

ABSTRACT

The present study exemplifies the role digital media used to play in 2019-2020 in the Russian language classroom at secondary schools in Austria, Germany and South Tyrol (Italy) before the *COVID-19*-pandemic hit, whereby on which also current digitisation efforts are focused. The empirical baseline study aims at investigating the types of digital media and how frequently these are employed as well as the specific purposes they are used for in the Russian language classroom. Aside from addressing the positive effects that arise from working with digital media in classroom settings, also challenges that Russian language teachers face when implementing digital technologies are discussed. The data were collected in a mixed-methods procedure: quantitative data from online-questionnaires and qualitative data from face-to-face semi-structured interviews. The data represent the teachers' perspective on the one hand and that of the pupils on the other. The data from the online surveys were analysed with descriptive and inferential statistics, those from the interviews with qualitative content analysis whereby also individual case studies were conducted. This paper presents major study results and closes with implications for teacher training programmes as well as for future research.

KEY WORDS

Digital Media. Digital Media Literacy. Teacher Education Programmes. Russian Language Classroom.

1 Introduction

Nowadays digital media are ubiquitous and form an integral part of everyday life. Especially younger generations cannot imagine a life without smartphones, *TikTok*, *Twitter*, *Instagram* or *YouTube*. We use digital technologies in our free time, at work and at school, e.g. we buy e-tickets, shop and order goods online, read e-books, video chat with our friends and family, browse the web for needed answers, look up words in online dictionaries etc. The importance of digital media in classroom settings and ways of successfully implementing them have been widely discussed in academic research. The rapid growth in prominence of digital technologies is lastly also due to the *COVID-19* pandemic during which schools all over the world had to switch to distance learning quasi overnight.

The constantly increasing significance of goal-oriented digital media use is also reflected in various European educational documents that have been published over recent years. The *Digital Competence Framework for Educators* (*DigCompEdu*) describes by means of can-do statements and six levels ranging from awareness (A1) to innovation (C2) the competencies educators need to acquire in the course of their pre- and in-service teacher training.² The can-do descriptors are grouped under six competence areas, namely *Professional Engagement*, *Digital Resources*, *Teaching and Learning*, *Assessment*, *Empowering Learners* and *Facilitating Learners' Digital Competence*. On the one hand, teachers should be able to critically select, modify and create digital resources for classroom use.³ On the other, they are required to empower their students to independently apply and produce digital media thereby guiding the pupils to respect netiquette as well as copyright regulations, to protect their privacy and to solve arising problems.⁴

In reference to the pre-service language teacher training in Austria, Swertz concludes in his quantitative content analysis of four university curricula still in force that digital competence objectives appear to be marginalised.⁵ The development of digital media skills is mostly limited to facultative courses that teacher trainees may or may not attend. In addition, media literacy is frequently only referred to, amongst numerous other competencies, in brackets that indicates its low status.⁶ The above-mentioned curricula are currently being revised whereby a greater emphasis will be laid on the digital media literacy of future teachers.⁷ In their qualitative case study conducted in 2018, Goertz and Baeßler highlight that many teacher training centres in Germany are still in their infancy concerning digital education.⁸

See, e.g.: BITKOM: Digitale Schule – vernetztes Lernen: Ergebnisse repräsentativer Schüler- und Lehrerbefragungen zum Einsatz digitaler Medien im Schulunterricht. Berlin: BITKOM Research, 2015; EICKELMANN, B. et al.: Computer- und informationsbezogene Kompetenzen von Schülerinnen und Schülern im zweiten internationalen Vergleich und Kompetenzen im Bereich Computational Thinking. Münster, New York: Waxmann, 2019; LORENZ, R. et al.: Schule digital – der Länderindikator 2017: Schulische Medienbildung in der Sekundarstufe I mit besonderem Fokus auf MINT-Fächer im Bundesländervergleich. Münster, New York: Waxmann, 2017.

See: REEDECKER, CH., PUNIE, Y.: The European Framework for the Digital Competence of Educators (DigCompEdu). Luxembourg: Publications Office of the European Union, 2017. [online]. [2022-09-06]. Available at: https://publications.jrc.ec.europa.eu/repository/bitstream/JRC107466/pdf_digcomedu_a4_final.pdf.

³ Ibid., p. 24.

⁴ Ibid., p. 25.

See: SWERTZ, CH.: Medien im Lehramtsstudium für die Sekundarstufe in Österreich: Eine quantitativinhaltsanalytische Lehrplananalyse von vier Curricula. In Medienimpulse: Beiträge zur Medienpädagogik, 2015, Vol. 53, No. 4, p. 1-8. [online]. [2022-09-01]. Available at: https://journals.univie.ac.at/index.php/mp/article/view/mi890/1008>.

bid., p. 6-41.

This piece of information can be provided since I used to be a member of the curricula commission from 2021 to 2022. The new curricula are to be published in 2023 or 2024.

GOERTZ, L., BAEßLER, B.: Überblicksstudie zum Thema Digitalisierung in der Lehrerbildung. Essen: Hochschulforum Digitalisierung, mmb Institut, 2018, p. 10. [online]. [2022-09-01]. Available at: https://zenodo.org/record/2592010#.YwipIXZBxPY.

Coming back to European documents that focus on digital media literacy skills, the Digital Competence Framework for Citizens (DigComp 2.1) as well as the Companion Volume of the European Framework of Reference for Languages (CEFR) are to be mentioned.9 DigComp 2.1 aims at describing the competencies each EU citizen should have to be able to cope with today's digitalised world. As this in fact also applies to students, the Austrian competence model DigComp. 2.2 AT for secondary schools was created based on DigComp 2.1 whereby only slight adaptations were made. 10 Here, constantly increasing task complexity and learner autonomy as well as cognitive processing are seen as vital regarding the development of media literacy in pupils. 11 Beginning with the school year 2022/2023, the Digitale Grundbildung (Basic Digital Literacy) will be established as a compulsory subject at lower secondary schools in Austria. The Basic Digital Literacy encompasses one lesson per week for four school years during which pupils need to be empowered to analyse and critically reflect on societal aspects of media change and digitalisation, to responsibly handle data and information systems, to communicate and cooperate with others via digital technologies and to produce and publish media resources as well as create algorithms. 12 Aside from this, as stated in the Austrian Grundsatzerlass zur Medienerziehung (Decree on Media Education), each educator is required to subject-specifically integrate digital technologies into their teaching to enhance the overall learning process.¹³ The aforementioned CEFR Companion Volume, more precisely the newly added section on Online Interaction as well as the updated scales provide foreign language teachers with a certain framework of what media-based language teaching might aim at while considering different competence levels (A1-C2). It is to be noted that the development of digital media literacy skills and inter-/transcultural language learning appear to be closely intertwined. This does not only become evident from the Companion Volume but is also referred to in Austrian, German and South Tyrolean (Italian) school syllabi or decrees for foreign / Russian language education.¹⁴ A CEFR-descriptor on Online Conversation and Discussion referring to level B2 reads as follows, thereby highlighting the interconnectedness of language, cultural and media-assisted language learning: "Can engage in online exchanges, linking his/her contributions to previous ones in the thread, understanding cultural implications and reacting appropriately."15

