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## The 7th International Conference on

# **Frontiers of Educational Technologies**

## **ICFET 2021**

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### Digital Competencies and Soft Skills for Final Qualification Assessment: Case Study of Students of Foreign Languages Programs in India

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#### ABSTRACT

The global pandemic and subsequent quarantine measures and restrictions have posed an array of challenges to the structure and procedure of the university summative assessment process. Qualification assessment for Foreign Languages major programs is a strict regimen that involves different stages (oral and written exams, final project viva, internal and external review). This paper presents a comprehensive case study analysis of the practices of the ICFAI Business School (Hyderabad, India) digital qualification assessment for students of European (English, French, Italian, Spanish, German) and Asian (Mandarin Chinese, Japanese, Hindi) Languages major programs, employed in the year 2020 due to quarantine measures. The survey and analysis of soft skills and corresponding educational activities, ICT tools applied, and corresponding digital competencies implemented is used to assess the transformation of real-life qualification assessment practices into the online and hybrid formats. The investigation identifies various groups of applied digital skills and collaboration skills, utilized through the qualification assessment process by primary stakeholders (students).

#### **CCS CONCEPTS**

• Human-centered computing; • Collaborative and social computing; • Empirical studies in collaborative and social computing;

#### **KEYWORDS**

ICT Tools, Final Qualification Assessment, digital literacy, digital learning

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#### **1 INTRODUCTION**

First decades of the XXI century were indicative of the rise and development of a framework of cultural, economic and technological factors, relevant for societal development in the changing world [1], namely: increased life-span, smart technologies and AI development, new media ecology and establishment of new media literacies, digital globalization, development of networked social structures (social networks, professional networks, knowledge networks). The global pandemic of COVID-19 emerged as a kind of a black swan scenario for various spheres of social and economic life, including education, upending and accelerating organic processes of transformation and innovation. The black swan theory is a metaphor to describe an event that comes as a surprise, has a major effect on society, and is often inappropriately rationalized after the fact with the benefit of hindsight [14].

In the educational sphere, according to the study estimations, the result of the COVID-19 pandemic development was the need to take quick action worldwide in order to achieve such desirable results: a) To adapt the existent educational scenarios to digital, hybrid and blended formats; b) To develop soft skills and social skills, instrumental for efficient digital and hybrid educational interaction; c) To boost ICT competence and digital literacy of all stakeholders of the educational process.

In the framework of the university studies workflow, the global pandemic and subsequent quarantine measures and restrictions have posed an array of challenges to the structure and procedure of summative assessment process. The challenges and alternations were vastly informed by the introduction of the emergency digital learning measures and formats.

The *relevant studies* on various aspects of digital education, conducted across the pre-COVID-19 framework have spanned such key avenues of inquiry as 1) assessment of satisfaction with distance learning experience [10; 26]; 2) evaluation of learning outcomes [6; 25]; 3) overall attitudes to distance learning [30]; 4) challenges of on-line education [27]. University-level assessment studies paradigm, for its part, adheres to such major tracks of inquiry: 1) summative assessment formats and efficiency [18]; 2) measurable outcomes of summative assessment [13]; 3) computer-assisted assessment and the e-Scape initiative [17; 23; 28].

These issues require a comprehensive revisit in terms of the toll the global pandemic took on individual learning experiences, activated skillsets and subsequent shift in efficiency estimations of linguistic education in universities of the world due to the abrupt transition to exclusively digital distant or hybrid learning formats.

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This inquiry estimates the *knowledge gap* in the cross-section of disclosing digital learning in the timespan of the COVID-19 as a comprehensive social and cognitive activity model, a holistic transformation of traditional practices and scenarios to achieve learning outcomes. As such, digital learning is determined to be a complex object system, dominated by concepts of electronic interaction and communication, acquiring the following features: ubiquity (inclusiveness); integrativity; isomorphism; normativity; communicative substantiality; information capacity; interactivity. Final Qualification assessment for Foreign Languages major programs in particular is chosen for analysis as a comprehensive practical and cognitive educational scenario, that, when digitized, involves the synergy of different of communicative types and activities (oral and written exams, final project viva, internal and external review). Qualification assessment for Foreign Languages major programs thus is a strict regimen that involves different stages, requiring interoperability of soft and applied digital skills.

