Application of the Short Card Method in Teaching Compositions in the Intensive Education Program

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Abstract:
In many Islamic education contexts, teaching Arabic composition poses pedagogical challenges due to students' limited exposure to structured writing and syntactic complexity. This study aims to examine the application and pedagogical impact of the Short Card Method as an instructional tool for improving Arabic writing skills within an intensive education program. Using a qualitative case study design, the research was conducted through class observations, student writing analysis, and interviews with learners and instructors. The data were analyzed thematically using the Miles and Huberman model to identify key patterns in learning behavior, grammatical development, and engagement dynamics. The findings demonstrate that the Short Card Method significantly enhances students' grammatical accuracy, fosters cognitive engagement, and improves coherence in written compositions. By incorporating color-coded, manipulable sentence and paragraph components, the method allows students to visualize syntactic relationships and logically organize ideas before writing. These outcomes suggest that low-tech, visual-based learning tools can effectively support Arabic writing instruction when combined with constructivist learning principles. The study contributes an innovative, student-centered approach to teaching composition that is adaptable to faith-based and resource-constrained learning environments.
Keywords: *Arabic Writing Instruction, Short Card Method, Visual-Syntactic Learning, Intensive Language Program*.

Abstrak:
Dalam banyak konteks pendidikan Islam, pengajaran komposisi bahasa Arab menimbulkan tantangan pedagogis karena keterbatasan paparan siswa terhadap penulisan terstruktur dan kompleksitas sintaksis. Penelitian ini bertujuan untuk menguji penerapan dan dampak pedagogis Metode Kartu Pendek sebagai alat pengajaran untuk meningkatkan keterampilan menulis bahasa Arab dalam program pendidikan intensif. Dengan menggunakan desain studi kasus kualitatif, penelitian dilakukan melalui observasi kelas, analisis tulisan siswa, dan wawancara dengan peserta didik dan instruktur. Data dianalisis secara tematis menggunakan model Miles dan Huberman untuk mengidentifikasi pola-pola utama dalam perilaku belajar, pengembangan tata bahasa, dan dinamika keterlibatan. Temuan menunjukkan bahwa Metode Kartu Pendek secara signifikan meningkatkan akurasi tata bahasa siswa, mendorong keterlibatan kognitif, dan meningkatkan koherensi dalam komposisi tertulis. Dengan menggabungkan komponen kalimat dan paragraf yang dapat dimanipulasi dan diberi kode warna, metode ini memungkinkan siswa untuk memvisualisasikan hubungan sintaksis dan mengatur ide secara logis sebelum menulis. Hasil ini menunjukkan bahwa alat pembelajaran berbasis visual berteknologi rendah dapat secara efektif mendukung pengajaran menulis bahasa Arab jika dikombinasikan dengan prinsip-prinsip pembelajaran konstruktivis. Penelitian ini memberikan pendekatan inovatif dan berpusat pada siswa dalam mengajarkan komposisi, yang dapat disesuaikan dengan lingkungan belajar berbasis agama dan terbatasnya sumber daya.
Kata Kunci: *Instruksi Menulis Bahasa Arab, Metode Kartu Pendek, Pembelajaran Visual-Sintaksis, Program Bahasa Intensif*.

INTRODUCTION / المقدمة

Writing skills are one of the most essential yet challenging competencies to master in second language acquisition, especially in Arabic language education. In the context of intensive Arabic education programs, students are required not only to understand grammatical structures but also to produce coherent, cohesive, and contextually appropriate written compositions (Azman et al., 2022; Wang et al., 2020; Zhou et al., 2023). However, many learners often experience difficulties in organizing ideas, applying syntax correctly, and maintaining thematic consistency in writing. These issues are exacerbated by the conventional teaching methods that still dominate composition classes methods which rely heavily on passive learning, textual explanation, and memorization without engaging cognitive and creative student participation (Arslan et al., 2023; Hu et al., 2021; Op de Coul et al., 2021). Consequently, there is a growing need for more effective, interactive, and learner-centered approaches that can facilitate the development of students' writing skills in Arabic within intensive learning environments.