See: CARRETERO, S., VUORIKARI, R., PUNIE, Y.: DigComp 2.1: The Digital Competence Framework for Citizens with Eight Proficiency Levels and Examples of Use. Luxembourg: Publications Office of the European Union, 2017. [online]. [2022-09-01]. Available at: https://publications.jrc.ec.europa.eu/repository/bitstream/JRC106281/web-digcomp2.1pdf_%28online%29.pdf; NORTH, B., GOODIER, T., PICCARDO, E.: Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Companion Volume with New Descriptors. Strasbourg: Council of Europe, 2018. [online]. [2022-09-01]. Available at: https://rm.coe.int/cefr-companion-volume-with-new-descriptors-2018/1680787989.

See also: BUNDESMINISTERIUM FÜR DIGITALISIERUNG UND WIRTSCHAFTSSTANDORT (BMDW): Digitales Kompetenzmodell für Österreich: DigComp 2.2 AT. [online]. [2022-09-01]. Available at: https://www.bmdw.gv.at/dam/jcr:54bbe103-7164-494e-bb30-cd152d9e9b33/DigComp2.2_V33-barrierefrei.pdf.

¹¹ Ibid., p. 28-29.

¹² BUNDESMINISTERIUM FÜR BILDUNG, WISSENSCHAFT UND FORSCHUNG (BMBWF): Lehrplan Pflichtgegenstand Digitale Grundbildung. [online]. [2022-09-01]. Available at: https://www.ris.bka.gv.at/ Dokumente/BgblAuth/BGBLA_2022_II_267/BGBLA_2022_II_267.pdfsig>.

See: BUNDESMINISTERIUM FÜR BILDUNG UND FRAUEN: Unterrichtsprinzip Medienerziehung – Grundsatzerlass. [online]. [2022-09-01]. Available at: https://www.bmbwf.gv.at/dam/jcr:f874e171-83ea-4e51-902b-48b373b3a187/2012_04.pdf.

See also, e.g.: KULTUSMINISTERIUM (KMK): Fachlehrplan Sekundarschule Russisch (Sachsen-Anhalt). [online]. [2022-09-01]. Available at: https://www.bildung-lsa.de/pool/RRL_Lehrplaene/Endfassungen/lp_sks_russ.pdf; SENATSVERWALTUNG FÜR BILDUNG, JUGEND UND FAMILIE (SenBJF): Rahmenlehrplan für den Unterricht in der gymnasialen Oberstufe: Gymnasien, integrierte Sekundarschulen mit gymnasialer Oberstufe, berufliche Gymnasien, Kollegs, Abendgymnasien. Russisch. [online]. [2022-09-01]. Available at: https://www.berlin.de/sen/bildung/unterricht/faecher-rahmenlehrplaene/rahmenlehrplaene/anhoe_russisch_sek_2.pdf; AUTONOME PROVINZ BOZEN – SÜDTIROL: Rahmenrichtlinien für die Gymnasien in Südtirol. [online]. [2022-09-01]. Available at: <a href="https://www.provinz.bz.it/bildung-sprache/didaktik-beratung/downloads/582072_Rahmenrichtlinien-Gymnasien_web_(2).pdf.

NORTH, B., GOODIER, T., PICCARDO, E.: Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Companion Volume with New Descriptors. Strasbourg: Council of Europe, 2018, p. 97. [online]. [2022-09-01]. Available at: https://rm.coe.int/cefr-companion-volume-with-new-descriptors-2018/1680787989>.

In view of the school subject Russian, the major aim of the present study is to investigate whether and how the requirements specified in educational decrees, digital competence models for learners and teachers as well as school syllabi actually inform teaching practice and teacher training. In this context, specific challenges that teachers and learners of Russian encounter when applying digital media in class will also be focused on. More precisely, the objectives of this empirical baseline study are to point out what types of digital media are employed in the Russian language classroom as well as how frequently and for what learning purposes digital technologies are implemented. At the same time, this also entails the question why certain digital media are not used or specific digital learning objectives appear to be neglected, the multifaceted reasons of which will be elaborated on in the chapters to follow.

2 Methodology and Study Subjects

The data for this study were collected in 2019-2020 by triangulating quantitative and qualitative research methods (between-method triangulation). ¹⁶ The concurrent mixed-methods design aims at enhancing the reliability and validity of the data as well as gaining deeper insights into the interrelatedness or interdependence of different influence factors, teacher and learner beliefs as well as the media literacy skills of the study participants. ¹⁷ In order to research the questions raised above, on the one hand online questionnaires primarily containing closed answer formats such as multiple choice, Likert and rating scale questions were employed. On the other, semi-structured face-to-face interviews with secondary school teachers and adolescent learners of Russian from Austria, Germany and South Tyrol were conducted. The online-survey data were analysed in *SPSS 25* with descriptive and inferential statistics (non-parametric significance tests), the interview transcripts with qualitative content analysis. ¹⁸ To gain further insights, 15 individual case studies were carried out.

