



Funded by the
Erasmus+ Programme
of the European Union

Blueprint “New Skills Agenda Steel”:
Industry-driven sustainable European Steel Skills Agenda and Strategy (ESSA)

Mid-term Conference Of the European Steel Skills Alliance (ESSA)

“Online Skills Ecosystem and Pilot Training Course”

27th of May 2021

Jorge Muract, worldsteel



Agenda



Online Skill Ecosystem

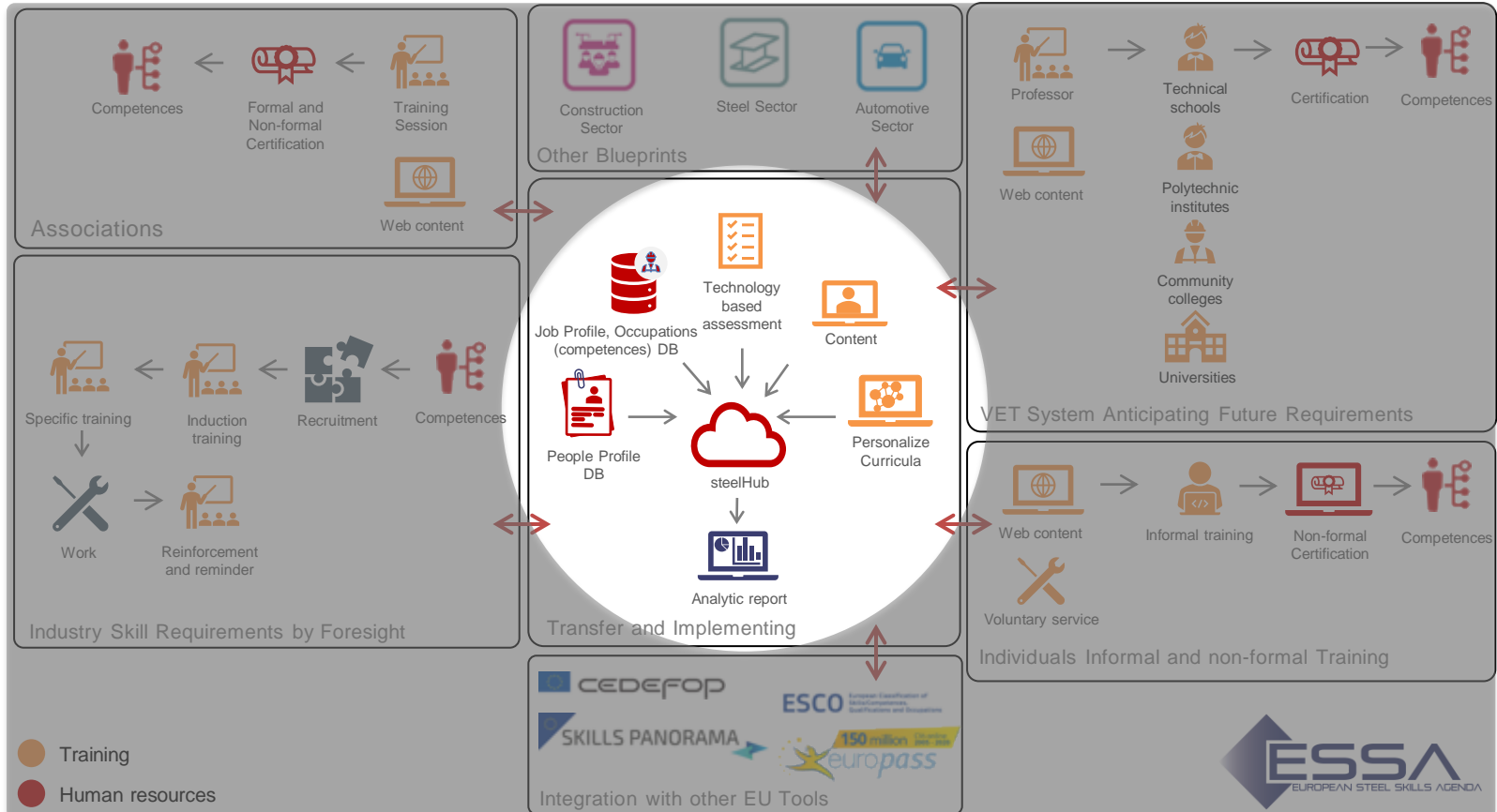
Collaborative tool to disseminate training to support upskilling and reskilling talent in the steel industry and academia.



