

## DIGITAL LEARNING IN LEGAL EDUCATION: EDUCATIONAL POLICIES, PRACTICES, AND POTENTIALS OF PEDAGOGY-DRIVEN DIGITAL INTEGRATION

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**Abstract.** *This review research paper provides an insight into the broad framework of Digital Learning. The first part of the paper presents the conceptual, structural and pedagogical framework of Digital Learning, with reference to global, regional and national policies, instruction models and underlying digital integration processes. The second part examines Digital Learning in legal education and practices in developed countries, in Serbia, and at the Faculty of Law, University of Niš, before, during and after the Covid-19 pandemic. Based on the research findings and experiences from the first e-learning experience at the LF Niš (March 2020-May 2022), the author provides a brief analysis of Digital Learning and outlines the opportunities for a systemic integration of flexible Digital Learning formats into the contemporary legal education for academic, professional and work-related training purposes.*

**Key words:** *Digital Learning, policies, legal education, practice, pedagogy, integrated instructional design*

### 1. INTRODUCTION

The history of education demonstrates constant evolution of educational technology, instructional design and, most recently, digital technology. *Educational technology* refers to the ethical use of knowledge (educational theory, research, best practices) and instruments (devices, resources, tools, media, methods, strategies, processes and environments) that facilitate teaching/learning and improve instruction and performance through strategic design, management, implementation and assessment (AECT, 2024;<sup>1</sup> Janusewski, Molenda,

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<sup>1</sup> AECT (2024). A new definition of Educational Technology, [https://aect.org/news\\_manager.php?page=17578](https://aect.org/news_manager.php?page=17578)

2008:1). In addition to *analogue technology*,<sup>2</sup> the evolution of Information and Communication Technologies (ITC) in the 20<sup>th</sup> and the 21<sup>st</sup> century engendered the conceptual framework of *digital technology*. *Digital technology* encompasses digital devices (hardware), applications (software), environments (platforms), computer-based and web-based media, tools and resources<sup>3</sup> used to create content and present, process, record, store, circulate, send/receive it in a digital form (Mirrlees, Alvi, 2019:2; OUP, 2021).<sup>4</sup> As the effective use of both educational and digital technology rests on context-related educational purposes, pedagogy and curriculum design, *Instructional Design* (ID) is a systematic approach to planning, designing, developing, managing, implementing, analyzing and evaluating the entire system and individual elements of learning-centered instruction by using diverse ID models (Wagner, 2018: 2). The rapid advancement of digital technology in the 21<sup>st</sup> century has engendered the concept of **Digital Learning**, encompassing different forms of learning designed, supported, mediated, facilitated and delivered by using digital technology (CIPD, 2021:2). The Covid-19 pandemic (2020) has prompted educators to reassess the challenges and potentials of Digital Learning for contemporary learners and devise new opportunities for integration of digital technology for the purpose of learning, training and development.

In this context, the paper presents the conceptual, structural and pedagogical framework of Digital Learning, referring to global, regional and national policy frameworks, underlying processes and instruction models. The second part explores Digital Learning in legal education, including the practices in developed countries, in Serbia, and at the Law Faculty in Niš before, during and after the COVID-19 pandemic. Relying on research findings and insights from the first institutional form of e-learning at the LF Niš (March 2020-May 2022), the author provides a brief SWOT analysis and outlines the opportunities for a systemic integration of Digital Learning into the instructional design for the purpose of facilitating flexible learning in different academic, professional, workplace, and international contexts.

## 2. THE CONCEPTUAL, STRUCTURAL, AND PEDAGOGICAL FRAMEWORK OF DIGITAL LEARNING

### 2.1. The Conceptual Framework of Digital Learning

**Digital Learning** (hereinafter: DigLearning) is an umbrella term for different formal and informal models of learner/learning-centered, technology-supported learning designed, developed, mediated, facilitated and delivered in different digital environments by using a range of digital technologies (Wheeler, 2012:1109), but it may also be a combination of online and onsite instruction, depending on the available infrastructure, environments, devices, resources, etc. The development of DigLearning was triggered by rapid technological

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<sup>2</sup> *Analogue technology* refers to organic devices for presenting, recording, storing, sending/receiving information by turning an image/sound into electrical/radio signals, image and data of the same (analogous) type (CUP, 2021; OUP, 2021), e.g., radio, television, photocopier, record players, vinyl records, VHS tapes, tape/video recorder, printer, etc.

<sup>3</sup> E.g. e-books/readers, floppy disks, CDs, DVDs, Internet, collaboration tools (wikis, blogs, forums), smartphone apps, social media, gamification, etc. (Sutori/Seaton, 2021), and most recently: robotics, blockchain technology, cloud-computing, machine learning, artificial intelligence, virtual/augmented reality, quantum computing (PcW, 2023).

<sup>4</sup> In the context of digitalization, the term *EdTech* (digital technology in education) refers to EdTech industry, the providers of hardware (devices, servers, gadgets), software (operating systems, application, services) and learning platforms (Canvas, Blackboard, Moodle, Google Classroom) facilitating digital learning (Mirrlees, Alvi, 2019: 2,4 ).

developments, the emerging challenges to provide equal access to cost effective and supportive education, the need to address the learning habits/needs of ‘millennial’ learners and facilitate a flexible, dynamic, personalized, instruction, and the need to provide efficient professional training for the labour market through tailor-made programs reflecting real-life settings (Means, Bakia, Murphey, 2014:3-5).

The development of DigLearning in the 20<sup>th</sup> and 21<sup>st</sup> century has been embodied in various learning models using different digital technologies, pedagogical approaches and instruction models. As some of them are often confused, they are briefly clarified in the footnotes: Computer-Assisted Learning/CAL; Technology-enhanced learning/TEL<sup>5</sup>; Distance Learning/DL, Online Learning, E-Learning<sup>6</sup>; Flipped Learning/FL, Blended Learning/BL or hybrid learning<sup>7</sup>; Mobile Learning/ML, Virtual Learning/VL<sup>8</sup>, Machine/Artificial Intelligence Learning).<sup>9</sup> The latest trends are the AI technology and *Immersive technologies*<sup>10</sup> which

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<sup>5</sup> **Computer-Assisted Learning (CAL)** uses computer-based technology (software, floppy disks, CDs, DVDs) to support or supplement learning, commonly organized offline. In the 1990s-2000s, **Technology-enhanced Learning (TEL)** entailed the use of both analogue devices (OHP, video/audio players) and digital devices (computers, CDs, DVDs) to enhance learning in low-tech classrooms without the Internet. More recently, it refers to flexible spaces (open-source LMS, websites, apps, online resources, social media) to store or present material, provide discussion, collaboration and assessment tools (Bates, 2019:524) and video-conferencing platforms (Skype, MS Teams, Zoom).

<sup>6</sup> **Distance Learning** encompasses different forms of remote instruction conducted at a distance (physically separated learners and instructor) and delivered in synchronous (real-time) and asynchronous mode (at different times and locations): **a) print-based correspondence courses (1860-1970s); b) educational radio programs (1920-1930s); c) television-broadcasted programs (1960s); d) computer-assisted learning (1990s); and e) web-based learning (2000s) via LMSs, VLEs, MOOCs, OER, webinars, social media, smartphones, video-conferencing platforms** (Bates, 2019: 325-327).

**Online learning or e-learning** is *web-based* instruction fully designed and delivered electronically via the Internet, LMS platforms (Canvas, Moodle), video-conferencing tools (Zoom, Skype), virtual learning spaces (VLEs) or cloud-based 3D virtual worlds (*Second Life*). It may be formal/informal, synchronous/asynchronous, instructor-guided or self-paced, with content management, communication, collaboration, assessment, learning analytics (Learning Ladders, 2021).

