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Digital Tools in Language Education – Origins, Frameworks, Perspectives

1. Introduction

Language education appears to be at a crossroads. Changing communicative and interactional realities as well as the growing acceptance of competence orientation and action-oriented methodologies are some of the reasons for this. Within this context, the following text will focus on some reflections on the implementation of digital resources and practices in the language classroom. One might be tempted to assume that an increase in the use of digital media in (language) learning is mostly due to necessities created by the COVID-19 pandemic. However, the ongoing digitalisation of everyday social and professional life in general is a more relevant key factor, as this is beginning to lead to a revision of existing constructs of communicative competence, which now includes digital "literacies" at the utilitarian level as well as the level of effective and appropriate interactional agency in digital spaces in all its multimodality. In addition, action-oriented paradigms for language learning, for example, suggest the need for more flexible learning arrangements, not just in pandemic times. Deliberations regarding curricular development might be well advised to redefine the construct of hybridity in learning to go beyond the mere technological level. Hybrid teaching and learning modes that include holistic and flexible teaching strategies, integrating a variety of processes or procedures that draw on multimodal resources in the language classroom, need to be included in curricular development. Finally, plurilingual realities, in part also due to global digital networking, require pedagogies that foster plurilingual repertoires, and digital tools can play a significant role in this.

Considering such tendencies, the purpose of this paper is to examine the relevant 'historical' contexts concerned with the implementation of digital tools in language learning over the past forty to fifty years, thereby contextualising current attitudes, practices, and future prospects as to their full integration into second language learning and teaching. Therefore, the author will not just look at the current state of digitally enhanced language learning and its role, in light of the aspects mentioned above, but will also look back to the very beginnings of what was then labelled *computer assisted language learning* (CALL), an emerging field of practice and study resulting from the development of the first personal computers in the late 1970s and early 1980s. Based on the author's involvement in CALL from very early on, the text will also contain a few descriptions of past samples of practice. In addition, the paper will revisit Stephen Bax's reflection on normalisation as a necessary prerequisite for the natural use of digital tools in language education. Furthermore, changing and evolving interactional practices in recent years, due to the digitalisation of social and professional interaction, will be addressed, together with a presentation as to how the *Common European Framework of Reference for Languages* (CEFR) has incorporated these developments,

in order to provide a suitable framework for the integration of digital media into language classrooms.

2. Recalling Early Stages

Readers might wonder why a look back in history might be of interest, as early ideas on how language learning might benefit from the then-emerging new technology are often perceived as being mainly focused on simple instructional interactions on a PC, as part of rote pattern drills embedded in traditional exercise formats. However, as will be shown in this paper, colleagues at that time were already looking for unusual, innovative, and collaborative interaction-oriented options for using computers in the language classroom that were very much in line with the communicative shift that was in full swing in language pedagogy in those days. This is evident in publications reflecting the history of CALL, which refer to the early post-mainframe stage of CALL as being "based on the communicative approach to teaching which became prominent in the 1970s and 80s," with proponents "of this approach [feeling] that the drill and practice programs of the previous decade did not allow enough authentic communication to be of much value" (Warschauer 1996, 3). In another reflection of "Historical perspectives on CALL," Davies, Otto, and Rüschoff (2013) point out that applications even in those early stages provided a variety of learning opportunities for learners by engaging them in listening, interacting, collaborative and responding activities. Apart from the most obvious role of the computer as tutor, digital tools were already considered to be more effectively and more appropriately used in a role as stimulus, where "the purpose of the CALL activity is not so much to have students discover the right answer, but rather to stimulate students' discussion, [collaboration], writing, or critical thinking" (Warschauer 1996, 4).

