



**Leveraging Skype and Teeming Pictures for L2
German Vocabulary Acquisition in Children: A
Practical Report**

Michael Kanak, Rome

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Leveraging Skype and Teeming Pictures for L2 German Vocabulary Acquisition in Children: A Practical Report

Michael Kanak

This article shows how screen-sharing on Skype with teeming pictures was used to teach German vocabulary to two Greek boys learning German as their second language (L2). Throughout three one-hour online sessions, participants learned five new words each time by discussing situations within the teeming pictures, writing the new words in combination with drawing the corresponding image from the teeming picture, submitting written tests, and participating in synchronous practice via pronunciation checks. According to Nation's (2001) specifications, the results showed receptive vocabulary growth and suggested minor growth in productive knowledge, with teeming pictures boosting interest and context understanding.

1. Introduction

Vocabulary acquisition is fundamental when learning a new language (Nation 2001). Research shows that children who learn a second language implicitly acquire vocabulary through repeated exposure to words in context. New vocabulary words are initially picked up as chunks and then are gradually integrated into the developing linguistic system (Ellis 2008; Tomasello 2003). Horst, Parsons, and Bryan (2011) demonstrate that contextual repetition benefits vocabulary growth as early as the age of three; for example, hearing the same story repeatedly enhances young children's ability to learn new words from storybook reading. Several further studies suggest that words need to be encountered 6 to 10 times or more before they are likely retained in long-term memory, rather than forgotten soon after exposure (Shin & Kim 2023).

In the case of German as a foreign language, vocabulary acquisition involves not only learning lexical meaning but also coping with morphosyntactic features, such as grammatical gender, inflection, and compound formation. The Common European Framework of Reference for Languages (CEFR) urges that new vocabulary items should not be learned as isolated memorization words, but promotes an "action-oriented" approach, in which vocabulary is acquired through meaningful, task-based communication, using a functional repertoire of high-frequency words related to familiar domains (Council of Europe 2001; 2020). Research in the German context also shows that young learners typically acquire high-frequency content words earlier than function words and morphologically complex forms, with grammatical accuracy developing

gradually over time (Tracy 2008). During the Covid pandemic those well-established and proved “action-orientated” methods, like picture-based approaches, role plays, information gap projects or posters had to move to the digital world and many academic texts describe this adaption process also for the specific DaF context (Karbi 2021; Rösler & Zeyer 2021). One picture-based approach is the use of teeming pictures or “Wimmelbilder” to promote vocabulary acquisition and it is a proven didactical method when used in presence with particular books available for teaching new vocabulary, e.g. “Farbige Wimmelbilder für den DaZ-Unterricht: Mit 7 Postern Wortschatz & sprachliche Strukturen üben und für das freie Sprechen begeistern” (Fromm et al. 2023).

However, there is no available research about the online use of teeming pictures for teaching new vocabulary items. This report contributes to the existing scientific dialogue on their use in the digital environment by analysing a study on the use of Skype videoconferencing to teach vocabulary to younger students learning German as a second language. Cornelia Rémi (2010) describes the teeming picture, or “Wimmelbild”, as a picture full of detail that shows a mishmash of persons, situations, and landscapes. Screen sharing enables the instructor to present large, detailed images that facilitate discussions and effectively illustrate concepts during each lesson. The primary purpose of this teaching method is to demonstrate how desktop videoconferencing, utilizing Skype’s screen-sharing feature, can be combined with colorful and detailed images to make online vocabulary activities more engaging. Examining the students’ success through tests and lesson records helped the study adhere to the Nation’s (2001) guidelines on vocabulary knowledge, which, for understanding words’ components (spelling, pronunciation, grammar, collocations), emphasize a balanced approach with listening, speaking and writing, and using technology for computer-assisted learning to build depth (richer knowledge) and breadth (number of words). Furthermore, the study builds on Webb’s (2007) observations about the benefits of repetition, which found that repetition led to substantial vocabulary acquisition gains from 10 or more encounters with the target word. The approach supports effective online teaching of languages where traditional classroom methods are not feasible. When teeming pictures are used in conjunction with synchronous online communication, children can learn new words while being given multiple opportunities to see and discuss them, thereby addressing common problems in L2 vocabulary acquisition and utilizing simple, accessible technology.

