Complex Framework of Digital Learning Quality Assessment in Covid-19 Context: Survey Study for European and Oriental Languages Programs

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Abstract: The global pandemic and subsequent quarantine measures have posed an array of challenges to the complex comprehensive structures and procedures of higher education workflow, which influenced significantly the scope of individual experiences, projected outcomes, and estimated quality of higher education in countries across the world. This study focus is the in-depth assessment of individual perceptions and experiences of complex models of digital distance and blended learning by students of different tiers (Bachelor's level, Master's level, Graduate school level) in European and Oriental Languages university programs in regions of Ukraine through the span of educational activities in the time-frame of COVID-19 quarantine measures of March 2020 to January 2021. The survey is used to assess the parameters and challenges of individual quality and efficiency of translation of the complex system of real-life Foreign Languages Acquisition practices into the digital format, involving activation of interdisciplinary skills and cross-sectorial activities, implemented by ICT tools. The online survey of 14 universities in regional centres of Ukraine provides for disclosure of student comprehensive assessment of the complex framework of digitalized foreign languages education, systematized individual experiences, and quality estimation of e-learning and hybrid learning in the framework of COVID-19 lockdown.

1 INTRODUCTION

Theoretical problems of complex, holistic, multidimensional modelling of reality and its separate spheres (one of which within the English-speaking linguistics of the XX-XXI centuries is the sphere of development of the latest computer technologies) are directed by the deterministic interaction of objects, signs of their reception and interpretation (in the field of individual and collective consciousness), embodiment, consolidation and retransmission of the results of interaction of these systems of features.

In this regard, the fundamental dimension of being (as synonymous with the latter "reality", "realm" and "world" can be used) (Aristotle, 2014; Budko, 1990; Kireev, 2008) is defined as a heterogeneous concept that can summarize the multidimensional features of the world order: the world that really exists and is subject to direct perception; a world that is not subject to direct reception, but exists in reality; a world that is imaginary, unreal (for example the ideal, mythological images); reality, which exists objectively, regardless of human consciousness (nature, objective physical laws of the world order, space-time dimensions); the general way of life of humankind, society, culture, civilization.

Thus, the Computer Being dimension is understood as a fundamental ontological parameter that exists outside the scope of human mind and is involved in the perceptual field regardless of the will of the subject of cognition.

The intellectualization of modern global culture determines a qualitatively new approach to understanding the processes of parallel development of human activities and cognitive (intellectual) experiences. That is the origin and methodological premise of the concept of "Noosphere". The

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Noosphere is defined as the current stage of development of the biosphere, associated with the emergence of humanity in it (Kasavin, 1990; Gachev, 1993), and is interpreted as part of the planet and planet ambient with traces of human activity.

The integral real component of the Noosphere is identified as the Technosphere – a set of artificial objects (technologies) created by the humankind, and natural objects changed as a result of technological activity of humankind (Heim, 1993; Makhachashvili, 2020). In turn, Computer Being (computer reality, cyberspace) is a complex, multidimensional, interdisciplinary sphere of synthesis of reality, human experience and activity mediated by the latest digital and information technologies; technogenic reality, a component of the Technosphere of existence.

In the educational sphere, according to our estimations, the result of fundamental Technosphere shift, induced by the COVID-19 pandemic development and enhanced by subsequent digitalization measures, was the need to take quick comprehensive action (Makhachashvili, Semenist, Bakhtina, 2020) in order to achieve such desirable results: a) to adapt the existent complex educational scenarios to digital, remote and blended formats; b) to activate comprehensive complex skillsets, otherwise latent or underutilized in the educational process; c) to boost ICT competence and digital literacy of all participants of the educational process relocated to computer being.

The global pandemic of COVID-19 emerged as a kind of a black swan scenario or a singularity (event horizon) (Tu, 1994) for interdisciplinary domains of social and economic life, including education. The black swan theory is a concept that describes an event that comes as a surprise, has a major effect on society, and is often rationalized after the fact (Taleb, 2010).

