# The Quality Reference Framework for MOOCs to improve online learning

Citation for published version (APA):

Stracke, C. M. (2019). The Quality Reference Framework for MOOCs to improve online learning. In G. Ubachs, L. Konings, & B. Nijsten (Eds.), *The 2019 OpenupEd trend report on MOOCs* (pp. 14-16). European Association of Distance Teaching Universities. https://tinyurl.com/2019OpenupEdtrendreport

**Document status and date:**
Published: 01/01/2019

**Document Version:**
Publisher's PDF, also known as Version of record

**Document license:**
CC BY

**Please check the document version of this publication:**

• A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
• The final author version and the galley proof are versions of the publication after peer review.
• The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

**General rights**
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the “Taverne” license above, please follow below link for the End User Agreement:

https://www.ou.nl/taverne-agreement

**Take down policy**
If you believe that this document breaches copyright please contact us at:

pure-support@ou.nl

providing details and we will investigate your claim.

Downloaded from https://research.ou.nl/ on date: 12 Feb. 2025

Open Universiteit
www.ou.nl

# The 2019 OpenupEd trend report on MOOCs

OpenupEd EADTU Erasmus+

## Editors
European Association of Distance Teaching Universities (EADTU) | George Ubachs; Lizzie Konings; Beau Nijsten

## Authors
European Students' Union (ESU), Belgium | Gohar Hovhannisyan; Katrina Koppel
FH JOANNEUM, Austria | Christian Friedl
Hasso Plattner Institute Potsdam (HPI), Germany | Thomas Staubitz
Cracow University of Economics, Poland | Agnieszka Żur
Open University of the Netherlands (OUNL), the Netherlands | Christian M. Stracke
University of Oviedo (UNIOVI), Spain | Patricia Herrero de la Escosura; Ana I. González
Hellenic Open University (HOU), Greece | Christoforos D. Karachristos; Dimosthenis Karakatsoulis; Theofanis Orphanoudakis; Dimitris Sideris; Elias C. Stavropoulos
Oulu University of Applied Sciences (OAMK), Finland | Leena Paaso
Tampere University of Applied Sciences (TAMK), Finland | Teija Lehto
Universidad Nacional de Educación a Distancia (UNED), Spain | Timothy Read; Elena Barcena; Tiberio Feliz-Murias; David Recio-Moreno

**Published by**: European Association of Distance Teaching Universities, The Netherlands

## Correspondence
European Association of Distance Teaching Universities (EADTU)
att George Ubachs, Managing Director
Parkweg 27, 6212 XN Maastricht, The Netherlands
Tel: +31 43 311 87 12 | E-mail: secretariat@eadtu.eu
www.eadtu.eu | www.openuped.eu

## Suggested citation
Author(s) (2019) Title of paper. In G. Ubachs; L. Konings; B. Nijsten (Eds.) The 2019 OpenupEd trend report on MOOCs. (pp. Pages). Maastricht, NL: EADTU. Retrieved from https://tinyurl.com/2019OpenupEdtrendreport

## License used
This work is licensed under a Creative Commons Attribution 4.0 International License: https://creativecommons.org/licenses/by/4.0/ This license lets others distribute, remix, tweak, and build upon this work (even commercially) as long as credit is provided for the original creation. This is among the most accommodating of CC licenses offered, and recommended for maximum dissemination and use of licensed materials.

## Disclaimer
This publication is partly funded by Erasmus+, KA3- Civil Society Cooperation, Education and Training. The European Commission supports for the production of this publication and does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Co-funded by the Erasmus+ Programme of the European Union

# Table of contents

**Foreword....4**
*George Ubachs, OpenupEd & EADTU, The Netherlands*

**A Role for Inclusive MOOCs in Societal Change....6**
*Timothy Read; Elena Barcena, Universidad Nacional de Educación a Distancia, Spain*

**MOOCs for business use: Six hands-on recommendations ....10**
*Christian Friedl, FH Joanneum University of Applied Sciences Graz, Austria; Agnieszka Żur, Cracow University of Economics, Poland; Thomas Staubitz, Hasso Plattner Institute Potsdam, Germany*

**The Quality Reference Framework for MOOCs to improve online learning....14**
*Christian M. Stracke, Open University of the Netherlands, the Netherlands*

**Investigating institutional MOOC strategy in Greek HEIs ....17**
*Christoforos D. Karachristos; Dimosthenis Karakatsoulis; Theofanis Orphanoudakis; Dimitris Sideris; Elias C. Stavropoulos, Hellenic Open University, Greece*