Foreign Languages Acquisition on university level major programs in general is a rigorous process [2; 7] that involves different stages and a regimen of activities and competences across interconnected interdisciplinary domains. The presented study is a *parcel of comprehensive institutional inquiry* [19; 20; 21] into the toll digitalization and amplified use of ICT tools put on different aspects of Oriental as well as European languages acquisition efficiency, assessment management, programmed results, communicative and digital competency formation in COVID-19 lockdown paradigm.

The research project to date spans the following areas: 1) full survey datasets on ICT enhanced Final Qualification Assessment protocols for Oriental languages (Mandarin Chinese and Japanese) and European Languages (Italian, Spanish, French, English) major programs in Ukraine, Germany, Italy and India; 2) full survey datasets on multidisciplinary, cross-sectorial and universal skills development for Oriental languages (Mandarin Chinese, Japanese, Hindi) and European Languages (Italian, Spanish, French, English) major programs in Ukraine; 3) full survey datasets on in-depth subjective experiences of e-learning and blended learning in COVID-19 timeframe for stakeholders of Oriental languages (Mandarin Chinese and Japanese) and European Languages (Italian, Spanish, French, English) major programs in capital cities and regional universities of Europe.

The outlined pre-existing studies paradigm informed the following *research questions*, this paper sets out to disclose:

- What are the multi-faced aspects of Final Qualification Assessment educational scenario transformation into digital format, assisted by Information and Communication Technologies and tools?
- 2) What are the measurable soft skills that inform the efficiency of Final Qualification Assessment for Foreign languages programs transformation into digital format?
- 3) What are the measurable digital skills that inform the efficiency of Final Qualification Assessment for Foreign languages programs transformation into digital format?
- 4) What are the efficiency parameters of ICT tools, consistently used for Final Qualification Assessment for Foreign languages programs in the digital format?

Informed by the scope of research questions, this study *objective* is to critically review the applied case of the ICFAI Business School (Hyderabad, India) Digital Final Qualification Assessment for students of European (French, Italian, Spanish, English, German) and Oriental (Mandarin Chinese, Japanese, Hindi) Languages major programs, employed in the year 2020 due to quarantine measures. The survey and analysis of different ICT tools is used to estimate the efficiency and functionality of the translation of real-life qualification assessment practices into digital format. The choice of the target objective is informed by the need to elaborate comprehensive models of digital transformation of the foreign languages acquisition.

The investigation also seeks to identify various formats of soft skills and digital skills application, utilized through qualification assessment process by primary stakeholders (students) in Asia. The choice of the considered case of university Final Qualification Assessment for Foreign Languages major programs is informed by the need to estimate similar and divergent socio-cultural parameters of digital literacy development and application in multi-cultural context.

#### 2 METHODOLOGY AND DESIGN

The study employs the combination of mixed methods [24] – a proportional arrangement of quantitative and qualitative inquiry to assess in-depth aspects efficiency estimation of digital Final Qualification for Foreign Languages programs. The comprehensive study design methodology included the following consecutive steps:

- Qualitative soft and digital skills framework profiling to identify indicators of that inform the efficiency of Final Qualification assessment activities, performed via ICT tools;
- Qualitative Finale Qualification Assessment framework profiling [7; 20] and structuring of framework transformation of this educational scenario into digital format;
- Quantitative assessment of the efficiency and expediency of The Final Qualification Assessment for European and Oriental languages programs, conducted in digital and hybrid format, performed based on the online survey method;
- 4) Quantitative efficiency ranking of Final Qualification Assessment ICT tools; the ranking procedure features the efficiency of ICT tools per educational activity they help implement as a main criterion.

This inquiry *methodological groundwork* is founded on identification of ICT competency principles, derivative of various paradigms of soft skills [22; 1; 4; 8; 15]: 21st century skills framework [1; 22], Competences 2020 [12; 19] framework and the newly devised Global Skills framework [31] has been devised (Table 1):

The projected digital literacy requirements for educational purposes in Liberal arts are consequently elaborated across UNESCO ICT Competency Framework [29], European e-competence framework guideline [12], and Digital Competence 2020 framework [11] – Table 1

 UNESCO ICT Competence Framework [29], customized for in-training and in-service teachers accommodates the following types of soft skills in terms of digital competence Digital Competencies and Soft Skills for Final Qualification Assessment: Case Study of Students of Foreign Languages Programs in India



Table 1: Soft skills paradigms and Digital literacy frameworks correspondence

requirements: collaboration, team-work, problem-solving, reasoning and ideation.