Pilot Training Course

Blended learning program with e-learning, webinars, simulations and gamification.

Online Training Eco-System





Stakeholders using steelHub



15 Industries



2 Universities



1 Research Center
1 Association

Agenda



Online Skill Ecosystem

Collaborative tool to disseminate training to support upskilling and reskilling talent in the steel industry and academia.



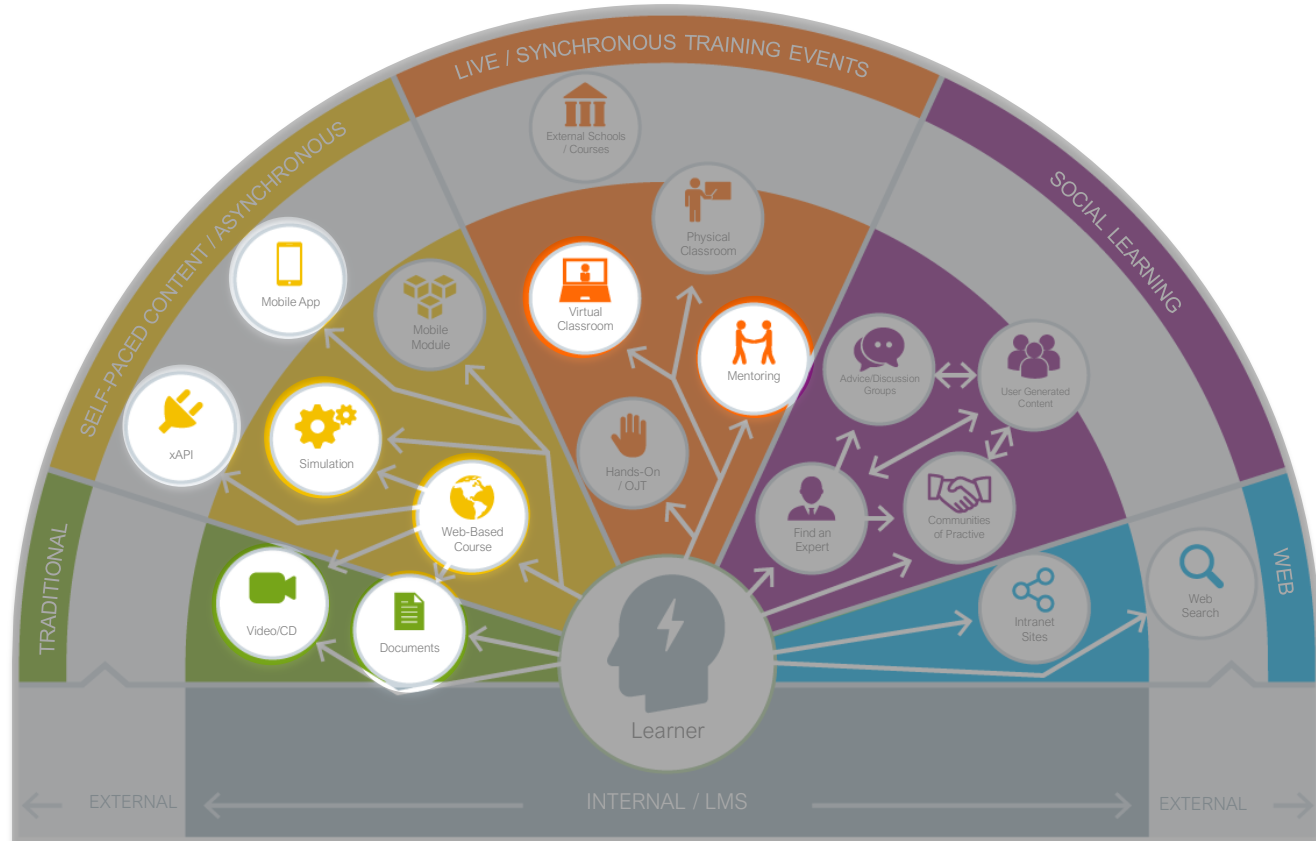
Pilot Training Course

Blended learning program with e-learning, webinars, simulations and gamification.

Objectives

- Pilot a blended learning program 100% online, which include e-learning, webinars, simulation and gamification.
- Testing steelHub infrastructure.
- Collect data and perform preliminary data analysis.

Blended learning program structure



Blended learning program structure

[Course Home](#)

- ✓ Participant Information
- ✓ SC15601-User Guide
- ✓ SC15901-Practice simulation
- ✓ SC15401-Online Webinar
- ☐ SC15902-Competition day
- ☐ SC15201-Your experience

[Return to steelChallenge-15](#)

steelChallenge-15 > SC15901-Practice simulation

COMPLETE



Introduction

We received an order to produce railroad tracks for an important company in the sector. The grade of steel to be produced must meet mixed traffic specifications that include high-speed trains, for which steel grade R260Cr or 1.0911 is required.

You are the technical manager of the Secondary Metallurgy and Continuous Casting processes. For both processes, you must comply with the chemical composition and inclusions content specified by the client. In addition, you must control the production parameters, such as temperature and production time, in order to reduce production cost and improve profitability of our company.