One promising approach to address this gap is the Short Card Method, a strategy that utilizes visual, segmented, and manipulable learning aids to help students build sentence structures and develop coherent paragraph compositions. This method encourages active student involvement in reconstructing texts, fosters creative thinking, and reinforces the logical flow of ideas through the physical arrangement of content cards (Gupta et al., 2021; Sicard et al., 2022). Despite its pedagogical potential, the application of the Short Card Method in Arabic composition classes remains underexplored, particularly in intensive educational settings where time constraints and curriculum demands often limit methodological innovation. Therefore, a systematic implementation and evaluation of this method are required to determine its effectiveness in improving students' writing outcomes (Epstein et al., 2022).

Empirical studies in language pedagogy suggest that visual-based, segmented learning tools such as short cards can improve writing fluency, idea organization, and grammatical accuracy (Anna et al., 2022; Tuygar Okutucu et al., 2023). These methods leverage students' spatial and visual memory and allow for kinesthetic learning, especially beneficial in environments with diverse learning styles. In addition, task-based learning strategies like the Short Card Method have been shown to foster better learner engagement and retention, particularly when integrated with repetitive practice and feedback loops (Judiono et al., 2023; Luo et al., 2022; Metta et al., 2023). Within the intensive program context, where students are expected to achieve high proficiency in a limited time, such alternative approaches could provide both cognitive scaffolding and motivational enhancement.

This research is positioned to fill a practical and theoretical gap by examining the implementation of the Short Card Method in teaching Arabic writing at the Intensive Education Program. Unlike previous studies that focus on grammar or reading comprehension, this study emphasizes structured composition development through an active learning model tailored to high-paced educational environments. Therefore, the

main research question of this study is: How does the application of the Short Card Method affect students' ability to compose structured Arabic texts in an intensive education program? Additionally, this study aims to explore students' responses to the method and to identify the factors that support or hinder its effectiveness in classroom settings. The underlying assumption is that through structured, visual, and interactive methods like short cards, students can achieve better learning outcomes in Arabic composition, thereby enhancing the overall quality of intensive Arabic education.

The argument underlying this research is that the Short Card Method provides a structured yet flexible framework that supports the cognitive processes involved in Arabic writing. Unlike traditional instruction that often isolates grammar from writing practice, this method integrates syntactic awareness, vocabulary usage, and logical coherence in one tangible activity. It enables learners to visualize the flow of sentences, experiment with sentence reordering, and self-correct through guided manipulation. The originality of this study lies in its contextual application within an intensive Arabic program, where time-bound learning objectives require innovative and efficient teaching strategies. By systematically examining the method's effect on learners' written output, this research contributes not only a practical model for teaching composition but also empirical insights into the integration of visual-manipulative techniques in Arabic pedagogy. This adds new dimensions to Arabic language instruction, particularly in environments that demand rapid and sustained language acquisition.

RESEARCH METHOD / المنهجية

This research was conducted at the Intensive Arabic Education Program of University of Maulana Malik Ibrahim Malang, which serves as the main unit of analysis. This program was chosen because it implements a high-paced learning structure that requires effective and practical strategies to improve students' Arabic writing skills. The students in this program often face challenges in organizing coherent sentences, applying grammar correctly, and maintaining thematic unity in their compositions. The study employed a qualitative design using a case study approach. This approach was deemed suitable to deeply explore the process, dynamics, and impact of implementing the Short Card Method as a pedagogical intervention in Arabic composition instruction (Cole, 2024; Scharp, 2021; Tasci et al., 2020). By focusing on a single institutional context, this research aims to provide a detailed and contextualized understanding of how the Short Card Method affects the writing performance of students in intensive language learning environments. (Abdullah, 2024)

Students were particularly central to this research, as their interaction with the learning tool and their compositional output became the primary indicators of the method's effectiveness (Byrne, 2022; Campbell et al., 2021; Kiger & Varpio, 2020). The selection of informants followed a purposive sampling strategy to ensure that participants had direct involvement with the Short Card Method and could provide rich, relevant data. A balanced representation of high-, mid, and low-performing students was included to assess the method's adaptability across varying levels of writing competence.