<sup>7</sup> **Blended Learning (BL)** is a flexible blend of online and onsite instruction, which may be held in several formats: **a) Technology-enhanced learning (TEL)** -fully offline technology-enhanced instruction in class (PPT, online resources);

**b) LMS-supported learning** (Moodle, G-Classroom) for storing content, assignment submission, assessment, but classes are onsite (Bates, 2019:524-526); **c) Flipped classroom:** using pre-recorded content for self-study online and onsite classes for communication; **d) mainly onsite instruction (80%) with some online work (20%)** via LMS, smartphones, VC tools; **e) hybrid learning: integrating onsite (50-70%) with online classes (30-50%), or online classes (50-70%) with onsite practice (30-50%), or alternating offline and online classes (e.g. 2 weeks/months each); f) flexible learning** -mainly online with onsite lectures, lab or practice work (Means, Bakia, Murphy, 2014: 6-7).

<sup>8</sup> **Mobile Learning** entails the use of mobile devices (smartphones, tablets, i-pads, social media, apps). **Virtual Learning** refers to virtual learning environments/VLEs: virtual worlds, animations, simulations (Bates, 2019: 339, 669, 400).

<sup>9</sup> **Machine learning** refers to descriptive, predictive and prescriptive technologies enabling computers to identify patterns, analyze data, solve problem, generate results, make diagnostics/predictions, propose solutions without human input (e.g. smartphone diagnostics, predictive text, e-mail spam, Google search, Google translate, AI-language apps).

**Artificial Intelligence (AI)** is the capacity of intelligent machines to mimic human thinking, language and conduct, analyze data, perform automated tasks, make decisions without human interference (Columbia Engineering, 2023): e.g. smartphone assistants, customer-support chatbots, virtual tutors, writing assistants (*Grammarly*), content-writing ChatGPT.

<sup>10</sup> **Immersive technologies** refers to XR technologies (VR, AR, MR) experienced via a head-set. **VR** creates a completely artificial environment via a computer-generated simulation. **AR** augments the real world by overlaying virtual computer-

facilitate interactive learning experiences via real-time simulations in virtual Extended Reality (XR) environments: Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR). Commonly used in scientific research, simulated training and education, they facilitate innovative and personalized learning in authentic contexts, **developing AI/VR literacy**, virtual tutoring, etc. (UNESCO, 2023).

## 2.2. Evolving 21<sup>st</sup> century learning frameworks for Digital Learning

The advancement of digital technology and the changing needs of “millennial” learners prompted the process of reconsidering traditional education and devising a new 21<sup>st</sup> Century Learning Framework. It was first envisaged in the UN Sustainable Development Agenda (2002) and developed in subsequent documents: the P21 Framework for 21<sup>st</sup> Century Learning (2009)<sup>11</sup>, the UNESCO’s Integrated Learning for Sustainable Development (2012), the UN Sustainable Development Agenda 2030 (Goal 4: equitable quality education and life-long learning) (UNGA Resolution, 2015), the OECD Learning Compass 2030 (2015)<sup>12</sup>, the OECD Global Competence Framework (2018), and the UNICEF Transferable Skills Framework (2019) (OECD, 2023a).

At the EU level, the EC *Digital Agenda for Europe* (2010)<sup>13</sup> proposed harnessing the ICT potentials for developing the *digital society* (EC Digital Agenda, 2010:3).<sup>14</sup> Confident, critical and creative use of ICT for learning, employability, personal/professional growth and social inclusion was supported in the EP/EC Recommendation on Key Competences (2006),<sup>15</sup> which envisaged *digital competence* as one of the 8 key life-long learning competencies.<sup>16</sup> The EC Joint Research Center devised the *Digital Competence Framework* (2013) and a self-assessment tool (*DigComp Wheel*, 2015).<sup>17</sup> The framework includes 21 competencies classified in 5 competence areas: 1) *Information and data processing* (identify, retrieve, store, organize, analyze, evaluate data relevance); 2) *Communication in digital environments* (collaborate, share content; cross-cultural awareness, digital identity, netiquette); 3) *Content creation* (process/create/edit content, integrate prior knowledge; copyright); 4) *Safety and protection* (protect digital identity, data, privacy, mental health); 5) *Problem-solving* (make informed decisions) (Kluzer, 2015:4). The *DigComp Framework for Citizens* (2022) correlates DigComp with life-long learning competencies<sup>18</sup> (Vuorikari, Kluzer, Punie, 2022:51).

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generated content onto the real-world object (e.g. to display interactive 3D model). **MR** blends the virtual (VR/AR) content and the real world in an interactive experience (Northeastern University, 2023).

<sup>11</sup> The P21 Framework (2009) includes: 1) *Learning and Innovation skills* (communication, collaboration, critical thinking, problem-solving, creativity); 2) *Information, Media & Technology Skills* (information, media and ICT literacy); and 3) *Life & Career Skills* (knowledge, cross-cultural skills, social skills: flexibility, self-direction, productivity, leadership), as well as teacher-support: standards, curriculum, environments, assessment, professional development (P21, 2009:3-9).

<sup>12</sup> The OECD learning framework (2015) focuses on pedagogical objectives (knowledge, skills, attitudes, values), curriculum design, learner agency and competencies (OECD, 2019:4-7), as well as on the teaching framework, teacher competencies, learning environments, and curriculum implementation (OECD, 2023a).

<sup>13</sup> EC/European Commission (2010). A Digital Agenda for Europe, COM/2010/245, Brussels, 19.5.2010.

<sup>14</sup> The *Digital Agenda* (2010) addressed security and privacy issues, digital literacy, competences, inclusion, open access, transparent management, investments in research, infrastructure, etc. (EC Digital Agenda, 2010: 5-6).

<sup>15</sup> EP/EC Recommendation on Key Competences (2006/962/EC), L394, *OJ. EU*, 30.12.2006.

<sup>16</sup> They are: mother tongue, foreign languages; basic STEM/science, technology, math competences; digital competence; learning to learn; social/civic competences; entrepreneurship; cultural awareness (EP/EC Recommendation, 2006:7).

<sup>17</sup> See: Digital Competence (2023a). *Digital Competence Wheel*; <https://digital-competence.eu/>.

<sup>18</sup> E.g. see: EC-JRC (2023). Personal, Social, Learning to Learn competence framework for individuals (*LifeComp*); Open Education framework for HE institutions (*OpenEdu*).

In 2015, the EC-JRC issued the *DigComp framework for Organisations (DigCompOrg)* and a self-reflection tool (*Selfie for Schools*).<sup>19</sup> The DigCompOrg includes: 1) *Leadership & Governance*: mission, strategy, governance, stakeholders); 2) *Infrastructure*: digital technologies, physical and virtual spaces, tech support, safety, privacy, inclusion; management, learning analytics); 3) *Teaching & Learning*: digital competencies, instructional design, staff/student agency); 4) *Content & Curricula*: digital content, open resources, redesigned curricula, authentic learning); 5) *Collaboration & Networking*: staff-student communication, collaboration, knowledge exchange); 6) *Continuous Professional Development*: teacher-training courses, webinars); 7) *Assessment*: formative/summative, self/peer-assessment, personalized feedback; recognition of prior formal/informal/open learning; digital certification tools (digital badges). It also includes a sector-specific element, which is adaptable to particular institutional contexts. DigCompOrg offers a map for addressing technological, organizational and pedagogical issues at the institutional level, but it may also help policy makers design, implement and assess policy programs/projects (Kampylis, Punie, Devine, 2015:5-6,17-20).