The online-surveys were accessible for several months. Altogether 158 teachers and 411 learners of Russian participated in them; of those, 65.2% of the teachers (N° 103) and 76.4% of the pupils (N° 314) finished the questionnaire. Due to possible result distortions, only fully completed questionnaires were considered in the analysis. As regards the Russian language teachers, different sampling strategies, more precisely convenience and snowball sampling, were applied. A true simple random sampling could not be achieved, because of coverage problems (e.g. non-functioning e-mail addresses), nonresponse, missing values, and the relatively high drop-out rate which amounted to over one third. Reasons for the latter my lie with the length of the online questionnaire (31 questions incl. demographic data), loss of interest or internet connection problems. Concerning the place of residence, 55 Russian language teachers from Austria, 41 from Germany and six from South Tyrol took part in the online-survey, their average age being 41.7. The majority of all federal Austrian and German countries are represented in the sample. The learner-questionnaire consists of 19 questions. Altogether 142 pupils from

See: CASPARI, D. et al.: Forschungsmethoden in der Fremdsprachendidaktik: ein Handbuch. Tübingen: Narr Francke Attempto, 2016. [online]. [2022-09-01]. Available at: https://doi.org/10.14220/odaf.2016.32.2.128.

See also: KELLE, U.: Mixed Methods. In BAUR, N., BLASIUS, J. (eds.): Handbuch der empirischen Sozialforschung. Berlin: Springer VS, 2014, p. 153-166. [online]. [2022-09-01]. Available at: https://doi.org/10.1007/978-3-531-18939-0_8.

See: RAAB-STEINER, E., BENESCH, M.: Der Fragebogen: Von der Forschungsidee zur SPSS-Auswertung. Vienna: Facultas, 2012; See also: MAYRING, P. H.: Qualitative Inhaltsanalyse: Grundlagen und Techniken. Weinheim, Basel: Beltz, 2015.

See: BAUR, N., FLORIAN, M.: Stichprobenprobleme bei Online-Umfragen. In JACKOB, N., SCHOEN, H., ZERBACK, T. H. (eds.): Sozialforschung im Internet: Methodologie und Praxis der Online-Befragung. Wiesbaden: VS Verlag für Sozialwissenschaften, 2009, p. 126.

²⁰ See also: GRÄF, L.: Online-Befragung: Eine praktische Einführung für Anfänger. Münster: LIT, 2010, p. 62-68.

Austria, 119 from South Tyrol and 47 from Germany completed the questionnaire. With regard to German students, the access to the field played a decisive role. The comparably low number of participants from Germany was caused by the lengthy and complicated process of obtaining permission from the authorities to conduct a study with pupils. In terms of sampling, the cluster sampling being a form of multistage random sampling was employed. More precisely, Russian language teachers functioned as gatekeepers and randomly chose different classes, i.e. clusters in which they conducted the online survey.²¹

Parallel to the online surveys, seven teacher and eight learner interviews were held which were audio-recorded, transcribed and coded by means of *MAXQDA*. In the interviews, Russian language teachers and pupils from Austria, Germany and South Tyrol relate personal viewpoints and experiences concerning the use or non-use of digital technologies in class. The average length of the teacher interviews amounts to approximately 35 minutes, and that of the learners to less than 20 minutes. The interviews allow deeper insights in teacher and learner beliefs as well as influence factors that either foster or hinder the implementation of digital media into the Russian language classroom.

One of the key aspects of this study is that the findings do not only reflect the teachers' viewpoints, which is frequently the case in other studies, but also the learners' opinions, and thus provide a broader and more balanced perspective on digital media use in the Russian language classroom. Additionally, the focus, the range and transnational character of this study are unique in the sense that there does not exist a similar survey in the field of media-based Russian language teaching.

3 Results

Nowadays a vast amount of different learning apps and digital tools are often freely available and eligible for classroom use. The question is not, as Roche puts it, whether digital technologies should be implemented into classroom settings, but rather how this could be done to provide added value to the learning process.²² With regard to successful and sustainable digital media use, different factors such as the technical equipment of schools, the digital media literacy of teachers and learners, available support systems and financial resources have been found to play a decisive role. This will be illustrated by means of selected study results in the subsections to follow.

3.1 Implementation of Digital Media

Firstly, the focus will be on what types of digital media are (not) implemented into the Russian language classroom whereby specific reasons based on the study results will be provided. Secondly, the findings demonstrate for what learning purposes teachers and pupils primarily use digital technologies.

Table 1 represents the teacher as well as the learner perspective. Furthermore, it shows the mean, mode and standard derivation that provide insight into the frequency of use. High standard derivation values indicate school-type specific differences in the available hard- and software as well as individual preferences, a conclusion that is also supported by the interview and further results from the online questionnaires. In terms of country-specific differences, study findings suggest that Austrian teachers and learners rate the technical equipment at their schools better than the South Tyrolean and German study participants (*H test*, teachers:

²¹ See: RAAB-STEINER, E., BENESCH, M.: Der Fragebogen: Von der Forschungsidee zur SPSS-Auswertung. Vienna: Facultas, 2012, p. 20; See also: MAYER, H.: Interview und schriftliche Befragung: Grundlagen und Methoden empirischer Sozialforschung. Munich: Oldenbourg, 2013, p. 63.

²² See: ROCHE, J.: *Mediendidaktik Fremdsprachen*. Ismaning: Huber, 2008, p. 60.

P 0.010, mean ranks: Austria 58.32, South Tyrol 44.58, Germany 42.29; pupils: P 0.013, mean ranks: Austria 167.79, South Tyrol 148.49, Germany 129.57). According to the study results, Austrian secondary vocational schools are digitally the best equipped. Coming back to Table 1, it is to say that the answers teachers and learners could choose from in the online surveys were often which was coded as 3, sometimes coded as 2, rarely (1) and never (0). The lines highlighted in green refer to a comparably frequent implementation of a specific tool, whereby the red sections show rare or non-use. Remarkably, the teacher and learner perspectives mostly coincide. It follows that online Russian dictionaries, search engines, presentation programmes, video platforms such as YouTube, digital textbook components and online reference books are most frequently employed whereas social networking sites, collaborative writing pads, blogs, webquests or online videoconferencing tools appear to be neglected in the Russian language classroom. As regards the latter, it must be emphasised that the results refer to pre-COVID-19 data. When the COVID-19 pandemic hit, most schools resorted to distance learning vastly using video conferencing tools such as Zoom, BigBlueButton as well as learning platforms such as GoogleClassroom that inevitably accelerated long overdue and necessary digitisation efforts. The reasons for the rare or non-use of digital writing tools (e.g. collaborative writing pads, blogs) lie - as was repeatedly stated in the interviews by teachers and pupils alike - with either non-functioning Russian keyboards or difficulties pupils experience when using those. According to some teachers, this leads to a preventable loss of precious teaching time. There appears to be a circular cause, since the avoidance of such writing tools leads to less practice in typing in Russian and consequently, to a fossilisation or degradation of typing skills. As regards M-textbooks for Russian, their non-use can be explained by their non-existence.