2. Participants

The practice was introduced in Greece at the end of the pandemic, when two siblings, aged 8 and 11, received private German instruction. Starting from the age of 6, both children were enrolled in a German school and began learning German, as their mother has German roots and both parents want them to study in Germany when they are older. Based on the recommendations of their homeroom teacher, they decided to hire the author to help them improve their German, in addition to the lessons at school.

Based on first impressions, both learners had nearly the same level of German vocabulary knowledge, despite the older child receiving three years more instruction than his brother. During the first few months of working with them for two to three hours a day at their home, the author noticed that, despite being able to understand most of what was said to them in German during their homework and leisure time, both had difficulties responding and could not form complete sentences, showing significant productive vocabulary gaps. The observation that they frequently stopped during speaking when they did not know a word or used Greek words instead led to a focus on their vocabulary growth. They showed different learning characteristics: The 8-year-old student was keen on learning vocabulary through games and visual activities. He had a lot of energy and enthusiasm, yet he often found it challenging to focus on long, written lessons. In comparison, the older child performed better in reasoning and analysis, enjoyed working on formal tasks, and required more encouragement to excel when the activities focused on vocabulary. After the author had to relocate to another city, the parents wanted to continue the lessons online for one hour a week for three weeks; hence, the research began. As Alqahtani (2015) reported, since neither learner had prior experience with digital learning technologies, the transition to online learning had to be made gradually and with extensive support. Therefore, the lessons had to be tailored to students' ages, hold their interest, and fit their mental and emotional needs.

3. Pedagogical challenges addressed

Hedgcock and Ferris (2018) summarize previous research by experts including Nation (2016), Coxhead (2006), Read (2004), and Schmitt (2010), concluding that teaching vocabulary has a tremendous positive impact on learning a new language. Folse (2004) found that vocabulary deficiencies are identified as the biggest problem in using a new

language, also observing that low vocabulary knowledge results in major comprehension problems. According to Marulis and Neuman (2010: 300) vocabulary is the “heart of oral language comprehension”. Günday and Atmaca go even further, stating that “it is impossible to use a language effectively and successfully without improving vocabulary” (2016: 120). Vocabulary plays a crucial role in all language skills, whose development “depends on word acquisition” (2016: 113). However, “traditional” methods for teaching vocabulary, like solemnly rote learning them without context, does not help learners achieve the depth of vocabulary growth needed to become fluent in a language. The frequent lack of engagement and requirement for active use suggests a use of more dynamic methods like contextualized learning, technology, and varied practice to achieve actual vocabulary growth (Maskor & Baharudin 2016). Maskor and Baharudin (2016) suggest, furthermore, that effective strategies require repetition, multiple exposures, and meaningful contexts for retention and application, moving beyond simple memorization. Although students can frequently identify and recall many words, they often struggle to use them independently, both in speaking and writing. Hence, their productive knowledge is limited (Nation 2001).

Initially, there was concern that online learning would make it difficult to sustain students’ attention and motivation. Faced with these challenges, and based on prior research that found technology in the classroom to solve some teaching problems and introduce new ways for students to expand their vocabularies (Lessard-Clouston 2013), the instructor decided to use Skype screen sharing to teach vocabulary with teeming pictures. Using pictures in this way allowed everyone involved to examine and discuss each vocabulary item in a real-life picture setting, which aided comprehension and helped them remember what was taught. Working in real-time allowed students to voice their questions, observe, and practice vocabulary. An example of a teeming picture can be seen in the following description of the detailed teaching practice (see Section 6).

