

ICT-related Educational Competencies of Teacher Educators from an Intercultural Perspective A Systematic Analysis of Competency Frameworks











Teacher educators

- Play a vital role in future teachers' media-related educational competencies development (Tondeur et al., 2019)
- Are **role models** for prospective teachers (Uerz et al., 2018)
- Need to prepare preservice teachers for teaching and learning in a world marked by globalization and diversity (Baroni et al., 2019)





Competency models/frameworks

- Have become helpful means to define ICT-related educational competencies (Tiede, 2020)
- Research focus on teacher educators' competency requirements
 (Foulger et al., 2017)
- International comparative research has emerged (Foulger et al., 2017; Tiede and Grafe, 2020; Schröter and Grafe, 2020)





Competency models/frameworks

- Further international comparative research needed (Borthwick and Hansen, 2017; Foulger et al., 2017, Tiede and Grafe, 2020)
- Further explication of underlying theoretical concepts required (Schröter and Grafe, 2020)
- Haven't been analyzed in terms of their approach to intercultural aspects yet





And what about intercultural competency models?

- "Intercultural Research" denotes a complex multidisciplinary field
 - (Deardorff and Arasaratnam-Smith, 2017; Spitzberg and Chagnon, 2009)
- Teacher educators aren't specifically targeted
- Explication of Concepts remains challenging as various labels are used
 - (Deardorff and Arasaratnam-Smith, 2017; Fantini, 2020)
- Anglocentricity Critique (Fantini, 2020; Dervin et al., 2020)



Research Question



(How) Do ICT-related competency frameworks for teacher educators include intercultural aspects?



Research Objectives



(How) Do ICT-related competency frameworks for teacher educators include intercultural aspects?

- Identification of ICT-related educational competence models for teacher educators
- Selection of **search terms** linked to intercultural research discourses
- Analysis of selected frameworks by means of the chosen search terms
- **Explication** of key concepts



Model Identification & Selection

Process

- Combination of findings from previous literature reviews on ICT-related competence frameworks for teacher educators / teachers in Higher Education (Joint Research Centre, 2017; Foulger et al., 2017; Tiede and Grafe, 2020; Schröter and Grafe, 2020)
- Additional literature review through ERIC, Web of Science & Google Scholar

Inclusion Criteria

published in English | publication date | international relevance



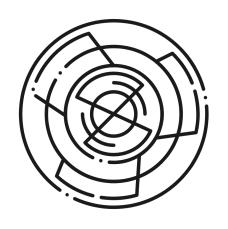
Model Identification & Selection

Frameworks selected for analysis

- TETCs (Foulger et al. 2017)
- DigCompEdu (Redecker 2017)
- Media Didactica (Meeus et al. 2014)
- Digital Capabilities (Jisc 2014)

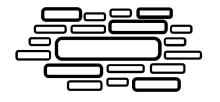


Search Term Identification & Selection



Recap: Complexity of Intercultural Research Field

50+ terms to denote "abilities needed for intercultural interaction" (Fantini, 2020)



Search Terms for the Present Study

Terminology identified by Fantini (2020) was used to analyze the selected ICT-related competence models for teacher educators



Analysis I: Media Didactica (Meeus et al., 2014)



Publication: Published by Belgian researchers

Scope: 3 competency dimensions, each containing 1-3 competency aspects;

which are further specified through learning goals and examples



- One relevant example found on learning goal level
- No reference to intercultural or related research discourses



Analysis II: Digital Capabilities (Jisc, n.d.)