The structure and procedure of higher education workflow in 2020-2021 were disrupted by a range of challenges, spawned by the global pandemic restriction measures, which influenced significantly the scope of individual experiences, projected outcomes and estimated quality of higher education in countries across the world.

Foreign Languages Acquisition at university level major programs is a rigorous process (Law of Ukraine, 2019) that involves different a complex arrangement of stages and a comprehensive regimen of communicative activities and competences across interconnected interdisciplinary domains. The presented study is a parcel of comprehensive institutional inquiry (*TRANSITION: Transformation, Network, Society, Education*) into the toll digitalization and amplified emergency use of ICT

tools put on different aspects of foreign languages acquisition efficiency, assessment, programmed results, soft skills and digital competency formation in COVID-19 lockdown paradigm.

The accumulated data so far has been seminal for a range of publications (Makhachashvili, Semenist, Bakhtina, 2020; Makhachashvili, Semenist, 2021), covering the issues of ICT tools efficiency rating regimen for foreign languages programs, isolated and comparative case studies of Oriental and European languages acquisition digitization procedures and best practices, student and faculty satisfaction with emergency online education measures.

The estimations of digital distant education state-of the-art, structure and quality, conducted across various studies in the pre-COVID-19 inquiry framework have spanned, among others, assessment of satisfaction with distance learning experience (Bekele, 2010; Bolliger, 2009); added value of online learning (Thiessen, Ambrock, 2011); evaluation of learning outcomes (Costareie, 2011); overall attitudes to distance learning (Salyers et al, 2014); challenges of online education (Markova et al, 2017), networking principles in e-learning (Smyrnova-Trybulska, Kommers et al, 2019).

These issues require a comprehensive revisit in terms of the toll the global pandemic took on complex framework transformation of educational formats to digital remote mode, subsequently, on the individual learning experiences and subsequent shift in quality estimations of linguistic education in universities due to the abrupt transition to exclusively distant, digital distant or hybrid learning formats as a mode of formal education and university degree acquisition (as opposed to being a mostly auxiliary learning method or an informal learning format).

This **study objective**, henceforth, is to estimate and critically review the quality assessment of complex, digitally enhanced formats of linguistic education via in-depth evaluation of individual digital distance and hybrid learning experiences and best practices by students of Oriental and European Languages of university programs in regions of Ukraine (Eastern Europe) through the span of educational activities in the time-frame of COVID-19 quarantine measures of March 2020 to January 2021. The survey and analysis of different ICT tools is used to assess the comprehensive array of parameters and challenges of individual quality and efficiency of translation of the real life Foreign Languages Acquisition practices into digital blended format, involving activation of interdisciplinary skills and cross-sectorial activities, assisted by ICT tools.

The study premise is based on identification of complex digital distant learning formats (u(biquitous)-learning (Crowe, 2007), m(obile)-learning, b(lended)-learning, hybrid learning) and modes for university educational programs and projected digital literacy requirements (European Commission, 2020; DQ, 2019; World Economic Forum, 2020).

2 METHOD AND SAMPLE OVERVIEW

The study employs the combination of mixed methods (Almalki, 2016) – a proportional arrangement of quantitative and qualitative inquiry to assess in-depth aspects of subjective and individual quality estimation of digital distant and hybrid learning. The comprehensive study design methodology included the following consecutive steps: 1) complex format of digital distant learning and application modelling; 2) The online survey method - based on D. Dillman's concept of mixed media and mixed mode surveys (Dillman, 2014) – applied to conduct in-depth assessment of individual digital distance and hybrid learning experiences and practices by relevant groups of stakeholders in Foreign Languages university level programs in regions of Ukraine; 3) digital content analysis of individual associations with different modes of learning by relevant groups of stakeholders in Foreign Languages university level programs in regions of Ukraine (via corpus and text-mining tools); 4) digital distance and blended learning models and procedures adaptation and customization, tailored to the individual and group needs of stakeholders in Foreign Language Acquisition on university level.

