive. FESTO Didactic developed a VDMA Toolbox to analyse how Digitalization & Industry 4.0 can be implemented in Small & Medium Sized Enterprises (SMEs).



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LCAMP's approach to the Learning Factory

One of the main activities of the LCAMP project is to create Collaborative Learning Factories (CLFs) and connect different VET Centres and so promoting collaborative learning and mobility opportunities for the students.

LCAMP's approach to the Learning Factory

A "Learning factory is a physical environment with learning purposes that recreate the entire value chain to produce a product with the closest similarity to reality." As explained by Mr Unai Ziarsolo, LCAMP Scientific Coordinator, this project goes one step further by introducing the Collaborative element which aims to create links among regionally distributed labs. In the Collaborative Learning Factory the product is divided into sub-products which can be produced in Learning Factories located in different regions.



LCAMP will open up many opportunities for VET institutions, such as support for setting up such Collaborative Learning Factories, collaborative networking and mobility for learners, and access to publications.


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Micro-credentials linked to the Learning Factory

Prof. Dr.-Ing. Dieter Rupp then continued by introducing the important elements of the CLF such as :

- defining a common product to exchange knowledge
- setting up a virtual connection of several workplaces with a Manufacturing execution system
- establishing the LCAMP Platform including the open innovation space and a list of training courses.

Micro-credentials will play an important role in the construction of the CLF's. Through LCAMP there will be a platform to find existing training courses to obtain micro-credentials in the field of Advanced Manufacturing, which will be based on the skills needed.


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The Canadian Learning Factory: Approaches and Aspirations

LCAMP is not only working with European partners but it is going across the sea by cooperating with the college Camosun from Victoria, Canada.

Dr Richard Gale and Prof. Imtehaze Heerah presented the Canadian model of Learning Factories. This is an innovative approach for Vocational Colleagues in Canada as until the moment this was developed mainly at the University level.

Therefore, the Camosun College colleagues are learning through the LCAMP EU-funded project how to implement future Learning Factories at their College level in Canada. Camosun is thinking out of the box in its educational model. They plan to integrate the Learning Factories approach into the College's existing curricula and benefit learners from this new training experience. Furthermore, their vision is to connect their activities with local SMEs and so promote and support local development. This can be linked to the Learning Factories as a good connection between VET learners and the local economy can be developed, creating a win-win situation.


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Company's perspectives

Cooperation with companies is key to building a strong advanced manufacturing community in the education sector. That's why it was important to bring forward companies' perspectives. Marc Froeschl, FORCAM ENISCO GmbH, Germany, introduced the Connectivity for learning factories, then discussed Digital Twins for Learning Factories with Mikel Ayani, Simumatik, Sweden, to finalise by understanding better with Dimitri Mestre, ARKITE Belgium, the guidance operator system Arkite. Companies had an exhibition during the conference so participants could discuss the benefits of the different products and services that they are offering.


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Breakout sessions

The afternoon session was dedicated to exploring three key activities of the LCAMP project and involving the conference participants in the project.

- The first breakout session was focused on the **LCAMP Alliance**. Participants expressed their interest in becoming members and that the Alliance would help them with their project ideas and finding mobility opportunities for their learners.
- In the second breakout session, the **Skills and Jobs Observatory** presented their first results on the impact of selected jobs for the twin transition.
- In the **Collaborative Learning Factories** participants had the opportunity to experience in practice what learners will have to do when they are involved in such learning environments.



Study visits to cutting-edge manufacturing companies

The conference was followed by visits to leading-edge manufacturing companies **BOSCH REXROTH** and **FESTO** in the Baden Württemberg region.



REXROTH - BOSCH
COMPANY



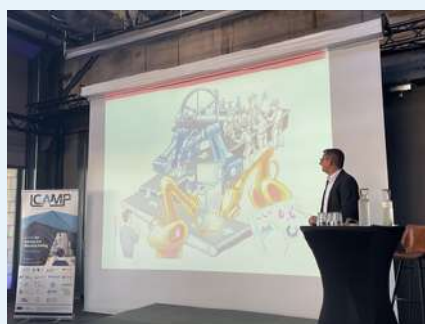
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Photo gallery



NEWS

PARTNERS MET IN ITALY AND GERMANY IN THIS SEMESTER

The Learner Centric Advanced Manufacturing Platform for Centre of Vocational Excellence (CovEs) consortium met twice in the past months.

First, partners meet from 15 to 17 January 2024 at the Headquarters of MADE-Competence Center i4.0 in Milan (Italy). The meeting included a visit to MADE-Competence Center i4.0, an ADMA Training as a step towards bridging the gap between SMEs and VET needs and a discussion about the next project's next steps.

The 5th partners meeting took place on 16 May 2024 in Heidenheim (Germany), following the first annual conference. On this occasion, partners continued with the progress of the project activities and visited the DHBW Learning Factory Lab.



MADE-Competence Center i4.0 in Milan (Italy)



DHBW in Heidenheim (Germany)

[Read more](#)

PEOPLE IN FOCUS

STAKEHOLDERS

“

THE ADVANCED MANUFACTURING SECTOR IS CRUCIAL FOR THE BASQUE COUNTRY DUE TO ITS SIGNIFICANT CONTRIBUTION TO REGIONAL GDP AND ITS CAPACITY TO DRIVE INNOVATION, COMPETITIVENESS AND HIGH-QUALITY EMPLOYMENT.

