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TABLE OF CONTENTS

FOREWORD ix

PROGRAM COMMITTEE xiii

KEYNOTE LECTURES xvii

SPECIAL TALK xix

FULL PAPERS

M-LEARNING IN HIGHER EDUCATION: TECHNOLOGY OWNERSHIP AND COMMON ATTRIBUTES AMONG MILLENNIALS IN SOUTH AFRICA 3
Chama Devi Ramchurn, Sumarie Roodt, and Sarah Mulaji

A REFERENCE MODEL FOR MOBILE PLAYFUL LEARNING ENVIRONMENTS 11
Jan Maushagen and Olga De Troyer

USING MOBILE TECHNOLOGY TO PROMOTE HIGHER-ORDER THINKING SKILLS IN ELEMENTARY MATHEMATICS 19
Debbie Marie B. Verzosa, Ma. Louise Antonette N. De Las Peñas, Jumela F. Sarmiento, Maria Alva Q. Aberin, Mark Anthony C. Tolentino and Mark L. Loyola

FOUR CORNERS OF THE WORLD: PROJECT-BASED LEARNING IN A MULTICULTURAL VIRTUAL ENVIRONMENT 27
Michael Stoica, Dmitri Nizovtsev and Russell E. Smith

ONLINE STUDIES IN HIGHER EDUCATION DURING THE COVID-19 PANDEMIC: STUDENTS' PERSPECTIVE 35
Edita Butrime and Vaiva Zuzeviciute

INTERNATIONAL TEACHER TRAINING COURSES - A NEW STEP TO GLOBALIZATION 43
Iliana Mirtschewa

A TRAINING DESIGN FOR PUBLIC SPEAKING ANXIETY 50
Charito G. Ong and K Marie D. Zambas

THE MICRO:BIT AND COMPUTATIONAL THINKING. EVALUATION RESULTS OF A COMPUTATIONAL PROJECT 57
Gerhard Brandhofer

AN INITIAL SUSTAINABLE E-LEARNING AND GAMIFICATION FRAMEWORK FOR HIGHER EDUCATION 65
Aidrina Sofiadin and Muna Azuddin

PRE-SERVICE TEACHER TRAINING FOR REALITIES OF 21st CENTURY CLASSROOMS 74
Osman Sadeck, Moses Moyo, Nyarai Tunjera and Agnes Chigona

PROBLEMS AND OBSTACLES OF DISTANCE LEARNING IN THE POINT OF VIEW OF PRIMARY SCHOOL TEACHERS IN THE "COVID PERIOD" 83
Zuzana Svobodova, Martin Kursch and Jaroslav Veteska

DISTANCE LEARNING IN THE TIME OF COVID-19 LOCKDOWN: NEW OPPORTUNITIES FOR INFORMATION AND COMMUNICATION TECHNOLOGIES IN EDUCATION? 91
Marion Utéza and Christophe Reffay

IMMERSIVE VIRTUAL REALITY (VR) CLASSROOM TO ENHANCE LEARNING AND INCREASE INTEREST AND ENJOYMENT IN THE SECONDARY SCHOOL SCIENCE CURRICULUM 99
Dennis Choon Guan Pang

ICT TOOLS FOR FINAL QUALIFICATION ASSESSMENT SURVEY STUDY FOR EUROPEAN AND ORIENTAL LANGUAGES PROGRAMS 107
Rusudan Makhachashvili, Ivan Semenist and Anna Bakhtina

IS ACADEMIC SUCCESS JUST A MATTER OF SHOWING UP? A STUDY OF THE CONTRIBUTION OF INDIVIDUAL DIFFERENCES AND ATTENDANCE TO PERFORMANCE 116
Maura A. E. Pilotti

OPTIMIZING VIDEO TUTORIALS FOR SOFTWARE TRAINING THROUGH CUEING 127
Vasiliki Ragazou and Ilias Karasavvidis

A MIXED METHODS STUDY OF ENGINEERING UNDERGRADUATES' ADAPTIVE LEARNING EXPERIENCES 135
Seok Joo Kwak and Joi-Lynn Mondisa