- 2) European e-competence framework guideline [12], customized according to European professional competence framework, accommodates the following soft skills in terms of digital competence requirements for vocational activity: service orientation; attention to detail, learning strategies, leadership and social influence, cognitive creativity and flexibility, coordination and time-management; human resources management;
- 3) Digital Competence 2020 framework [11] for general public, accommodates the following soft skills in terms of digital competence requirements for efficient digital citizenship: Communication and collaboration, creativity and adaptability, learning and innovation, trustworthiness, emotional intelligence, complex problem solving.

Subsequently, the study estimates, that the educational activities, correlated with these types of soft skills, serve as **indicators for activation of such groups of digital competency elements** as: 1) ICT practitioner skills, e-business skills, ICT user skills (European e-competence framework guideline); 2) Understanding ICT in

education, ICT for Curriculum development and assessment, ICT for Organization and administration, ICT for Teacher professional learning (UNESCO ICT Competence Framework); 3) information and data literacy; communication and collaboration through digital technologies; digital content creation; safety; problem solving through digital technologies (Digital Competence 2020).

#### 3 FINAL QUALIFICATION ASSESSMENT: CASE STUDY OF IBS, INDIA

# 3.1 Final Qualification Assessment Education Profile

Qualification assessment for Foreign Languages major programs is a mandatory procedure, involves different stages of foreign language acquisition skills assessment (oral and written exams, final project viva, internal and external review).

The generic form of summative state qualification of students is defined by the state standards of education and is reflected in the curricula in the countries across the world. Usually state qualification has two forms, combined or separate: 1) Qualification/final exam; 2) Defense (viva) of qualification (bachelor's or master's) paper.

QUALIFICATION ASSESSMENT ACTIVITIES	DIGITAL REMOTE FORMAT	SAMPLE ICT TOOLS
Final exam conduct (introduction, oral answers, grading, discussion, results)	Digital video conference; Remote test; Video recording; Voice recording	Conference service (Zoom, Webex, GoogleMeet) Speech converter (Speech Texter) LMS (Moodle, Google Classroom), Kahoot, Webcam
Final Exam assessment	Digital video conference; Automated grading system;	Conference service (Zoom, Webex, GoogleMeet) LMS (Moodle, Google Classroom) Google Suite MS Excel
Bachelor's project viva/defense	Digital video conference; Screen sharing; File sharing; Video recording; Voice recording	Conference service (Zoom, Webex, GoogleMeet), Google Suite (Google disc), MS Office Toolkit (PowerPoint), Microsoft Power Pint, Cloud presentation tools (Prezi),
Bachelor's project review	Digital survey; Digital assessment	Google Suite (Google Forms, Google Excel), MS Office Toolkit (Microsoft Excel, MS Word)
Bachelor's project assessment	Digital video conference; Automated grading system	Conference service (Zoom, Webex, GoogleMeet), LMS,Google Suite, MS Toolkit

#### Table 2: Qualification Assessment activities for foreign languages programs transfer to digital remote format at IBS, India

State standards of education in countries of Europe and Asia typically provide for the existence and observance of rules and requirements for the procedure of Final Qualification Assessment [7]. Moreover, the defense of the qualification work contains propaedeutic procedures designed to obtain the basis for admission of students to the defense.

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).

In the situation of the COVID-19 pandemic lockdown different elements of the Final Qualification Assessment for European and Oriental Languages programs have been relegated to the digital, remote or blended format with the use of ICT tools. This case is estimated in this study as a comprehensive best practice to suggest for implementation in higher educational institutions of Europe and Asia.

The following Qualification Assessment activities for European and Oriental languages programs have been transferred to digital remote mode at IBS, India: Final exam conduct (introduction, oral answers, grading, discussion, results); Final Exam assessment; Bachelor's project review; Bachelor's project viva/defense; Bachelor's project assessment.

