

THE DEVELOPMENT OF EARLY COMMUNICATION SKILLS USING FLASHCARDS

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Summary. *The article is investigating the development of early communication skills in children by using flashcards as a teaching-learning aid. The communication skills aimed by our research are the speech production, and the development of the verbal oral language. Language is a complex system and even though its primary function is not the communication (as Chomsky is stating), it is still broadly used as a facilitator and an enhancer of the communication. The use of flashcards is expected to facilitate the concept formation and vocabulary development. Flashcards are widely used in foreign language learning, and we aim at generalizing the positive effects on the vocabulary building for native language acquisition. However, the exploration of some drawbacks of using flashcards had been observed during focus-groups with practitioners (educators and teachers).*

Keywords: *communication, language development, flashcards, intervention.*

Introduction. Communication is important to human interaction and learning, and it starts even before child birth and could never end, as through language we can continue communication even after a person's disappearance (we can still communicate with Plato through his dialogues, for example). Language brings to communication a complex tool. It helps us name things and bring communication to a new dimension. The word deposits, the vocabulary is fundamental to communication [1, p.5362]. Communication has a great power, and during early ages is vitally important to provide and maintain a good communicative environment. Recent neuro-cognitive and psychological studies [8, p. 177; 27, pp. 29; 2, p. 71-83; 2, p. 71-83; 25, pp. 2110-2113] show that the first two years of life interaction experiences are crucial to early child-parent bonding. Social behaviours affect not only the child but the parents as well, especially child-mother dyad [27, pp. 32]. Directing attention [2, p. 71-83], child-parent interaction [22, p. 219], solid practice in authentic settings [25, pp. 2110-2113], meaningful feedback [25, pp. 2110-2113], role modelling and imitating [26, pp. 32-287; 21, pp.17-33] influence the development of early communication skills such as language. Visual stimuli are widely available and it is inevitable in learning environment. Studies [18, pp. 545-561; 13, pp. 104-111] show that visual applications with educational purposes provide exciting experiences for learners. Communication is enhanced while the child attempt to communicate is reinforced with a feedback, and the power of controlling the environment by communicating is motivating. Communication can be enhanced using some assisted systems that use external support, an example are visual aids (pictures, icons, photos, Bliss symbol, flashcards etc.) The use of flashcards is used also in activities for communication development at early ages, and the main reason is that linking pictures with some educational content foster memory and facilitate

understanding; also they are easily understood by a wide variety of communication partners in various contexts. The augmentative visual aids and the virtual environment offer a rich and dynamic context for communication and learning [24, pp. 102-190].

Theoretical background. Researches [29, pp. 196-208; 28, pp. 301-306; 24, p. 102; 6, pp. 8-16; 16, pp. 211-219; 15, pp. 96-99] show that children are widely exposed to visual stimuli generally provided by a kind of device. The most used visual aid in education is represented by the printed aids. Their usage is proved to facilitate learning by making it more efficient and more interesting [23, pp. 1-9; 17, pp. 78-81]. The multi sensorial method is validated against the use of text alone or phonics [23, pp. 1-9; 19, p. 695] inviting teachers to use embedded pictures in early literacy teaching. Visual aids are seen as part of the learning process, and their effect in maintaining learners' interest could be a greater support to teaching [11, pp. 46-56]. Visual exploring of the environment, of the objects, images are important practicing opportunities to develop optimal visual functioning. Visual aids are easily accessible, available and they can be used by children independently, even when the lesson is finished [4, p. 161]. At the same time, if digitalized visual aids are used, they can offer the opportunity to reuse them in flexible location, and at convenient time. Other advantages of flashcards, mostly for online flashcards [6, pp. 8-16] are „instant dictionary reference, interactive pronunciation and session statistics”. D. Rambli et.al. [16, pp. 211-219] recognize the short time attention and focus of the early age children as a difficulty of engagement in the learning process. The authors of the above-mentioned study pinpoint that flashcards are a fun and interactive approach and they bring joy to learning and therefore increase the chances to memorisation and understanding. The advantage identified is its tangibility and the opportunity to make learning more active by including the interactive element of manipulation and doing, memorising and linking the content with a certain motor action. Visual aids can be used as augmentative and alternative ways for words with the aim to clarify and go where spoken or written words alone can't do. Flashcards, like other visual aids, are helping learners to gain a deep understanding. E. Sanchez et.al. [18, pp. 545-561], C. Dong [6, pp. 8-16] identify the explanatory function of visual aids, they provide a support in understanding the to-be-learned contents; the study is recommending visual aids in order to ensure an explanatory function and it mentions that for regulatory control the information should be provided auditorily. J. Nikoopour et.al. [12, pp. 1366-1373] finds vocabulary gain in the case of the use of digitized and non-digitized flashcards. D. Casasanto et al. [3, p. 177] adds a variable to the use of flashcards; the location and the research findings show that placing flashcards to certain places chosen in accordance to their interpretation of the vocabulary (positive and negative) has a positive impact on learning. The interpretation and giving a personal meaning to the content learned accompanied by the motor action of placing the flashcards, organising and placing them led to a more efficient learning, more durable memories. Researches [9, pp.47-52] determined even a Reading Accessibility Index (ACC) that is establishing a single-value reading parameter that can capture information on both reading speed and print sizes that can be read. The permanence of the visual aid (books, flashcards) offers the opportunity to get back any time, as long and as often is needed. This characteristic offers an important tool for self-study, quick reference [5, pp.42-48]. Studies [7, pp. 32-44] show that students have to learn to use feedback and regulate their learning in accordance with the feedback received and flashcards could be used as well as a helpful revision technique. The primary use of flashcards was in learning a foreign language [14, pp. 103-113], but studies show that they are effective in understanding the