Let us briefly consider the following examples of computer assisted language learning software from those early days: *Storyboard* was a total cloze text reconstruction activity that invited learners to reconstruct a text by intelligently guessing words they would expect in the text to be 'disclosed.' The program progressively fit correct suggestions into the empty grid on the screen, thus providing additional points of reference and contextualized 'food for thought' for the learner. Teachers had the option of editing a text that fit in with the content and context of a given lesson and enter this into the tool. This might be, for example, the summary of a reading text used in class or a text to be 'created' based on context provided in the unit, e.g. a letter in reply to a correspondence dealt with in class. Learners were then invited to either individually or collaboratively reconstruct the text, working in front of a computer screen. One can easily imagine the kind of integrated linguistic and cognitive processing which learners engage in when considering options that might fit into the text lexically, grammatically and semantically. *Pinpoint* was another application, also

derived from a set of applications appropriately labelled 'Fun with Texts,' which presented learners with a hidden text that is progressively revealed, inviting them to match the text with one of four statements, titles, headlines or similar, also shown on screen. Starting with one word randomly presented, users were able to gradually look at more and more context from that point in the text by clicking the enter key. This application proved to be particularly useful when integrated into classroom discourse by using then-available projection facilities and inviting learners to focus on this predecessor of digital whiteboard and play the game in class. A scenario for classroom practice that also worked with *Storyboard* was *Contexts*, a vocabulary building activity that progressively presented up to ten concordance lines, i.e. lines of context all with the same KWIC, i.e. key word in context hidden. The KWIC gap served as a stimulus for learners to speculate on and identify the one common denominator, i.e. the software invited learners to 'guess' the one word missing and fitting into all the contexts available on the screen. This was quite different from traditional gapfilling exercises, as learners needed to consider all contexts in conjunction and carefully think about clues that suggested the one choice that fit all contexts and progressively discard a number of options that might fit in only one or two of the contexts available. Again, the tools came with an authoring option and allowed teachers to create activities with learner-group specific content.

Furthermore, gamification was something that teachers and software developers looked at from very early on. Some publishers, for example, developed adventure games specifically for language learning such as *London Adventure* or *Granville*. In addition, teachers started experimenting in their classrooms with commonly played games of the time, e.g. *Where in the world is Carmen San Diego?* or *Sim City*. Telecollaborative and CMC (computer-mediated communication) projects began to emerge immediately upon the arrival of more common access to e-mail and the internet. To name but a few, the *Times* initiated an 'International Newspaper Day,' a competition in which learners at schools around the world could draw on information made available by news agencies (via the *The Times*), but they could also feed in information from their own local context and then select from this pool of sources to produce and publish a school newspaper, offering a balance of local and international news. The school newspaper was distributed in print at the participating school and submitted by a given deadline in digital manuscript. Reinhard Donath and his students at a school in Aurich (Germany) were amongst the 'stars' of that competition while it was offered. In 1994, one of this colleague's CMC projects, with a focus on intercultural communication, even made front-page news in *Der Spiegel* (9/94), in its title feature on "Revolution des Lernens" (which could be translated as *revolutionizing learning at school*). The project in question was an e-mail exchange with learners from Aurich and learners in New York and was headlined "Ostfriesland meets the Bronx."

3. Normalisation, the Missing Link

Why did these initiatives, tools and applications developed at the time not have the impact and wide distribution desired by the CALL community? The examples referred to above most certainly foster "[p]articipation and interaction with others, which includes a social and even an emotional dimension, [considered to be] of value in education" (Bax 2011, 10). Furthermore, these examples do show that technology even at these early stages had the potential to contribute positively to language learning processes and offered opportunities to expand the scope of classroom practices. After all, as research over the years has shown, digital tools have the potential to fit in very nicely with a Vygotskian socio-constructive paradigm of learning which, amongst other principles, regards learning and development as "social rather than individualised processes" and as being fostered and constructed "communicatively" (Mercer and Fisher 1997, 13). In line with Piaget's postulate that human beings are by nature sense makers, Smudo, a German Hip Hop artist in an interview with *Süddeutsche Zeitung* once remarked that "Kreativität ist ein menschlicher Reflex," i.e. humans cannot not be creative. Digital tools always had an inherent potential for creativity. Starting from such assumptions, a number of paradigms began to emerge as being key to successful (language) learning: competence orientation and agency development, now accepted principles guiding the way curriculum development considers the outcomes of language learning; authenticity, self-directed (collaborative) knowledge construction, output orientation, and action orientation, now seen as important pedagogical principles that suggest flexible and participatory interactive classroom practice as being most fitting methodological constructs for fruitful learning contexts. Digital tools do (and did) have the potential to provide all of the above when appropriately integrated into the range of materials and practices available and used in language education. In addition, numerous programs and tools created in the early days of CALL might well serve as a blueprint for creating language learning-specific interactive and internet-compatible apps suitable for use on interactive whiteboards, in smartphone-enhanced learning scenarios as well as online collaboration and interaction within a classroom or in distance learning modes. This is just a byline for any start-up looking for ideas.