4. Selection of Words

To prepare for the lessons, the instructor examined various images and assessed their suitability for children, taking into account the number of meaningful objects included. The plan was to use pictures that allowed teaching at least five new vocabulary items during every session. Each word was associated with a visible object or movement in the

picture, ensuring its authenticity and the ability to hold students' attention, which was found to be especially important with younger children (Rémi 2010). The vocabulary items taught in every lesson were not chosen randomly but rather selected with a sound approach to teaching according to Nilsson (2023). He found that using the interests and environment of children in their age group is critical for vocabulary growth. For example, they both like nature a lot, and at the time of teaching, the current season was autumn. Therefore, the author chose a teeming picture that combines both their interests and displays a scene happening outside and in autumn. Based on the time spent with them over the prior three months, the author also knew approximately their vocabulary level and chose words that appeared to be missing in their discussions. Before they were taught, it was double-checked that they indeed didn't know the word. This was done before each lesson by reading them one word at a time. They had to say "STOP" when they knew a word. Their mother was also present at the beginning of each lesson, not just to help them set up the computer, but also because, as the author's client, she was a German speaker and wanted to know precisely which words her children would learn.

Hedgcock and Ferris (2018) recommend teaching only those words that are time- and attention-deserving. They also urge and recommend that teachers consistently manage and monitor vocabulary knowledge in L2 courses using word lists, including the most used words in a language. However, Dang and Webb (2016), who compared different word lists, found that there is very little research available on word lists, not every word list is the same, and should be chosen depending on the intended purpose. The instructor, therefore, chose only those words that fit the children's environment and age, were not known to them, and are most frequently used on Langenscheidt's Basic Vocabulary list. The list comprises the 4,000 most commonly used German words that appear in the chosen texts and are suitable for their presumed B1-B2 level, as determined by the Council of Europe (2001), which requires a vocabulary of 4,000 words. Such screening enabled students to work with words used in real-life contexts and focus on those most critical for various children's life situations.

5. Description of teaching practice

After the words were read aloud to double-check if the children already knew them, the instructor used screen sharing to display the teeming picture, allowing both students to view the material together. Their mother left at this point, allowing them to focus on the

lesson. Skype was chosen because it was free and provided a reliable way to share what was being taught on the screen. The process involved having both children in one room, which helped create a space where discussions and discovery were more likely to occur (Kotula 2016). The instructor led the students by exploring the parts of the picture one step at a time. He encouraged the children to share their thoughts about what was happening in the pictures and explained their activity by asking, “What do you think this person is doing?”. Whenever students had trouble describing a scene because they did not know the words, the instructor would say the word, demonstrate its pronunciation, translate it, and point it out in the scene. Guiding the discussion through questions kept students engaged and encouraged them to participate rather than listen and read. While being taught new words, they each kept a notebook. At the end of each lesson, the author shared a Word document with the correct spelling of each word. They wrote down the word and drew the corresponding part of the teeming picture in their notebooks. After they were finished, they held their notebook in front of the camera to double-check. This approach was used because, as Alqahtani’s (2015) research suggests, using multiple learning methods activates different senses and memory, leading to improved retention of content. Illustrations were not expected to be works of art but to help recall where and why each situation appeared in the teeming picture. Additionally, Alqahtani (2015) recommends using a notebook for teaching students vocabulary, as the increase in vocabulary depends significantly on the learner’s revision. In his research, students worked harder to understand the language in this way because they examined the context instead of relying on translations.

In many cases, learners made connections between vocabulary they already knew and the new words introduced during lessons, strengthening their overall understanding and helping them remember what they learned. Moreover, adding visual displays helped students learn new words, which, based on Paivio’s (1986) dual coding theory, were more likely to be mastered with the additional drawing (Clark & Paivio 1991).

Furthermore, participating in the creation of the documentation allowed students to feel responsible for their language development. Consequently, such activities helped preserve consistency, made reviews easier, and encouraged students to remember vocabulary by forming strong connections between their drawings and the new words.

To match Webb’s (2007) conclusions of substantial vocabulary acquisition gains from as many encounters of the target word as possible, the instructor ensured that each of the

five new words in each lesson was mentioned as much as possible. Without solely repeating the words, the teacher prompted their students to take one part of the teeming picture and use the previous vocabulary in different situations. For example, presenting “springen” (jumping) in one section of the picture, students could then be asked to analyze or describe a second person jumping or doing something else. Employing this technique, it was hoped that the learners would form stronger mental connections and reduce the resources required for memorization. The lessons were recorded, transcribed, and evaluated according to Nation’s (2001) framework for productive vocabulary. Between classes, the children could learn from their notebooks, which contained the correctly spelled German words and self-drawn pictures. On the day before each new lesson, the children took a brief test on the words they had learned (see Figures 2 and 3 in the Results section). Before learning new words, the pronunciation of the words from the previous lesson was checked.