ORAL FLUENCY: BASIS FOR DESIGNING A COMMUNICATIVE COMPETENCE STRUCTURED MODULE 143
Charito G. Ong and Eunice Villegas

CHANGES IN THE TEACHING METHODOLOGY AND THE STUDY OF THE ADAPTATION OF STUDENTS TO THE NEW TECHNOLOGY: FROM THE CANVAS METHODOLOGY TO THE ACCENTUATION OF THE FLIPPED METHODOLOGY 150
María Teresa Bendito Cañizares and Francisco Javier Sánchez Botas

EASY TECHNOLOGY DESIGNS FOR INNOVATIVE LEARN-ING 161
Marc Beutner and Rasmus Pechuel

PIANO STUDENTS' PERSPECTIVES AND EXPERIENCES WITH REMOTE PIANO INSTRUCTION 168
Gwendolyn C. Jefferson

ICT TOOLS FOR FINAL QUALIFICATION ASSESSMENT SURVEY STUDY FOR EUROPEAN AND ORIENTAL LANGUAGES PROGRAMS

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ABSTRACT

The global pandemic and subsequent quarantine measures and restrictions have posed a challenge to the structure and procedure of university summative assessment process. Qualification assessment for Foreign Languages major programs in particular is a strict regimen process that involves different stages (oral and written exams, final project viva, internal and external review). This study seeks to analyze the practices of Borys Grinchenko Kyiv University digital qualification assessment for students of European (French, Italian, Spanish, English, German) and Asian (Mandarin, Japanese) Languages major programs, employed in the year 2020 due to quarantine measures. The survey and analysis of different ICT tools is used to translate real life qualification assessment practices into online blended format. The investigation also seeks to identify various groups of applied digital skills and collaboration skills, utilized through qualification assessment process by all parties (students, faculty and referees). Comparative results of ICT tools and practices efficiency for respondents of European and Oriental languages programs are provided.

KEYWORDS

ICT Tools and Practices in Education, Final Qualification Assessment, Digital Literacy, Blended Learning, European and Oriental Languages Acquisition

1. INTRODUCTION

The global pandemic and subsequent quarantine measures and restrictions have posed an array of challenges to the structure and procedure of university summative assessment process. Qualification assessment for Foreign Languages major programs in particular is a strict regimen process that involves different stages (oral and written exams, final project viva, internal and external review).

This study **objective** is to critically review the applied case and best practices of Borys Grinchenko Kyiv University Digital Final Qualification Assessment for students of European (French, Italian, Spanish, English, German) and Oriental (Mandarin Chinese, Japanese) Languages major programs, employed in the year 2020 due to quarantine measures. The survey and analysis of different ICT tools is used to translate real life qualification assessment practices into online blended format. The investigation seeks to identify various groups of applied digital skills (Dos Reis 2015; Eduventures 2020) and soft skills (Abbott 2013; Hymes 1972; Morze, Makhachashvili, Smyrnova-Trybulska 2016), utilized through qualification assessment process by all parties (students, faculty and referees).

In the educational sphere, according to our estimations, the result of the COVID-19 pandemic development was the need to take quick action in order to achieve such desirable results: to adapt the existent educational scenarios to digital, remote and blended formats; to boost ICT competence and digital literacy of all participants of the educational process. This study aims to identify, among other parameters, challenges for actual and underdeveloped skills (hard, technical and soft), that participants of the educational process encountered through Final Qualification Assessment in programs of European and Oriental Languages.

The study **design** included the following qualitative and quantitative methodological elements: 1) Educational activity profiling for Finale Qualification Assessment; 2) The online survey method (Dillman 2014) applied to assess The Final Qualification Assessment for European and Oriental languages programs,

performed in digital and blended format; 3) the method of Final Qualification Assessment ICT tools efficiency ranking based on the user satisfaction quotient model.

According to the Law of Ukraine "On Higher Education" (Law 2019), Finale qualification assessment can be profiled as the establishment in compliance with learning outcomes (scientific or creative work) of higher education students with the requirements of the educational (scientific, educational and creative) program and / or the single state qualifying exam. The form of state certification of students is defined by the state standards of education and is reflected in the curricula of the Free Economic Zone. Usually state certification has two forms: 1. State exam; 2. Defense (viva) of Qualification (Bachelor's) paper/project.