Returning to the question posed above, as to why the many creative materials and ideas took so long to find a natural and common place in language education, one might say that, apart from the fact that technology at the time was not widely available or often being monopolized by the sciences in schools, a lot of the materials and ideas developed were ahead of their times. In 2003, Stephen Bax offered a critical examination and reflection of the history of CALL and put forward the hypothesis that any medium or technology can only become a fully accepted and common, natural factor in language education once it is "so integrated into our lives that it becomes invisible – 'normalised'" (Bax 2003, 25). He reiterates this point when revisiting this

concept almost ten years later by stating: "A technology has reached its fullest possible effectiveness in language education when it has arrived at the stage of 'normalisation,' namely when it is used without our being consciously aware of its role as a technology, as a valuable element in the language learning process" (Bax 2011, 1).

Considering the way digital tools and practices have now become a common fact of life, it is safe to say that we have in fact reached the stage of normalisation. Therefore, even without the current pandemic, technology is finding its natural place in language education. As one teacher contributing to a European-wide survey on "The future of language education – learning lessons from the pandemic" – conducted on behalf of the Council of Europe's European Centre for Modern Languages (ECML) by an expert group, with the author as a member – put it: "Personally, I did not need the pandemic to realize the importance of technology in language learning. [However,] I [finally] had the opportunity to use ... internet ... and [technology], which made my [teaching] ... more productive" (qtd. from anonymous contribution to ECML 2021).¹ In a more general sense, people seem to no longer be consciously aware of the exact role and function of technology. They simply use digital tools and social media as a normal and natural way to communicate and interact, and today's learners "have adopted technology as a 'sixth sense' that serves as the principal means through which they interact with the world" (Hershatter and Epstein 2010, 217). In summary: Digital tools have become normalised and are now commonly used means of social and professional communication, interaction, and networking. In an educational context that advocates real-world relevance and classroom practice based on real-world interaction, there are enough reasons to not only draw on the potential of digital tools in language learning but also to fully integrate them into the portfolio of learning materials from textbooks and beyond. After all, in Bax's terms, normalisation is achieved "when computers are treated as always secondary to learning itself, when the needs of learners will be carefully analysed first [...], and then the computer [is] used to serve those needs" (Bax 2003, 24). Even if some might still consider digital tools as not being valuable and useful for creating meaningful learning opportunities, everyday communicative and interactional practices suggest the need to use digitally enhanced spaces in language learning in order to truly provide learners with the skills sets and competences needed in their daily lives.

4. Changing and Evolving Interactional Practices

With regard to normalisation, another point has gained in importance and recognition, almost like a self-fulfilling prophecy, as the increase in normal and everyday use of digital interaction and transaction has led to changing and constantly evolving, adapted

1 '...' in the quotation signals pauses in the original ECML transcript.

modes of language use: Since communicative practices in a digital context often differ significantly from the way people communicate in oral, face-to-face, or more traditional analogue written contexts, more flexible options afforded in social networks of mixing and mashing multimodal and multisensory ways of expressing oneself require additional communicative and interactive mediational practices and strategies. Consequently, such competencies and the agencies needed in such contexts must be recognized, reflected, and addressed in the language classroom. As a result, together with the issue of how to use technology effectively in language teaching and learning, it is necessary to analyse carefully what learning means in principle, what learners do and need in the real world, very much interrelated with digital practices, thereby leading to the aforementioned revised and up-to-date construct of current communicative competence in our digital era and ultimately integrating digital practice itself into language education so as to serve those needs.