Based on the activity profile (digital distance and blended learning in Foreign Language Acquisition) an online survey was devised to assess in-depth subjective experiences of e-learning and hybrid learning in COVID-19 timeframe (March 2020 – January 2021) for students of Oriental languages (Mandarin Chinese and Japanese) and European Languages (English, French, Spanish, Italian) major programs.

The online questionnaire comprised of 21 questions total (multiple choice, ranking/scoring and open-end/short answer types), divided into groups, according to inquiry dimensions: 1) questions on overall assessment of individual experiences and quality estimation of e-learning and hybrid learning in the framework of COVID-19 lockdown and quarantine measures (March 2020 – January 2021) for university programs of Oriental and European languages; 2) questions on assessment of individual experiences and quality of e-learning and hybrid learning in the framework of COVID-19 lockdown as compared to traditional, face-to-face learning formats; 3) questions on individual quality assessment of learning process design, programmed leaning outcomes and projected competences for university programs of European and Oriental languages in the framework of COVID-19 lockdown and quarantine measures (March 2020 – January 2021).

A total 507 respondents total across programs of European and Oriental languages in universities of the capital city and regional universities of Ukraine took part in the survey. The following groups of stakeholders of the digital distant education in the timespan of COVID-19 pandemic measures were respondents of the survey overall in regions of Ukraine: Students of Bachelor's programs for Foreign languages (1st, 2nd, 3rd and 4th years of study) – 94,3%; Students of Master's programs for Oriental Foreign languages (1st and 2nd years of study) – 3,8%; Students of Post-graduate programs for Linguistics and Foreign languages (1st, 2nd, 3rd and 4th years of study) – 1,9%.

The survey sample geographic distribution covers the universities of the capital city of Ukraine (Kyiv) (3 universities) and a representative selection of regional universities of Ukraine (14 universities), offering major programs in Oriental (Mandarin Chinese, Japanese) and European (English, French, Spanish, Italian) languages on all three tier of educational levels according to the legislature of Ukraine (Law of Ukraine, 2019): undergraduate, graduate and post-graduate.

The regional parameters of the assessed universities allow to estimate complex quality assurance through individual experiences of e-learning and hybrid learning in the framework of COVID-19 lockdown across foreign languages programs in 9 regional city-centers of Ukraine (Kharkiv, Dnipro, Zaporizhzhya, Kropivnitski (Kirovohrad), Kherson, Odessa, Chernivtsi, Lviv, Lutsk) and 3 regional cities of Ukraine (Mariupol, Kryviy Rih, Dneprodzerzhinsk). The geographic distribution of the sample allows to feature all regions of Ukraine - North, East, South and West.

For the purposes of this study the survey results were scaled to feature students of European and Oriental languages programs of 14 regional universities of Ukraine (excluding the capital city – Kyiv) to estimate the parameters and challenges of the individual quality assessment of complex e-learning and hybrid learning formats in the framework of

COVID-19 lockdown, common for higher educational institutions of the regional scale.

The overarching research project hypothesis is the observable variation in the individual perception of e-learning and hybrid learning quality of foreign languages acquisition by different groups of stakeholders in different regions of Ukraine and in the capital city due to an arrangement of educational (core competences, soft skills proficiency), social and psychological (information fatigue, stress, community influence) and technological factors (digital literacy, digital divide, digital gap, pre-existing level of educational process digitization and e-learning experiences).

3 FINDINGS

3.1 Modelling of Complex Digitally Enhanced Learning Formats

For the purposes of this study digitally enhanced or electronic learning (e-learning) is estimated as a form of ubiquitous learning (u-learning) that involves learning in an environment with full access to digital devices and services at any given moment (Van't Hooft, 2007).

As a parcel of the Technosphere shift in comprehensive human activity, parameterization principles of a concept of electronic (or digitally enhanced) interaction and communication in the paradigm of the humanities in general (Makhachashvili, 2020), allow to identify the features of e-learning as a complex object system pertaining the following parameters: Ubiquity; Ontocentrism; Integrativity; Automorphism; Normativity; Communicative substantiality; Information capacity; Interactive framework meta status.