6. Example lesson

This section illustrates one of the three teeming pictures and the corresponding lesson. The words that were chosen to be learned are written in red.



Fig.1: Autumn: Picture used to teach words like “schälen” (peel) and “pressen” (press). Retrieved from <https://www.schule.at/portale/deutsch-als-zweitsprache-und-inkl/detail/wimmelbilder2.html?parentuid=232173&cHash=843b95363d49073e9b799d864040f0be>

Situation 1

T: Hier ist unser Bild. (*Here is our picture.*)

S: Ich sehe nichts. (*I don't see anything.*)

T: OK, dann ist vielleicht die Verbindung schlecht. Warten wir ein bisschen. (*Ok, then maybe the connection is slow, let's wait a bit.*)

S: Jetzt! Jetzt sehe ich es gut. (*Now! Now I can see it.*)

T: Super. Was macht dieser Junge hier? (*Great, what is the boy doing here?*)

S: Er schneidet (*He is cutting.*)

T: Ja, aber wir suchen ein anderes Wort. Man macht es auch mit einer Banane. Du **schälst** den Apfel! Ich bin sicher, dass du das schon einmal gehört hast. Er **schält** den Apfel. Die Banane kannst du auch **schälen**. Warum **schält** er den Apfel? Was denkst du? (*Yes, but we search for another word. You do it also with a banana. You peel the apple! I am sure you heard it. He is peeling the apple. You can also peel the banana. Why does he peel the apple, what do you think?*)

S: Damit der Apfel keine **Schale** hat. (*So that the apple doesn't have peelings.*)

T: Genau! Schau hier oben, alle **geschälten** Äpfel sind in dieser Schüssel. (*Exactly! Look up here, all the peeled apples are in this bowl.*)



Situation 2

T: Und hier ist eine Maschine, sie **presst** und macht Apfelsaft. Ups, jetzt habe ich das Wort gesagt. **Pressen**. (*And here is a machine, and they press apple juice. Oops, I've said the word now. Press.*)

S: Ah, das weiß ich. Ich kenne das Wort doch. Es ist von den Weintrauben. (*Ah, I know that. I know it from the grapes!*)

T: Ja, Weintrauben werden auch **gepresst**. In Griechenland werden sehr viele davon **gepresst**. Wenn du Saft haben willst, dann musst du die Weintrauben **pressen**. Und schau mal hier, sie trinkt den Apfelsaft auch gleich. Er zieht diesen Hebel hier, dann wird eine Holzscheibe heruntergedrückt und die Äpfel werden **gepresst**. Zuerst **schält** sie die Äpfel, dann tut er sie dort hinein und dann werden sie **gepresst**. Und dann kommt Saft heraus. (*Yes, grapes are also pressed. They press a lot of them in Greece. Yes, if you want to have juice, you have to press the grapes. And look, she drinks the apple juice right away. He pulls that and then a wooden disc comes down and presses the apples. In the beginning he peels the apples, then he puts them in here and they are pressed. And juice comes out.*)



Situation 3

T: Nächstes Wort, was macht der Junge hier unter dem Baum? (*Next word, what is the boy doing here below the tree?*)

S: Er schläft. (*He is sleeping.*)

T: Das stimmt, aber wir suchen ein anderes Wort. Dein Bruder sagt er „chillt“. Aber das sagt man nur umgangssprachlich. Wenn man etwas in der Schule schreiben muss, dann sagt man das nicht. Ich sage es, er **döst**. Wenn du nicht komplett schläfst, dann nennt man das „**dösen**“.