Publication: Published by UK-based government-funded organization **Scope:** 6 dimensions, each of which is subdivided into 2-3 capabilities followed by 3-5 operationalizations



- Two relevant examples were found on the operationalisation level
- No reference to intercultural or related research discourses



Analysis III: DigCompEdu (Redecker, 2017)



Publication: Published by Joint Research Centre (Service to the EU) **Scope:** 6 competency areas, each including 3-5 competences, which are each explicated by 10-15 examples



- One relevant example was found at the example level
- References are made to "21century skills" (Binkley et al., 2012), which include a) Global Citizenship and b) cultural awareness and competence



Analysis IV: TETCs (Foulger et al., 2017)



Publication: Published by US-Researchers

Scope: 12 competencies, each comprising 3-5 competency aspects



- One relevant example found at competency-level
- Direct references to Global Competence discourse can be found



Discussion | All Frameworks at a Glance

Media Didactica | Digital Capabilities | DigCompEdu

References to culture are made on the microlevel and occur sporadically

TETCs

Address culture through one **competence**, which is further specified into **three competence aspects**



Discussion | TETC 8 (Foulger et al., 2017, 433)

Teacher Educators will use technology to connect globally with a variety of regions and cultures

- 8.1 [Teacher educators will **m]odel engagement** using technologies to connect teacher candidates with other cultures and locations.
- 8.2 [Teacher educators will] will **design instruction** in which teacher candidates use technology to collaborate with learners from a variety of backgrounds and cultures
- 8.3 [Teacher educators will **a]dress strategies needed for** cultures and regions having **different levels of technological connectivity**.



Discussion | TETC 8 (Foulger et al., 2017, 433)

Teacher Educators will use technology to connect **globally** with a variety of **regions and cultures**

- 8.1 [Teacher educators will m]odel engagement using technologies to connect teacher candidates with other cultures and locations.
- 8.2 [Teacher educators will] will design instruction in which teacher candidates use technology to collaborate with learners from a variety of backgrounds and cultures
- 8.3 [Teacher educators will a]dress strategies needed for **cultures** and **regions** having different levels of technological connectivity.



Discussion | TETC 8: Theoretical Foundations

Crowdsourcing Process

"Global Competence" (van Roekel, 2010; Mansilla & Jackson, 2011)

- Awareness of global issues
- Appreciation of cultural diversity
- Global competitiveness

Delphi Process

Theoretical backgrounds of Delphi participants **may be diverse** and remain **implicit**.



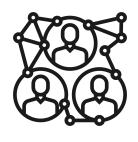
Discussion | TETC 8: Theoretical Foundations

→ The construct of culture itself remains undefined within the framework



"Closed" / structure oriented

- nationality and culture are closely linked
- perceived homogeneity
- allows for comparability and measurability in research
- → Reduces complexity

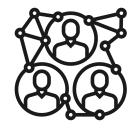


"Open" / process oriented

- Culture as "shared sense of normality" between members of a group
- individuals belong to various cultures / networks
- → Acknowledges complexity



Discussion | TETC 8: Theoretical Foundations



Consequences of an "Open" concept of culture

- "Zooming in & out" becomes possible (global cultures, national cultures, sub-/co-cultures)
 - → Digital communities / cultures
- Stereotypes & biases are actively addressed
- Prerequisite for meaningful intercultural dialogue within "global communities"



Limitations & Outlook



- Few analysis objects: In-depth analysis, but limited frameworks
- Narrow focus of analysis: In depth analysis, but only one main construct is explored



- The TETCs best meet the need to integrate an intercultural dimension into ICT-related educational competency discourse.
- Further international and diverse discourse is needed
- Training formats with TETC 8 as a guiding principle needed to foster teacher educators ICT-related & intercultural competencies



Contact

Questions or comments?