In 2017, the EC-JRC developed the *DigComp framework for Educators (DigCompEdu)*, covering 22 competencies in 3 areas (professional competence, pedagogic competence, and learner's digital competence) and 6 aspects of using technology: 1) *Professional Engagement* (to communicate, collaborate, reflect on practices; professional development); 2) *Digital Resources* (select, create, modify, share resources); 3) *Teaching/Learning* (use technology in teaching, learner guidance, collaborative/self-regulated learning); 4) *Assessment* (analyze evidence, assess learning, provide feedback, plan further action); 5) *Empowering Learners* (enhance accessibility, inclusion, engagement, personalized and differentiated learning); 6) *Learners' Digital Competence* (promote learning, information/media literacy, critical thinking, problem-solving, content creation, ethical use of tools for communication/collaboration) (Redecker, Punie, 2017:16). The DigCompEdu is accompanied by a self-reflection tool (*Selfie for Teachers*)<sup>20</sup> and a self-assessment tool (on the A1-C2 CEFR scale).<sup>21</sup> In line with the labour market requirements, there are also free online self-assessment tools for assessing digital skills for employment purposes (Europass, 2024) and work-based learning (EC, 2023c).<sup>22</sup>

Early in 2020, the EC *Digital Education Action Plan (2021-2027)*<sup>23</sup> envisaged two strategic priorities for digital education: 1) to foster the development of *digital education ecosystems*, and 2) to enhance digital competencies for *digital transformation* (EC DigEdu Action Plan, 2020). It calls for a brief clarification of the key digital agenda processes: digitization, digitalization, digital transformation, digital divide, digital disruption, and the concept of digital learning ecosystems.

### 2.3. Processes underlying the integration of Digital Technology in education

**Digitization** is the process of converting *analogue* data (sound, image, text, video) into *digital* formats readable by computers (jpg, pdf, zip files). Digitized data are “interactive, distributive, replicable and reusable”; thus, the process enables handling, processing and storing data for subsequent use, display, reproduction, adaptation, and control (Brennan,

<sup>19</sup> See: EC (2023a). *Selfie for Schools*, <https://education.ec.europa.eu/selfie>.

<sup>20</sup> See: EC (2023b). *Selfie for Teachers*; <https://educators-go-digital.jrc.ec.europa.eu/>

<sup>21</sup> Digital Competence (2023b). *Self Assessment tool*, <https://digital-competence.eu/digcompedu/en/survey/qid-8430>

<sup>22</sup> Europass (2024). Test your digital skills! (online test), <https://europa.eu/europass/digitalskills/screen/home>; EC (2023c). *Selfie for work-based learning (WBL)*, <https://education.ec.europa.eu/selfie/selfie-for-work-based-learning>

<sup>23</sup> EC/European Commission (2020). *Digital Education Action Plan 2021-2027*, European Union, 2020.

Kreiss, 2014). Digitization of (cultural, historical, scientific) data is crucial for preserving the accumulated knowledge for posterity in the form of digital heritage. Thus, digitization facilitates digitalization.

**Digitalization** is a process of integrating digital technology in order to provide new opportunities, improve institutional capacities and personal competencies, increase effectiveness, reduce costs, introduce change or innovative practices (Brennan, Kreiss, 2014). It entails holistic planning, organization, management, collaboration, and related considerations: a) organizational change (administration, leadership, funds); b) digital infrastructure (Internet, digital services, devices, resources); c) digital support (tech staff); d) digital management, e) digital pedagogy; d) digital competences, etc. (Pettersson, 2021:189). The ultimate goal of digitalization is digital transformation.

**Digital transformation** is “the cultural, organizational and operational change of an organization, industry or ecosystem through a smart integration of digital technologies, processes and competences across all levels” (i-Scoop, 2021). It entails a systematic approach to planning, organizing, instituting and controlling digital transformation processes. Culture, workforce and technology shifts generate “new educational models and transform strategic directions, operations and values”, promote the **digital mindset** and stakeholders’ agency, and create a new quality (Brooks, McCormack, 2020:3). Yet, as paradigm shifts affect the existing structures, digital transformation inevitably includes two related phenomena: digital divide and digital disruption.

**Digital divide** was initially a gap between digital natives and digital nomads, proponents and opponents of digital technology, active users and non-users or reluctant users. Today, it refers to a disproportionate access to digital technology, resulting in social inequality, insufficient funds, inadequate resources, lacking opportunities (OUP, 2021).<sup>24</sup> Bridging the digital divide commonly implies ensuring equal learning opportunities by promoting digital infrastructure, competencies, digital rights (to access, use, control, protect data), etc. (UNICEF, 2021:5).

**Digital disruption** may be related to: a) the disruptive nature of digital technologies (AI, XR, Blockchain); b) disruptive social phenomena (policy changes, emergencies, pandemics); c) users’ expectations, conduct and use of technologies; d) disruptive use of technologies to institute change (i-Scoop, 2021). These disruptive factors have to be considered in devising DigLearning.

The integration processes have also generated the concept of **Digital Learning Ecosystems**. By analogy with ecosystems in biology, a *learning ecosystem* is defined as “a dynamic, evolving and interconnected network of educational spaces”, provided in physical and digital environments offering engaging, personalized, self-directed learning opportunities for knowledge-sharing, innovation and development (Hannon, Thomas, Ward, Beresford, 2019:9,11-13). These learning networks are well-structured, decentralized, learner-driven, adaptable and outcome-oriented systems, based on users’ needs and distributed governance. They include: multiple stakeholders; physical/digital infrastructures, services, resources and data repositories; structural/organizational/pedagogical design (Hannon, *et al.*, 2019:26,82,86). In view of technology integration, a **digital learning ecosystem** (DLE) is “an adaptive socio-technical system” facilitating interaction between “digital species” (infrastructure, learning spaces, services, resources) and “communities of users” (learners, educators, service providers, institutions, experts, employers, local/regional/global communities) in different educational,

<sup>24</sup> OUP (2021). Oxford Dictionary: digital divide; <https://www.oed.com/view/Entry/52611#eid6774712>

social and cultural settings (Laanpere, Pata, Normak, Põldoja, 2014:422-423). DLEs enable learners to share knowledge, create new content, collaborate in problem-solving/joint projects,<sup>25</sup> obtain micro-credentials (digital badges) for future learning/employment purposes, etc. As DLEs constantly evolve, they call for a new system-thinking mindset, “reconfiguration” of conventional education, and a robust physical, digital and organizational “architecture” for learning, research and innovation (Hannon, *et al.*, 2019:8,18,81).

The presented DigLearning framework clarifies the key technology-related concepts and integration processes, but it also maps the structural, organizational and pedagogical components of DigLearning, which will be summarized in the next subsection.

#### 2.4. The Structural and Organizational Framework of Digital Learning

The structural and organizational framework of DigLearning includes a range of essential components that have to be considered in designing effective DigLearning programs:

1. **Digital Strategy and Action Plan** at both national and institutional level: identify the mission, values, goals; digital capacity planning, management, development, innovation; investment in digital infrastructure, devices, services, resources, competences; learning environments, community networks; learning analytics; stakeholders’ roles (OECD Edu, 2020:6-7);
2. **Digital Infrastructure, Connectivity and Digital Learning Environments**: high-speed Internet, Wi-Fi connectivity; digital devices (computers, laptops, tablets, smartphones); educational hardware/software, cloud storage, tech support; digital environment (learning platforms, management systems, digital ecosystems, resources, social media) (OECD Edu, 2020:7-12);
3. **Data Management and Learning Analytics**: collection, analysis and use of data to address specific problems, tackle the digital divide, promote inclusion, cooperation and learning through internationalization, global/regional/local partnerships; open data standards, AI policy, digital assessment and credentials (OECD Edu, 2020:12-15);
4. **Digital Security, Ethics and Privacy**: data protection and safety in digital education, personal data security and privacy; ethical conduct in the digital environment, ethical guidelines on the use of data and training in using AI in research and teaching/learning (OECD Edu, 2020:22);
5. **Digital Learning Plan**: comprehensive, strategic plan: objectives, actionable goals, action steps, stakeholder roles, management, implementation, delivery, assessment/evaluation, monitoring/supervision; incorporating technology across the curriculum; integrating blended learning, virtual learning (VLE, VR, AI), collaboration projects (Hanover Research 2017:6);
6. **Digital Literacy**: students/teachers’ information/data/media literacy; teaching/learning skills; management skills, self-reflection; 4C skills: communication, collaboration, critical thinking/problem-solving, creativity/content-creation in digital environments (OECD Edu, 2020:18-20);
7. **Digital Competences**: enhance learners’ digital skills, self/peer-evaluation, autonomy, leadership, life-long learning; enhance teachers’ professional development: digital