Es ist wie „chillen“ aber ein besseres Wort für die Schule. Wenn du in der Schule etwas schreibst, dann benutzt du **dösen**. *(That's right but we are looking for another word. Your brother said he's chilling. But that's only what you say in everyday talk, you wouldn't write that in school. I say it, he is snoozing. If you don't sleep fully, you call it snoozing. It's like chilling but is a better word for the school. If you want to write that in school you can write snoozing.)*

Situation 4

T: Und jetzt hier, hinter den Traktor, was geben sie in den Anhänger hinein? *(And behind here with the tractor, what are they putting in the trailer here?)*

S: Sie sammeln die Äpfel. *(They are collecting the apples.)*

T: Super, jetzt hast du das Wort sammeln richtig gesagt! Von unserer letzten Stunde. Und was ist alles was sie in den Anhänger hineingeben? Es ist die **Ernte**! Du verstehst, was die **Ernte** ist? *(Great, now you said the word collect! It's from our last session. And what do they put on here. It is the harvest! You know correctly what the harvest is?)*

S: Ja. *(Yes)*

T: Ja, es gibt die Apfel**ernte**, die Weintrauben**ernte**. Sie werden **gepresst**. Aber Weintrauben **schält** man nicht, oder? *(Yes, there is the apple harvest, grape harvest. They get pressed then. The grapes don't get peeled, right?)*

S: Du kannst sie doch nicht **schälen**! Sonst werden sie zerstört. *(Because you cannot **peel** them! They get destroyed!)*



Situation 5

T: Genau. Und jetzt unser letztes Wort. Was ist das Adjektiv hier? Wie denkst du schmeckt der Apfel? *(Exactly, and our last word. What is the adjective here? How do you think this apple tastes?)*

S: Dummer Geschmack. *(Dumb taste)*

T: Kennst du ein anderes Wort? *(Do you know another word?)*

S: Es schmeckt nicht gut. *(It doesn't taste good.)*

T: Ja, und das Wort ist **ekelhaft**. *(Yes, and the word is disgusting.)*

S: Ja, das weiß ich. *(Yes! I know that.)*

T: Super, zum Beispiel kannst du sagen "Igitt", das ist **ekelhaft**. Es schmeckt **ekelhaft**. Gut, jetzt schreibt bitte die Wörter in euer Vokabelheft. **Schälen, pressen, dösen, die Ernte, ekelhaft** [Wimmelbild wird geschlossen und Word-Dokument mit der richtigen Schreibweise wird geteilt]. *Great, for example you can say eew, that is disgusting! It tastes disgusting. Good, now we write the words down really quickly: peel, press, snooze, the harvest, disgusting.) [Teeming picture closed and word document with correct spelling is shared on screen.]*

S: **Schälen, pressen, dösen, die Ernte, ekelhaft**. *(Peel, press, snooze, the harvest, disgusting)*

T: Habt ihr die Wörter geschrieben? Super. Kannst du bitte einen Satz mit jedem Wort machen? *(Did you write them? Great. Can you make a sentence with each word, please?)*



S: Ich **schäle** einen Apfel. Ich **presse** die Früchte. Ich **döse** neben einem Baum. **Die Ernte** wird in die Scheune gebracht. Der Apfel war **ekelhaft**. (*I peel an apple. I press the fruits. I snooze besides a tree. The harvest is brought into the barn. The apple was disgusting.*)

T: Super Hans! Alles richtig! Bis zum nächsten Mal! (*Great Hans! All correct. See you next time!*)

S: Bis bald! (*See you!*)

7. Results

In Figures 2 and 3 below, the test pages designed by the author are displayed. As mentioned, the children filled out the test a day before each new lesson. They were in the same room but separated to prevent copying from each other, and the mother was present to monitor and send me a picture of their tests afterwards to correct them. Test page 1 helped, in addition to correct spelling, to confirm the correct receptive knowledge of the word, using the same context, picture, and example sentences from the teeming picture. Test page 2 was designed to confirm productive understanding of the word, with a focus on using different phrases and contexts than those encountered during the lessons to check if they indeed understood the meaning of the word and could produce it in a different context (Nation 2001). Later, it was realized that sentence two, which tested the word “pressen” in connection to the subway in Athens, was not perfectly fitting. Despite the author using body language during the lesson and showing himself “pressed”, none of the children could get it right on the test.