A digital remote analogous activity was devised for each Qualification Assessment element at IBS, India, and a selection of ICT tools was arranged (Table 2):

#### 3.2 Final Qualification Assessment: Survey Study for Students of Foreign Languages Programs in India

Informed by the Final Qualification Assessment activity profile, a survey was conducted among the stakeholders of the Final Qualification Assessment at the ICFAI Business School (Hyderabad, India) Foreign languages programs, in order to assess the efficiency of qualification assessment transfer into digital format via various ICT tools employed. The survey was conducted over the span of late June-early July of 2020, after the wrap up of all academic year Qualification Assessment procedures.

The survey comprised of 12 questions total (multiple choice and scoring), divided into such categories:

- 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 stakeholders;
- 3. Questions on soft skills, required of Final Qualification Assessment stakeholders;
- 4. Questions, aimed to conduct Efficiency Ranking [5; 16] of crucial ICT tools for Final Qualification Assessment.

The following participants of the digital Final Qualification Assessment were respondents of the survey overall: Students of senior year of bachelor's program; Assessment board members; Faculty members (who took part in digital qualification assessment preparation and conduct); Bachelor project referees and supervisors.

ICT tools ranking 5	ICFAIBS (India)	Score 5 (most useful)
E-mail services	+	42%
Google forms	+	19%
Videoconferencing services	-	-
Screen sharing services	-	-
Microsoft Office tool-kit	+	31%
Social media platforms	+	32%
Android Apps	+	14

### Table 3: Scoring of highest ranking ICT tools for Final Qualification Assessment for respondents from ICFAI Business School (India)



#### Figure 1: ICT tools identification through the digital qualification assessment (ICFAI Business School, India)

For the purposes of this paper we singled out student respondents, as primary subject of Final Qualification Assessment. A total of 66 students of Foreign languages programs at ICFAI Business School (Hyderabad, India) were respondents of the survey. The choice of the survey sample 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 in countries of Europe and Asia.

Respondents of all groups spanned the foreign language Bachelor's programs in proportional distribution measures: English program - 38,6%; Spanish program- 32,8%; French program - 15,5%; German program - 12%; Italian program- 5,5%; Mandarin Chinese program - 2,24%; Japanese program- 1,9%; Hindi program - 1%.

The overall digital qualification assessment experience on the Likert scale of 1 to 5 was defined by Respondents from ICFAI Business School (India) as predominantly as less agreeable (3) - 48,5% and mostly agreeable (4) - 25,8%.

The respondents from India 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 respondents of Foreign language programs at ICFAI Business School, India were: e-mail (80% of respondents); Google forms (76,9% of respondents); Videoconferencing services (56% of respondents); social media platforms (46,2% of respondents); Microsoft Office Tools (46,2 of respondents). The Likert scale ranking 1-5 of the ICT tools employed through digital qualification assessment process yields following tools getting the highest scoring (5 – most useful) among all ICT tools identified and used by respondents from India: e-mail services; Android Apps; Microsoft Office tool-kit; social media platforms (Table 3).

The data on implementation of ICT tools for Final Qualification assessment in Foreign languages allows to identify the **activation of such predominant groups of digital competency elements**: 1) ICT practitioner skills; 2) communication and collaboration through digital technologies; 3) digital content creation; safety; 4) problem solving through digital.

Activation of digital competency elements allowed to identify the following most prominent activities across all ICT tools used throughout the digital qualification assessment process by respondents from India (Figure 2): Communication (synchronous); Communication (asynchronous); Collaboration; Information/file sharing; Summative assessment; Formative assessment; Peer review; Presentation; Speech quality assessment; Brainstorming.

Information sharing and presentation are considered prominent for such types of tools as e-mail (40,9% of respondents), Videoconferencing services and Microsoft Office Toolkit (36,3% of respondents), Google Suite services (21,2% of respondents). These parameters correspond to such elements of digital competence *as ICT practitioner skills* and *digital content creation*.