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<sup>25</sup> See: Hannon, *et al.*, 2019:30,61,64; DigL ecosystems at the city, municipal and university level: *Remake Learning*, Pittsburgh, Pennsylvania (p.64); *Educació360*, Catalonia (p.30); *LenPolyGrafMash*, St.Petersburg, Russia (p.61).

design, content-creation, classroom management, delivery, self-reflection/assessment (OECD Edu, 2020:17-20);

8. **Digital Resources:** e-textbooks, audio, video, interactive software applications, games; digital lesson-planning, collaborative, feedback/assessment tools; open online resources/courses, platforms, learning hubs, digital ecosystems, AI/VR learning resources, etc.;
9. **Digital Content:** high quality digital content, materials, interactive content-based activities; digitization of learning materials; open access to contents; digital skills training for handling content; tech-supported ecosystems for developing quality content (OECD Edu, 2020:12);
10. **Digital Pedagogy:** instructional design for integration of digital technologies, professional development, digital skills (design, content-creation, presentation, delivery, assessment); self-assessment tools; guided, differentiated teaching/learning, etc. (OECD Edu, 2020:7-23).

Each of these aspects may be a huge challenge as well as an opportunity in the process of developing and implement DigLearning programs. Yet, as the purpose of digital integration is not technology *per se* but effective and purposeful learning supported and facilitated by digital technology for personal/professional growth and social inclusion, the instructional design necessarily entails a number of pedagogical and methodological considerations.

### 2.5. The Pedagogical and Methodological Framework of Digital Learning

The DigLearning pedagogical framework rests on the principles of several learning theories: 1) behaviorism (tech-based habit formation); 2) experiential/situated learning (learning by doing/being); 3) cognitivism (inquiry/problem-based learning by discovery); 4) connectivism (peer-learning through interaction); 5) constructivism (learning by constructing knowledge); 6) collaborative learning (community/project-based); 7) game-based learning (learning by playing); 8) Multiple Intelligences (ample ways of learning), including Digital Intelligence (DQ Institute (2019); 9) competency-based learning (outcomes/performance/evidence-based); 10) open learning (equitable, open to people, places, methods); 11) adaptive, personalized, self-directed, differentiated, negotiated learning (Bates, 2019).<sup>26</sup> Thus, DigLearning inevitably entails a flexible *integrated instructional design based on several ID models*,<sup>27</sup> which may be tailored to specific needs.

In the context of designing a digital learning ecosystem, Laanpere *et al.* (2014) proposed a the pedagogy-driven design based on three components: 1) *technology* (software with in-built tools); 2) *functionality* (user-friendly technical, social-interaction, learning functions), and 3) *pedagogy*. Pedagogy-driven design is seen as a blend of four approaches: a) *task-based instruction* (problem-based, situated learning in authentic contexts); b) *collaborative learning* (knowledge-sharing); c) *self-directed learning* (learner-driven, self-regulated); and d) *competence-based learning* (demonstrated knowledge/skills/attitudes/values). Activities include: a) *receptive* tasks (reading/listening/viewing); b) *information* tasks (data

<sup>26</sup> Bates, 2019: 74, 78, 82, 86, 125/126, 139, 145/146, 170, 179, 281, 368, 414/415, 453,458, 544, 566/588.

<sup>27</sup> In the US: ADDIE, SAM, ASSURE, Dick&Carey's (systems) model, Kemp's (holistic) model, Backward Design (EduTechnology, 2015), Universal Design (CAST, 2018), SAMR for integrating digital technology (EduTechnology, 2023); in the EU: *ABC-Learning Design* (acquisition, investigation, practice, discussion, collaboration, production); and *Four Components for Instructional Design*: tasks, support info, procedure, sub-tasks (Henderikx, Ubachs, Antonaci, 2022:33,36).



gathering/handling); c) *adaptive* task (engaging/modeling); d) *experiential* tasks (inquiry/practice); e) *productive* tasks (individual/group, oral/written creation); f) *communicative* tasks (discussions/presentations/role-play/simulations) (Laanpere *et al.*, 2014:424-425).

In terms of *quality assessment*, many states have instituted common national standards for instructional design.<sup>28</sup> In Europe, there are: *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ENQA, 2015), *Handbook for Quality in e-learning Procedures* (EADTU, 2015)<sup>29</sup>, and *Quality Assessment for E-learning: a Benchmarking Approach* (EADTU, 2016)<sup>30</sup>. The last one offers an *E-xcellence instrument* for assessing the key components: 1) Strategic management; 2) Curriculum design; 3) Course design; 4) Course delivery; 5) Staff support; and 6) Student support. Each component contains a checklist of benchmark statements, indicators, and guidance notes (EADTU, 2016: 13), which are applicable in any HE context.

The rapid technological development and the Covid-19 pandemic period (2020-2022) have contributed to raising awareness about DigLearning. Before this period, many countries promoted digital education through policies and interventions.<sup>31</sup> In the Covid-19 period, governments and institutions worldwide were compelled to institute some form of e-learning.<sup>32</sup> After the pandemic, the OECD Digital Education Outlook 2023,<sup>33</sup> including country-specific reports on managing digital transformation (OECD, 2023b), shows diverse approaches to DigLearning, exposes various digital divides, and indicates the need to reconsider the learning framework and improve the resilience and response of education systems in both emergency and regular circumstances.

### 3. DIGITAL LEARNING IN LEGAL EDUCATION

Legal education is traditionally rather conservative, hesitant and even reluctant to change practices deeply rooted in a specific legal tradition (Thomson, 2008:15; Weinberger, 2021:2013). This section explores the development of DigLearning in legal education, with reference to practices in developed countries, in Serbia, and at the Law Faculty in Niš.

#### 3.1. An overview of Digital Learning practices in developed countries

The history of US legal education shows that it initially rested on *ex-cathedra* lectures, the Socratic method (1775), and the case study method (Harvard, 1870) (Hirsh, Miller, 2004:3). In the 20<sup>th</sup> century, law schools started introducing courses on practical skills. After World War II, they introduced analogue technology, legal clinics (1960s), legal databases (Lexis, 1970), lawyer skills (1980s), computer-assisted instruction (CALI, 1992),

<sup>28</sup> *E.g. see:* NSQ (2007). National Standards for Quality Online Teaching; National Standards for Quality Online Programs, National Standards for Quality Online Courses (USA); QAA (2020). Digital Learning Taxonomy (UK).

<sup>29</sup> EADTU (2015) focuses on developing policy, student-centered pedagogy, course design, design skills, LMS/VLE management, learner-support, learning analytics, certification, etc. (Williams, Ubachs, Bacsich, 2015:2-3).

<sup>30</sup> EADTU (2016) provides a common assessment framework at 3 levels: a) macro-level (governance, theories, methods); b) meso-level (institutions, management), and c) micro-level (teaching/learning) (Zawacki-Richter, Jung, 2022:4).

<sup>31</sup> *See, e.g.* Conrads, Rasmussen, Winters, Geniet, Langer, 2017: 23-25.