In the situation of the COVID-19 pandemic lockdown all elements of the Final Qualification Assessment at Borys Grinchenko Kyiv University for European and Oriental Languages programs have been transformed to the digital, remote or blended format with the use of ICT tools. The qualification assessment regimen was adapted to digital format as a framework (a legal procedure that results in the degree confirmation of a student), the string of consecutive activities according to the legal procedure described in the profile above, the "ritual" scenario (and experience for the student that is emotionally uplifting and somber in nature, connects with the traditions of the university culture of Europe).

According to the law mandate, the following Qualification Assessment activities for European and Oriental languages programs at Borys Grinchenko Kyiv university have been transferred to digital remote mode: State exam conduct (introduction, oral answers, grading, discussion, results); State Exam card selection; State Exam assessment; State Exam results declaration and appeal; Bachelor’s project submission; Bachelor’s project review; Bachelor’s paper/project viva; Bachelor’s project assessment; Bachelor’s project results declaration and appeal.

2. ICT TOOLS FOR FINAL QUALIFICATION ASSESSMENT FOR EUROPEAN AND ORIENTAL LANGUAGES: SURVEY STUDY

2.1 Questionnaire Overview

Based on the activity profile (Final Qualification Assessment) a survey was conducted among the participants of the Final Qualification Assessment at Borys Grinchenko Kyiv University Foreign European and Oriental languages programs (Spanish, French, Italian, English, Mandarin Chinese, Japanese major) in order to assess the efficiency of qualification assessment transfer into digital format via various ICT tools employed.

The survey comprised of 12 questions total (multiple choice and scoring), divided into such categories: 1) questions on overall experiences of Final Qualification Assessment participants in all procedures, conducted via ICT tools; 2) questions on digital literacy skills, required of Final Qualification Assessment participants; 3) questions on soft skills, required of Final Qualification Assessment participants; 4) questions, aimed to conduct Efficiency Ranking (Dos Reis 2017; Morze, Makhachashvili, Smyrnova-Trybulska 2016) of most widely used Final Qualification Assessment ICT tools.

2.2 Survey Results for European and Oriental Languages Programs

The following participants of the digital Final Qualification Assessment were respondents of the survey: students of senior year of Bachelor’s program – 53,4% of respondents; assessment board members – 15,5%; faculty members (who took part in digital qualification assessment preparation and conduct) – 20,7%; Bachelor project referees and supervisors – 8,6%. Respondents of all groups took part in the survey – 59 total. The survey sample covers all the participants of Final Qualification Assessment in European and Oriental languages programs exhaustively, in the timeframe of the COVID-19 lockdown through the spring semester of 2020. The choice of respondent groups corresponded to the variation or similarity of tasks, performed throughout Final Qualification Assessment by representatives of European and Oriental languages programs and, subsequently, the variation and similarity of ICT tools used.

Respondents of all groups spanned the 4-year foreign language Bachelor’s programs in proportional distribution measures: Spanish major program - 32,8%; Japanese major program - 19%; Mandarin Chinese major program - 22,4%; French major program - 15,5%; Italian major program - 15,5%; English major

program- 8,6%. Students of all Bachelor's programs (senior year) surveyed had 4 years of the major foreign language training (European or Oriental) and 3 years of the minor foreign language training (European or Oriental). The spring (final) semester of foreign languages programs was conducted remotely in digital format due to country-wide quarantine measures.

The overall digital qualification assessment experience on the scale of 1 to 5 was defined as mostly agreeable (4) by 50% of respondents, most agreeable (5) by 29% of respondents and less agreeable (3) by 17% of respondents across all foreign language programs surveyed. Digital activities got overall rankings of 5-4 from respondents of European languages programs and 4-2 from respondents of Oriental languages programs.

The respondents identified all the ICT digital tools that they have to employ the most in digital qualification assessment process (Figure 1). The highest scoring ICT tools by all the groups of respondents of both European and Oriental language programs were: e-mail (93% of respondents), Google services (76% of respondents), videoconferencing services (84% of respondents), social media platforms (77% of respondents), automated testing systems and learning management systems (31% of respondents).