Data were collected through in-depth interviews, classroom observation, and document analysis (Creswell & Poth, 2018). Interviews were conducted to explore teachers' strategies, students' experiences, and program administrators' perceptions regarding the integration of the Short Card Method. Observations focused on how students used the short cards during writing sessions, how instructors guided the process, and how

students collaborated or worked independently to build compositions. Document analysis included samples of student writings before and after the implementation, lesson plans, instructional materials, and assessment rubrics. The data collected were analyzed using a three-step qualitative analysis procedure: data reduction, data display, and conclusion drawing. Data reduction was carried out to focus on segments relevant to the research questions. The data were then displayed thematically and descriptively, followed by triangulation to confirm the validity and reliability of the findings.

FINDINGS AND DISCUSSION / نتائج البحث و المناقشة
Findings
Visual-Syntactic Structuring Improves Grammatical Accuracy

One of the main findings of this study is that the implementation of the Short Card Method significantly improved students' grammatical accuracy in writing Arabic. In this method, students are given colored short cards, each representing the main grammatical elements such as mubtada, fi'il, maf'ul bih, jar–majrur, and dhuruf zaman/makan. These cards are designed with color codes and simple syntactic symbols that make it easier for students to recognize and structure sentences visually.

Based on the results of intensive class observations in the third and fourth weeks of implementing the method, there was a change in students' learning behavior in understanding sentence structure. Previously, many students, especially those with intermediate and low initial abilities, often made mistakes in composing verbs and object sequences, as well as in recognizing the relationships between sentence elements. However, with the help of the cards, they began to construct sentences logically and were quickly able to recognize the mistakes they made when the sentence structure appeared visually incoherent.

The writing subject teacher noted that in three writing exercises before and after the implementation of the method, the level of grammatical errors decreased consistently. This is especially evident in types of errors such as the use of verb forms that match the subject (fi'il mudhari'–madhi), the agreement between mubtada and khabar, and the correct use of the letter jar. One teacher stated, "They used to be confused about determining the order. Now they can arrange them first with cards, then write them down confidently." This statement shows that physical manipulation of sentence elements has a strong cognitive impact in strengthening syntactic understanding. The following presents observation data related to the application of the method and its impact on students' grammatical abilities:

Table 1. Impact of Visual-SyStrategic Card Structuring on Grammatical Accuracy

Aspect	Implementation	Observed Impact
Visual Structuring	Use of color-coded short cards for each grammatical unit (e.g., subject, verb, object, modifier)	Students showed a clearer understanding of sentence structure and logical word order.
Syntax Manipulation Practice	Students rearranged cards to test sentence coherence before writing them	Reduction in syntactic errors, especially in verb-subject agreement and use of prepositions
Grammatical Error Identification	Peer checking using card patterns before transcription into writing	Increased self-correction rate and peer-assisted feedback during practice sessions
Structured Writing Tasks	Weekly composition assignments using card-guided outlines	Grammatical accuracy scores improved by an average of 22% after three weeks

Table 1 above illustrates that the Short Card Method is not only a visual aid but also a pedagogical tool that encourages independent analytical and corrective thinking processes. Students not only memorize structures, but also actively construct and reconstruct sentences in visual form before being written down. This finding indicates that teaching Arabic writing skills will be much more effective if it integrates a visual-manipulative approach that is in accordance with the principles of experiential learning and constructivist pedagogy. Thus, this method is worthy of being developed more widely in the context of intensive Arabic language learning in madrasahs and Islamic boarding schools.

Cognitive Engagement and Student Motivation Increased Dramatically

The second important finding of this study shows that the use of the Short Card Method not only has an impact on the cognitive aspect in the form of increased understanding of syntax, but also significantly increases students' mental engagement and learning motivation in Arabic writing lessons. The results of classroom observations during the three weeks of implementation showed a change in the learning atmosphere to be more dynamic, participatory, and enjoyable. Students were seen more actively raising their hands, discussing in small groups, and showing high enthusiasm when constructing sentences using short cards that are varied in color and easy to manipulate.