		Teacher perspective			Learner perspective		
		mean	mode	standard derivation	mean	mode	standard derivation
1.	M-textbooks	.76	0	.995	.18	0	.550
2.	Digital textbook components	1.70	2	1.083	.67	0	.982
3.	Learning platforms	.75	0	.997	.50	0	.912
4.	Online Russian dictionaries	1.65	2	1,026	1.34	0	1.186
5.	Online reference books	1.49	1	.938	.66	0	.858
6.	Search engines	1.86	2	.950	1.19	1	1.008
7.	Presentation programmes	1.54	2	.937	.92	0	.944
8.	Video platforms	1.97	2	.845	1.30	1	.799
9.	Podcasts	.53	0	.861	1.11	0	1.003
10.	Social networking sites	.28	0	.584	.16	0	.464
11.	Collaborative writing pads	.19	0	.525	.26	0	.561
12.	Chat programmes	.60	0	.974	.50	0	.843
13.	Blogs	.14	0	.486	.18	0	.490
14.	Digital pin boards	.14	0	.444	.09	0	.381
15.	Webquests	.14	0	.465	.11	0	.388
16.	Online videoconferencing tools	.15	0	.452	.12	0	.410
17.	Learning apps	1.06	0	1.018	.88	0	1.006
18.	Online mind mapping tools	.31	0	.642	.06	0	.269
19.	Online tests / exercises	.73	0	.819	.45	0	.774
20.	e-texts	.79	0	.882	.25	0	.587

TABLE 1: Types of digital media (not) used

Source: own processing, 2020.

As study results illustrate, digital media are mostly used for improving the pupils' audiovisual or listening skills (e.g. by means of YouTube) and their vocabulary range (e.g. through online dictionaries, learning apps), for developing their inter-/transcultural competences, for online research on different topics, for the mere transmission of knowledge (e.g. with the help of PowerPoint) as well as for motivational purposes. In the online survey, two thirds of the pupils confirm that the use of digital media motivates them whereas the others feel motivated only to a certain extent or not at all. In the interview, one student repeatedly states that she prefers working with traditional media. Another student relates that she favours writing Russian texts on her laptop, since this sparks her imagination and provides her with the opportunity to quickly resort to online dictionaries. Hence, individual learning preferences play an important role when it comes to digital media use. Other learning objectives such as media-assisted personalisation and differentiation as well as developing the pupils' critical digital media literacy often remain unconsidered. Although in the online survey as well as in the interviews, teachers emphasise the importance of these learning goals, they still have difficulties in putting them into practice, which is partly attributed to a lack of skill. Moreover, digital tools such as social networking sites, webquests, online pin boards or collaborative writing pads that help foster an action-oriented approach to teaching Russian are rarely used. As interview data suggest, the reasons for this lie with the teacher belief that setting up and conducting action-based digital learning scenarios is a rather complex and time-consuming task. In the interviews, three out of seven teachers specify that they only once or twice embedded a bigger task-based digital learning scenario such as an e-tandem with a partner school or programming language games for other groups of pupils by means of SCRATCH. One teacher explicitly states that she stopped integrating e-tandems due to time constraints, new requirements regarding the standardised school leaving exams in Austria and a slight loss in teacher motivation. Furthermore, some of the teachers feel that they lack certain competencies that would help them successfully integrate action-based online activities into their teaching. Data from the questionnaires support this fact, as we will see in the next subchapter.

3.2 Digital Media Literacy of Teachers and Learners

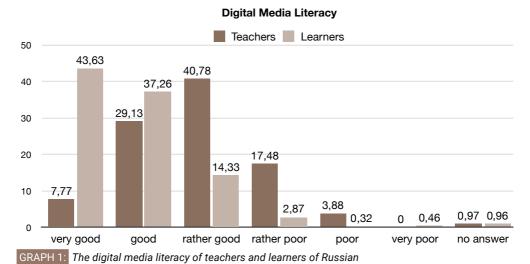
Aside from functioning and easily available hard- and software at schools, the digital media literacy of teachers and learners appears to be one of the most important prerequisites for efficacious digital learning and teaching.²³ Nowadays pupils tend to think of themselves as digital natives, a term originally coined by Prensky.²⁴ In the interviews, five out of seven teachers acknowledge the existing digital divide between their and the learners' competences. Nonetheless, the teachers tend to conceive of this fact as something positive in the sense that they can learn and profit from one another's strengths and knowledge. Here, mutual support mechanisms and collaborative learning seem to be foregrounded. The above-mentioned also has its parallels in the students' answers. In the interviews, three out of eight respondents mention that teachers lack certain digital skills that sometimes leads to the non-use of specific digital devices or tools. One of the Austrian interviewees remarks that her Russian teacher could not handle the interactive whiteboard wherefore the teacher ultimately stopped using it. Apart from this, a Russian language teacher from South Tyrol emphasises that, since there apparently was some money left, her school purchased two interactive whiteboards. According to her, the teachers did not receive any training which was why the smartboards were mostly

²³ EICKELMANN, B. et al.: Computer- und informationsbezogene Kompetenzen von Schülerinnen und Schülern im zweiten internationalen Vergleich und Kompetenzen im Bereich Computational Thinking. Münster, New York: Waxmann, 2019, p.14.

²⁴ See: PRENSKY, M.: Digital Natives, Digital Immigrants. In *On the Horizon*, 2001, Vol. 9, No. 5, p. 1-6.

left unused. This underlines the importance of constant, hands-on and high-quality pre- and in-service teacher training. As regards teacher education in the field of digital media, study results suggest a general lack in practice-oriented as well as of subject-specific training measures. Online survey data show that less than half of the teachers (N° 43) are satisfied with the teacher education they received. Hence, improvements in the teacher training sector seem necessary. The findings also suggest that the more satisfied teachers are with existing teacher training measures, the greater their willingness to attend those (*U test*, *P* 0.000; *Spearman's rank correlation coefficient*, *R* 0.386).