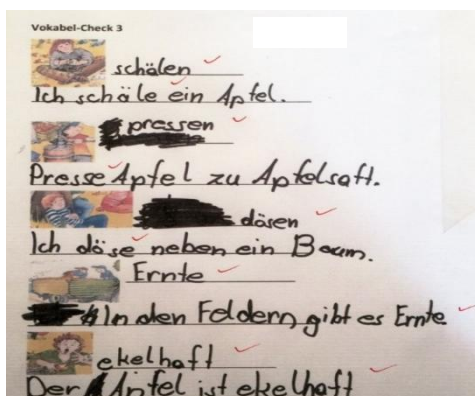


Fig. 2: Written Test of Hans selective. Note. Test page 1 example. Own work.

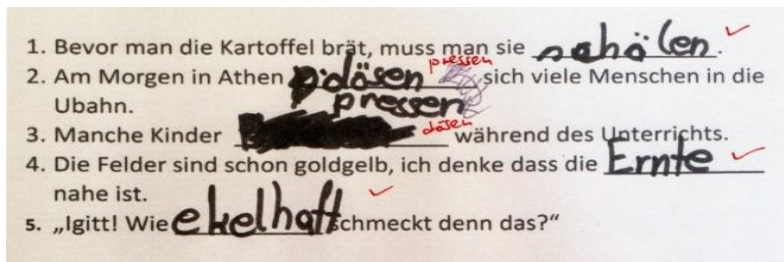


Fig. 3: Written Test of Hans productive. Note. Test page 2 example. Own work.

Table 1 presents the combined results for the 8-year-old boy, Hans, summarizing the times the word was used during the lesson, his pronunciation results, and the receptive and productive knowledge of the word, based on Test Page 1 and Test Page 2. The final productive knowledge of the word means that he was able to pronounce the word correctly, with the correct intonation, spell the word correctly, and use it in another context (Nation 2001).

	Used in the lesson	Correctly pronounced	Receptively know (correctly pronounced + correctly used in test with the same picture and context):	Productively known
Peel	11x	yes	yes	yes
Press	12x	yes	yes	no
Snooze	6x	yes	yes	no
Harvest	7x	yes	yes	yes
Disgusting	6x	yes	yes	yes

Table 1: Combined results of Hans. Note. Results. Own work.

8. Lessons learned

In this study, the rich pictures, full of many details, provided students with plenty to discover, motivating them to learn. It was observed that the learners became more involved and excited, and especially the younger learner showed improvement, as he had often struggled to pay attention during the three months of in-person teaching that preceded. Spontaneous engagement helped maintain a natural flow in the conversation, while also giving students the sense that they were in control of their own learning (Rémi

2010). By keeping things simple with Skype, the instructor could devote more attention to teaching than addressing technical difficulties (Kotula 2016). However, some technical and connectivity issues occasionally prevented the lessons from starting on time. Kotula (2016) also explored this in one of her papers: sharing screens is useful most of the time, but sometimes, the display quality fades, and the instructor cannot show attention-grabbing details to participants. Consequently, the teacher should ensure that their internet connection is stable, that both their and their students' audio directions are clear and sync well, and that screen sharing is crisp with minimal lag. Establishing a routine for this process helps teachers feel relieved and reassures students that everything is in place to ensure their learning proceeds smoothly (Folse 2004). Still, instructors should always be prepared for disruptions and arrange ways to maintain contact, and they should be ready to have a "backup" plan (Shintani 2016). The author was prepared to send the picture to the mother's iPad and use regular phone calls to continue with the lesson; however, it was not needed.

Other research (Chen 2019) has furthermore highlighted that, despite its many advantages, online lessons can raise various issues related to student motivation and independent assignment completion. The author could also observe this, as the older student's motivation to study slowly declined from week to week, particularly noticeable when work was done independently, such as copying words from the shared word document, and while sketching the corresponding part of the teeming picture in the notebook. Because the mother told the author that he skipped reviewing vocabulary he had already learned during the week, it could also be that the didactics and online methodology, using teeming pictures and screen-sharing in this research, were not helpful for his motivation to learn new vocabulary. It is also possible that during online lessons, no one was physically present to offer support or encouragement. According to Powell (2013), the absence of physical materials or the inability to physically interact with the materials shared with other students may have reduced their overall experience. Strictly following a planned approach, such as using visual aids like teeming pictures to teach vocabulary, guarantees a focus on specific essential words. However, when used too intensively or as the sole method for acquiring new vocabulary, it can also make things boring and limit the ability to use language in various situations.