Through the fragmented set of qualitative features, digitally enhanced (electronic) learning framework is tangent to the concepts of complex frameworks of cognitive outlook and activity, such as: 1) Model of the world/worldview (inclusivity, integrativity, automorphism); Linguistic worldview/mapping (communicative substantiality; interactive framework meta status); Noosphere (ontocentrism, information capacity).

The integrative concept of e-learning stands as a complex synthesis of these frameworks (Figure 1):
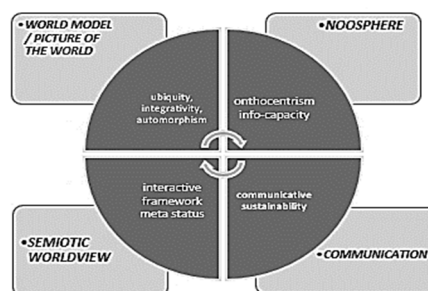

Figure 1: E-learning profiling against complex cognitive systems.

The framework evolution and innovation of e-learning as a complex system of human activity in the digital age, is determined by a range of qualifying conditions of its emergence, existence and transformation in the COVID-19 timeframe, including: 1) exhaustive synchronization of the object, phenomenological and anthropological planes of educational activities and procedures of ICT development; 2) exhaustive output of parameterization isomorphism of ontological (substance phenomenological), anthropic and digitized structures of reality and educational activity; 3) flexibility, adaptability and dynamic potential of the educational activities enhanced by ICT tools and digital technology (that is fulfilled, in particular through info-capacity, hybridization, and evolution of the basic functional features of the learning process).

COVID-19 quarantine measures, put in place country-wide in educational institutions Ukraine in the time spans of March-June 2020, October-December 2020 and January 2021 have demanded the simultaneous employment and overlap of the following structurally complex learning formats: e-learning 1.0 (direct synchronous computer assisted distant instruction); e-learning 2.0 (asynchronous computer-assisted collaborative learning) (Trentin, 2010); blended learning (in-person teaching with asynchronous ICT assisted learning methods) (Voorn, Kommers, 2013; Dos Reis, 2015; Boyarsky, 2020); hybrid learning (synchronous instruction of in-presence and remote students via ICT tools) (Duff, 2020).

Modelling of the comprehensive framework of educational activities and experiences in foreign language acquisition transformation into digitally enhanced format is, therefore, possible through an interoperable set of parameters (Figure 2): 1) Time; 2) Space; 3) Communicative distance; 4) Dependence on ICT tools and infrastructure; 5) Level of complexity.
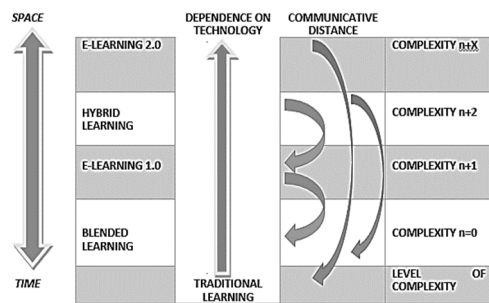
Figure 2: Model of Complex Digital Learning Formats.

Based on the level of quarantine alert, adopted in regions of Ukraine, different level of complexity was utilized for educational activities in universities: e-learning 1.0/2.0 (for red and orange zones of quarantine) and hybrid learning (for yellow zones) formats were implemented.

3.2 Complex Digitally Enhanced Learning Formats Individual Quality Assessment: Survey Results

Profiling and subsequent modelling of complex digitally enhanced learning formats that permeated the foreign languages acquisition landscape in the timeframe of COVID-19 measures informed the content and structure of the survey, conducted among Oriental and European languages primary stakeholders to assess the in-depth individual experiences among the estimated parameters of digitally enhanced distant learning models: Complexity; Subjective efficiency; Information and communication efficiency; Learning outcomes efficiency.