Graph 1 illustrates how teachers and learners of Russian holistically assess their digital media literacy. Over 80% of the pupils refer to their digital skills as being very good or good. In contrast, about one third of the teachers conceive of their digital competences as very good or good, over 20% describe them as being (rather) poor. Concerning their assessment, the Mann-Whitney U test did not show any statistically significant differences between male and female teachers. Interestingly, male learners rated themselves better than females (U test, P 0.005). This does not necessarily reflect their actual competencies, since girls – as Eickelmann et al. state - tend to downplay their skills.25 In terms of countries, no statistically significant differences could be extracted from the teacher survey (H test, P 0.770). In contrast to this, Austrian pupils assessed their skills best, followed by German and South Tyrolean students (H test, P 0.000; mean ranks: Austria 176.59, Germany 143.72, South Tyrol 131.29). Moreover, there is a statistically significant correlation between the age of the Russian language teachers and their digital competencies (H Test, P 0.000; Spearman's rank correlation coefficient, R -0.491). This means, the older the teachers the less developed their digital media literacy. The reason for this lies with pre-service teacher education programmes then in force, again the average age of the interviewed teachers being 41.7. More than twenty years ago, modern digital technologies were just evolving. In the interviews, some of the teachers conceive of the increasingly fast-pace of media change as problematic. For them it seems difficult to permanently keep updated.



Source: own processing, 2020.

See: EICKELMANN, B. et al.: Computer- und informationsbezogene Kompetenzen von Schülerinnen und Schülern im zweiten internationalen Vergleich und Kompetenzen im Bereich Computational Thinking. Münster, New York: Waxmann, 2019, p. 20-24, p. 278-279.

Besides the holistic assessment, an analytic evaluation was also conducted by means of can-do statements that were grouped under the categories Technical and User Skills, Critical Digital Media Literacy as well as Participation and Media Production. The basis for these three competence areas and descriptors respectively, are the European models referred to in the introduction. Each of these categories consists of five to six can-do descriptors. Table 2 illustrates selected study results of how teachers assess specific digital media skills whereby the emphasis is on competencies that entail some difficulties within the teaching process. In the online-questionnaire, teachers could choose from the answers applies coded as 4, rather applies (3), rather does not apply (2), does not apply (1).26 Additionally, Table 3 provides the response distribution in numbers and percentages. As regards item 3 in the section Technical and User Skills, 32 teachers feel that they (rather) cannot flexibly react to technical problems occurring during lessons. Some teachers (N° 15 and N° 17, respectively) have difficulties in making pupils aware of certain dangers or helping them observe so-called netiquette when using the internet or interacting with others online. Considering the student perspective, some of the respondents feel insecure when it comes to copyright restrictions, data protection, privacy settings and health issues.²⁷ These aspects need to be dealt with in teacher training as in the interviews some teachers refer to their insufficient knowledge of legal concerns regarding internet use. For Russian teachers, the category Participation and Media Production seems to be the most challenging, as shown in Table 2 and Table 3. The overall mean of this question battery amounts to 2.83, i.e. rather applies or rather does not apply. Twenty one to 52 teachers out of 103 admit difficulties with their own digital media adaptation and production skills as well as with the protection of legal interests. Remarkably, over 50% of the study subjects cannot apply digital media to foster a task-based approach to teaching Russian.

Teachers					
Technical and User Skills					
Items	mean	mode	med.		
Item 3	2.89	3	3.00		

I can react flexibly to technical problems arising during lessons.

Critical Digital Media Literacy

Items	mean	mode	med.
Item 9	3.22	3	3.00
Item 10	3.21	4	3.00

I can make my pupils aware of possible dangers (e.g. cyberbullying, privacy concerns) when using digital media.

I can guide my pupils to observe appropriate rules of conduct (netiquette) when using digital media.

Participation and Media Production

T di dolpadoli alla ilicala i Toddodoli						
Items	mean	mode	med.			
Item 12	3.15	3	3.00			
Item 13	2.48	3	3.00			
Item 14	2.68	3	2.00			

I can adapt existing digital learning tools for my own purposes.

I can create appropriate learning materials or activities (e.g. webquests, learning apps) using digital media.

I can use digital media to foster a task-based approach to learning Russian.

²⁶ In retrospective, it would have been more logical to code the answer does not apply as 0 etc.

²⁷ See also: BITKOM: Digitale Schule – vernetztes Lernen: Ergebnisse repräsentativer Schüler- und Lehrerbefragungen zum Einsatz digitaler Medien im Schulunterricht. Berlin: BITKOM Research, 2015, p. 22-47. [online]. [2022-09-01]. Available at: https://www.bitkom.org/sites/default/files/file/import/BITKOM-Studie-Digitale-Schule-2015.pdf.

Mean	2.83			
Item 16	2.91	3	3.00	l car parti
Item 15	2.97	3	3.00	I car (e.g.

I can help my students to create their own media products (e.g. presentations, videos or podcasts).

I can protect legal interests (e.g. copyright, privacy) when participating in the digital world.

TABLE 2: Analytical assessment of digital media literacy by teachers (selected study results) Source: own processing, 2020.

	Answer options (N° 103)							
	applies		rather applies		rather does not apply		does not apply	
Item	N	%	N	%	N	%	N	%
Item 3	25	24.27	46	44.66	28	27.18	4	3.88
Item 9	40	38.83	47	45.63	15	14.56	1	0.97
Item 10	45	43.69	38	36.89	17	16.50	3	2.91
Item 12	39	37.86	43	41.75	18	17.48	3	2.91
Item 13	19	18.45	32	31.07	31	30.10	21	20.39
Item 14	17	16.50	45	43.69	32	31.07	9	8.74
Item 15	30	29.13	45	43.69	23	22.33	5	4.85
Item 16	25	24.27	49	47.57	24	23.30	5	4.85

TABLE 3: Response distribution in numbers and percentages regarding the analytical teacher assessment Source: own processing, 2020.

3.3 Advantages and Challenges of Digital Media Use

Unquestionably, digital media – when used sensibly – have their benefits as they facilitate communication and help us throughout our day, be it at school or at work. The study results presented in this subchapter highlight positive aspects and further challenges teachers and learners of Russian encounter when applying digital technologies.