**AgileAMK production model for creating MOOC-type courses....21**
*Teija Lehto, Tampere University of Applied Sciences (TAMK), Finland; Leena Paaso, Oulu University of Applied Sciences (OAMK), Finland*

**Designing a MOOC course for promoting the active participation of European citizenship....25**
*Patricia Herrero de la Escosura; Ana I. González, University of Oviedo, Spain*

**Students at the forefront of assessing quality of MOOCs....29**
*Gohar Hovhannisyan; Katrina Koppel, European Students' Union, Belgium*

**Massive Open Gamification....33**
*Tiberio Feliz-Murias; David Recio-Moreno, Universidad Nacional de Educación a Distancia, Spain*

**Christian M. Stracke**

***Open University of the Netherlands***

# The Quality Reference Framework for MOOCs to improve online learning

## Innovative impact

The QRF has already achieved direct short-term innovative impact: It was used for the design and implementation for the development of two MOOCs as pilot implementations. They were following different pedagogical approaches (one xMOOC as traditional online course and one cMOOC for collaborative online learning). In both cases, the usage of the QRF was considered as very helpful by the MOOC designers and leading to reduced efforts due to the design support provided by the QRF.

Thus, the QRF will achieve long term innovative impact for the development of MOOCs, too. In addition, the QRF will also help MOOC providers and MOOC facilitators to improve the provision and facilitation of future MOOCs: The QRF Key Quality Criteria and the QRF Quality Checklist are addressing all stakeholder groups offering support for beginners as well as experts.

The QRF can be downloaded for free with an open license from: www.MOOC-quality.eu/QRF

## The QRF - based on a broad and truly international collaboration

"The Quality Reference Framework (QRF) for the Quality of MOOCs" was developed by the European Alliance for the Quality of Massive Open Online Courses (MOOCs), called MOOQ. Overall, MOOQ could address and reach out to more than 100,000 MOOC learners, designers, facilitators and providers through dissemination and exploitation activities. The main objective of MOOQ was the development of the QRF that was finalized and published in the year 2018 after more than three years of revisions and refinements.

In close cooperation with leading European and international institutions and associations, MOOQ could involve in the QRF finalization more than 10,000 MOOC learners, designers, facilitators and providers through divers means including the Mixed Methods research with the Global MOOC Quality Survey (GMQS), the MOOQ presentations and workshops at regional, European and international conferences as well as communication and collaboration in traditional channels and social media.

## The three dimensions of the QRF

The QRF consists of three dimensions: Phases, Perspectives and Roles.

These three dimensions were carefully selected, discussed and agreed with all MOOC stakeholder groups to cover the different views, requirements and responsibilities during the lifetime of a MOOC.

They are mainly based on the results from the Mixed Methods research by MOOQ: That included the realization and evaluation of the first Global MOOC Quality Surveys (for MOOC learners, designers and facilitators), the 27 semi-structured interviews conducted with MOOC experts (MOOC designers, facilitators and providers) and the MOOQ Workshops at eight international conferences (ICDE 2015 in Sun City, South Africa, OE Global 2016 in Krakow, Poland, EC-TEL 2016 in Lyon, France, OE Global 2017 in Cape Town, South Africa, IEEE EDUCON 2017 in Athens, Greece, ICALT 2017 in Timisoara, Romania, EARLI 2017 in Tampere, Finland and EC-TEL 2017 in Tallinn, Estonia). Furthermore, the QRF has adapted the International learning quality standard ISO/IEC 40180 (former ISO/IEC 19796-1) to the specific requirements and needs for MOOCs.

## References


Stracke, C. M., Kameas, A., Vassiliadis, B., Sgouropoulou, C., Texeira, A. M., Pinto, M., & Vidal, G. (2017). The Quality of Open Online Education: Towards a Reference Framework for MOOCs. In *Proceedings of 2017 IEEE Global Engineering Education Conference (EDUCON)* (pp. 1712-1715). doi: 10.1109/EDUCON.2017.7943080

Stracke, C. M., Sgouropoulou, C., Kameas, A., Vassiliadis, B., Texeira, A. M., & Pinto, M. (2018). Fostering Quality in MOOCs: a European Approach. In K. Ntalianis, A. Andreatos, & C. Sgouropoulou (Eds.), *Proceedings 17th European Conference on e-Learning (ECEL)* (pp. 533-538).