<sup>32</sup> *See, e.g.:* EADTU (2022). The Envisioning Report for Empowering Universities (No.6), (ed.. G. Ubachs), European Association of Distance Teaching Universities, the Netherlands; <https://doi.org/10.5281/zenodo.6511424>

<sup>33</sup> *See:* OECD (2023 b). Country Digital Education Ecosystems and Governance: A companion to Digital Education Outlook 2023; <https://www.oecd.org/education/country-digital-education-ecosystems-and-governance-906134d4-en.htm>

and integrating web-based technology (Hirsh, Miller, 2004:3-4; Thomson, 2008:18). In the early 21st century, many law schools started providing distance learning via LMSs (2005), open MOOC courses (2012), and blended learning (2015). The integration of instructional technology was supported by relevant policy, pedagogy, design guidelines, web resources (*LegalED*), synchronous/asynchronous learning (tutorials, streaming, discussion boards, wikis, blogs, quizzes, collaboration groups, chat rooms, learning communities), online mentoring (*LawMeets*), virtual forums (*LawWithoutWalls*) for solving real-life problems in collaboration with lawyers, etc. (Pistone, 2015:593-602, WG on DL in LE, 2015:6).

An empirical research on DigLearning in legal education in the period 2010-2020 (Storr, McGrath, 2023) offers a glimpse into practices in the US, UK, Australia, New Zealand, Columbia, Sweden): flipped, blended and online learning, game-based learning, virtual learning (*Second Life*) for virtual law clinics and simulations, and various tools (podcasts, digital flashcards, e-portfolios). The article also stresses the need for promoting teachers' digital literacy, content-design skills and digital pedagogy (Storr & McGrath, 2023: (Storr, McGrath, 2023:128-129, 133).

In the UK, Ryan & Mcfaul (2020) report on digitalization in legal education, research and practice. Besides offering legal technology modules, some law schools integrate social media and virtual spaces into the curriculum and clinical education. The Open University created an online law clinic (Open Justice Centre, 2016), where students promoted their digital and employability skills by developing understanding of legal ethics, case management and client communication skills in real-life settings (Ryan & Mcfaul, 2020:4-6). The trainees also used mobile technology to disseminate information on discrimination and employment law, and a smartphone app (Open Justice VR, 2017) to practice presentation skills in simulated settings (Ryan & Mcfaul, 2020:7). Many UK law schools offer online degree programs.<sup>34</sup> In practice, the integration is reflected in the digitalization of evidence and judicial system (2016), digital services (divorce, pleas submission), virtual hearings in high criminal courts (2018), the Online Dispute Resolution platform (2016)<sup>35</sup>, and AI-based contract management platform (Ryan, Mcfaul, 2020:2-3).

In legal education and training, there are many virtual learning opportunities: *virtual campuses* for online courses/degrees<sup>36</sup>; *virtual exchanges* for international collaboration<sup>37</sup>; *virtual internships* for work-based learning<sup>38</sup>; case-law databases (HUDOC)<sup>39</sup>; online portals (E-Justice)<sup>40</sup> and professional networks (EJTN)<sup>41</sup> providing access to resources, services, learning spaces; and *digital learning ecosystems* connecting multiple stakeholders, providing services, and enabling collaboration, knowledge exchange or self-regulated learning (Harvard, 2024).<sup>42</sup>

<sup>34</sup> See: UKStudyonline.com (2023). Online Law Courses; <https://www.ukstudyonline.com/subject/law/>

<sup>35</sup> See: EC (2023). Online Dispute Resolution; <https://ec.europa.eu/consumers/odr/main/?event=main.home2.show&lng=EN>

<sup>36</sup> See: Learn.org (2023). Criminal Justice and Law Degrees, [https://learn.org/directory/category/Legal\\_Studies.html](https://learn.org/directory/category/Legal_Studies.html)

<sup>37</sup> See: EC (2020). Erasmus+ Virtual Exchanges; <https://erasmus-plus.ec.europa.eu/programme-guide/part-b/>

<sup>38</sup> See: Virtual Internships (2023). FAQs for Interns, UK; <https://www.virtualinternships.com/interns/faqs>; Leo Cussen Centre for Law (2023). Virtual Internships, Australia; <https://www.leocussen.edu.au/virtual-legal-internships> (It offers free, self-paced, simulated-environment lawyer-skills training in human rights, family and criminal law contexts).

<sup>39</sup> See: ECtHR (2023). HUDOC database, ECtHR Strasbourg, <https://www.echr.coe.int/hudoc-database>

<sup>40</sup> See: E-Justice (2023). The European E-Justice Portal; <https://e-justice.europa.eu/home?action=home&plang=en>;

<sup>41</sup> See: EJTN (2023). European Judicial Training Network; <https://ejtn.eu/about-us/>; <https://ejtn.eu/publications/>

<sup>42</sup> E.g. Harvard DigLearning ecosystem: Harvard Legal Heritage; Harvard Digital Library; Harvard University Press, HU open courses (in law, government, public policy, leadership) (Harvard Uni, 2024), HLS Library (HLS, 2024).

AI-technologies (AI-assistants, generative Open-AI ChatGPT, 2022) are increasingly used in legal research, case analysis, legal writing, drafting documents, etc. (BPP University, 2023). The immersive extended reality (XR) technologies are reported to have a huge potential in training and research, but their wider use is still limited by many factors: hardware/software costs, tech and curriculum support, teacher training, safety, privacy and ethical concerns on effects of their application (Satre, 2022:21-28). Aware of the increasing use of technology in legal practice, some universities introduce legal technology, data analytics, e-discovery, blockchain technology, and AI-related legal research and writing courses in their curricula (Michigan State University, 2024),<sup>43</sup> open MOOC courses on AI-related legal issues in different areas of law (Lund University, 2024),<sup>44</sup> or optional courses for teaching staff and students on AI and VR/AR technologies (Michigan Online, 2024a).<sup>45</sup> To facilitate students' hands-on learning experience in simulated VR/AR settings, some universities provide optional courses in soft skills (leadership, workplace communication skills, feedback in legal contexts, Academic English) (Michigan Online, 2024b).<sup>46</sup> Yet, most law schools do not provide either general courses or access to these technologies, and interested students have to resort to self-directed learning (Connell, Black, 2019:15) via open MOOCs or open AI ChatGPT.

These technologies have already found many applications in legal research, training and practice. There are reports on using immersive VR/AR technologies in criminology (delinquency, risk-assessment, sex crimes) (Van Gelder, 2023:5), digital forensics (crime investigation, reconstruction, processing evidence), law-enforcement training for the police (P&SN, 2020) and correctional facility officers (BSD XR, 2024). EdTech companies provide accounts on benefits for students, trainees, employers, practitioners and the judiciary (IFour, 2024).<sup>47</sup> In addition to automated applications (Amber Alert)<sup>48</sup> and AI legal assistants (Ross, 2016; Eve, 2023)<sup>49</sup> with large databases of statutory and case law in different legal areas (Connell, Black, 2019:14), the adaptive and autonomous AI-powered Law ChatGPT (2023) can analyze data, perform complex tasks, deliver multi-perspective arguments, and improve lawyer's efficiency.<sup>50</sup> While some legal practitioners warn about legal and ethical issues (copyright, data protection, privacy, health, safety) (BUSE/Wilucki, 2023), legal inaccuracies

<sup>43</sup> E.g. Michigan State University, College of Law (2024). Course Offerings in Technology and Innovation in Law; <https://www.law.msu.edu/lawtech/Courses.html>

<sup>44</sup> E.g. Lund University, Faculty of Law (2024). MOOCs: AI and Law; <https://www.law.lu.se/study/mooc-massive-open-online-courses>; available via Coursera: <https://www.coursera.org/learn/ai-law>

<sup>45</sup> E.g. see: Michigan Online (2024a). Teach-outs, Centre for Academic Innovation, Michigan University;

<sup>46</sup> E.g. see: Michigan Online (2024b): XR Innovation Projects, AI online courses, Soft skills

<sup>47</sup> This tech company provides an insight into possible applications of VR/AR/MR technologies in the legal sector:

a) *for law students*: 3D visualizations, interaction with 3D models, analysis of complex cases, presentation models, argumentation; debates, court proceedings and legal roles; "shadowing" lawyers and judges in daily work, etc.

b) *for employees/employers*: leadership, social communication, workplace and employability skills (presentation skills with feedback, interviews), junior staff training in simulated settings, process and exchange information, etc.;

c) *for trainees and lawyers*: crime scene investigation; discover evidence, prepare cases, test strategies, practice advocacy skills; observe outcomes in simulated trial; improve client engagement, prepare clients/witnesses for court;

d) *for the judiciary*: improve the justice system efficiency, enable witnesses, jurors, attorneys and judges to explore the crime scene, understand the case/processes and make better decisions (IFour, 2024).