The *Common European Framework of Reference for Languages* (CEFR) is perceived as a key contributing factor towards real-world rooted competence orientation in language education. As to the characteristics of online interaction and transaction, amongst the many research initiatives relevant for language education, the Council of Europe, while reflecting, adapting, and expanding the original descriptive scheme of the CEFR, considered the many observations that applied linguists have put forward to characterize the specific quality of communication in digital contexts. It is beyond the scope of this paper to reflect these in all their manifestations, but a few might be exemplified here. Amongst these are, for example, the need for more redundancy in messages as well as the need to check that a message has been correctly understood. Strategically, this includes an ability to reformulate, in order to support comprehension and deal with misunderstandings, together with a high degree of intercultural sensitivity and an ability to handle emotional reactions, both in synchronous and asynchronous modes of interaction. In blogs or chats, participation in sustained interaction with one or more interlocutors and an appropriate way of composing posts and contributions for others to respond to are important features. Furthermore, regarding the multimodality of communication and interaction, composing and reacting to messages with embedded media as well as the ability to include symbols, images, and other codes for making the message convey tone and 'non-verbal' subtext need to be addressed in a framework that provides descriptors and scales for language use in the digital era.²

Following its original publication in 2001, the CEFR – in order to maintain its real-world grounding – considered it necessary to not just look at – amongst other aspects affecting real-world language use – changes (of the kind addressed above) in communicative, interactional and transactional practices impacted by the normalisation

2 See the CEFR Companion Volume (Council of Europe 2020, 84) for more detail.

of digital tools. The CEFR also deemed it necessary to integrate relevant descriptors covering language use in digital contexts into the framework, as published in the *CEFR Companion Volume* (Council of Europe 2020). This was a necessary step to maintain the CEFR's "stand as a central point of reference" in language education (Trim 2012). In addition, this is very much in line with the CEFR's clear message that language learning should be directed towards enabling learners to act/react in real-life situations. Clearly, a descriptive framework for language education needs to be based on how language is used in a given context and for which specific purpose. While the CEFR itself does not "impose particular approaches and methods," as Byram and Parmenter (2012) point out, one cannot underestimate the CEFR's important and significant role as a framework "that brings curriculum, teaching/learning and assessment into much closer interdependence than has usually been the case" (Little 2006, 187). As hinted at above, language education is in the process of examining traditional constructs of the aims and outcomes of language learning, thus broadening the concept of communicative competence in terms of the evolving scope of communicative, interactional, and transactional practices affected by the normalisation of digital media, which now includes digital literacies in a more inclusive, holistic sense that goes beyond the mere technological level.

5. The CEFR Companion Volume – Providing a Suitable Framework³

As becomes apparent from the above, the CEFR needs to consider the implementation of digital tools in language education. The recently published CEFR Companion Volume (Council of Europe 2020) prominently addresses issues that will impact the further integration (normalisation) of digital tools and digitally enhanced classroom practices. One of the key contributions to language teaching and learning of the CEFR is the fact that it overcomes the skills distinction and moves language teaching and learning towards competence orientation grounded in real-world modes of communication and interactional practices. Thus, it also suggests action orientation as a key paradigm when considering methodologies that have the potential to foster competence orientation. This has been a key contributing factor to the acceptance of current competence-oriented curricula that guided innovation in language education in aims, content, and classroom practice. The changes in language use and communication identified above are clearly related to globalization and digitalisation, leading to a significant level of diversification and hybridity of modes of communication and interaction in socio-professional networking. The role of online modes of interaction has developed exponentially worldwide. As said above, the existing 2001 illustrative

3 The deliberations in parts of this paper concerned with the CEFR Companion Volume draw on the collaborative work of the Council of Europe's CEFR Expert Group, of which the author is a member, as well as the volume itself.

scales did not adequately represent multi-modal online interaction and collaboration, but the new descriptors and scales integrated into the framework in the CEFR Companion Volume, concerning the multimodal quality of activities typical of digital communication and web usage, are likely to have an impact on an increase in the natural use of digital tools in the language classroom.

Online interaction, conversation and discussion, together with goal-oriented online transactions and collaboration, are now represented in the CEFR in such a way that descriptors not only truly reflect current practices but also acknowledge the fact that digital communication technologies, tools, and modes of interaction are constantly developing. The CEFR Companion Volume acknowledges, for example, that online interaction, either synchronous or asynchronous, involves multiple remote social actors who flexibly remix media and texts to support their message. While this text, due to its focus on a more general reflection of digital tools in language education, cannot describe in detail all the changes in the CEFR Companion Volume, the refined and expanded scales concerning mediation also need to be mentioned, as mediation is an important aspect when considering digital practices and digitally enhanced language learning. The concept of mediation now includes a more multi-modal, plurilingual, pluricultural approach to reflect communicative and transactional practices. As a result, the perception of mediation, as represented in the CEFR, now integrates a truly holistic, multi-modal, plurilingual and pluricultural approach to describing communicative and transactional practices. Mediation is regarded not as a mere skill or competence but as social practice, again significantly impacted by and involving digital interactive practices.