You must consider that the temperature and cost of the three ladles going into Continuous Casting process will be the same obtained in the Secondary Metallurgy process.

Play

< Previous Lesson

[Back to Course](#)

Next Lesson >



E-learning



E-learning



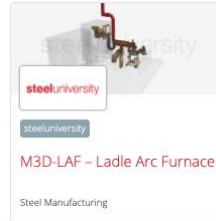
Simulation



Simulation



3D Interactive Model



3D Interactive Model

steelChallenge-15

Regional Championship | 25 November 2020

Start: 25 November 2020 12 UTC / End: 26 November 12 UTC
Secondary Steelmaking + Continuous Casting integrated simulator



Runs in the integrated simulator

85,226

Secondary Steelmaking runs

73,233

Continuous Casting runs

11,993

Participants

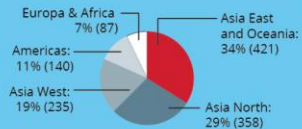
1,241

51% Industry // 49% Students



Participants from more than
50 companies and
90 educational institutions
registered for the challenge.

PARTICIPATION PER REGION



TOP PARTICIPATING COUNTRIES

China	358
South Korea	354
India	134
United Arab Emirates	99
Mexico	52
Brazil	47
Taiwan, China	47
Argentina	34
Slovenia	21
Russia	15

steelChallenge15 is generously sponsored by the following companies:



Leaderboard Europe for student and industry



Students

Europe and Africa - Student Category				
Position	Person	Affiliation	Country	Price
1	Andre Massaccesi Guimaraes	University of Westminster	United Kingdom	57,4669
2	Blaž Žerjav Jereb	University of Ljubljana	Slovenia	57,4807
3	Noel Gregori	University of Ljubljana	Slovenia	57,4916
4	Gregor Šegel	University of Ljubljana	Slovenia	57,6215
5	Matija Arzenšek	University of Ljubljana	Slovenia	57,6419

