

DIGITAL COMPETENCE AS A COMPONENT OF UNIVERSAL DESIGN FOR LEARNING (UDL) FOR ENGLISH TEACHERS

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Introduction

In the 21st century, digital transformation has significantly influenced educational systems worldwide. English teachers are expected not only to possess strong linguistic and pedagogical knowledge but also to demonstrate advanced digital competence. Within inclusive education, digital competence becomes especially important when applying Universal Design for Learning (UDL), a framework developed by CAST to ensure equal access to learning for all students. UDL promotes flexible teaching strategies through multiple means of engagement, representation, and action and expression. Digital technologies serve as essential tools for implementing these principles effectively in English language classrooms.

This thesis explores digital competence as a structural component of UDL and examines how English teachers can integrate technological skills to enhance inclusivity, communicative competence, and learner engagement.

Theoretical Foundations of UDL and Digital Competence

UDL is grounded in neuroscience and focuses on reducing barriers in curriculum design. According to CAST (2018)¹, UDL encourages educators to provide diverse learning materials, varied assessment methods, and flexible instructional approaches. Technology plays a crucial role in enabling this flexibility.

Digital competence refers to the confident, critical, and responsible use of digital technologies for teaching, communication, and professional

¹ CAST. (2018). *Universal Design for Learning Guidelines version 2.2*. Wakefield, MA: Author.
<https://udlguidelines.cast.org/>

development. The European Commission defines digital competence in its DigComp framework as involving information literacy, communication, content creation, safety, and problem-solving skills (European Commission, 2019)². For English teachers, digital competence includes the ability to use multimedia resources, online collaboration tools, virtual learning platforms, and digital assessment systems.

When aligned with UDL, digital competence allows teachers to create inclusive and adaptive learning environments.

Digital Competence within the Three Principles of UDL

1. Multiple Means of Engagement

Digital tools increase student motivation and participation. English teachers can use interactive platforms, gamified quizzes, discussion forums, and virtual collaboration tools to support diverse learners. For example, online polling systems and educational applications help shy or anxious students participate more confidently. Multimedia storytelling and project-based digital tasks also foster communicative competence by encouraging authentic language use.

Digital competence enables teachers to select appropriate tools, manage online interaction, and ensure safe digital communication.

2. Multiple Means of Representation

UDL requires presenting information in different formats. Digital competence allows English teachers to provide audio recordings, subtitles, interactive presentations, visual organizers, and adaptive reading platforms.

² European Commission. (2019). *DigComp 2.2: The Digital Competence Framework for Citizens*. Publications Office of the European Union. https://joint-research-centre.ec.europa.eu/projects-and-activities/education-and-training/digital-transformation-education/digital-competence-framework-digcomp/digcomp-30_en

For example, grammar explanations may be delivered through videos, infographics, and interactive simulations.

Assistive technologies such as text-to-speech software and captioned videos support students with learning difficulties. By integrating multimedia materials, teachers ensure that learners with different cognitive styles and language proficiency levels can access content effectively.

3. Multiple Means of Action and Expression

Students should be able to demonstrate learning in various ways. Digital competence enables English teachers to design alternative assessment formats such as video presentations, podcasts, digital storytelling, blogs, or online quizzes.

These tools align with communicative language teaching and the Common European Framework of Reference for Languages (CEFR), which emphasizes practical language use in real-life contexts. Through digital projects, students practice speaking, writing, listening, and reading in meaningful communicative situations.

Benefits of Integrating Digital Competence into UDL

Integrating digital competence into UDL offers several advantages:

1. **Inclusivity:** Technology reduces barriers for learners with disabilities or different learning needs.
2. **Flexibility:** Digital platforms allow differentiated instruction and personalized learning paths.
3. **Engagement:** Interactive tools increase motivation and active participation.

4. **Professional Growth:** Teachers continuously update their technological and methodological skills.

Furthermore, digital competence strengthens teachers' reflective practice, as online platforms enable feedback collection, peer collaboration, and professional networking.

Challenges and Solutions

Despite its advantages, integrating digital competence into UDL presents challenges. Some teachers may lack sufficient training or confidence in using technology. Limited access to digital infrastructure can also hinder implementation. Additionally, excessive reliance on technology without pedagogical purpose may reduce instructional quality.

To address these challenges, teacher education programs should include systematic digital training aligned with UDL principles. Workshops, mentoring systems, and practical assignments can help pre-service English teachers develop technological and methodological integration skills. Institutions should also ensure access to reliable digital resources and promote responsible digital citizenship.

Conclusion

Digital competence is an essential component of implementing Universal Design for Learning in English language education. It enables teachers to apply the three UDL principles effectively, creating flexible, inclusive, and communicative learning environments. By integrating digital tools thoughtfully and strategically, English teachers enhance student engagement, accessibility, and language development.

Therefore, the development of digital competence should be a priority in pre-service and in-service teacher education programs. Strengthening this

competence ensures that English teachers are prepared to meet the demands of modern, technology-rich, and inclusive classrooms.

References:

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3. European Commission. (2019). *DigComp 2.2: The Digital Competence Framework for Citizens*. Publications Office of the European Union. https://joint-research-centre.ec.europa.eu/digcomp_en
4. Florian, L., & Black-Hawkins, K. (2011). Exploring inclusive pedagogy. *Cambridge Journal of Education*, 41(4), 495–510. <https://doi.org/10.1080/0305764X.2011.625540>