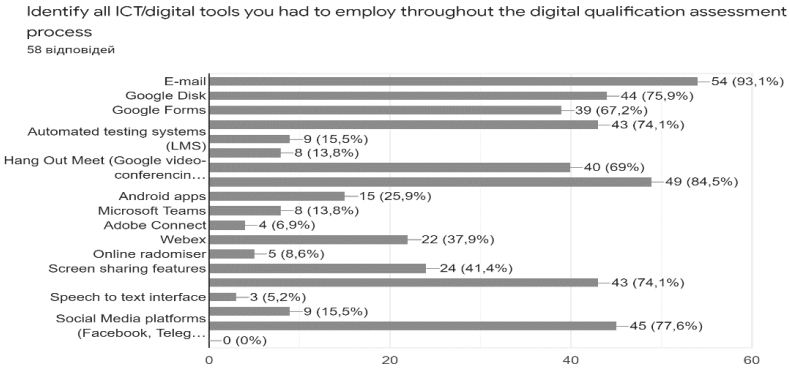

Figure 1. ICT tools identification through the digital qualification assessment

The ranking 1-5 of the ICT tools employed through digital qualification assessment process yields following tools getting the highest scoring (5 – most agreeable) among all ICT tools identified and used: email services; google forms; Zoom video conferencing services; screen sharing services; Microsoft Office tool-kit and various social media platforms.

The respondents identified the following most prominent activities across all ICT tools used throughout the digital qualification assessment process: Communication (synchronous); Communication (asynchronous); Collaboration; Information/file sharing; Summative assessment; Formative assessment; Peer review; Presentation; Speech quality assessment; Brainstorming.

Respondents from European languages programs identify Information sharing as and overwhelmingly prominent (59,1%) across all ICT tools employed for Final Qualification Assessment (Figure 2):

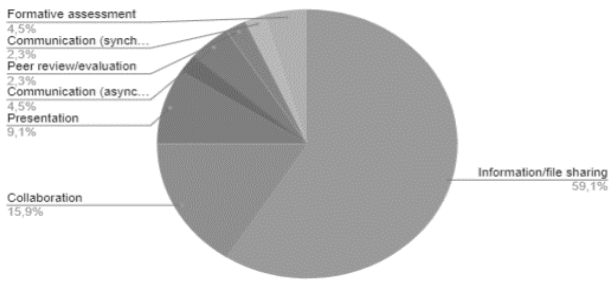

Figure 2. Activities prominent for ICT tools in Finale Qualification Assessment. European languages

For respondents of Oriental languages programs Speech quality assessment features as prominent as Information sharing across identified ICT tools (Figure 3). The following is inferred as being due to the phonetical and tonal features of Mandarin Chinese and Japanese languages being essential to meaning comprehension and decoding, which is hard to recreate and evaluate in a digital communicative environment.

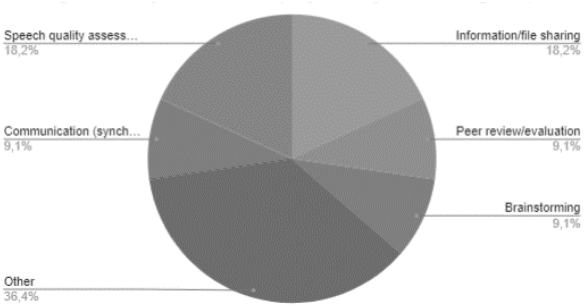

Figure 3. Activities prominent for ICT tools in Finale Qualification Assessment. Oriental languages program

Information sharing and presentation are considered prominent for such types of tools as email, Google services, Microsoft Office Toolkit. Both synchronous and asynchronous communication and collaboration is distributed proportionally among email services, learning management systems and various video conference services. The tools that feature summative assessment as a prominent activity are Google forms and LMS Moodle. Formative assessment as a type of activity features but does not dominate evaluation of ICT tools used qualification assessment process.

The *following technical and user requirements*, most prominent for ICT/digital tools employed throughout the digital qualification assessment process were identified: Bandwidth; Specialized software; Specialized hardware (webcam, mic, PC type etc.); Intuitive interface; Advanced digital literacy; Intermediate digital literacy; Elementary digital literacy; Customized training before use.