<sup>48</sup> See: Amber Alert (2019). Amber Alert Factsheets, Oct.2019 (a warning system on abducted/missing persons)

<sup>49</sup> See: Ross Intelligence (2016); [https://www.youtube.com/watch?v=ZF0J\\_Q0AK0E](https://www.youtube.com/watch?v=ZF0J_Q0AK0E); Eve.legal (2023) Introducing Eve; <https://www.eve.legal/>; <https://www.eve.legal/blogs/introducing-eve>

<sup>50</sup> See: Law ChatGPT (2023). Meet Law ChatGPT, <https://lawchatgpt.com/blog/6-ways-to-use-law-chatgpt-for-legal-studies>

and “problematic” results generated by Law ChatGPT (Perlman, 2022: 1), others strongly believe these technologies which will be part of the 21<sup>st</sup> century legal world. Thus, in order to prepare prospective lawyers for practice, law schools should include such courses in the curricula and provide hands-on training experiences (Connell, Black, 2019:17).

The diverse efforts exerted in developing countries to integrate digital technology in legal education, training and research may be briefly compared with the situation in Serbia.

### 3.2. An overview of Digital Learning practices in the Republic of Serbia

In Serbia, the Internet was made publically available in early 1996.<sup>51</sup> Digitization started in 2002, in order to preserve the national heritage and enable access to digital resources (Ognjanović, 2022:2). The normative framework for digitalization has been established since 2005 by adopting various documents<sup>52</sup> promoting the ICT integration (Mitrović, 2017:4). In line with the 2015 UN Sustainable Development Goal 4 (education), the current National Strategy for the Development of Education by 2030 (2021)<sup>53</sup> highlights the role of ICT in raising the quality of education at all levels. The accompanying Action Plan (2021-2023) elaborates on specific goals: research, innovation, human resources, quality assurance, internationalization, and life-long learning (Government RS, 2021: 80-86). Digitalization has been supported by many normative acts<sup>54</sup> aimed at promoting quality Digital Learning. In particular, the digitalization of higher education (HE) refers to investing in infrastructure, digital competences, digital/hybrid instruction, and internationalization of study programs. The Ministry of Education adopted the *Digital Competence Framework (2019)*,<sup>55</sup> which envisages teacher training, piloting digital books, innovating curricula/syllabi, using e-gradebooks and *Selfie* tools (for teachers’ competencies). Relevant public institutions<sup>56</sup> have endeavoured to provide infrastructure, resources and teacher training, but these activities have been largely aimed at primary and secondary schools.

Although Serbian public HE institutions receive financial support in terms of infrastructure (Internet via academic networks, devices), scientific research projects, conferences and mobility (via EU Erasmus+ project), very limited support is provided for teacher-training and professional development opportunities related to DigLearning. HE institutions are largely left to their own resources and initiatives. Most HE staff are unaware of available self-assessment

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<sup>51</sup> The first academic Intranet was established in 1992 at the University in Belgrade, which was linked to the European academic network in 1995, but the Internet was publicly available since 1996 (RTS video, 2016; Nova energija.net, 2016).

<sup>52</sup> Strategy for the Development of the Information Society (2006, 2010); Telecommunications and ITC Services Act (2006); Strategy for Sustainable Development (2008); Strategy for Scientific and Technological Development (2010); Strategy for the Development of Education (2012) (Mitrović, 2017: 5-6).

<sup>53</sup> Government RS (2021). National Strategy for the Development of Education by 2030, *Official Gazette RS*, no.63/2021.

<sup>54</sup> Social inclusion Strategy (2016); Information Security Act (2016, 2017, 2019); Personal data Protection Act (2018), National Qualification Framework Act (2018, 2020); Science and Research Act (2019); Strategy for developing Artificial Intelligence (2019); Strategy for developing the Public Information System (2020); Strategy for developing the Digital Competence (2020) (see: Government RS (2021). National Strategy for Education by 2030.

<sup>55</sup> Ministry of Education RS (2019). *Digital Competence Framework: Teacher for the Digital Age* (2019).

<sup>56</sup> The Ministry of Public Administration (MPA), the Ministry of Education, Science and Technological Development (MEST), the National Institute for Advancement of Education (NIAE), the National Institute for Quality Assessment (NIQA) have developed supporting infrastructure: e-learning platforms, digital classroom, e-gradebooks, publications, guidelines, and recommended the use of *Selfie* assessment tools for teachers (See: MPA, MEST, NIAE, NIQA websites).

tools and useful guidelines for designing flexible blended learning.<sup>57</sup> HE qualifications are aligned with EU standards but there are no benchmarks, pedagogical guidelines or profession-specific resources for digital integration. The staff in subject-specific areas often lack technical and pedagogical training. As there is no systemic approach to promoting and supporting effective DigLearning, enhancing teachers/students' digital competencies and integrating DigLearning across the curriculum, digital transformation at HE institutions is either sluggish or standing at a standstill.

At the outset of the Covid-19 pandemic (mid-March 2020), HE institutions were taken by surprise: they had to "go digital" on the fly. The HE institutions which had already been using the open source Moodle LMS platform<sup>58</sup> simply kept using it. HE institutions without such an option had to resort to available tools: Google Classroom and video-conferencing platforms (Zoom, MS Teams, Skype, Google Meet). For most students and teachers, it was the first online learning/teaching experience. As for law schools in Serbia, there are very few articles on law students/teachers' experiences from this period.<sup>59</sup> The next part of the paper briefly presents the forms of instruction at the Law Faculty in Niš, before, during and after the Covid-19 pandemic.

### 3.3. An overview of Digital Learning practices at the Law Faculty in Niš

The LF Niš Computer and Information Centre was established in 1997 to provide technical support for administration, scientific research, education and student services. LF Niš is linked to the academic network (via the University of Niš) and has local Intranet and WI-Fi services.<sup>60</sup> In the pre-pandemic period, e-learning had not been part of educational practices but teachers used *technology-enhanced instruction* (computers and OHPs) in class since early 2000s and the Internet has been available since 2013.<sup>61</sup> The LF tech staff occasionally organized teacher-training on digital tools but there are no courses on digital competencies, digital content design, or emerging (AI/VR/AR) technologies. LF teaching staff are largely self-taught in using digital technology.

The first institutional form of online learning at the LF Niš was organized in the emergency circumstances of the Covid-19 pandemic (in March 2020). Due to the changing safety situation, LF Niš organized online instruction from mid-March 2020 to May 2022; the first two terms were fully held online, while the next two terms were held in a *hybrid* format (most students attended classes online but some students opted to attend classes at LF Niš). The instruction was provided via G-Classroom (for material sharing and assessment) and video-conferencing platforms (Zoom, Google Meet for online communication and collaboration). LF teachers were provided tech support on using Zoom and creating G-Classrooms, and given a week to get organized and prepare content for initial classes. Most teachers resorted to flipping the existing teaching materials and posting them in G-Classrooms on a class-to-class basis, while some teachers used pre-recorded files or online materials to

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<sup>57</sup> See: NIQA (2023). Guidelines for Online and Hybrid Learning; Moodle; Assessment; Open Education Resources, etc.