6. The CEFR Companion Volume – A Descriptive Scheme Befitting Digital Practices in Real-Life and Language Learning

It is important to mention that the rather elaborate scheme of illustrative descriptors for online interaction and transaction, as well as for mediation activities, integrated into the CEFR, were not developed in a kind of ivory tower mode. The descriptors were subjected to a number of validating steps and now have the potential to inform a further differentiation of the aims and outcomes of language teaching and learning for public, personal, occupational and educational domains. This, in turn, will necessitate the full integration of the use of digital tools and digitally-enhanced practice into the language classroom. Obviously, a full representation of all the changes and additions in the CEFR Companion Volume would be beyond the scope of this paper. However, a few examples might help to illustrate the way in which the CEFR has developed, thus demonstrating the relevancy of digital tools in language teaching and learning. As to reading and writing, descriptors identify the ability to "understand short texts on subjects that are familiar or of current interest, in which people give their points of view

(e.g. critical contributions to an online discussion forum or readers' letters to the editor)" at the B1 level or to "use formality and conventions appropriate to the context when writing personal and professional letters and e-mails" at the B2 level. The following examples are indicative of the action-oriented paradigm the CEFR is rooted in and what the goals for learners should be during a straightforward and/or clearly structured online collaborative activity at school/university:

- Can participate actively in an online discussion, stating and responding to opinions on topics of interest at some length, provided contributors avoid unusual or complex language and allow time for responses.
- Can engage in online exchanges between several participants, effectively linking their contributions to previous ones in the thread, provided a moderator helps manage the discussion.
- Can recognise misunderstandings and disagreements that arise in an online interaction and deal with them, provided the interlocutor(s) are willing to co-operate. (= Online conversation and discussion B2)
- Can take a lead role in online collaborative work within his/her area(s) of expertise, keeping the group on task by reminding them of roles, responsibilities and deadlines in order to achieve established goals ... during a straightforward and/or clearly structured online collaborative activity at school/university (see Council of Europe 2020, 86-87)

Based on the above, it is easy to imagine how such descriptors might guide curriculum and materials development concerned with digital practices in language classrooms at any level.

As mentioned earlier, when it comes to the use of digital tools in social, professional as well as educational contexts, mediation is a key development in the CEFR that is relevant for the use of digital tools. Mediation as a competence, as well as a social practice, is important for successful communication and interaction. This is due to the fact that globalisation and digital networking necessitate, on the one hand, the ability to bridge gaps in contexts where interlocutors have different languages. On the other hand, due to the increasing multimodality in interaction, where it has become common practice that language users and participants in online interactions either mesh (= mediate) audio-visual and written elements into a message or adapt text according to context and medium used, mediational agency has become a central factor. Consequently, the CEFR now proposes a broader, more inclusive view of mediation. In addition to cross-linguistic mediation, the construct also encompasses mediation related to communication and learning as well as social and cultural mediation across worlds, genres, and – most importantly – media. In addition, an action-oriented approach, often seen as a natural result of the methodological message embedded in the CEFR, puts the co-construction of meaning (through interaction) at the centre of the learning and teaching process (North 2014). As the descriptors referred to above show, this is very much relevant when considering the use of digital tools in language education in communicative and mediational activities.