Synchronous communication scores highest as the activity implemented by various video conference services (30% of respondents) and e-mail (12%), asynchronous communication is distributed proportionately among such tools as mobile apps and speech to text interfaces (11% of respondents). These parameters indicate *activation of such elements of digital competence* as *communication and collaboration through digital technologies* and *information and data literacy*.

Google Suite tools feature formative assessment as a prominent activity (11,5% of respondents). Summative assessment as a type of activity features but does not dominate evaluation of ICT tools used qualification assessment process. These parameters indicate *acti*vation of elements of digital competence, customized for in-training teachers of Foreign languages, such as **understanding ICT in edu**cation and ICT for curriculum development and assessment.

The following technical and user requirements, most prominent for ICT/digital tools employed throughout the digital qualification



Figure 2: Activities per ICT tools used throughout the digital qualification assessment. Sample evaluation card



#### Figure 3: Technical and user requirements for ICT tools in digital qualification assessment process. Sample evaluation card

assessment process were identified (Figure 3): 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 Foreign languages program of ICFAI Business School, India have identified the prominent ICT tools requirements (Figure 4) being Specialized software (30,0%), Bandwidth (25,0%) and advanced digital literacy, specialized hardware and customized training (10,0%). These parameters testify to the predominant activation of *such elements of digital competence* as *information and data literacy*.

Specialized software is a technical requirement to future the most across all ICT tools that have been analyzed by respondents from ICFAI Business School, India. It is identified as a leading technical requirement for such ICT tools as email, Google Suite services, video conferencing services, automated testing platforms, Microsoft Office Toolkit. In and of itself this parameter is indicative of an apparent digital literacy gap and an ongoing need for specialized digital training in academia, that the COVID-19 lockdown measures exposed.

According to skills of the 21st century frameworks, various levels of digital literacy have been identified in the survey. Digital literacy is understood primarily as the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills [3; 9].

Advanced digital literacy as the requirement for qualification assessment ICT tools efficiency is attributed overall by students of foreign languages programs to such ICT instruments as Google



Figure 4: Technical and user requirements for ICT tools in digital qualification assessment process

Suite services, learning management systems, online randomizer, Android Apps, screen sharing services, social media services.

Intermediate digital literacy is required predominantly for such instruments as Videoconferencing services, Google Suite services (Google Forms), email, speech to text 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, cloud based presentation tools, speech to text interfaces and social media platforms.

The distribution of various levels of digital literacy requirements for ICT tools used for Final Qualification Assessment procedures by Table 4: Distribution of various levels of digital literacy requirements for ICT tools used for Final Qualification Assessment procedures by respondents from ICFAI Business School, India

Digital literacy level	IBS, India ICT tools for Final Qualification Assessment	Respondents
Advanced digital literacy	Google Suite services, learning management systems, Android Apps, screen sharing services, social media services	66,1% of respondents
Intermediate digital literacy	Videoconferencing services, Google Forms, email, speech to text interface	51,5% of respondents
Elementary digital literacy	E-mail, Social media platforms, Google Disc, Cloud based presentation tools	42,4% of respondents

Table 5: Comparative score of key soft skills, identified as necessary for successful Final Qualification Assessment by respondents form ICFAI Business School, India

Soft skills	IBS (India)	Score
Communication	+	83,3%
Collaboration	+	44%
Team work	+	17%
Decision making	+	16%
Flexibility and adaptability	-	(less than 10%)
Digital literacy	+	31%
Learning and Innovation	+	42%



Figure 5: Soft skills for ICT/digital tools in digital qualification assessment process for Foreign languages program at ICFAI Business School, India

respondents ICFAI Business School, India is presented as follows (Table 4):

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* 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 Foreign Languages program of ICFAI Business School, India (Figure 5):

Soft skills scoring highest, identified as necessary for successful Final Qualification Assessment respondents form India, are distributed in the following way (Table 5):

As is apparent form the data, the range of soft skills, identified as prominent by respondents from India is different. Top soft skills identified by respondents from Foreign languages program of ICFAI Business School, India, are Communication (83,3%), Collaboration (44%) and Learning/innovation (42%).

The distribution of core soft skills, necessary to apply ICT tools for Qualification assessment is as follows. Communication, collaboration rank by respondents from India as a type of skills most widely applied for the use of such instruments as email, Google services, video conferencing services and social Media platforms. Subsequently, the application of soft skills across these ICT tools for Qualification assessment entices activation of *such elements of digital competence* as communication and collaboration through digital technologies; digital content creation; problem solving through digital technologies.