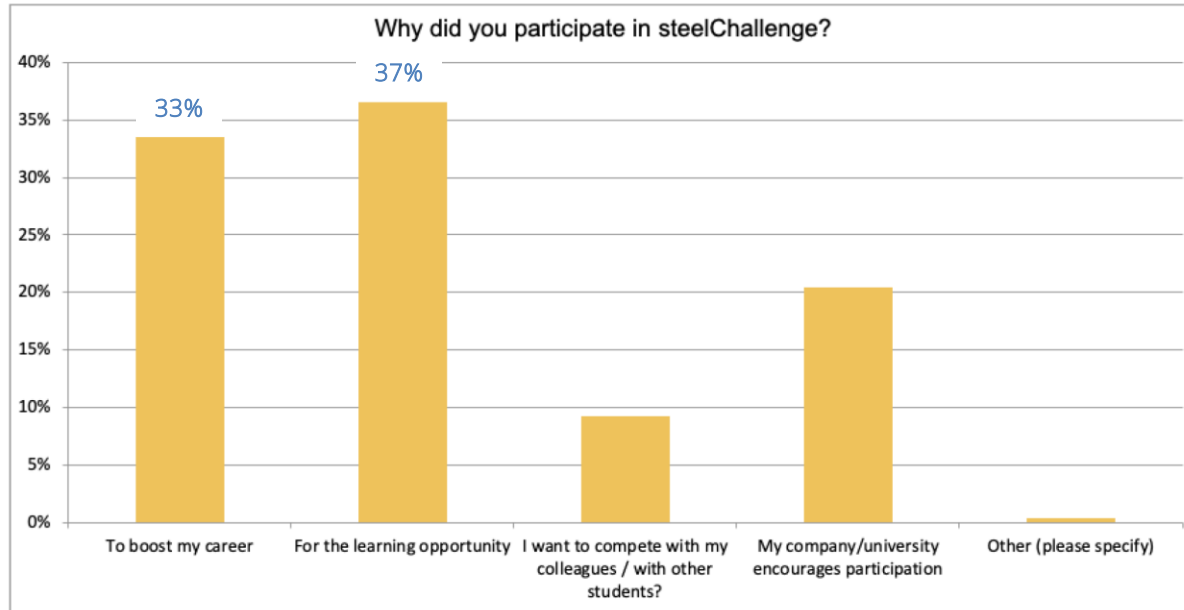


Industry

Europe and Africa- Industry Category				
Position	Person	Affiliation	Country	Price
1	Alexander Nesmeev	TMK	Russia	59,3997
2	Nikolay Stolbov (Николай Столбов)	TMK	Russia	60,3446
3	Timur Gaisin	TMK	Russia	61,3687
4	Lorenzo Bergamo	Tenaris	Italy	62,6143
5	Alexey Vladimirovich Nikitin (Алексей Владимирович Никитин)	TMK	Russia	62,9744

Survey

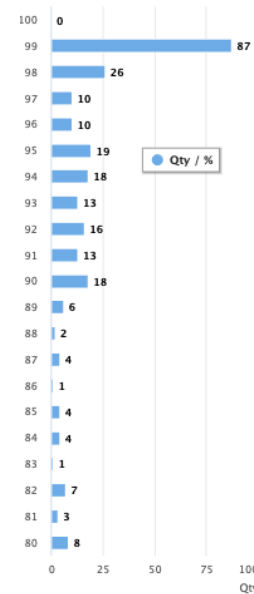
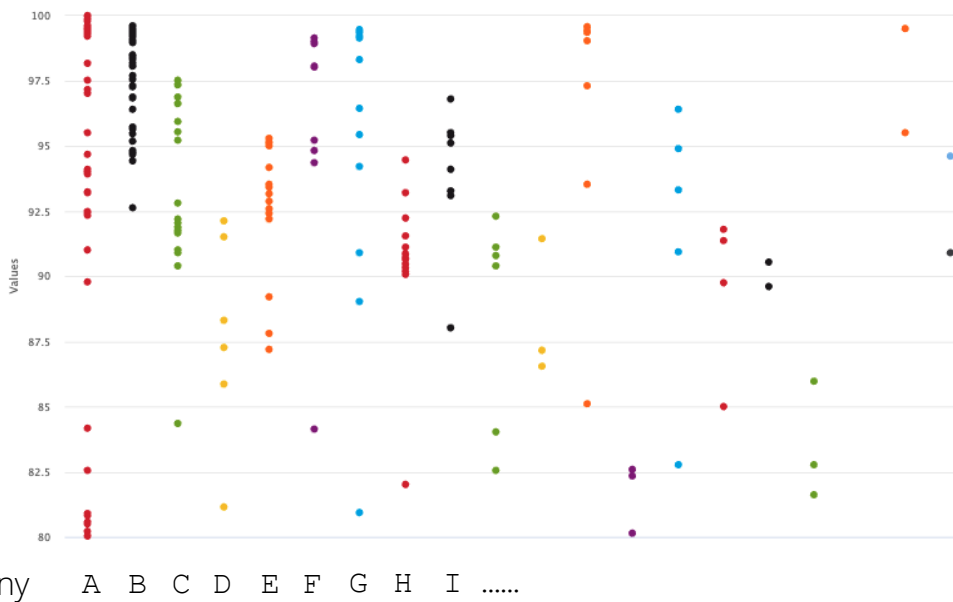
99% participants recommended