7. Current and Future Perspectives/Prospects

Whether or not a particular tool or material finds its meaningful, authentic and effective place in language education involves a number of pre-conditions. Obviously, real-world relevance and real-world communicative and interactional practice are relevant factors. Furthermore, as argued at the beginning of this paper, normalised and natural use of a given tool or material in everyday practice is an important aspect. Most importantly, though, the curricular context and grounding of language education need to support, even naturally necessitate, not just particular methodological approaches but also the use of particular tools in order to foster the aims and outcomes needed for successful and appropriate communication and interaction. Considering learning theories and fitting methodologies, in the opinion of the author, Vygostkyan sociocultural approaches and action orientation provide a firm grounding for the integration of digital tools into language education. Furthermore, digital tools do have the potential to afford paradigms such as agency, competence-orientation, authenticity, output orientation, action orientation, self-directed (collaborative) knowledge construction as well as flexibility in participatory classroom practice and interaction together with flexibility in time and space. As to future prospects, perhaps even necessities, concerning organisational principles of language teaching and learning, the construct of hybridity needs to be reflected to go beyond technology-afforded opportunities for blended or synchronous/asynchronous learning. Hybridity in its most basic sense can be described as a mixture, as something that integrates a variety of components to support and foster the same or similar results. Therefore, as far as teaching and learning is concerned, the term hybrid might best be referred to as integrating physical and online spaces together with all available resources into one inclusive construct. As already pointed out, digital media afford greater flexibility in materials and resources available as well as regarding modes of interaction and collaboration in the language classroom itself and the linking of learning spaces in school and outside school. This should be taken into consideration when reflecting the organisation of learning and distribution of materials and resources of any kind in language education. The challenge is to consider this in terms of holistic and flexible teaching strategies, integrating a variety of processes or procedures, together with the full range of materials and resources as well as physical and digital modes of interaction and communication in the language classroom. New types of hybrid learning materials, combining print and digital media, and aiming at the multimodal integration of learning spaces and practices, are most likely the way forward.

With regard to the aims and outcomes as well as the curricular framework, the CEFR Companion Volume provides not only a valuable platform to refer to when considering the above but also serves as a real-world grounded construct of communicative, interactional competence that should guide future content and

practices in language education. This framework has now integrated competences related to online interaction and transaction, and one can reasonably assume that this will lead to long-lasting (and natural, normalised) curricular integration of digital tools in language education. One can already observe an increase in more natural uses of digital tools in the language classroom. Educational publishers in most cases already offer an impressive portfolio of digitally enhanced materials and applications and are beginning to work on what one might metaphorically call the 'hybrid textbook' of the future, but which might best be labelled a multimodal pool of resources to support flexible, diversified, and inclusive learning arrangements. More and more teachers are exploring the potential of interactive whiteboards and smart devices to create a more open and flexible classroom. This includes the integration of non language learning-specific applications and tools, such as multimedia production and social networking with learning partners outside their own classroom. While it might be argued that current, pandemic-grounded requirements regarding distant and hybrid learning contexts have predominantly propelled this development, teachers were already beginning to appreciate more and more the potential of digital tools and materials before the pandemic.

Returning to the findings of the Europe-wide survey on "The future of language education in the light of Covid: Lessons learned and ways forward" (ECML 2021) already mentioned above, it can be said that a number of points raised in this paper were directly and indirectly addressed or implied in the close to 1,800 responses received. Many respondents found that while there were valuable lessons to be learned for their future teaching from their experiences of working online, they also pointed out that the pandemic only further fuelled the realisation of the importance of technology in language learning in general. The current pandemic, despite all the challenges and deficiencies it has revealed and which need to be addressed urgently, has also forced language teachers to explore and experience how technology can be used more effectively in language teaching and learning. To quote but one or two more of the many statements to that effect, put forward by respondents to the ECML survey referred to above: "I've learned that technology is an integral part of our daily lives and of education as well ... we ... now ... have a great tool in our hands. Teaching can be [more] motivating, interesting, pleasant, ... [even] free of stress," (ibid.) with another teacher commenting on the impact of digitalisation of language learning by pointing out that "the wide range of materials available has made teaching more varied and enticing" (ibid.).

8. Conclusion

As to the key points addressed in this paper concerning full and sustainable integration of digital resources and digital learning spaces into language education, these can be