In the interviews, six out of seven teachers and all eight pupils emphasise the fact that using digital media in class provides for variety. This finding also has its parallels in the online surveys. Here, 86.4% of the teachers and 77.6% of the pupils (strongly) agree with the statement that digital tools render lessons more varied. In this context, the fun-factor and motivational purposes are referred to by almost all interviewees. In view of geographically distant languages such as Russian, five respondents each consider it especially beneficial that by means of the internet, authentic language use and real-life situations within Russian speaking communities can be experienced. In turn, as stated by several interview participants, this again motivates pupils to study harder. Further positive aspects of digital media use mentioned by the majority of the interviewees are the facilitation of organisational and work processes (e.g. administering school trips or homework assignments) as well as multimodal learning. Some of the study subjects emphasise that the multimodality that comes with digital media use helps students better memorise specific linguistic patterns. Additionally, it facilitates the learners' inter-/ transcultural competences as they experience certain cultural features with more than one of their senses when interacting with target language users online (e.g. by means of e-tandems).

Some of the problem areas of digital media such as non-functioning devices, time constraints, the digital divide and lack of skill have already been addressed. Besides this, study results suggest that current educational policies as well as the question of added value pose further challenges to Russian language teachers. In reference to the latter, five out

of seven teachers state that it sometimes just does not pay to integrate digital media as it is too time-consuming. Instead, they prefer using traditional tools. As study results show, this is due to several causes. Amongst them are technical problems, missing or broken digital devices, and insufficient media literacy skills. In addition to that, the small amount and the often poor quality of available digital learning materials for the school subject Russian pose a problem. In the interviews, several Russian language teachers point out that they need to create digital resources for teaching purposes themselves which again is labour-intensive. This is not the case with regard to other school subjects such as English, as some of the respondents highlight. In the interviews, teachers and learners alike state that they favour a healthy mix of traditional and digital tools. Coming back to current educational policies, some of the study subjects feel pressured by the authorities to instantly digitise each and every step they take. According to several teachers and learners, this is tantamount to a digitalisation mania. In the interviews, four teachers point out that there is a gap between the digitalisation objectives stipulated in school syllabi or educational decrees and the prevalent school reality. This entails a certain media scepticism and loss in teacher motivation. Multifaceted causes are held responsible for the existing gap. Evidently, some schools lack financial and human resources such as IT admins or data protection consultants. Missing support mechanisms, be they technical or pedagogical-didactic, lead to frustration among teachers. As stated in the interviews, some teachers feel left alone in their endeavours, and in view of their workload find it difficult to cope with constantly changing or newly added educational duties.

4 Discussion and Conclusion

Undoubtedly, the *COVID-19* pandemic and the necessary shift to distance learning have accelerated the digitalisation of the education system. Since teachers and pupils were somewhat forced to quickly comply with the new digital school reality, their overall media literacy can be said to have inevitably improved, although this might not be true for everybody. During the *COVID-19* pandemic, the Austrian ministry of education made efforts to more quickly supply schools, teachers and pupils with digital devices and learning platforms. So did the German and South Tyrolean authorities. As the presented study results show, the technical equipment is only one of many prerequisites that are responsible for efficacious digital language learning and teaching. The aforementioned gap between educational policy requirements and teaching practice – as Mehlhorn points out – will still exist in the near future. Structural changes such as the implementation of pedagogical-didactic support systems or the realignment of pre- and in-service teacher training oftentimes take years. Consequently, this gap cannot be closed instantaneously or even cost-neutrally just by relying on the voluntary commitment of teachers. Based on the study results, possible ways of diminishing the existing divide will be discussed in this chapter.

As regards pre-service teacher training, current university curricula need to be adapted to better prepare educators for their digital and related educational duties. Mandatory scientific-academic as well as pedagogical-didactic courses focusing on the meaningful implementation of digital media into teaching must be installed. Thus, it can be guaranteed that each future language or Russian teacher possesses research-based knowledge and a certain set of digital hands-on skills. Study results indicate that greater prominence in teacher education needs to be given to production-based and participatory media competencies. With regard to DigCompEdu, the competence areas that need to be more profoundly focused on are Digital Resources, Teaching and Learning as well as Empowering Learners. The latter advocates a learner-centred classroom in which pupils function as social agents and work autonomously. Therefore, (Russian) language teachers must be enabled to efficiently integrate action-oriented digital learning scenarios into their teaching to better fulfil the requirements set in educational

decrees and school syllabi, respectively. On the one hand, this can be realised by simulating sample scenarios in subject-specific didactic courses. On the other, action-based digital media use needs to be practiced during school placements. Further subject areas to be dealt with in teacher training are legal issues and the sustainability of media usage (e.g. copyright restrictions, *Creative Commons* licenses, protection of the environment, one's health and privacy). In terms of *DigComp 2.1*, these topics correlate with the competence area *Digital Content Creation* in conjunction with *Safety*. Specialists in the aforementioned fields such as legal advisors, psychosocial consultants and data protection officers should be available to teacher trainees as well as to in-service teachers and pupils. Hence, additional expert staff needs to be hired to support (future) teachers in putting educational duties into practice. Thus, teachers would cease to feel left alone in their endeavours to make the most of their lessons and the teacher motivation could be maintained.

Study results point to another field of action, being the development of additional high-quality, action-oriented digital language learning materials and M-books. Some Russian textbooks currently on the market, although also available as PDF-versions, appear to be outdated in view of digital educational standards (e.g. *Most neu A1-A2* and *Most neu B1*). Apart from online vocabulary trainers, MP3-files and supplementary behaviouristic pattern-drill exercises primarily focusing on grammar, they – except for the *Dialog* series – have little to offer. As regards textbook development, there seems to be a divide between target group orientation and financial feasibility. As Russian is a minor subject in German-speaking areas, the sales market for textbooks and other learning materials is comparably small. In order to counterbalance this trend, ministries of education should also provide financial means for the professional, research-based development of online learning materials and, importantly, for concomitant quality management. In doing so, the successful implementation of digital media can be promoted and the workload of teachers reduced.