Overall assessment of individual experiences and quality estimation of e-learning and hybrid learning in the framework of COVID-19 lockdown and quarantine measures (March 2020 – January 2021) for university programs of European and Oriental languages – yielded the following representative results.

The assessment of overall comprehensive individual experience (or a take-away) of e-learning and hybrid learning in the framework of COVID-19 lockdown by different groups of stakeholders was conducted according to the 5-Point Likert Scale (a response scale in which responders specify their level of engagement with a statement or a parameter in five points: (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree (Handbook, 2010). The extremum points for evaluation were 1 (maximum negative overall experience of e-learning and hybrid learning) and 5

(maximum positive overall experience of e-learning and hybrid learning).

Students of Foreign languages programs of all levels in regional universities of Ukraine evaluated their comprehensive individual experience of e-learning as predominantly 4 – mostly agreeable (34,3% of respondents), 3 – Average (30,6%), 5 – most agreeable – 21,3%.

The average estimation of the overall individual satisfaction with e-learning and hybrid learning experience on Oriental and European Languages programs by students of regional universities of Ukraine is 3>4 – average to mostly agreeable.

Qualitative assessment of the e-learning and hybrid learning was conducted through the retrospective evaluation of respondents' individual experience in order identify and select the preferred features and elements of e-learning and hybrid learning among the following: Ability to work from home; Ability to customize of the study space (video conferencing or LMS); Adaptability and flexibility of the work schedule; Save time for commute; Parallel performance of several tasks and activities; Opportunity to technologically diversify educational activity, educational materials and methods; Ability to adapt the structure and content of curricula of disciplines to the conditions of online learning; Ability to activate and improve different types of soft skills; Opportunity to improve digital literacy; Ability to work independently in the learning process; No need for constant interpersonal communication; Ability to engage international professionals through digital means.

Quantitative assessment demonstrated that students of Foreign languages programs of all levels have distributed preferred features and elements of e-learning and hybrid learning and identified the significantly top ranking ones as follows: 1) Ability to work from home (75,5% of respondents); 2) Parallel performance of several tasks and activities (50%); 3) Adaptability and flexibility of the work schedule (47,2%); 4) Ability to work independently in the learning process (38,7%).

Most common preferred features of e-learning and hybrid learning by all groups of students of Foreign languages programs of all levels in regional universities of Ukraine are correspond directly to the framework complex skills (WEF, 2020), identified as relevant for the job market of the 2021-2020 timespan – flexibility, adaptability, active learning, time-management.

Qualitative evaluation of respondents' individual experience through the span of March 2020 to January 2021 allowed to identify the features and

elements of complex e-learning and hybrid learning, considered drawbacks, challenges or a hindrance to overall quality: Forced need to work at home (uncomfortable living conditions); Impossibility / difficulty of adaptation and flexibility of the work schedule; The need for specialized technical means of training and online communication / technical limitations; Lack of interpersonal communication with students and colleagues on a regular basis; Emotional burnout; The need to activate and improve different types of soft skills; The need to improve digital literacy; Increasing the amount of workload in preparation for training sessions and ensuring the learning process; The need to adapt the structure and content of curricula of disciplines in terms of online learning; The need to organize and control the independent work of students; Availability of mechanisms for control and accounting of the educational process.

Quantitative assessment distributed drawback features and elements of e-learning and hybrid learning as follows (Figure 3):
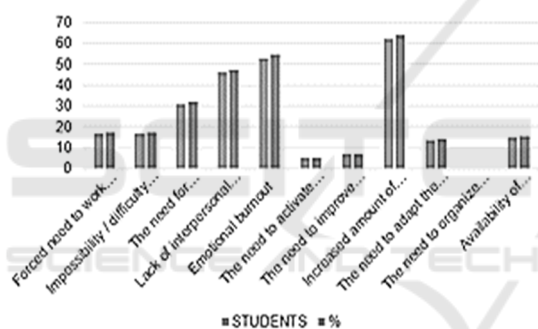

Figure 3: Drawback features and elements of e-learning and hybrid learning.