summarised as follows: Despite myths to the contrary, those advocating digital tools in the early stages of CALL already created language learning specific programs (applications) that went beyond the scope of mere rote pattern drill with a focus on linguistic knowledge. Even 'back in the day,' a growing number of applications invited learners to interactively and collaboratively use language in a communicative and, at times, playful context that often encouraged cognitive processing and which led to an increase in language awareness. Nevertheless, as language learning is clearly rooted in real-world context and has adopted the necessity for real world relevance as a principle, a noticeable lack of normalisation in everyday life for some time prevented technology from becoming a normal fact of language teaching and learning. Following Bax's deliberations, tools and applications that are not part of normalised everyday lives and communicative practice will not become normalised in language education. However, due to digital tools having become a common feature in social practices, applied linguistics has begun to redefine the communicative competence construct, leading to the need for a redefined and expanded set of aims and outcomes for language education. This has been taken on board by those concerned with providing frameworks for curricular development as well as classroom practice and approaches to assessment. Together with a newly calibrated construct of what communicative competence with the inclusion of digital literacy should embed, issues such as plurilingual realities and learners bringing plurilingual repertoires to the classroom – in addition to mediation now being recognized not only as a holistic social practice that extends into the use of digital tools but also as an agency to bridge gaps in message format and contents across media – have an impact on the way language education is evolving. While the growing recognition of the potential of digital tools for language teaching and learning, as well as the need to actually use such tools in a real-world grounded language classroom, had already begun to develop, their potential was boosted by the current pandemic, not belittling the negative aspects and challenges that came with COVID-19. Current research into the effects of the pandemic on language education and lessons to be learnt for the future, as reported in this paper, suggests that teachers and educators, in a significant number of cases, actually experienced at first hand the great potential of digital tools, including benefits for heterogeneous learner groups and the creation of more flexible, hybrid learning contexts that, in the future, might lead to both a further integration of learning spaces in school and outside school and to a more motivating and stimulating classroom practice. Obviously, there still are a number of further issues that need to be addressed in order to achieve full normalisation of the implementation of digital tools as a natural fact of life in language education. Still, from the perspective of someone who has been involved in making the digitally-enhanced language classroom a more realistic and viable option almost from the beginning, the prospects are very encouraging.

Works Cited

- Bax, Stephen. "CALL – past, present and future." *System* 31 (2003): 13-28.
- Bax, Stephen. "Normalisation Revisited: The Effective Use of Technology in Language Education." *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)* 1.2 (2011): 1-15.
- Byram, Michael, and Lynne Parmenter. *The Common European Framework of Reference: The Globalisation of Language Education Policy*. Bristol: Multilingual Matters, 2012.
- Council of Europe. *Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Companion Volume*. Strasbourg: Council of Europe, 2020. <<https://rm.coe.int/common-european-framework-of-reference-for-languages-learning-teaching/16809ea0d4>> [accessed 29 September 2021].
- Davies, Graham, Sue E. K. Otto, and Bernd Rüschoff. "Historical perspectives on CALL." *Contemporary Computer-Assisted Language Learning*. Eds. Michael Thomas, Hayo Reinders, and Mark Warschauer. London and New York: Bloomsbury Academic, 2013. 19-38.
- ECML Professional Network Forum. "The future of language education in the light of Covid: Lessons learned and ways forward." 2021. <<https://www.ecml.at/ECML-Programme/Programme2020-2023/Thefutureoflanguageeducation/tabid/5491/language/en-GB/Default.aspx>> [accessed 29 September 2021].
- Hershatler, Andrea, and Molly Epstein. "Millennials and the world of work: An organization and management perspective." *Journal of Business & Psychology* 25 (2010): 211-223. DOI: 10.1007/s10869-010-9160-y.
- Little, David. "The Common European Framework of Reference for Languages: Content, Purpose, Origin, Reception and Impact." *Language Teaching* 39 (2006): 167-190.
- Mercer, Neil, and Eunice Fisher. "The Importance of Talk." *Computers and Talk in the Primary Classroom*. Eds. Rupert Wegerif and Peter Scrimshaw. Clevedon: Multilingual Matters, 1997. 13-21.
- Mohr, Reinhard. "Revolution des Lernens." *Der Spiegel* 9.94 (1994): 96-113.
- North, Brian. *The CEFR in Practice*. Cambridge: Cambridge University Press, 2014.
- Trim, John. "Preface." *Language Functions Revisited: Theoretical and Empirical Bases for Language Construct Definition Across the Ability Range*. Ed. Anthony Green. Cambridge: Cambridge University Press, 2012. xxi-xxxiv.
- Warschauer, Mark. "Computer Assisted Language Learning: An Introduction." *Multimedia Language Teaching*. Ed. Sandra Fotos. Tokyo: Logos International, 1996. 3-20.