Team work ranks second most prominent skill employed through the use of Google Forms, Learning management systems and Videoconferencing services. Application of the soft skill across ICT tools for Qualification assessment entices activation of *such elements of digital competence* **as ICT practitioner skills, ICT user skills, collaboration through digital technologies.** 

Learning and Innovation skills feature as priority relevant 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. Application of these soft skills across relevant ICT tools for Qualification assessment entices activation of *such elements of* 

		Ranking 1-5 by respondents					RC	SR	
	Activity	1	2	3	4	5	Sum	Rating coeffi- cient	Total sum x coeff.
1	Communication (synchronous)	1	5	12	11	7	36	36/(66x5) = 0,10	36x0,18 =3,6
2	Communication (asynchronous)	2	4	14	11	6	37	0,11	4,1
3	Collaboration	1	2	15	11	6	35	0,11	3,7
4	Information/file sharing	1	5	6	10	13	35	0,11	3,7
5	Summative assessment	2	2	12	13	6	35	0,11	3,7
6	Peer review/evaluation	2	6	9	11	8	36	0,11	3,9
7	Formative assessment	1	3	11	12	7	34	0,10	3,5
8	Presentation	4	3	10	9	10	36	0,11	3,9
9	Speech quality assessment	2	5	11	11	4	34	0,1	3,4
10	Brainstorming	3	4	10	12	7	36	0,11	3,9
	Total efficiency rating: (ER)								3,74

#### Table 6: Evaluation of Tool Type 1 (Google Suite). Sample ranking score card

### digital competence as ICT practitioner skills, ICT user skills, information and data literacy.

The Final Qualification Assessment ICT tools, identified as prominent in application, have been subjected to Customer Satisfaction Evaluation Ranking [4; 15], featuring the efficiency of ICT tools per educational activity they help implement as a main criterion.

The procedure and algorithm of ICT tools for Final Qualification Assessment efficiency ranking has been approbated through the analogous case study of European and Oriental languages program at Borys Grinchenko Kyiv University, Ukraine [20].

For the purpose of the efficiency ranking the Final Qualification Assessment ICT tools have been divided into 4 groups according to types:

- 1. Google Suite Tools (Google Disc, Google Forms, G-mail);
- 2. Videoconferencing services (Google Meet, Zoom, Webex);
- 3. Learning management systems (LMS Moodle, Automated testing systems);
- 4. Microsoft Office Toolkit (Word, PPoint, Excel).

All respondents had to rank the activity importance for the selected ICT tools used according to the Likert scale (1 – minimum efficiency, 5 – maximum efficiency) (Table 6).

The efficiency rating (ER) for each type of ICT tools assessed in the paper has been calculated via a 3 step algorithm:

Rating coefficient (RC) calculation:  $\sum(p)$  of points per activity divided by  $x = (N(r) \times 5)$  of experts, 5 points maximum per each activity rating:

$$RC = \sum_{P} / (N(r) \times 5)$$
(1)

Summative rating (SR) of each activity per ICT tool calculation:  $\Sigma$ (p) of points per activity multiplied by RC (rating coefficient):

$$SR = \sum_{p} \times RC \tag{2}$$

Total Efficiency Rating (ER) of a type of ICT tools assessed calculation:  $\Sigma$  of summative ratings (SR) per each activity divided by

N(a) of activities evaluated for the ICT tool type:

$$ER = \sum_{SR} / N(a) \tag{3}$$

The calculations for the Total efficiency ratings for each type of ICT tools for Final Qualification Assessment by stakeholders of Foreign languages programs in India are as follows:

- Tool Type 1 (Google Suite: Google Disc, Google Forms, Gmail) – 3,74;
- Tool Type 2 (Videoconferencing: Google Meet, Zoom, Webex) - 4,28;
- Tool Type 3 (LMS: Moodle, Google Class, Automated testing systems)- 3,25;
- Tool Type 4 (Microsoft Office Toolkit: Word, PPoint, Excel etc.) 4,34.