300/1200 answer the survey

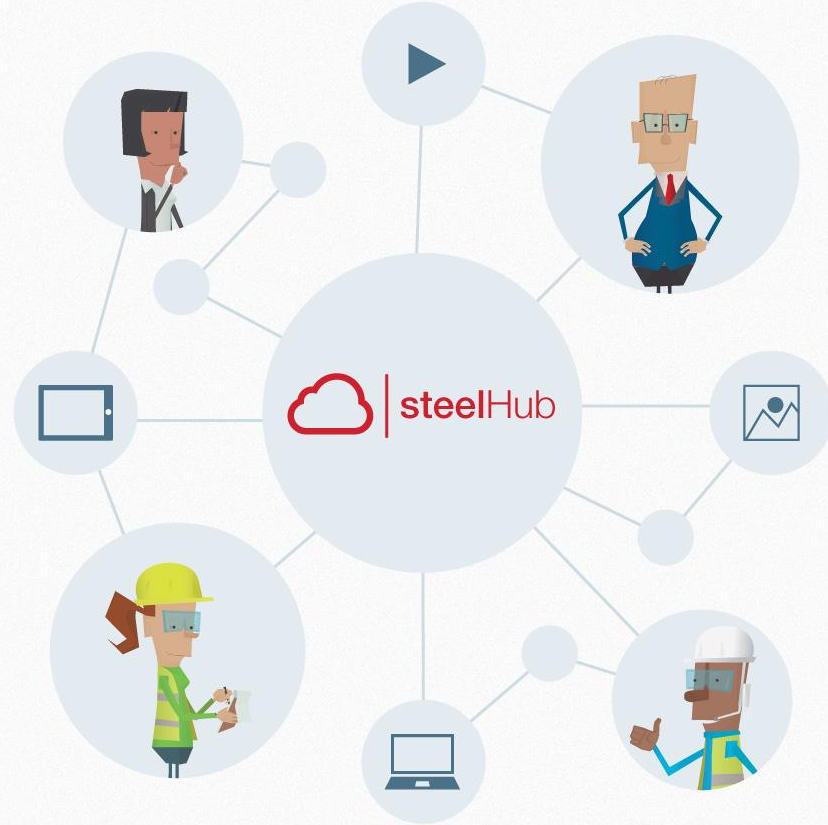


Aggregated Data Analysis



Conclusion

First working prototype of steelHub to collaborate in the dissemination of training content to support upskilling and reskilling talent in the steel industry and academia.





Funded by the Erasmus+ Programme of the European Union

Agreement Number: 2018-3059/001-001

Project Number: 600886-EPP-1-2018-1-DE-EPPKA2-SSA-B

Thanks for your attention

Jorge Muract, worldsteel
muract@worldsteel.org

ESSA website: <https://www.estep.eu/essa>

Follow us on  and 