This activity creates a learning atmosphere that resembles an educational game (game-like learning), which makes the process of learning to write no longer feel boring or one-way. In-depth interviews with several students confirmed these observational findings. A grade XI student said, "Usually writing makes you dizzy because you have to write sentences straight away, now we can play by arranging the cards first, then write them. It feels more relaxed and more confident with the sentence structure." Another student added, "It feels like playing a puzzle, but using Arabic. So I'm excited to join the lesson because I'm not always told to sit down and write." These comments indicate that the activity of constructing sentences visually through cards not only strengthens syntactic skills but also creates a positive learning experience emotionally and cognitively.

The writing subject teacher also expressed the view that this method helps overcome student boredom, which has been a challenge in learning Arabic. One teacher stated, "Usually students are passive and just copy from the board, but with this method, they compete to try to construct sentences in front of the class. I was overwhelmed dividing the groups because everyone wanted to participate." These findings indicate that the Short Card Method opens up space for students to play a more active role, feel in control of the learning process, and be involved in learning as a whole, both mentally, socially, and emotionally.
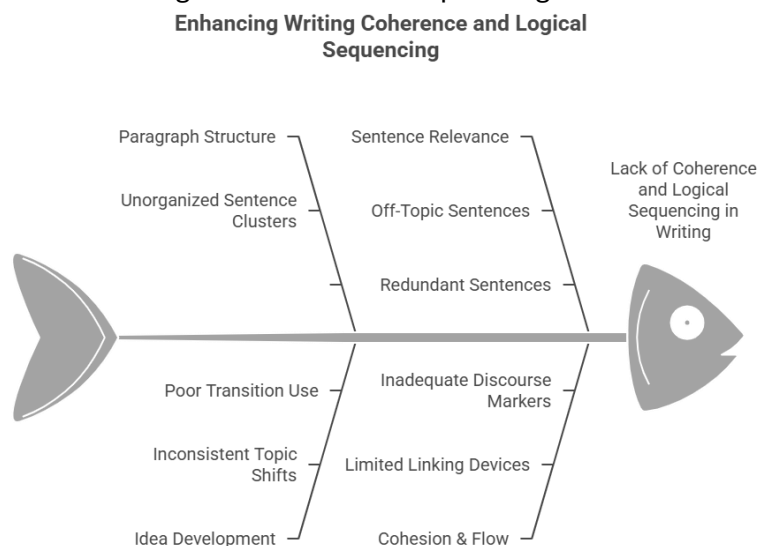
So, if seen from the interview shows that this method not only helps students understand grammatical aspects but also stimulates the spirit of learning through multisensory involvement and kinesthetic approaches. The implication of this finding is that teaching Arabic writing, which has been considered difficult and boring, can be reformulated into a more interactive, enjoyable, and empowering learning experience. The Short Card Method does not require high technology, but can produce strong psychological effects on student learning engagement. Thus, this method offers an innovative contribution to the strategy of increasing motivation to learn Arabic in the context of

madrAsahs and contemporary Islamic education.

Writing Coherence and Logical Sequencing Enhanced Significantly

In addition to improving the accuracy of grammatical structures and increasing students' cognitive engagement, the application of the Short Card Method has been proven to have a significant positive effect on the coherence of writing and the logical sequence of students' ideas in writing Arabic paragraphs. This method is equipped with additional cards that are classified based on the function of the paragraph, such as main sentences (jumla ra'īsiyyah), supporting sentences (jumal musā'idah), and closing sentences (jumla khātimah). In learning practices, students are directed to compose paragraphs by first identifying the type of each sentence through a certain color or symbol on the card. This process allows students to see concretely how one main idea can be developed through supporting sentences and end with a relevant closing, forming a whole and meaningful paragraph unit.