Top features and elements of complex e-learning and hybrid learning framework, considered challenges or a hindrance to quality of education by all respondents are: 1) Increased amount of workload in preparation for training sessions (63,9%); 2) Emotional burnout (54,6%); 3) Lack of interpersonal communication on a regular basis (47,4%); The need for specialized technical means of training and online communication / technical limitations (32%).

Qualitative assessment of complex foreign languages acquisition process by respondents allowed to select the following indispensable elements of the educational design: Conducting lectures; Conducting practical classes; Development of training materials and materials for assessment; Execution of tasks (volumes, format, method of presentation); Organization of group work of students; Organization of independent work of students; Organization of

creative work of students; Organization of research work; Communication with students (current); Communication with students (advisory); Informal communication outside the learning process / mentoring and moderation; Assessment (formative, summative, qualification).

Each element of educational design was subjected to ranking by all groups of students according to the 5-Point Likert Scale in terms of its efficiency for e-learning and hybrid learning quality assurance.

Respondents of Oriental and European languages programs of all levels have identified the following elements of the educational design and management as ranking highest (*5 – most conductive for quality of e-learning and hybrid learning in individual experience*): Conducting lectures (52% of respondents); Organization of group work of students (42%); Summative assessment (38%); Organization of independent work of students (29,5%); Communication with students (current) (29,5%).

Respondents of Foreign languages programs of all levels selected the e-learning and hybrid learning educational process elements that are conductive to quality of complex learning experiences outside of the COVID-19 framework and are preferable to be retained and implemented on a regular basis. The following elements of hybrid and e-learning scored highest as desirable to be retained in the complex framework of the educational process past of the COVID-19 emergency digitization measures: 1) Electronic tests and assessments online – 70,8% of respondents; 2) Use of e-textbooks and materials – 55,7%; 3) Online classes through video conferencing systems – 54,7%; 4) Communication through electronic resources – (mail, video, chat services, social networks) – 53,8%.

Qualitative and quantitative comparative assessment of individual experiences and quality of e/hybrid learning in the framework of COVID-19 lockdown and face-to-face learning formats yielded the following representative results.

Respondents of all groups were asked to compare the individual experiences and estimations of quality and efficiency of traditional, face-to-face in-presence learning and hybrid or e-learning in the timeframe of the COVID-19 lockdown (respondents were instructed to disregard their individual assessment of blended learning or online learning prior to 2020). The comprehensive comparison of individual quality assessment of traditional learning (TL) and e-learning (EL) was ranked according to the 5-Point Likert Scale (5 – maximum quality and efficiency, 1 – minimum quality and efficiency) – Figure 4:
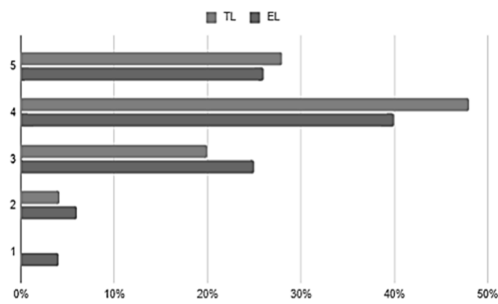
Figure 4: Comparison of individual experiences ranking of traditional learning (TL) and e-learning (EL).

Respondents of foreign languages programs of all levels have estimated the comparative framework quality of traditional and e-learning in the following way: 1) 4 – mostly qualitative and efficient (TL – 48%, EL – 40% of respondents); 2) 5 – most qualitative and efficient (TL – 28%, EL – 26% of respondents); 3 – average in quality and efficiency (TL – 20%, EL – 25% of respondents); 4) 2 – low in in quality and efficiency (TL – 4,1%, EL – 6% of respondents); 5) 1 – poor in quality and efficiency (TL –0%, EL – 4% of respondents). The average score of framework quality and efficiency comparison for traditional learning (TL) and e-learning (EL) by all groups of students in regional universities of Ukraine is 4 – mostly qualitative and efficient. The assessment of e-learning ranks higher in reverse correlation to the estimated quality of traditional learning formats.