In summary, mutually interdependent factors such as better technical equipment and teacher training, freely available high-quality digital resources as well as practice-oriented educational policies on digitalisation in conjunction with pedagogical-didactic and psychosocial support are held responsible for the efficacious integration of digital tools into the foreign language classroom.

The study results also have implications for future research. As they represent pre-COVID-19 data, a similar follow-up study investigating aspects of digital media use that have substantially and sustainably changed needs to be conducted. Moreover, classroom observations should be carried out. Thus in addition to subjective teacher and learner beliefs, the data would also provide an external perspective on the actual implementation of digital media into language teaching. In doing so, an answer to the question of what digitalisation measures initiated during the COVID-19 pandemic have indeed proven successful and realistic within the existing framework could be found. In conclusion and in reference to the concept of Balanced Teaching, an integrative use of both, digital and traditional tools is to be advocated. Thus, different learning preferences could be met and learner motivation maintained.

Literature and Sources:

AUTONOME PROVINZ BOZEN – SÜDTIROL: Rahmenrichtlinien für die Gymnasien in Südtirol. [online]. [2022-09-01]. Available at: https://www.provinz.bz.it/bildung-sprache/didaktik-beratung/downloads/582072_Rahmenrichtlinien-Gymnasien_web_(2).pdf.

AUTONOME PROVINZ BOZEN – SÜDTIROL: Südtirol digital 2020: Leitlinien für die digitale Entwicklung in Südtirol. [online]. [2022-09-05]. Available at: https://www.provinz.bz.it/politik-recht-aussenbeziehungen/europa/downloads/SUEDTIROL_DIGITAL_2020.pdf.

BÄR, M.: Fremdsprachenlehren und -lernen in Zeiten des digitalen Wandels: Chancen und Herausforderungen aus fremdsprachendidaktischer Sicht. In BURWITZ-MELZER, E., RIEMER, C., SCHMELTER, L. (eds.): Das Lehren und Lernen von Fremd- und Zweitsprachen im digitalen Wandel: Arbeitspapiere der 39. Frühjahrskonferenz zur Erforschung des Fremdsprachenunterrichts. Tübingen: Narr Francke Attempto, 2019, p. 12-23.

BAUR, N., FLORIAN, M.: Stichprobenprobleme bei Online-Umfragen. In JACKOB, N., SCHOEN, H., ZERBACK, T. H. (eds.): *Sozialforschung im Internet: Methodologie und Praxis der Online-Befragung.* Wiesbaden: VS Verlag für Sozialwissenschaften, 2009, p. 109-128.

BITKOM: Digitale Schule – vernetztes Lernen: Ergebnisse repräsentativer Schüler- und Lehrerbefragungen zum Einsatz digitaler Medien im Schulunterricht. Berlin: BITKOM Research, 2015.

BUNDESMINISTERIUM FÜR BILDUNG UND FORSCHUNG (BMBF): DigitalPakt Schule: Das smarte Klassenzimmer. [online]. [2022-09-05]. Available at: https://www.das-macht-schule.net/wp-content/uploads/dlm_uploads/2020/01/DigitalPakt_Schule-Das_smarte-Klassenzimmer.pdf>. BUNDESMINISTERIUM FÜR BILDUNG UND FRAUEN: Unterrichtsprinzip Medienerziehung – Grundsatzerlass. [online]. [2022-09-01]. Available at: https://www.bmbwf.gv.at/dam/jcr:f874e171-83ea-4e51-902b-48b373b3a187/2012 04.pdf>.

BUNDESMINISTERIUM FÜR DIGITALISIERUNG UND WIRTSCHAFTSSTANDORT (BMDW): Digitales Kompetenzmodell für Österreich: DigComp 2.2 AT. [online]. [2022-09-01]. Available at: https://www.bmdw.gv.at/dam/jcr:54bbe103-7164-494e-bb30-cd152d9e9b33/DigComp2.2_V33-barrierefrei.pdf.

BUNDESMINISTERIUM FÜR BILDUNG, WISSENSCHAFT UND FORSCHUNG (BMBWF): Lehrplan Pflichtgegenstand Digitale Grundbildung. [online]. [2022-09-01]. Available at: https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2022_II_267/BGBLA_2022_II_267.pdfsig. CARRETERO, S., VUORIKARI, R., PUNIE, Y.: DigComp 2.1: The Digital Competence Framework for Citizens with Eight Proficiency Levels and Examples of Use. Luxembourg: Publications Office of the European Union, 2017. [online]. [2022-09-01]. Available at: https://publications.jrc.ec.europa.eu/repository/bitstream/JRC106281/web-digcomp2.1pdf_%28online%29.pdf. CASPARI, D. et al.: Forschungsmethoden in der Fremdsprachendidaktik: ein Handbuch. Tübingen: Narr Francke Attempto, 2016. [online]. [2022-09-01]. Available at: https://doi.org/10.14220/odaf.2016.32.2.128.

EICKELMANN, B. et al.: Computer- und informationsbezogene Kompetenzen von Schülerinnen und Schülern im zweiten internationalen Vergleich und Kompetenzen im Bereich Computational Thinking. Münster, New York: Waxmann, 2019.

GOERTZ, L., BAEßLER, B.: Überblicksstudie zum Thema Digitalisierung in der Lehrerbildung. Essen: Hochschulforum Digitalisierung, mmb Institut, 2018. [online]. [2022-09-01]. Available at: https://zenodo.org/record/2592010#. YwipIXZBxPY>.

GRÄF, L.: Online-Befragung: Eine praktische Einführung für Anfänger. Münster: LIT, 2010. HILLMAYR, D., REINHOLD, F., ZIERNWALD, L., REISS, K.: Digitale Medien im mathematisch-

naturwissenschaftlichen Unterricht der Sekundarstufe: Einsatzmöglichkeiten, Umsetzung und Wirksamkeit. Münster: Waxmann, 2017.

KELLE, U.: Mixed Methods. In BAUR, N., BLASIUS, J. (eds.): *Handbuch der empirischen Sozialforschung*. Berlin: Springer VS, 2014, p. 153-166. [online]. [2022-09-01]. Available at: https://doi.org/10.1007/978-3-531-18939-0_8>.