The results of observations showed that after two cycles of using this method, most students were able to compose paragraphs with a more logical and organized structure. Previously, many students tended to mix ideas without clear transitions or insert irrelevant information. However, after using the Short Card Method, there was an increase in students' ability to develop ideas sequentially, maintain one main topic, and use connectors such as li-dzālika, min hādzā, or 'alā sabīl al-mithāl appropriately to strengthen the relationship between sentences.

Analysis of 20 student writing samples before and after the application of the method showed a significant increase in the aspects of coherence and sequence of ideas. Teacher observations also noted that students were less likely to jump topics or insert sentences out of context. The process of composing paragraphs became more planned, with students seen matching cards based on the flow of thought they had previously designed. This shows that this method not only helps the technical aspects of writing but also develops critical thinking skills and narrative planning abilities.

Enhancing Writing Coherence and Logical Sequencing

Paragraph Structure — Sentence Relevance — Lack of Coherence and Logical Sequencing in Writing

Unorganized Sentence Clusters — Off-Topic Sentences

Redundant Sentences

Poor Transition Use — Inadequate Discourse Markers

Inconsistent Topic Shifts — Limited Linking Devices

Idea Development — Cohesion & Flow

Figure 1. Writing Coherence and Logical Sequencing Enhanced Significantly

Figure 1 above shows that the Short Card Method has a real impact in helping students structure ideas coherently and logically in paragraphs. By providing visual and systematic aids, this method allows students to map out ideas before writing, thereby

reducing logical errors and increasing cohesion between sentences. From a pedagogical perspective, this finding indicates that writing is not only about mastering vocabulary and grammar but also about strategic thinking in building narratives and arguments. Therefore, this method can be recommended as an effective approach in developing academic writing skills in Arabic at the middle school level.

Discussion

The findings of this study reveal that the Short Card Method offers a significant pedagogical innovation in the teaching of Arabic writing at the secondary school level. Its impact is multidimensional, covering grammatical accuracy, student engagement, and the coherence of written output. This discussion explores how each of these outcomes aligns with theoretical perspectives on language acquisition and writing instruction, while also highlighting the broader implications for Arabic language pedagogy in Islamic educational contexts. The improvement in students' grammatical accuracy confirms the cognitive value of visual and kinesthetic learning in language instruction. By physically manipulating short, color-coded cards that represent key grammatical elements (e.g., mubtada, fi'il, maf'ul bih, etc.), students are encouraged to visualize the syntactic structure of sentences. This aligns with the principles of Dual Coding Theory of Fusinska-Korpik & Gacek (2022), which emphasizes the power of combining verbal and visual representations in enhancing cognitive processing. Instead of merely memorizing rules, students engage in sentence construction tasks that are interactive and corrective by design. Moreover, this approach reflects a constructivist learning model, where knowledge is actively built rather than passively received (Motappa et al., 2022; Ward & Vengrin, 2021). The findings that students could more easily identify and self-correct grammatical errors after using the cards suggest that the method fosters metalinguistic awareness, a critical factor in second language acquisition.

The dramatic increase in student motivation and engagement observed during implementation indicates that the Short Card Method does more than support grammar learning; it transforms the learning environment. The shift from passive copying to active sentence construction mirrors experiential learning models of Temitayo-Oboh et al. (2022), wherein learners grasp concepts more fully through active participation and reflection. Student testimonies reinforce this view, likening the activity to a puzzle game. Such feedback implies that the method stimulates both intrinsic motivation and cognitive engagement, as described in Self-Determination Theory (Longmuss & Hoehne, 2020; Singh et al., 2021; Sinha et al., 2021). The freedom to experiment with card arrangements and group collaboration created a positive emotional climate, reducing anxiety and increasing learner agency. In the context of Arabic writing, which is often perceived as rigid and rule-bound, this playful yet structured method represents a breakthrough in lowering affective filters and increasing accessibility.