Respondents of the European languages program have assessed the dominant ICT tools requirements (Figure 4) being Intuitive interface (28,8%), elementary digital literacy (26,9) and specialized software (17,3%).

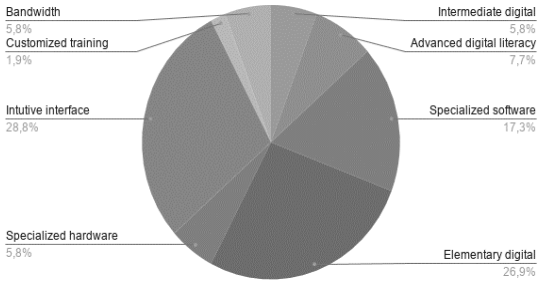

Figure 4. Technical and user requirements for ICT tools of qualification assessment for European languages

Respondents of the Oriental languages program have assessed the prominent ICT tools requirements (Figure 5) being Intuitive interface (31,8%), elementary digital literacy (31,8) and bandwidth and advanced digital literacy (9,1).

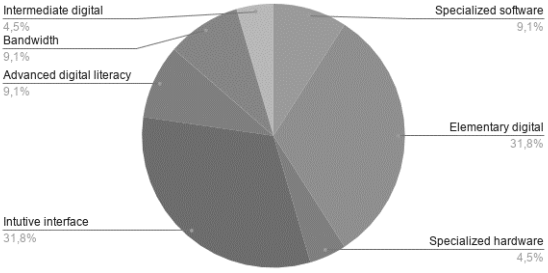

Figure 5. Technical and user requirements for ICT tools of qualification assessment for Oriental languages

It bears pointing out, that according to the status criterion in Final Qualification Assessment, different technical requirements are attributed importance by different respondents, regardless of the foreign language program (Figure 6 and Figure 7):

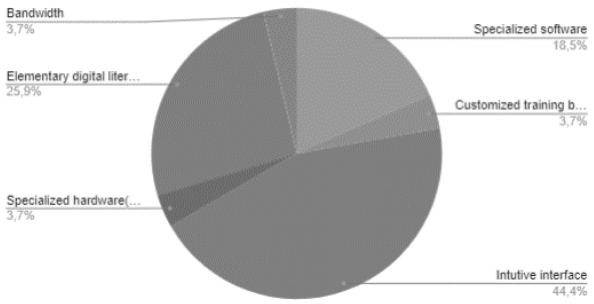

Figure 6. Technical and user requirements for ICT tools of qualification assessment for students

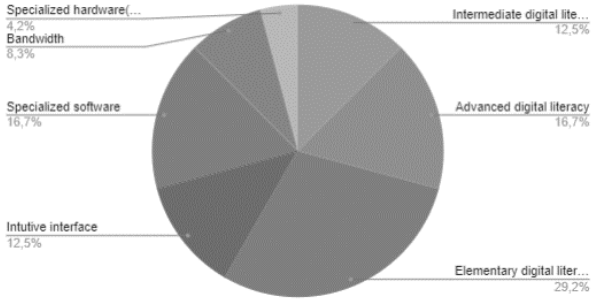

Figure 7. Technical and user requirements for ICT tools of qualification assessment for Assessment board members, Faculty members and referees

As can be seen in Figure 6, students rate Intuitive interface (44,4%) and Elementary digital literacy (25,9%) as highest necessary requirements. Assessment board members, Faculty members and referees (Figure 7) rate Advanced Digital Literacy (16,7%) and Intermediate Digital Literacy (12,5%) as proportionally prominent requirements to engage with the technical interface of ICT tools for Final qualification assessment. Intuitive interface ranks significantly lower as a requirement (12,5%) with Faculty and Staff than it does with students (average age 21-22 y.o.) Such distribution of technical requirement assessment testifies to the phenomenon of *digital divide* (TDD 2020), pervasive in various areas of educational activities in the framework of Covid-19 lockdown.