Stracke, C. M., & Tan, E. (2018). The Quality of Open Online Learning and Education: Towards a Quality Reference Framework for MOOCs. In J. Kay, & R. Luckin (Eds.), *Rethinking learning in the digital age. Making the Learning Sciences Count: The International Conference of the Learning Sciences (ICLS) 2018* (pp. 1029-1032). doi: http://hdl.handle.net/1820/9909

Stracke, C. M., Tan, E., Texeira, A. M., Pinto, M., Kameas, A., Vassiliadis, B., & Sgouropoulou, C. (2018). Gap between MOOC designers' and MOOC learners' perspectives on interaction and experiences in MOOCs: Findings from the Global MOOC Quality Survey. In M. Chang, N.-S. Chen, R. Huang, Kinshuk, K. Moudgalya, S. Murthy, & D. G. Sampson (Eds.), *Proceedings 18th IEEE International Conference on Advanced Learning Technologies (ICALT)* (pp. 1-5). doi: 10.1109/ICALT.2018.0000


The QRF dimensions are explained more in detail in the following sub-sections.

## *QRF Dimension 1: Phases*

The QRF consists of five phases that normally overlap and can be repeated in iterative cycles:

1. **Analysis** (A): identify and describe requirements, demands and constraints
2. **Design** (D): conceptualise and design the MOOC
3. **Implementation** (I): implement a MOOC draft and finalize it through testing
4. **Realization** (R): realise and perform the MOOC including support and assessment
5. **Evaluation** (E): define, run and analyse the evaluation and improve the MOOC

## *QRF Dimension 2: Perspectives*

The QRF distinguishes three perspectives that have to be addressed and focused during the different phases:

1. **Pedagogical**: how has the MOOC to be designed and developed?
2. **Technological**: how has the MOOC to be implemented and realized?
3. **Strategic**: how has the MOOC to be managed and offered?

## *QRF Dimension 3: Roles*

The QRF covers three roles and indicates their involvement and responsibilities in relation to the phases and perspectives:

1. **Designer**: Designer includes content experts, content authors, instructional designers, experts for MOOC platforms, technology-enhanced learning and digital media as well as any others who may contribute to the design of a MOOC.
2. **Facilitator**: Facilitator includes the pedagogical facilitators and experts with content knowledge (such as moderators, tutors, teaching assistants) who manage forum, provide feedback and monitor learning progress, the technical facilitators (such as technical support for learners) as well as others who may contribute to support participants in their learning process in a MOOC.
3. **Provider**: Provider includes the (internal and external) MOOC providers, the technical providers (such as technology providers, programmers, software designers and developers), managers, communication and marketing staff as well as others who are involved in the decision-making processes leading to the delivery

of a MOOC.

## The structure of the QRF

The QRF presents the quality framework as general template to be adapted together with two applications: the QRF Key Quality Criteria for MOOC experts and the QRF Checklist for MOOC beginners:

### *QRF Key Quality Criteria for MOOC experts*

The QRF Key Quality Criteria are provided in a table for experienced MOOC designers, facilitators and providers. They are intended as support for analysing, designing, implementing, realizing and evaluating a MOOC. The QRF Key Quality Criteria are defined as action items for potential activities in the different processes.

### *QRF Quality Checklist for MOOC beginners*

The QRF Quality Checklist presents leading questions for all three QRF dimensions. They are intended for both, beginners and experts in the MOOC design and development. Therefore, the QRF Quality Checklist serves as a starting point and a reminder on critical issues to be addressed. It complements the QRF Key Quality Criteria that defines the phases and processes of the MOOC design and development.

## Usage and benefits of the QRF

To use the QRF, it is most important to adapt it to own specific needs. MOOC designers, facilitators and providers have to select and define the relevant phases including their perspectives and roles according to their own situation, learning objectives, target groups, context and further conditions. Such adaptations should be documented to inform all involved stakeholders as well as to allow their review in the evaluation and further improvement of the MOOCs.

There are four core benefits of the QRF: First, the QRF provides a generic framework that can be adapted to each specific context. Second, the QRF identifies key quality criteria for better orientation on the MOOC design. Third, the QRF presents a checklist for the quality development and evaluation of MOOCs. And fourth, the QRF enables a continuous improvement cycle for MOOC design and provision.

## Conclusion

The QRF is the first and unique guideline for the quality of MOOCs based on Mixed Methods research and involvement of the global MOOC community. The included QRF Quality Checklist offers MOOC beginners an easy tool for the design and implementation of a first MOOC. And the QRF Key Quality Criteria support MOOC experts to continuously evaluate and improve their MOOC designs. Thus, the QRF will improve the future MOOCs and online learning in general.

OpenupEd

ISBN/EAN: 978-90-79730-36-0
2019, European Association of Distance Teaching Universities (EADTU)