The enthusiasm shown by students also indicates the value of kinesthetic learning, often underutilized in language classrooms. By touching, moving, and arranging cards, students activate sensory pathways that reinforce memory and understanding (Lai et al., 2023; Yılmazel, 2023). These findings validate the importance of multisensory learning strategies in improving not only outcomes but also learner attitudes toward complex tasks such as writing. Meanwhile, the enhancement in paragraph coherence and logical sequencing affirms that the method supports higher-order writing skills, not merely sentence-level accuracy (Duman et al., 2022; Levine et al., 2020). By categorizing cards

into paragraph functions (main sentence, supporting details, conclusion), students internalize the rhetorical structure of a well-formed paragraph. This strategy resonates with genre-based approaches to writing, where learners are explicitly taught how different parts of a text function to achieve communicative goals.

The significant improvements in cohesion, logical flow, and use of discourse markers suggest that students are not only writing more accurately but are also thinking more strategically about how to express and organize their ideas. This outcome is particularly important in the Arabic language, where rhetorical coherence relies heavily on logical connectors and precise transitions (Fitri et al., 2022; Jiménez-Hinojosa et al., 2023). The visual mapping afforded by the cards gives students a mental framework that they can transfer to writing tasks beyond the classroom. From a pedagogical standpoint, this confirms the utility of scaffolded writing instruction, where learners are gradually supported in developing complex skills through structured tools. It also supports the process writing approach, which emphasizes planning, drafting, and revising stages often neglected in traditional language instruction. The Short Card Method operationalizes this process through tangible, student-centered activities (Opperman & De Vries, 2022).

Thematically, the three findings in this study converge on the transformative potential of low-tech, high-impact strategies in Arabic writing instruction. The Short Card Method not only addresses structural grammatical challenges but also reframes the learning experience into one that is cognitively stimulating and emotionally engaging. This holistic impact illustrates that effective language teaching, particularly in faith-based or resource-constrained environments, does not always require digital sophistication, but rather pedagogical creativity grounded in student-centered principles. The method's emphasis on visual scaffolding, peer interaction, and narrative logic aligns well with contemporary approaches to second language writing, while remaining accessible to a wide range of institutional contexts.

In conclusion, this study provides empirical evidence that supports a pedagogical shift in Arabic writing instruction, one that moves beyond rote learning and passive reception, toward a more engaged, structured, and empowering experience for students. By integrating visual tools, cooperative learning, and clear rhetorical structuring, the Short Card Method offers a replicable model for improving Arabic writing skills across various levels. More broadly, this approach represents a pedagogical reimagination that balances tradition with innovation, and formality with play. It can serve as a valuable reference for educators and curriculum designers in Islamic education who seek to modernize language instruction without compromising its cultural or linguistic integrity.

CONCLUSION / الخلاصة

This study concludes that the Short Card Method is an effective pedagogical approach for enhancing Arabic writing instruction in intensive education programs. Its application leads to substantial improvements in three main areas: grammatical accuracy, student cognitive engagement, and the coherence and logical sequencing of written compositions. By utilizing color-coded, manipulable cards that represent syntactic and rhetorical elements, the method enables learners to visualize, construct, and self-correct sentences and paragraphs in a structured yet interactive manner. These findings underscore the method's ability to integrate form-focused instruction with learner-centered strategies, transforming writing into an active and cognitively rich process. Scientifically, this study contributes to the development of innovative yet accessible tools

for Arabic language teaching, particularly within resource-limited and faith-based educational settings. The method aligns with principles of experiential learning and constructivist pedagogy, suggesting its broader applicability in second language writing contexts. However, the research is limited to observational and qualitative data within a single institutional context. Future studies are recommended to conduct controlled trials, measure long-term writing development, and explore its application across diverse linguistic and curricular settings to assess the method's generalizability and sustained impact.