Across various ICT tools for the digital qualification assessment process the following skills and competences most widely implemented and practiced, drawn from various relevant 21st century skills frameworks (Davies 2011; Dos Reis 2015; EC 2020; Hymes 1972; UNESCO 2018; DGGSR 2019) have been identified: Communication; Collaboration; Team work; Digital literacy; Emotional intellect; Interdisciplinary skills; Critical thinking; Leadership; Flexibility and Adaptability; Decision making; Learning and Innovation skills. Different priorities in soft skills are identified for participants of digital Qualification assessment of the European languages program (Figure 8) and Oriental languages program (Figure 9):

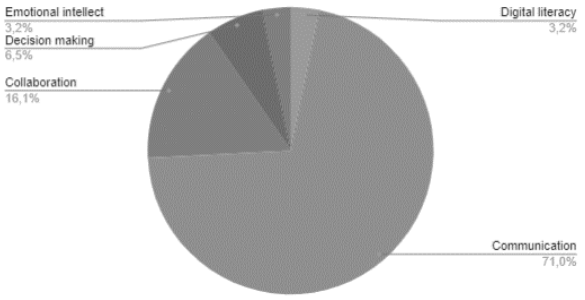

Figure 8. Soft skills for ICT tools in digital qualification assessment for European languages program

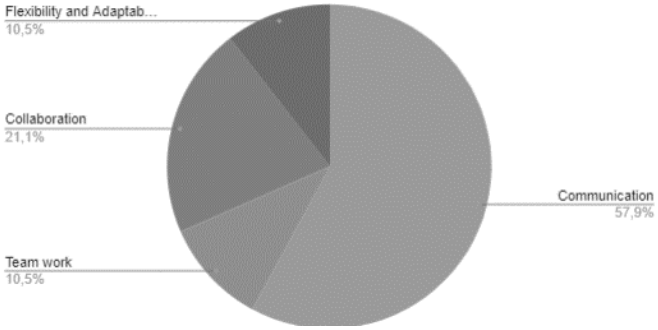

Figure 9. Soft skills for ICT tools in digital qualification assessment for Oriental languages program

Communication is identified as an overwhelmingly important soft skill for fulfilling Final Qualification Assessment via digital format (71% of respondents of European languages programs and 57,9% of respondents of Oriental languages programs). Collaboration as a skill ranks proportionally second across the board (16,1% of respondents of European languages programs and 21,1% of respondents of Oriental languages programs).

Yet respondents of Oriental languages distribute such soft skills as Team Work (10,5%) and Flexibility/Adaptability (10,5%) as proportionately activated in digital Final Qualification Assessment. Respondents of European languages programs distribute such soft skills as Decision making (6,5%), Digital literacy (3,2%) and Emotional Intellect (3,2%) as proportionately activated in digital Final Qualification Assessment.

Communication and collaboration rank as a type of skills most widely applied by respondents of all foreign language programs for the use of such instruments as email, Google services, video conferencing services and social Media platforms. Communication as a skill is ranked highest among respondents of the European languages program. Team work ranks second most prominent skill employed via the use of Google disk, learning management systems and video conferencing services. Team work and flexibility feature as top 5 priority skills among respondents of the Oriental languages program. Relevance is attributed to learning and Innovation skills in the use of such ICT tools as a learning management system (ranking second after interdisciplinary skills), automated Testing System (offline, online and cloud based), Android apps and Microsoft Office tools. Creativity as a skill ranks 3rd in the use of Google services and ranks 1st in the use of Microsoft Office tools.

2.3 ICT Tools Final Qualification Assessment Efficiency Ranking

The Final Qualification Assessment ICT tools were subjected to Customer Satisfaction Evaluation Ranking (Dos Reis 2017). This ranking method features *the efficiency of ICT tools per education activity* as the main criterion. The CSER, as applied to various types of ICT tools in education process was approbated through the run of the IRNet framework project, funded by the People Program (Marie Curie Actions) of the European Union's Seventh Framework FP7/2007-2013/ (Morze, Makhachashvili, Smyrnova-Trybulska 2016).