9. Conclusion

The study suggests that merging teeming pictures with Skype could lead to stronger engagement among learners compared to “traditional” teaching methods for vocabulary, like rote memorization, vocabulary drills, writing as often as possible, etc. However, since the sample size is only two students and a control group is missing, no general conclusions can be drawn in this aspect. Further research is also needed to verify the actual efficiency of combining teeming pictures with Skype. For example, could three similar lessons be conducted, using two other Greek children at a similar language level as a control group, and use the above-mentioned “traditional methods” to teach the same vocabulary items? In this way, it could be verified if vocabulary was indeed learned better or worse. Testing the same vocabulary items after several months could also reveal which method works better to retain vocabulary in the long term, allowing for more sophisticated conclusions and comparisons to be drawn.

Additionally, word lists from official certification bodies, such as the Goethe Institute, could also be used. Some of them are freely available and have the advantage of being grouped into topics and created for the explicit CEFR Language Proficiency levels (A1-C2). Further research could include utilizing the Goethe Institute word lists and employing Artificial Intelligence to create a specifically tailored picture for each topic. This would reduce the time teachers spend searching for suitable pictures and eliminate elements from traditional “real-life” pictures that do not cover the topic. In this way, teachers who don’t have access to Goethe Institute materials can create their own, have peace of mind that the words they teach are proven and valuable for the corresponding Language proficiency, and that the learner will reap the most from the effort spent learning vocabulary.

Bibliography

- Alqahtani, M. (2015) The importance of vocabulary in language learning and how it is taught. *International Journal of Teaching and Education* 3:3, 21–34. <https://doi.org/10.20472/TE.2015.3.3.002>
- Chen, M. (2019) A comparison of synchronous versus asynchronous CMC peer feedback for EFL learners' pronunciation improvement. *Hwa Kang English Journal* 24:1, 77–102.
- Clark, J. M.; Paivio, A. (1991) Dual coding theory and education. *Educational Psychology Review* 3:3, 149–210. <https://doi.org/10.1007/BF01320076>

- Council of Europe (2001) *Common European Framework of Reference for Languages: Learning, teaching, assessment*. Cambridge: Cambridge University Press.
- Council of Europe (2020) *Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume*. Strasbourg: Council of Europe Publishing.
- Coxhead, A. (2006) *Essentials of teaching academic vocabulary*. Boston, MA: Houghton Mifflin.
- Dang, T. N. Y.; Webb, S. (2016) Evaluating lists of high-frequency words. *ITL – International Journal of Applied Linguistics* 167:2, 132–158. DOI: [10.1075/itl.167.2.02dan](https://doi.org/10.1075/itl.167.2.02dan)
- Ellis, R. (2008) *The study of second language acquisition* (2nd edn.). Oxford: Oxford University Press.
- Folse, K. (2004) *Vocabulary myths: Applying second language research to classroom teaching*. Ann Arbor, MI: University of Michigan Press.
- Fromm, J.; Kuhn, N.; Speier, C. (2023) *Farbige Wimmelbilder für den DaZ-Unterricht: Mit 7 Postern Wortschatz & sprachliche Strukturen üben und für das freie Sprechen begeistern* (1. bis 4. Klasse) [Teaching material]. Donauwörth: Auer Verlag in der AAP Lehrerwelt GmbH.
- Günday, R.; Atmaca, H. (2016) Vocabulary teaching in an action-oriented approach. *Participatory Educational Research* 4:1, 112–121.
- Hedgcock, J. S.; Ferris, D. R. (2018) *Teaching readers of English: Students, texts, and contexts* (2nd edn.). New York, NY: Routledge.
- Horst, J. S.; Parsons, K. L.; Bryan, N. M. (2011) Get the story straight: Contextual repetition promotes word learning from storybooks. *Frontiers in Psychology* 2, Article 17. <https://doi.org/10.3389/fpsyg.2011.00017>
- Karbi, G. (2021) „Könnt ihr mich gut hören?“ DaF-Unterricht in Zeiten der Corona-Pandemie. *Zeitschrift für Interkulturellen Fremdsprachenunterricht* 26:2, 345–360.
- Koller, U. (2015) *September_normal*. <https://www.schule.at/portale/deutsch-als-zweitsprache-und-inkl/detail/wimmelbilder2.html?parentuid=232173&cHash=843b95363d49073e9b799d864040f0be>
- Kotula, K. (2016) Teaching a foreign language in a desktop videoconferencing environment. *Teaching English with Technology* 16:3, 37–51.
- Lessard-Clouston, M. (2013) *Teaching vocabulary*. Alexandria, VA: TESOL International Association.
- Marulis, L. M.; Neuman, S. B. (2010) The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research* 80:3, 300–335. <https://doi.org/10.3102/0034654310377087>
- Maskor, Z.; Baharudin, H. (2016) Receptive vocabulary knowledge or productive vocabulary knowledge in writing skills, which one is important? *International Journal of Academic Research in Business and Social Sciences* 6:11, 261–271. <https://doi.org/10.6007/IJARBS/v6-i11/2395>
- Nation, I. S. P. (2001) *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- Nation, I. S. P. (2016) *Making and using word lists for language learning and testing*. Amsterdam: John Benjamins. <https://doi.org/10.1075/z.208>