REFERENCES / المراجع

Abdullah, A. (2024). Innovative Approach in Curriculum Development : Improving Education and Training Programs through Multidimensional Strategies. *PEDAGOGIK: Jurnal Pendidikan*, *11*(2), 160–176. https://doi.org/10.33650/pjp.v11i2.9290

Anna, A., Wang, C. J., Lai, W. S., & Chen, H. M. (2022). Developing and validating question cards for the gamification of cardiovascular emergencies. *Nurse Education Today*, *117*. https://doi.org/10.1016/j.nedt.2022.105482

Arslan, O., Kececi, T., Solmaz, M. S., & Usluer, H. B. (2023). A Social Sustainability Model for Maritime Labour Force based on Card Sorting, Fuzzy AHP & QFD Method. *Research in Transportation Business and Management*, *49*. https://doi.org/10.1016/j.rtbm.2023.101018

Azman, N. M., Ismail, M., Mokhtar, W. Z. A. W., & Ariffin, A. K. (2022). PC Sound Card: Transformation to High Technology Physics Experiment. In *Journal of Physics: Conference Series* (Vol. 2309, Issue 1). https://doi.org/10.1088/1742-6596/2309/1/012068

Byrne, D. (2022). A Worked Example of Braun and Clarke's Approach to Reflexive Thematic Analysis. *Quality and Quantity*, *56*(3), 1391–1412. https://doi.org/10.1007/s11135-021-01182-y

Campbell, K. A., Orr, E., Durepos, P., Nguyen, L., Li, L., Whitmore, C., Gehrke, P., Graham, L., & Jack, S. M. (2021). Reflexive Thematic Analysis for Applied Qualitative Health Research. *The Qualitative Report*, *26*(6), 2011–2028.

Cole, R. (2024). Inter-rater Reliability Methods in Qualitative Case Study Research. *Sociological Methods & Research*, *53*(4), 1944–1975.

Duman, F., Can, H., & Leventoğlu, A. (2022). Evaluation of Short-term Memory, Working Memory, and Executive Functions in Patients with Relapsing-remitting Multiple Sclerosis. *Turk Noroloji Dergisi*, *28*(3), 162–168. https://doi.org/10.4274/tnd.2022.24992

Epstein, A., Jabori, S. K., Wo, L. M., Huberman, M., Samaha, G., Ovadia, S., & Thaller, S. R. (2022). Reflecting on Plastic Surgery Training during the Early COVID-19 Pandemic: Resident Exposure and Telemedicine. *Journal of Craniofacial Surgery*, *33*(6), 1820–1824. https://doi.org/10.1097/SCS.0000000000008471

Fitri, Z. E., Sahenda, L. N., Pratama Putra, R. O., Zulkarnain, M. I., Triasasti, A. A., & Mustofa, Z. A. (2022). Attractive Learning Media for Introduction to Popular Fruits Using Computer Vision. In *ICEECIT 2022 - Proceedings: 2022 International Conference on Electrical Engineering, Computer and Information Technology* (pp. 14–19). https://doi.org/10.1109/ICEECIT55908.2022.10030261

Fusinska-Korpik, A., & Gacek, M. (2022). Decision-making in people with mild intellectual disability: Relations with Intelligence and A Measure of Executive Functioning. *Journal of Intellectual and Developmental Disability*, *47*(1), 87–95. https://doi.org/10.3109/13668250.2021.1945416

Gupta, M. K., Shah, R., Rathod, J., & Kumar, A. (2021). SmartIdOCR: Automatic Detection and Recognition of Identity Card Number Using Deep Networks. In *Proceedings of the IEEE International Conference on Image Information Processing* (Vols. 2021-November, pp. 267–272). https://doi.org/10.1109/ICIIP53038.2021.9702703

Hu, L., Zhang, L., Yin, R., Li, Z., Shen, J., Tan, H., Wu, J., & Zhou, W. (2021). NEOGAMES: A Serious Computer Game That Improves Long-Term Knowledge Retention of Neonatal Resuscitation in Undergraduate Medical Students. *Frontiers in Pediatrics*, 9. https://doi.org/10.3389/fped.2021.645776

Jiménez-Hinojosa, I., De-La-rosa-guerra, H., Valdés-Sedeño, R. R., Acosta-Montes-de-oca, M., Berrillo-Batista, S., & Rodríguez-Del-toro, E. R. (2023). Design of the Electroencephalography Practical Skills Card for the Technician in Clinical Neurophysiology. *Revista Medica Electronica*, *45*(6). https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85176590386&origin=inward