We are looking forward to your feedback. Please contact us via AcademicExperts or at:



KRISTINA FÖRSTER
Chair of School Pedagogy
University of Würzburg, Germany
https://go.uniwue.de/schoolpedagogy



Chair of School Pedagogy
University of Würzburg, Germany
https://go.uniwue.de/schoolpedagogy



References

- Baroni, A., Dooly, M., García, P. G., Guth, S., Hauck, M., Helm, F., Lewis, T., Mueller-Hartmann, A., O'Dowd, R., Rienties, B., & Rogaten, J. (2019). Evaluating the impact of virtual exchange on initial teacher education: a European policy experiment. Research-publishing.net.
- Bolten, J. (2014). Kultur' kommt von colere: Ein Plädoyer für einen holistischen, nicht-linearen Kulturbegriff. In E. Jammal (Eds.), Kultur und Interkulturalität (pp. 85-107). Springer.
- Borthwick, A. C., & Hansen, R. (2017). Digital Literacy in Teacher Education: Are Teacher Educators Competent? *Journal of Digital Learning in Teacher Education*, 33(2), 46-48.
- Deardorff, D. K., & Arasaratnam-Smith, L. A. (Eds.). (2017). *Intercultural competence in higher education: International approaches, assessment and application*. Routledge.
- Dervin, F., Moloney, R., & Simpson, A. (Eds.). (2020). *Intercultural competence in the work of teachers: Confronting ideologies and practices*. Routledge.
- Fantini, A. E. (2020). Reconceptualizing intercultural communicative competence: A multinational perspective. *Research in Comparative and International Education*, 15(1), 52-61.
- Foulger, T. S., Graziano, K. J., Schmidt-Crawford, D., & Slykhuis, D. A. (2017). Teacher educator technology competencies. *Journal of Technology and Teacher Education*, 25(4), 413-448.
- Jisc. (2014). Developing Digital Literacies. https://www.jisc.ac.uk/guides/developing-digital-literacies
- Meeus, W., Van Ouytsel, J., Driesen, A., & T'Sas, J. (2014). Media Didactica: A Media Literacy ReferenceFramework for Learners, Teachers and Teacher Educators. *Merz medien + erziehung*, 58(6),41-49.
- OECD. (2018). Preparing our youth for an inclusive and sustainable world. The OECD PISA glo-bal competence framework. https://www.oecd.org/education/Global-competency-for-an-inclusive-world.pdf



References

- Rathje, S. (2009). The definition of culture: an application-oriented overhaul. *interculture journal: Online-Zeitschrift für interkulturelle Studien*, 8(8), 35-58.
- Redecker, C. (2017). European Framework for the Digital Competence of Educators. DigCompEdu.

 https://www.researchgate.net/profile/ChristineRedecker/publication/329191291_European_Framework_for_the_Digital_Competence_of_Educators_DigCompEdu/links/5bfc01
 d7458515b41d0f6a0e/European-Framework-for-the-Digital-Competence-of-Educators-DigCompEdu.pdf
- Schröter, T., & Grafe, S. (2020). Digital Literacy and Digital Competency of University Teachers. A Systematic Analysis of Frameworks. In T. Bastiaens & G. Marks (Eds.), *Proceedings of Innovate Learning Summit 2020* (pp. 144-157). AACE. https://www.learntechlib.org/primary/p/218795/
- Tiede, J. (2020). Media-related Educational Competencies of German and US Preservice Teachers. A Comparative Analysis of Competency Models, Measurements and Practices of Advancement. *MedienPädagogik: Zeitschrift für Theorie und Praxis der Medienbildung*. Medien Pädagogik.
- Tiede, J., & Grafe, S. (2020, April). International Perspectives on the Media-related Educational Competencies of Teacher Educators. A Systematic Category-Based Comparison of Competency Frameworks. In *Society for Information Technology & Teacher Education International Conference* (pp. 1251-1260). AACE.
- Tondeur, J., Scherer, R., Baran, E., Siddiq, F., Valtonen, T., & Sointu, E. (2019). Teacher educators as gatekeepers: Preparing the next generation of teachers for technology integration in education. *British Journal of Educational Technology*, 50(3), 1189-1209.
- Uerz, D., Volman, M., & Kral, M. (2018). Teacher educators' competences in fostering student teachers' proficiency in teaching and learning with technology: An overview of relevant research literature. *Teaching and Teacher Education*, 70, 12-23.