<sup>58</sup> See: RCUBeLearning (2024) and websites of Law Faculties in Serbia using Moodle (see links in final references).

<sup>59</sup> A Google search yielded very few results: a) one conference report on students' views on using MS Teams (Počuča, Matijašević, Zarubica, 2021), and one on teachers' experiences in online instruction (Matijašević, Carić, Škorić, 2021); and b) an extensive empirical research on law students and teachers' experiences at LF in Niš (Ignjatović, 2022).

<sup>60</sup> See: Pravni fakultet u Nišu (2024). Computer and Information Center.

<sup>61</sup> For the lack of official records, the data are based on the oral accounts of the LF Computer Centre staff (26. 2.2024).

support their instruction. Colloquia, tests and exams were organized when the pandemic subsided. The experiential learning by doing proceeded throughout the first term. The subsequent semesters provided a chance to revise the material and reconsider instructional design. This *ad hoc* approach was challenging for all participants: state administration, LF management, tech staff, teachers and students. It may be best illustrated by the results of an extensive empirical research (Ignjatović, 2022) on LF Niš students and teachers' experiences in this period (March 2020-May 2022). For the purposes of this paper, we may briefly review the respondents' perceptions on some important components of DigLearning.

On average, LF students assessed online instruction (mid-March 2020-May 2022) as follows: Ss' prior online learning (16,66%); positive attitude to e-learning (71.8%); digital skills (66.4%); digital platforms G-Classroom/Zoom (84.6%); quality of instruction (82.05%); Ts' agency (92%). LF teachers (N=22; 48%) assessed different stakeholders' agency (November 2020) as follows: ME (25.5%); LF Management (57.7%); LF tech staff (86.36%); LF teachers (80.5%), LF students (50%). Different aspects of online instruction were assessed as follows: LF digital infrastructure (80.9%); LF strategy/action plan/supervision (40.9%); learning platforms: G-Classroom (66.45%) and Zoom (82.6%); LF tech support for digital content-creation (40.96%); LF digitalization level (65.5%); Ts' prior online experience (22.5%); Ts' digital competences (63.6% in March 2020; 86.3% in May 2022; 71.9% in November 2022); Ts' perception of Ss' activity (41%) and learning (54.5%); Ts' use of formative (54.5%) and summative (49.9%) assessment; additional online applications, databases, tool (50%); Ts' attitude to e-teaching/learning (95% for hybrid learning) (Ignjatović, 2022:70-83).

The presented data clearly illustrate the strengths and shortcomings of e-learning at the LF Niš during the Covid-19 pandemic. Most importantly, they indicate the areas which should be addressed in future efforts to develop viable DigLearning opportunities and enhance digital transformation in legal education. Although the first-e-learning experience contributed to raising awareness about the relevance, benefits and potentials of DigLearning, the progress attained in digital integration has not been furthered in the post-pandemic period. Legal education at the LF Niš has largely relapsed into the traditional onsite instruction. It seems promising that quite a number of LF Niš teachers have kept using available online platforms (G-Classroom, G-Meet),<sup>62</sup> either for the sake of convenience (posting material and communication) or in an effort to preserve a form of blended learning. Notably, the international scientific conference annually hosted by the LF Niš has been held in a hybrid format (both onsite and online) since 2021. Yet, there is still a lack of systemic approach, investment and thorough consideration of flexible DigLearning options which may be integrated across the LF Niš curricula.

### 3.4. A brief SWOT analysis of Digital Learning

We may briefly review the strengths, weakness, threats and opportunities of DigLearning.

The presented conceptual, structural and pedagogical framework, as well as legal education practices worldwide, indicate many *strengths and benefits* of DigLearning:

- a) it is *flexible and adaptable* to specific contexts because it enables instruction: in different learning environments, via diverse digital tools, by using integrated instructional

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<sup>62</sup> Based on the data from the LF Niš students' services, obtained by the Computer Centre administrator (26. 2.2024), Google Classroom is used in 31 undergraduate courses, 46 master degree courses, and 2 doctoral degree courses.

design, in various formats (BL/ML) and modes (synchronous/asynchronous, virtual/live, online/onsite);

- b) it is relatively *inexpensive and cost-efficient* as it may be provided even by using modest open source tools and resources (free open resources, courses, books, whiteboards, etc.);
- c) it entails *collaborative, negotiated and differentiated learning* processes and *changed roles* of all stakeholders who are perceived as partners in the digital integration project;
- d) its multidimensional framework enables the integration of *pedagogy-driven* instructional design in authentic contexts and open *digital learning ecosystems* for life-long learning.

In DigLearning, teacher is no longer “a sage on the stage” but “a guide on the side” (Bates, 2019:554) who facilitates meaningful instruction in authentic contexts. Students are proactive agents who take full responsibility for their learning and have a voice and choice in the process. Competent authorities, LF management and tech services have the key role in providing strategic, financial, structural, organizational and technical support for the digital technology integration.

On the other hand, DigLearning entails ample **challenges and shortcomings**:

- a) insufficient strategic, financial, structural, organizational and pedagogical support;
- b) multiple lacks, insufficiencies and inequalities in integrating digital technology and resources for specific educational, professional and personal development purposes;
- c) the intrinsic complexity of integration processes (digitization, digitalization, digital divide, disruption, transformation) which may aggravate and slow down the stakeholders’ efforts.

In terms of *state authorities*, the major drawbacks are insufficient funding and promotion of DigLearning at HE level, lacking strategy/action plan for digital integration, lacking profession-specific benchmarks and guidelines for pedagogy-driven integration of relevant digital tools, etc. As for *LF Nis*, the major challenges involve insufficient funds, capacities and resources, teacher/student training on digital skills and new technologies, slow-paced development, etc. As for *LF Nis students*, their first online learning experience demonstrated average learner agency and awareness of DigLearning opportunities; although their competencies certainly improved, they need student-training courses on new digital technologies and online subject-specific courses promoting e-learning for educational purposes. As for *LF Niš teachers*, the surveyed teachers (48%) demonstrated a huge commitment to provide purposeful instruction in the given extraordinary circumstance and a considerable growth in digital competencies, but they also expressed the need for further teacher-training and ongoing tech support in the digital integration. Yet, as half of the LF teachers did not participate in the survey, it may be interpreted as resistance to Digital Learning, which remains an issue for further institutional consideration.

In addition to strategic (policy), financial, structural/organizational and pedagogical issues, there are ample technological, social, affective, personal and professional concerns which may adversely affect DigLearning.<sup>63</sup> The major **threats** are related to safety, privacy, data protection, mental health, ethics and values, which are additionally at risk by the rapid development and use of disruptive AI and XR technologies. These risks have to be addressed in DigLearning design.

Despite all challenges and risks, the provided examples from legal education worldwide show that DigLearning offers flexible **opportunities** for scientific research, knowledge-exchange, education and training in various academic, professional, work-related and social contexts, both in regular and emergency circumstances. To put them into practice,

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<sup>63</sup> For more, see: Ignjatović, 2022: 83-84, 86-88, 90-92.

there is a need for genuine *partnership* of all stakeholders which may eventually lead to changing the conventional mindset and instituting a paradigm shift, in line with the declared HE educational goals in DigLearning.