For the ranking purpose the Final Qualification Assessment ICT tools were divided into 4 groups according to technical types and purpose in the Final Qualification Assessment process: 1) Google cloud services (Google Disc, Google Forms, G-mail); 2) Video conferencing services (Google Meet, Zoom, Webex); 3) Learning management systems (LMS Moodle, Automated testing systems); 4) Microsoft Office tools (Word, PPoint, Excel).

All respondents had to rank the activity importance 1-5 (1 = least prominent for the use of a tool type, 5 = most prominent for the use of a tool type) for the selected ICT tools type used. The activities, scored for each type of ICT tool for Final Qualification Assessment were presented in the following order: Communication (synchronous); Communication (asynchronous); Collaboration; Information/file sharing; Summative assessment; Formative assessment; Peer review; Presentation; Speech quality assessment; Brainstorming.

Figures 10-13 below exemplify the discrepancy in ranking score for one activity type - Communication (synchronous) – across all types of ICT tools for Final Qualification Assessment:

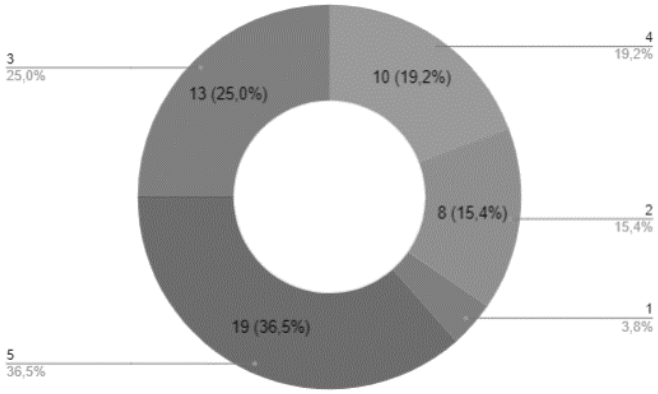

Figure 10. Evaluation of Tool Type 1 (Google Disc, Google Forms, G-mail). Sample ranking score card for Communication (synchronous)

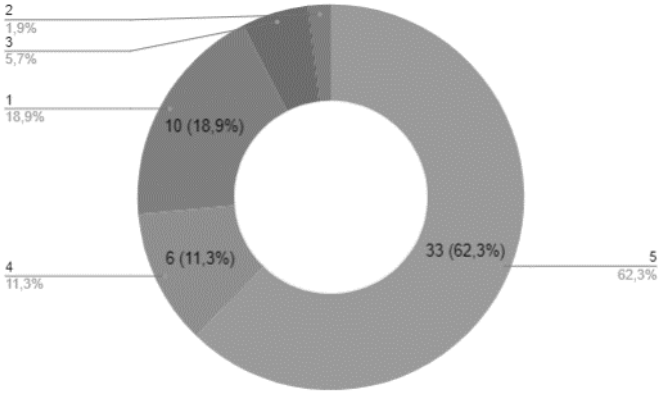

Figure 11. Evaluation of Tool Type 2 (Google Meet, Zoom, Webex). Sample ranking score card for Communication (synchronous)

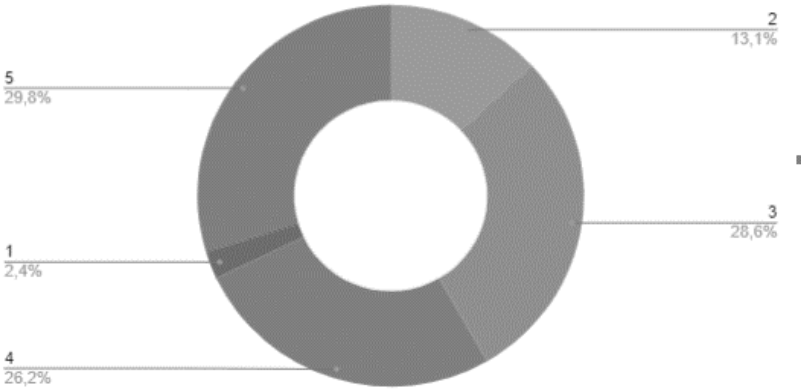

Figure 12. Evaluation of Tool Type 3 (LMS Moodle, Automated testing systems). Sample ranking score card for Communication (synchronous)