As can be inferred by the results, according to the surveyed case of IBS, India Final Qualification Assessment transference to digital format the highest efficiency rating – 4,34 – among all groups of respondents is attributed to Microsoft Office toolkit. Videoconferencing services are a runner up with the Total efficiency rating of 4,28.

The educational activities, derivative of different sets of soft skill, scoring the highest summative rating (SR), realized effectively per each type of ICT tools assessed, are as follows:

Tool Type 1 (Google Suite: Google Disc, Google Forms, G-mail) -Communication (synchronous) (SR = 4,1), Peer review/evaluation (SR=3,9), Brainstorming (SR = 3,9), Presentation (SR = 3,9);

Tool Type 2 (Videoconferencing: Google Meet, Zoom, Webex) – Information sharing (SR = 4,8), Brainstorming (SR = 4,3), Communication (synchronous) (SR=4,1), Presentation (SR=4,1), Speech quality assessment (SR = 4,1);

Tool Type 3 (LMS: Moodle, Google Class, Automated testing systems) – Collaboration (SR = 3,5), Communication (synchronous) (SR=3,3), Brainstorming/Information sharing/Presentation (SR = 3,3);

Tool Type 4 (Microsoft Office Toolkit: Word, PPoint, Excel etc.) – Presentation (SR = 4,8), Communication (synchronous) (SR = 4,5), Information sharing (SR = 4,3), Peer review (SR = 4,2).

The calculated scores of ICT tools efficiency across various educational activities for the framework of Final Qualification Assessment testifies to the following inferences:

- Information sharing, presentation and brainstorming are the key educational activities, instrumental to the Final Qualification Assessment transformation into digital format for the case of IBS, India;
- Cloud-based ICT services and learning management systems score consistently low in efficiency across all educational activities, presumably due to the institutional technological factors;
- ICT tools efficiency ranking is directly dependent on estimated digital literacy level and technical requirements for ICT tools evaluated;
- Highest scoring educational activities, implemented by the ICT tools assessed, correspond to such soft skills activation as: communication, collaboration, learning innovation, creativity, team-work.

#### 4 CONCLUSIONS

The study results attest to the argument that all procedures and scenarios of the Final Qualification Assessment activities for foreign languages 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.

The inquiry findings indicate the highest interoperability between such elements of digital competence as communication and collaboration through digital technologies; digital content creation; ICT practitioner skills and information and data literacy across all educational activities that comprise digital Final Qualification Assessment for Foreign languages programs. Subsequently, highest scoring educational activities, implemented by the ICT tools used for Final Qualification Assessment of Foreign Languages, necessitate the activations of such soft skills as: communication, collaboration, learning innovation, creativity, team-work.

The survey results conducted among students as participants of Final Qualification Assessment for European and Oriental foreign languages in India have yielded contribution as to representative data on the customized efficiency of various ICT tools implementation for rigorous assessment procedure scenario. Microsoft Office toolkit ranks highest in efficiency among respondents from India, 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.

The comprehensive transference process of the Final Qualification Assessment procedure for European and Oriental languages programs in India from face-to-face into all-digital format can be accompanied by the following recommendations across various socio-cultural contexts:

 The need for customized digital literacy training for participants of the Final Qualification Assessment process for all stages of the procedure;

- Overcoming digital divide in accessibility of computer and Web technologies, necessary for all stages of Final Qualification Assessment;
- Customized training to diversify the activation of soft skills through application of digital competence in comprehensive educational contexts.

Various levels of digital literacy have been identified in the survey in sampled universities of Asia (India). Across the board, implementation of Final Qualification Assessment via various ICT tools requires of participants of educational process upper intermediate digital literacy. There's a significant observed discrepancy in digital literacy and ICT competence requirements between Final Qualification Assessment stakeholders of European and Oriental languages programs of ICFAI Business School, India (advanced to intermediate digital literacy required for efficient use of crucial ICT tools).

The survey results will be furthered and elaborated in assessment of ICT tools efficiency and digital skills adaptability for separate groups of Final Qualification Assessment (students of foreign languages programs in countries of Europe and Asia, Assessment board members, staff members, reviewers) according to roles and tasks performed, as well as according to age and entry digital literacy level.

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