#### 4. CONSIDERATIONS FOR PROMOTING DIGITAL LEARNING IN SERBIA AND AT LF NIŠ

In spite of evident digitalization efforts, Serbia is lagging behind the developed countries in many respects. The current level of digital integration in legal education may be assessed as average, and it is likely to decline if DigLearning potentials are not fully recognized by all stakeholders. Considering the observed strategic, financial, structural, organizational, pedagogical and technological issues, the presented strengths, benefits and challenges may serve as a starting point for reflection, reconsideration and joint action in addressing the shortcomings and risks, and devising viable solutions for improving the quality of DigLearning in higher education.

Given the multidisciplinary and interdisciplinary nature of legal education, the integration of technology inevitably entails an *integrated instructional design* approach, based on pedagogy-driven integration and subject-specific requirements in terms of knowledge, competencies, attitudes and values envisaged in the LF undergraduate, graduate and post-graduate curricula. The presented practices in legal education worldwide and prior experiences of LF teachers and students may offer practical solutions for integrating DigLearning across the LF Niš curricula. We may sum up some opportunities by revisiting the key components of DigLearning design:

1. **Digital Strategy and Action Plan:** at the national level, it is essential to adopt separate national policy documents: *Strategy and Action plan for the Development of Higher Education*, and *Digital Transformation in HE* (including clear standards, benchmarks, indicators, goals, and guidelines for digital capacity planning, investment, management, development, innovation, security, stakeholders' agency), which may be subsequently used for developing digital integration strategy, action plan and learning plans at the institutional level;
2. **Digital Infrastructure, Connectivity and Digital Learning Environments:** ensure relevant support and investment in digital infrastructure (high-speed Internet, WI-FI connectivity in classrooms, hardware, software), access to digital environments via academic networks, etc.;
3. **Data Management and Learning Analytics:** ensure safe collection, analysis and evidence-based use of data to promote DigLearning, inclusion, internationalization of learning, global/regional/local partnerships; use learning analytics as support for technology integration; introduce institutional self-assessment via the EU *DigComp Selfie for Schools*;
4. **Digital Security, Ethics and Privacy:** ensure data protection, privacy and personal data safety; provide guidelines on ethical conduct/use of digital tools in education and research and teacher/learner training courses on security and privacy issues;
5. **Digital Learning Plan:** devise a holistic technology integration plan for collaborative, blended learning, virtual learning, open resources; devise design guides (with clear benchmarks, competences, goals, delivery modes, assessment) to be used in syllabus design and planning;



6. **Digital Literacy:** there is a need to promote students/teachers' information, data, media and digital literacy, as well as communication, management, content-creation, AI-literacy skills by organizing regular training courses and stand-by tech support;
7. **Digital Competences:** promote students' competencies (data/media/digital literacy) and self assessment via DigComp tools; promote teachers' competencies (digital design, content-creation, classroom management, assessment) and self-assessment via the *DigComp Selfie for Educators*; provide professional development options and recognize digital credentials;
8. **Digital Resources:** provide access to varied resources (open resources, databases, digital textbooks, interactive apps, games, collaboration/assessment tools); promote informal learning (virtual courses, internships, exchanges, professional networks, learning ecosystems);
9. **Digital Content:** promote material digitization; devise high quality digital content; ensure access to OER contents and ecosystems for developing quality content; provide content-creation training; devise interactive content-based activities and authentic assessment tools;
10. **Digital Pedagogy:** ensure teachers' ongoing professional development/training (in instructional design, content-creation, delivery, assessment); promote the use of self-assessment/self-reflection tools for educators; facilitate effective instruction in authentic contexts; correlate cognitive, affective, social and technical aspects of technology-based instruction; ensure systematic technology integration across the syllabus/curricula and knowledge/good practices exchange; use learning analytics for prospective development and innovation.

In the digital age, in addition to the traditional classroom settings, Digital Learning offers ample spaces, resources and tools for purposeful and innovative collaborative as well as differentiated and self-regulated learning mediated by digital technologies or technology-enhanced approaches (e.g. Blended Learning). Thus, instead of resorting to *ad hoc* approaches in emergency situations, it may be high time to reconsider the existing policies and practices, and ensure a more extensive, well-planned and well-supported integration of flexible DigLearning in Serbian legal education. The process of instituting quality DigLearning requires strategic and concerted action of all stakeholders as partners and active agents, genuinely committed to harnessing the available potentials to ensure new learning opportunities. If strategically postulated and funded (by authorities), adequately structured, managed and monitored (by institutions), properly blended with onsite instruction (by teachers) on the principles of pedagogy-driven design, and genuinely recognized (by students) as a life-long learning model, the DigLearning may provide highly meaningful and effective learning experiences in various formal/informal educational, professional development, scientific research, and authentic work-related or subject-specific contexts. Besides enhancing the systemic agency of all stakeholders, this interdisciplinary and transdisciplinary model may promote the development of various global, communicative and professional competencies, transferable and life skills in line with the contemporary learners' real-life needs. Finally, the systematic integration of DigLearning across the curriculum may contribute to developing the digital mindset and eventually lead to digital transformation in legal education, in line with the envisaged global and regional DigLearning frameworks and the 21<sup>st</sup> century sustainable development goals in HE.

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## DIGITALNO UČENJE U OBRAZOVANJU PRAVNIKA OBRAZOVNE POLITIKE, PRAKSE I POTENCIJALI ZA INTEGRACIJU ZASNOVANU NA PEDAGOŠKOM PRISTUPU

*Ubrzani razvoj digitalnih tehnologija uslovio je potrebu da se preispita tradicionalno shvatanje obrazovanja, prepoznaju potrebe novih generacija studenata i osigura implementacija milenijumskih ciljeva održivog razvoja u oblasti obrazovanja. Nova paradigma podrazumeva integraciju digitalnog učenja (Digital Learning) u korpus pedagoških pristupa. Početkom 2020.godine, suočene sa pandemijom Korona virusa (Covid-19), obrazovne institucije širom sveta bile su prinuđene da pribegnu nekom vidu online učenja. Digitalno učenje predstavlja spoj digitalnih tehnologija, infrastrukture, resursa, okruženja za učenje, interaktivnih alata, kompetencija, sadržaja, pedagogije i nastavnog dizajna.*

*Ovaj pregledni rad predstavlja rezultate istraživanja o digitalnom učenju u obrazovanju pravnika. Prvi deo rada predstavlja konceptualni, strukturalni i pedagoški okvir digitalnog učenja, sa osvrtom na obrazovne politike o digitalnom učenju (na globalnom, regionalnom i nacionalnom nivou), različite vidove digitalne nastave i procese u okviru digitalne integracije. Drugi deo rada istražuje primenu digitalnog učenja u pravnom obrazovanju u razvijenim zemljama, u Srbiji i na Pravnom fakultetu u Nišu pre, tokom i nakon pandemije. Na osnovu istraživanja i kratkog prikaza iskustava studenata i nastavnika PF u Nišu sa online nastave tokom Kovid pandemije (2020-2022), autorka daje kratku analizu prednosti, izazova, rizika i potencijala digitalne nastave. U završnim napomenama se ukazuje na aktivnosti koje bi omogućile efikasnu i kvalitetnu integraciju digitalnog učenja zasnovanog na pedagoškim principima integrisanog nastavnog dizajna. Umesto ad hoc pristupa online nastavi u vanrednim okolnostima, ova saznanja mogu biti od koristi u procesu planiranja, organizovanja, kreiranja i implementacije fleksibilnih formata digitalnog učenja na institucionalnom nivou kao i na nivou individualnih predmeta. Rad ima za cilj da podstakne saradnju svih aktera u cilju unapređenja digitalnog učenja za potrebe obrazovanja pravnika, naučnih istraživanja, profesionalnog usavršavanja i budućeg pravnog poziva.*

**Ključne reči:** *digitalno učenje, obrazovne politike, obrazovanje pravnika, prakse, pedagogija, integrisani nastavni dizajn.*