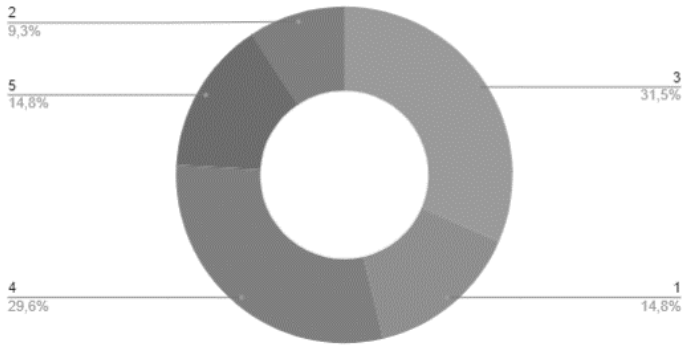

Figure 13. Evaluation of Tool Type 4 (Word, PPoint, Excel). Sample ranking score card for Communication (synchronous)

As apparent**,** Video conferencing services (**Google Meet, Zoom, Webex**) score the highest efficiency ranking for synchronous communication (62.5% for top score 5), but get a surprising ratio of lowest score as well (18,9% for lowest score 1). Learning management systems (29,8% for top score 1) and Google services (25%) get a proportional highest score 5 for efficiency in Synchronous communication in the framework of Final Qualification assessment across European and oriental languages programs.

This sample ranking testifies to the following suppositions: a) the specificity of ICT use for transference of Final Qualification assessment into digital mode for foreign languages programs that may not be encountered outside of this activity framework; b) the specificity of digital literacy, featured by participants of Final Qualification assessment for foreign languages programs.

3. CONCLUSION

All procedures and scenarios of the Final Qualification Assessment activities for foreign languages at Borys Grinchenko Kyiv university have been successfully transferred to digital remote format with the use of various sets of ICT tools in the framework of the COVID-19 pandemic adjustments. This transference could serve as a best practice model for other universities of Ukraine and European countries both as an adaptable measure for prolonged lockdown and as a way to further advance of blended learning and further digitalization and democratization of educational process.

The survey results conducted among all groups of participants of Final Qualification Assessment for European and Oriental foreign languages have yielded representative data as to the efficiency of various ICT tools implementation for rigorous assessment procedure scenario. Microsoft Office toolkit ranks highest in efficiency among respondents, presumably, due to the least digital literacy level adjustments required of users at a short notice to carry out the full spectrum of necessary activities for Final Qualification Assessment.

Various levels of digital literacy have been identified in the survey. *Advanced digital literacy* as the requirement for qualification assessment ICT tools efficiency is attributed to such instruments as learning management systems, Microsoft Office toolkit and social media platforms. *Intermediate digital literacy* is required predominantly for such instruments as Microsoft Office Toolkit, screen sharing interface, online randomizer, automated testing system, learning management system. *Elementary digital literacy* level is assessed as dominant for such tools as email, google disc, video conferencing, speech to text interfaces and social media platforms. Across the board, implementation of Final Qualification Assessment via various ICT tools requires of participants of educational process elementary to intermediate digital literacy. There's no significant discrepancy in digital literacy and ICT competence requirements between Final Qualification Assessment participants of European and Oriental languages program.

Communication, collaboration and team work are evaluated as crucial soft skills in various combinations within the scenario of digital Final Qualification Assessment. This results corroborate the correspondence between communicative competence and ICT competence components, adapted for Liberal Arts. Namely, the following components prove indispensable for all participants of Final Qualification Assessment in digital format: participation in group ICT initiatives, creating e-learning tasks, system using of ICT, presentation to the community the results of one's own research activities through the use of ICT.

The survey results will be furthered and implemented and explored in assessment of ICT tools efficiency and digital skills adaptability for separate groups of Final Qualification Assessment (students of foreign languages programs, Assessment board members, staff members, reviewers) according to roles and tasks performed, as well as according to age and entry digital literacy level (the distinction in efficiency assessment among digital natives and digital immigrants). The perspective of the study is in corresponding survey of digital qualification assessment experiences of students and faculty members of Asian (Oriental) countries and countries of Europe.

ACKNOWLEDGEMENT

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