Laura Marrón, Director General of BAIC- Basque Artificial Intelligence Center, talks to LCAMP about the impact of AI on the world of work, and her work to identify skills trends and promote the industrial future of the Basque Country.

The Basque Artificial Intelligence Centre's (BAIC) main mission is to promote the development and application of artificial intelligence (AI) in the Basque Country, to foster innovation, improve the competitiveness of local companies and contribute to social welfare. BAIC also has the vision of positioning the Basque Country as an international benchmark in this field



Laura Marrón

Director General of BAIC- Basque Artificial Intelligence Center

[Read more](#)

ACTIVITIES



a skills and jobs
observatory

on Advanced
Manufacturing tendencies
from a VET perspective



an open innovation
community

of best practices to
articulate applied research
actions



learner-centric
training

for advanced
manufacturing



collaborative
learning factories



SME – VET
connection

[Read more](#)

POLICY RECOMMENDATIONS (I)

The first policy recommendation shares the key findings of our research on the effects of digital and green transitions on Advanced Manufacturing jobs and provides recommendations for policymakers to respond to the challenges.

These recommendations are aimed at the EU level, but they can also be relevant at the national, regional, and even local levels.



[Read the recommendations here](#)

ANALYSIS OF THE EVOLUTION OF JOBS IN ADVANCED MANUFACTURING IN THE BASQUE COUNTRY

This report presents an in-depth analysis of 12 advanced manufacturing jobs at the EQF level 5 of VET in the Basque Autonomous Community.

Drawing from the literature review and interviews conducted with companies in the field, several key findings have emerged



[Read the sub report here](#)



LCAMP AROUND THE WORLD



PARTNERS ARE SHARING THE LCAMP PROJECT AT LOCAL ADVANCED MANUFACTURING AND VET EVENTS

BASQUE COUNTRY

On 11 March 2024, LCAMP partner Miguel Altuna LHII hosted the LCAMP: Learner Centric Advanced Manufacturing Platform for CoVEs Collaborative Learning Factory regional session.

Partners shared insights from the project and extended invitations to Basque Country VET centres to collaborate with LCAMP in developing their Learning Factories.



BASQUE COUNTRY - SWEDEN

LCAMP-er Curt Nicolin Gymnasiet (Sweden) engaged in a learning exchange with Miguel Altuna VET Center (Bergara, Basque Country) from 16 to 20 March 2024. The learning activity included one automation teacher and 15 electricity, electronics, and automation learners from the Curt Nicolin Gymnasiet.



MALTA

The EU4DUAL 1st Annual Conference "Shaping the future of European Dual Higher Education" took place in Malta between 10- 11 April. The event gathered more than 200 participants coming from 20 countries. LCAMP research experts Liher Errasti Gonzalez and Unai Ziarsolo (Miguel Altuna) and Prof. Dr.-Ing. Klaus-Dieter Rupp (DHBW Heidenheim) attended on behalf of LCAMP partnership.



ITALY

On the 26th and 27th March 2024, the European Cluster Collaboration Platform (ECCP), in partnership with AFIL – Associazione Fabbrica Intelligente Lombardia and Lombardy Region, organised a Clusters Meet Regions event in Milan (Italy). Italian AFIL and MADE showcased LCAMP project and the synergies with ADMA TranS4MErs initiative.



SWEDEN

On 7 May 2024, Curt Nicolin High School hosted an LCAMP Stakeholder event in Finspång, Sweden. This session aimed at showcasing the objectives of LCAMP and inviting local SMEs and bigger companies to join hands in our journey towards innovation and collaboration.





LCAMP AROUND THE WORLD



EU LEVEL

On 29 January 2024, the European Commission and Cedefop organised a **“Peer-learning activity on microcredentials for the labour market – A sectoral approach: manufacturing and retail”** counting with the participation of the LCAMP project officer, Íñigo Araiztegui (TKNIKA).



Between April 17- 18 2024, the Belgium Presidency of the Council of the EU organised a **high-level Conference on Lifelong Learning – fostering a learning culture** in Brussels (Belgium). This was one of the flagship events of the education agenda of the Belgian Presidency. EARLALL's secretariat was invited to participate in the conference and hold a stand during the Lifelong Learning Festival, where they networked with relevant stakeholders and discussed EARLALL's work.



On 25 April 2024, the European Committee of the Regions (CoR) and the European Commission, DG for Employment, Social Affairs and Inclusion (DG EMPL) co-organised the event **“Investing in Skills in Europe's Regions and Cities”**. This conference marked the closing of the European Year of Skills at the Committee of the Regions. The event was divided into three sessions focused on the critical role of skills development and the transformative power of upskilling and reskilling in bolstering the socio-economic fabric of Europe's diverse regions and cities. Mr Íñigo Araiztegui, Director of the Internationalisation Department of TKNIKA, was invited to introduce LCAMP Skills and Jobs Observatory findings in the second-panel discussion.



On 30 April 2024, the European Commission organised the closing event of the **European Year of Skills – what comes next?** in Brussels. The conference gathered hundreds of participants from all over Europe to look back at the achievements of the Year and reflect on the next steps. All the speakers and participants agreed that the European Year of Skills does not end here, and that everyone is committed to fostering “skills” as a top priority in the political agenda and to making a true “decade of skills.”



MEET THE TEAM



The LCAMP consortium is composed of 19 full partners from 11 countries, of which 9 are educational organisations, 7 are industrial companies and 4 are VET and industrial associations. The consortium is also supported by 61 associated partners.



[Meet the team](#)

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