# Workshop: Curriculum Development for Technical Communication in a Digitalized World Based on the TecCOMFrame Competence Framework

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***Abstract - Mainly due to technology developments, the roles of technical communicators are constantly evolving. Therefore, it is important that curricula in technical communication stay up to date with the developments to prepare students for their future jobs. Participants in this workshop will develop ideas for a new, future-oriented course, based on the competencies and learning outcomes as defined in the TecCOMFrame Competence Framework. This framework was developed as part of an EU-funded project with the goal of stimulating curriculum development in technical communication. The outcomes of the workshop will be saved in a wiki, so participants can use them and further develop them afterwards, according to their specific context and needs.***

***Index Terms – Curriculum development, digitalization, TecCOMFrame, technical communication.***

## INTRODUCTION

Because the role of the technical communicator is constantly evolving—due to digitalization, exponential technology developments, and concomitant standards, legal, and related requirements—robust and future-oriented academic curricula are essential. In ever increasing numbers, citizens, consumers, and users of applications access information online, and use self-service applications to conduct personal, legal, and professional transactions. Therefore, ongoing concerns for technical communication practitioners include data management and protection, and the provision of dynamic and personalized content for users. Future-oriented courses and curricula develop students' competencies and skills, and enable them to respond to dynamic workplaces and roles.

The TecCOMFrame project (www.teccom-frame.eu) was an EU-funded project that ran from September 2015 to August 2018 with the goal of supporting technical communication curriculum development. The project involved partners from universities in eight European countries with different levels of integration of technical communication programs in their universities: KU Leuven, Karlsruhe University of Applied Sciences, University of Limerick, Uniwersytet Szczecinski, Universitatea Politehnica Bucuresti, Université Paris Diderot, Universiteit Twente, and Aarhus Universitet. Apart from the primary partners, "silent" partners from other European institutions for higher education, and stakeholders from industry and service companies contributed to the project. The project was coordinated by tekom Europe. The framework was developed by the project partners, in collaboration with silent partners and stakeholders, in an iterative process during the first year of the project. (See [1] and [2] for an overview of the TecCOMFrame project, its goals, processes, and outputs.)

This workshop explores the state of the art in technical communication education and training, and sets out suggestions for future development, based on the TecCOMFrame project outputs.

The facilitators will explain the TecCOMFrame academic competence framework and discuss how it formed the basis for prototype curricula for various technical communication educational contexts. Participants will then collectively identify the

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competencies needed for, and the learning outcomes associated with, a future-oriented technical communication course. They will use the framework systematically to develop a unique and specific course.

## TARGET AUDIENCE

The target audience for this workshop is both academics and practitioners who are interested in teaching and learning technical communication in a digitalized world.

The TecCOMFrame competence framework is a broad and comprehensive collection and classification of the skills, competencies, and learning goals in the technical communication discipline. It is, therefore, not restricted to any particular education system. The prototype curricula developed in the TecCOMFrame project demonstrate that the framework can successfully be used to develop EU instruments of higher education as outlined in the Bologna process. These instruments include standardized credits and the European Qualifications Framework (EQF) [3]. The workshop is, however, not only relevant for educators developing technical communication programs and courses in Europe. It will be beneficial for any participant who is planning a future-oriented technical communication course with a focus on digitalization.

## LEARNING OUTCOMES

During the workshop, participants will explore the TecCOMFrame competence framework.

They will also collaborate to develop ideas for a future-oriented technical communication course. More specifically, they will drill deeper into and build upon those competence dimensions and (sub-)subjects across the framework that seem most relevant to help students and future employees handling innovative digital technologies and services.

At the end of the workshop, participants will be able to use the TecCOMFrame competence framework to build academic courses and curricula in technical communication.

They will also be able to use the specific materials developed during the workshop.

## PROJECTED ACTIVITIES

As initial input, the facilitators will present the core subjects and learning goals of the TecCOMFrame academic competence framework and explain how curricula can be developed based on this framework. While some subjects within the framework are more relevant to the workshop theme, the facilitators will demonstrate the breadth and depth of the whole framework, and the potential for users to select competencies from various subjects to contribute to a single, unique course (in this case, a course that focuses on future skills).

Together with the audience, the facilitators will develop a list of competencies of technical communicators, and appropriate learning outcomes needed in a digitalized world. This part of the workshop will be a collaborative session during which attendees will select course contents.

All ideas will be saved in a wiki specifically set up for this workshop. The results can be used thereafter and further developed by all participants.

A laptop will be useful but not required for participation in this 75-minute workshop.

## REFERENCES


[1] Y. Cleary *et al*., "TecCOMFrame: a competence framework for technical communication," *Proc. IEEE Int. Professional Commun. Conf.*, 2017.

[2] J. Karreman *et al*., "TecCOMFrame: Developing Prototype Technical Communication Curricula," *Proc. IEEE Int. Professional Commun. Conf.*, 2018, pp. 69-73.

[3] European Commission (2016). Descriptors defining levels in the European Qualifications Framework. [Online]. Available: https://ec.europa.eu/ploteus/en/content/descriptors-page.


## ABOUT THE AUTHORS


**Yvonne Cleary** is a lecturer in Technical Communication and Instructional Design, and Program Director for the MA in Technical Communication and E-Learning at the University of Limerick, Ireland. She holds an MA and a PhD in technical communication. Her research interests include professional issues in technical communication, technical communication pedagogy, virtual teams, and international technical communication. She has presented her work at conferences in Europe and the United States and has published in leading journals in the technical communication field.

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**Sissi Closs**, professor of Information and Media technology at Karlsruhe University of Applied Sciences, CEO of C-Topic Consulting, and inventor of the class concept method®, is one of the leading experts in the field of Technical Communication. She introduced in 1997 together with 2 colleagues the first technical communication studies at Karlsruhe university of Applied Sciences. She is also the author of a number of books about Single Source Publishing, Topic-based Structuring, DITA, and Mobile Documentation.