The respondents of all groups were prompted to contrast their individual assessment e-learning and hybrid learning against the prior to COVID-19 timeframe paradigm of experience of traditional in-presence learning. In-presence learning (TL) was estimated as a conventional 100% of potential quality of education process and learning outcomes for European and Oriental languages programs. Accordingly, the respondents were to scale their assessment of e-learning and hybrid learning quality from 0% (no correspondence to TL quality in individual experience) to 100% (full correspondence to TL quality in individual experience) in 10% increments.

According to survey data in regional universities of Ukraine, e-learning and hybrid learning satisfaction in the timespan of COVID-19 scores the highest quality approximation to traditional learning in such regional centers as: Kharkiv (East) – 85% comparative score to TL; Lviv (West) – 80% comparative score to TL; Zaporizhzhya (South) – 80% comparative score to TL; Dnipro (South-East) – 78% comparative score to TL. The accompanying

social, educational and technological factors that contributed to this results are estimated as follows: 1) Satisfactory to high level of digitalization in surveyed universities (prior to quarantine measures); 2) High level of blended learning implementation in the classrooms of European and Oriental languages surveyed; 3) High level of digital literacy of students (individual and institutional); 4) High level of international mobility prior to quarantine measures that informed implementation of e-learning techniques.

Respondents of all groups were prompted to evaluate the efficiency of adaptation of each educational design element, heretofore identified as conductive to quality of e-learning and hybrid learning format in the framework of COVID-19. The scale of 5 (most efficiently adapted for complex e-learning and hybrid learning format) to 1 (least efficiently adapted for complex e-learning and hybrid learning format) was applied. Respondent identified the following elements of the educational design and management as ranking highest (5 – most efficiently adapted for e-learning and hybrid learning format): 1) Conducting lectures (54% of respondents) 2) Independent work of students (42% of respondents) 3) Assessment (summative, qualification) (35% of respondents); 4) Practical classes/seminars (34% of respondents); Training materials and materials for assessment (34% of respondents). Of the elements of educational design, identified heretofore as instrumental to e/hybrid learning quality, "Communication with students (current)" *didn't score* as efficiently adapted to the emergency digital learning format.

Qualitative content analysis of the individual experiences of foreign languages programs students through hybrid and e-learning was conducted via Voyant Engine (https://voyant-tools.org/) – a family of digital cloud-based corpus and text-mining tools. Each respondent submitted at least three (3) free ranging concepts that were individually associated with hybrid and e-learning through the COVID-19 pandemic timespan. The concepts (words and phrases) and associations were originally supplied by respondents in their native languages (Ukrainian and Russian).

The key notions, thematically foregrounded in the corpus sample, that designate individual experiences of students in Oriental and European languages programs of all levels in regional universities of Ukraine: ONLINE (frequency index 0,12); TIME (frequency index – 0,078); LACK (frequency index – 0,039); SCHEDULE (frequency index – 0,039); WORK (frequency index – 0,039); CONVENIENCE (frequency

index – 0,025); COMMUNICATION (frequency index – 0,022); STRESS (frequency index – 0,022). Identified foregrounded concepts correspond to the dimensions of the complex digitally enhanced learning formats modelling.

The collocation content analysis of foregrounded notions allows to identify the following predicate frameworks that shape the subjective quality assessment of complex hybrid and e-learning experiences by students of foreign languages programs in regional universities of Ukraine (Figure 5): 1) LACK =>(of)=.> communication; 2) LACK =>(of)=.>convenience; 3) LACK =>(of)=.> digital/online connection; 4) LACK =>(of)=.> resources; 5) LACK =>(of)=.> teacher/mentor.
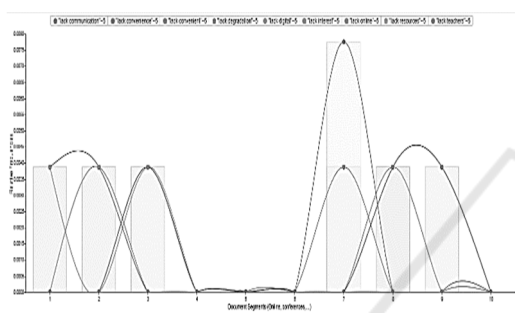

Figure 5: Collocation content analysis of individual e-learning and hybrid learning experinces.