- Nilsson, K. (2023) *Vocabulary development within an informal environment: Extramural activities' effect on children's vocabulary acquisition*. Malmö: Malmö University.
- Paivio, A. (1986) *Mental representations: A dual-coding approach*. Oxford: Oxford University Press.
- Powell, B. (2013, January) Getting the most from video teaching. *Strd*, 60. <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=84432654&site=ehost-live>
- Read, J. (2004) Research in teaching vocabulary. *Annual Review of Applied Linguistics* 24:1, 146–161.
- Rémi, C. (2010) Reading as playing: The cognitive challenge of the wimmelbook. In: B. Kümmerling-Meibauer (Hrsg.) *Emergent literacy: Children's books from 0 to 3*. Amsterdam: John Benjamins, 115–139.
- Rösler, D.; Zeyer, T. (2021) Ich! – Wer ich? Zur Interaktion im Online-Unterricht. *Informationen Deutsch als Fremdsprache* 48:5, 545–568. <https://doi.org/10.1515/infodaf-2021-0072>
- Schmitt, N. (2010) *Researching vocabulary: A vocabulary research manual*. Basingstoke: Palgrave Macmillan. <https://doi.org/10.1057/9780230293977>
- Shin, J.-W.; Kim, J. Y. (2023) Effects of exposure frequency, depth of processing, and activity repetition types on vocabulary learning. *English Teaching* 78:4, 293–322.
- Shintani, N. (2016) The effects of computer-mediated synchronous and asynchronous direct corrective feedback on writing: A case study. *Computer Assisted Language Learning: An International Journal* 29:3, 517–538. <https://doi.org/10.1080/09588221.2014.993400>
- Tomasello, M. (2003) *Constructing a language: A usage-based theory of language acquisition*. Cambridge, MA: Harvard University Press.
- Tracy, R. (2008) *Wie Kinder Sprachen lernen: Und wie wir sie dabei unterstützen können* (2. Aufl.). Tübingen: Francke.
- Webb, S. (2007) The effects of repetition on vocabulary knowledge. *Applied Linguistics* 28:1, 46–65. <https://doi.org/10.1093/applin/aml048>

Biographical Information

Dr. Michael Kanak currently teaches at the German School in Rome and combines insights from pedagogy, psychology, and intercultural education research. He is particularly interested in child development, especially under conditions of instability. His many years of experience as a classroom teacher at various German elementary schools abroad allow him to bring a practical perspective to his research. Email: michael.kanak@uniroma1.it.

Keywords

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