SERIOUS GAMES FOR BUILDING DIGITAL SKILLS FOR EMPLOYABILITY

H. Tsalapatas\textsuperscript{1}, O. Heidmann\textsuperscript{2}, E. Houstis\textsuperscript{1}

\textsuperscript{1} University of Thessaly (GREECE)  
\textsuperscript{2} CERTH-IRETETH (GREECE)

Abstract

Digital skills are part of the basic competences with high demand in the work place. They are not only necessary for professionals in the ICT sector; diverse jobs in wide economic sectors require the capacity of a professional to deploy digital tools and services. For example, a store manager must manage inventory through a database, a professional in tourism must register customers into an on-line system and check availability of services, an educator needs to deploy digital tools in classroom contexts, an architect must design through a digital application, and more.

At the policy level, the Grand Coalition for Digital Jobs \cite{1} estimates that in the coming years there will be a shortage of up to 900K professionals in Europe in the ICT sector and ICT-using sectors. The New Skills for New Jobs Agenda \cite{2} and ET2020 \cite{3} both identify digital skills as core, basic competences that are desirable for students independently of area of study.

At the same time the EU-28 unemployment rate was 9.6\% in January 2017 while the youth unemployment rate was 19.7\% in 2015 according to Eurostat. These statistics demonstrate that there is a skills mismatch in the job market: one the one hand there is a shortage of professionals with digital skills while on the other youth unemployment rates are high.

Digital competences for employment are a broad set of skills that are related to how a professional in various field may use digital services and tools in job contexts for completing specific tasks or for becoming more effective in her job. Wide definitions of digital competences exist. Some related skills include: using software for text authoring, using software for image or video editing, surfing the Internet, using email, using social media, being safe on the Internet, performing economic transactions through digital services, being aware of one's digital footprint on the Internet, understanding the principles of copyright of information reached through the internet, and a lot more.

The EMPLOY project aims to help bridge the skills mismatch in the job market by building digital competences for employment among secondary education students. The project aims to achieve this objective through active, experiential learning approaches that expose learners to the way digital skills may be applied in work contexts. EMPLOY develops a serious game, namely a digital game designed for learning, through which learners build broad digital skills useful in work contexts. The game is designed for classroom deployment and is aimed as a complementary learning tool that an instructor may deploy towards enriching digital skill building educational practices. The game includes specific learning scenarios through which learners develop a contained set from the wide list of digital competences. The game simulates work in an office, challenging learners to complete tasks in the context of a typical a work day. The game is being evaluated in schools in Italy, Greece, France, Estonia, and Turkey.

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References:

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