KULTUSMINISTERIUM (KMK): Fachlehrplan Sekundarschule Russisch (Sachsen-Anhalt). [online]. [2022-09-01]. Available at: https://www.bildung-lsa.de/pool/RRL_Lehrplaene/Endfassungen/lp_sks_russ.pdf.

KURTZ, J.: Lehrwerkgestütztes Fremdsprachenlernen im digitalen Wandel. In BURWITZ-MELZER, E., RIEMER, C., SCHMELTER, L. (eds.). Das Lehren und Lernen von Fremd- und Zweitsprachen im digitalen Wandel: Arbeitspapiere der 39. Frühjahrskonferenz zur Erforschung des Fremdsprachenunterrichts. Tübingen: Narr Francke Attempto, 2019, p. 114-125.

LORENZ, R. et al.: Schule digital – der Länderindikator 2017: Schulische Medienbildung in der Sekundarstufe I mit besonderem Fokus auf MINT-Fächer im Bundesländervergleich. Münster, New York: Waxmann. 2017.

MELZER, E., RIEMER, C., SCHMELTER, L.: Das Lehren und Lernen von Fremd- und Zweitsprachen im digitalen Wandel: Arbeitspapiere der 39. Frühjahrskonferenz zur Erforschung des Fremdsprachenunterrichts. Tübingen: Narr Francke Attempto, 2019.

MAYER, H.: *Interview und schriftliche Befragung: Grundlagen und Methoden empirischer Sozialforschung.* Munich: Oldenbourg, 2013.

MAYRING, P. H.: Qualitative Inhaltsanalyse: Grundlagen und Techniken. Weinheim, Basel: Beltz, 2015.

MEHLHORN, G.: Digitaler Wandel und Medienkompetenz: Implikationen für die Russischlehrerausbildung. In BURWITZ-MELZER, E., RIEMER, C., SCHMELTER, L. (eds.): Das Lehren und Lernen von Fremd- und Zweitsprachen im digitalen Wandel: Arbeitspapiere der 39. Frühjahrskonferenz zur Erforschung des Fremdsprachenunterrichts. Tübingen: Narr Francke Attempto, 2019, p. 173-184.

NORTH, B., GOODIER, T., PICCARDO, E.: Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Companion Volume with New Descriptors. Strasbourg: Council of Europe, 2018. [online]. [2022-09-01]. Available at: https://rm.coe.int/cefr-companion-volume-with-new-descriptors-2018/1680787989.

ORF: *Laptop- und Tabletinitiative an Schulen soll verbessert werden.* [online]. [2022-09-02]. Available at: https://orf.at/stories/3248258/>.

PRENSKY, M.: Digital Natives, Digital Immigrants. In *On the Horizon*, 2001, Vol. 9, No. 5, p. 1-6. ISSN 1074-8121.

RAAB-STEINER, E., BENESCH, M.: *Der Fragebogen: Von der Forschungsidee zur SPSS-Auswertung.* Vienna: Facultas, 2012.

REEDECKER, CH., PUNIE, Y.: *The European Framework for the Digital Competence of Educators (DigCompEdu)*. Luxembourg: Publications Office of the European Union, 2017. [online]. [2022-09-06]. Available at: https://publications.jrc.ec.europa.eu/repository/bitstream/JRC107466/pdf digcomedu a4 final.pdf>.

ROCHE, J.: Mediendidaktik Fremdsprachen. Ismaning: Huber, 2008.

RÖSLER, D.: Prinzipien der Entwicklung und Evaluation von Lernmaterialien und Medien. In BURWITZ-MELZER, E. et al.: *Handbuch Fremdsprachenunterricht: Sechste, völlig überarbeitete und erweiterte Auflage.* Tübingen: Narr Francke Attempto, 2016, p. 471-476.

SCHMIDT, T.: Digitally Empowered Teaching and Learning: Kompetente Fremdsprachenlehrkräfte und intelligente Technologie. In BURWITZ-MELZER, E., RIEMER, C., SCHMELTER, L. (eds.): Das Lehren und Lernen von Fremd- und Zweitsprachen im digitalen Wandel: Arbeitspapiere der 39. Frühjahrskonferenz zur Erforschung des Fremdsprachenunterrichts. Tübingen: Narr Francke Attempto, 2019, p. 228-236.

SENATSVERWALTUNG FÜR BILDUNG, JUGEND UND FAMILIE (SenBJF): Rahmenlehrplan für den Unterricht in der gymnasialen Oberstufe: Gymnasien, integrierte Sekundarschulen mit gymnasialer Oberstufe, berufliche Gymnasien, Kollegs, Abendgymnasien. Russisch. [online]. [2022-09-01]. Available at: https://www.berlin.de/sen/bildung/unterricht/faecher-rahmenlehrplaene/anhoe_russisch_sek_2.pdf.

SWERTZ, CH.: Medien im Lehramtsstudium für die Sekundarstufe in Österreich: Eine quantitativ-inhaltsanalytische Lehrplananalyse von vier Curricula. In *Medienimpulse: Beiträge zur Medienpädagogik*, 2015, Vol. 53, No. 4, p. 1-71. ISSN 2307-3187. [online]. [2022-09-01]. Available at: https://journals.univie.ac.at/index.php/mp/article/view/mi890/1008>.

THALER, E.: Lernerfolg durch Balanced Teaching: Offene Lernarrangements, aufgabenorientiert, spielorientiert, medienorientiert. Berlin: Cornelsen Scriptor, 2010.

TULODZIECKI, G., HERZIG, B., GRAFE, S.: *Medienbildung in Schule und Unterricht*. Bad Heilbronn: Julius Klinkhardt, 2019.

Author



Mag. Mag. Sonja Bacher, PhD.
Innsbruck University
Department of Slavonic Studies and department of Foreign Language
Teacher Education
Innrain 52d, 6020 Innsbruck
AUSTRIA
sonja.bacher@uibk.ac.at

Sonja Bacher holds a degree in Slavonic, English and American Studies, in teaching Russian and English as well as a PhD in Foreign Language Education. She is currently working as a senior lecturer at the department of Slavonic Studies and the department of Teacher Education at Innsbruck University. She is one of the founding and editorial board members of the *DiSlaw*-journal (*Didaktik slawischer Sprachen*). Her major research interests are digital media in the foreign language classroom, media literacy and mediabased inter-/transcultural language learning.