content in other areas, as flashcards support the meaning of the provided content. C. Lin [10, pp. 529-539] suggests that there is little research on the use of flashcards and their effects on learning outcomes.

Research question. The article is trying to answer to the following question: what kind of effects flashcard educational aids have on the communication skills of 2-6-year-old children in primary school education. The main problem addressed is to explore if in the rich visual stimuli environment, flashcards, another visual aid, would facilitate verbal communication skills and would have significant effect on the building receptive language and would facilitate expressive language. The null hypothesis in this research, consequently, asserted that flashcards have no effect on building receptive and expressive language. The hypothesis tested during our research demarche is the exploration if the independence and the autonomy that could be given by the use of flashcards on the mnemonic power could push and launch spontaneous use of the new vocabulary. It was tested also the content arrangement (aesthetics, the sizes, the number of elements) and the organisation of the information on the flashcards as well as the message that should be conveyed through picture in favour of the written communication. We were interested to explore the situations and conditions when using flashcards can confuse the user by attracting attention to themselves and becoming consequently distractions. The research aim was to test it empirically as it provides guidelines about how to present verbal aids.

Research design. To address the research question, we applied during communication activities a teaching method that incorporates flashcards. During the study we used flashcards as an augmentative communication tool in language learning; the purpose of their usage was enhancing comprehension and thus memorisation and giving clues by flashcard manipulability in order to help expressing skills. Participants included thirty children in junior kindergarten (ages 4–5) enrolled in kindergartens in Pitești, Romania. Participants were split randomly into experimental and control groups to participate in this acquisition study. The experimental group received instruction accompanied by flashcards, the control group was taught using text books. The selection of the groups was undertaken under the following criteria: no visual or auditory difficulties, no intellectual delay, normal speech and language development, in order to ensure homogenised group according to development (the instrument used for their evaluation was Portage Guide, as well as teacher feedback and appreciation). We chose to practice vocabulary as a working content, and it was selected the basic vocabulary (5 themes) from national curriculum. Flashcards were developed by research team in cooperation with educators, and the basic idea was to introduce the vocabulary in a visual context. The procedure followed acquisition activity and assessment (done 3 session each theme, every 3 days). During acquisition activity, teachers worked around 10 minutes individually with each child and there was also a group activity for giving feedback and provide the space to interaction and use of the new vocabulary learned. After 3 sessions, children performances were assessed and the correct use of vocabulary was recorded (we were interested in the expressive language).

Findings and observations. The preliminary results indicated a positive reaction of the children towards the introduction of flashcards during activities. Further observations have been made and the novelty element (the use of flashcards) could explain children's reactions. Findings of the present research show a significantly increased performance on the final test for participants from the experimental group against control group participants. Flashcards produced more correct responses and facilitated expressing skills of children, increasing the number of

spontaneous expressions with the new learned vocabulary during class participations (recorded by educators working with children) as well. Results of ANOVAs confirmed the research hypothesis: participants receiving instruction using flashcards outperformed those receiving instruction just auditorily or using textbooks. At the same time, educators punctuate a more engaging behaviour in the learning process for experimental group participants. Results have practical implications for the design of the materials used for communicational activities for early learners. The preliminary results indicate the children reacted positively towards the books; most reported they like and enjoy using the AR book. Observation of the children behaviours during study corroborates this finding. Most students requested to use the AR book repeatedly. These results suggest the potential of AR book as a tool to create fun learning environment especially for preschool children. Furthermore, the brief interview with the teacher of the preschool also suggested that the system seems to grab the attention of the children. Further research is planned to examine the impact of student-generated flashcard in the learning and in the development of meta cognitive skills. It is important to state that all participants were tested after a month consequently to the experiment and a good recognition rate of the vocabulary was recorded by the experimental group. We can conclude that the learning content remained constant, while in the control group the number of correct words recognition and usage decreased.

Conclusion. Learning methods have to adapt to the information age and to take advantage of the available digital tools to create didactic materials and ease children understanding of the new vocabulary. Flashcards give autonomy to practice outside classroom and go over and over the content independently of the teacher providing a solid base for retention and learning. A „hybrid system” [15, pp. 96-99] could be take into account for future teaching and learning material design.

Funding. The paper is presenting the results of an analyse of the impact of flashcards use in schools in the framework of FLASHMIND Project (no.2019-1-FR01-KA201-063156), financed by European Commission, within ERASMUS+ KA201. The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

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