Preliminary qualitative assessment allowed to identify and select the following generic challenges that impaired effective and qualitative adaptation of complex learning design for foreign languages programs into hybrid and digital distant format: 1) *Social and psychological*; 2) *Technical challenges and digital literacy*; 3) *Soft skills.*

Students of foreign languages programs have identified the following challenges and limitations of efficient and qualitative complex transformation of educational elements into hybrid and e-learning format in their individual experience: 1) Technical difficulties (lack of stable Internet connection, lack of necessary equipment, capacity of household computer equipment) – 68% of respondents; 2) Fatigue – 59,6% of respondents; 3) Emotional burnout – 45,2% of respondents; 4) Stress – 45,2% of respondents.

Most of the challenges of the 'digital literacy' type specifically feature as relatively insignificant in individual experiences of students of all levels. Such distribution of technical challenges testifies to the phenomenon of *digital gap* (DQ, 2019; WEF, 2020), pervasive in various areas of educational activities in the framework of Covid-19 lockdown. That placed

students as an age group, as mostly representatives of the "*digital native*" generation – a term by M. Prensky (2001) – at a significant advantage in the hybrid and digital educational process through the implementation of emergency quarantine measures of 2020 and 2021.

4 CONCLUSIONS

The global pandemic and subsequent quarantine measures and restrictions have significant influence on the complex structure and procedures of higher education workflow, which informed the scope of individual experiences, projected outcomes and estimated quality of higher education in the realm of Foreign languages acquisition in all regions of Ukraine.

The survey results on the individual experiences and quality assessment of e-learning and hybrid learning in the framework of COVID-19 lockdown yield comprehensive data on the parameters and challenges of e-learning and hybrid learning complex transformation of Oriental and European languages programs, common for students of higher educational institutions of the regional scale and status across Ukraine.

The qualitative assessment of the complex e-learning and hybrid learning framework was conducted through the retrospective evaluation of respondents' individual experience that helped identify the comparative coordinates of positive and negative dimensions of the latter. The invariant positive quality indicators for e-learning and hybrid learning across all groups of students surveyed are the opportunity for multitasking, digital skills improvement and lack of commute expenditure. The invariant negative quality indicators for e-learning and hybrid learning across all groups of students surveyed across the regions of Ukraine are the lack of interpersonal communication, technical impediments and psychological states (fatigue, burnout, stress).

The contrastive exposure of individual experiences and quality of e-learning and hybrid learning in the framework of COVID-19 lockdown against the backdrop of traditional, in-presence learning formats identify e-learning and hybrid learning as mostly to average comparative in quality across all regions of Ukraine. Regional distribution of contrastive assessment of hybrid and e-learning permits to further disclose social, economic, cultural and political factors, that inform the overall success of educational formats adaptation for Oriental and

European languages programs in different regions
Ukraine.

Assessment of complex learning process design,
programmed leaning outcomes and projected
competences allowed to identify the types of
challenges that impaired effective and qualitative
adaptation of learning process design into hybrid and
digital distant format as predominantly socio-
psychological for students of all groups surveyed in
regions of Ukraine.

The presented study is *limited* in scope to the
indicative survey results, exemplifying the outlined
quality assurance dimensions of complex e-learning
and hybrid learning implementation for foreign
languages programs in regional universities of
Ukraine, induced by COVID-19 measures. The *future
inquiry* includes fine-tuned estimation of the in-depth
subjective quality assessment and subsequent
efficiency assessment of hybrid and e-learning in
different regions of Ukraine and Europe; contrastive
studies of Oriental and European languages programs
emergency digital distance format adaptations in the
COVID-19 timespan; efficiency assessment of ICT
tools instrumental to quality assurance of complex
digital and hybrid learning formats.

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