Judiono, J., Priawantiputri, W., Indraswari, N., Widawati, M., Ipa, M., Megawati, G., Prasetyowati, H., & Marhaeni, D. (2023). Determinant Factors of Short Birth Length Baby as a Risk Factor of Stunting in West Java. *Amerta Nutrition*, *7*(2), 240–247. https://doi.org/10.20473/amnt.v7i2.2023.240-247

Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, *42*(8), 846–854. https://doi.org/10.1080/0142159X.2020.1755030

Lai, L., Liu, L., Wang, Y., Liu, S., Zhang, J., & Zheng, X. (2023). QR Code Technology in Individual Identification Training: Provides an Introduction to Hands-On Forensic DNA Genotyping to Medical Students. *BMC Medical Education*, *23*(1). https://doi.org/10.1186/s12909-023-04284-3

Levine, D., Gadivemula, J., Kutaimy, R., Kamatam, S., Sarvadevabatla, N., & Lohia, P. (2020). Analysis of Patient Safety Messages Delivered and Received During Clinical Rounds. *BMJ Open Quality*, *9*(3). https://doi.org/10.1136/bmjoq-2019-000869

Longmuss, J., & Hoehne, B. (2020). Agile Learning in Continuing Education: Learning Structures and Materials for Work-Based Learning. In *SEFI 47th Annual Conference: Varietas Delectat... Complexity is the New Normality, Proceedings* (pp. 726–734). https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85077817005&origin=inward

Luo, H., Li, W., Wu, L., Zhong, S., Du, C., Liu, Y., Xu, Y., Huang, X., Bahru, A. H., Tang, X., Zhou, J., Wang, D., Lou, X., Bin, X., & Xiao, X. (2022). Differences in Cognition, Short-Chain Fatty Acids and Related Metabolites in Pregnant Versus Non-Pregnant Women: A Cross-Sectional Study. *BMC Pregnancy and Childbirth*, *22*(1). https://doi.org/10.1186/s12884-022-04853-2

Metta, E., Shayo, E. H., Ngalesoni, F., Kalolo, A., Nyamuryekung'e, K., Mboya, I. B., Ndumwa, H. P., Njiro, B. J., & Amour, M. A. (2023). The Role of Trust in the Implementation and Uptake of COVID-19 Response Measures: A Qualitative Study of Health Professionals' Experiences in Tanzania. *BMC Health Services Research*,

23(1). https://doi.org/10.1186/s12913-023-10043-3

Motappa, R., Fathima, T., & Kotian, H. (2022). Appraisal on Patient Compliance and Factors Influencing the Daily Regimen of Anti-Tubercular Drugs in Mangalore City: A cross-sectional study. *F1000Research*, *11*. https://doi.org/10.12688/f1000research.109006.2

Op de Coul, E. L. M., Peek, D., van Weert, Y. W. M., Morré, S. A., Rours, I., Hukkelhoven, C., de Jonge, A., van Benthem, B., & Pereboom, M. (2021). Chlamydia Trachomatis, Neisseria Gonorrhoea, and Trichomonas Vaginalis Infections among Pregnant Women and Male Partners in Dutch Midwifery Practices: Prevalence, Risk Factors, and Perinatal Outcomes. *Reproductive Health*, *18*(1). https://doi.org/10.1186/s12978-021-01179-8

Opperman, P., & De Vries, M. (2022). Evaluating the Usefulness of An Online Participative Modelling Tool when Post-Graduate Engineers Co-Model Enterprise Operations. In *2022 IEEE IFEES World Engineering Education Forum - Global Engineering Deans Council, WEEF-GEDC 2022 - Conference Proceedings*. https://doi.org/10.1109/WEEF-GEDC54384.2022.9996269

Scharp, K. M. (2021). Thematic Co-Occurrence Analysis: Advancing a Theory and Qualitative Method to Illuminate Ambivalent Experiences. *Journal of Communication*, *71*(4), 545–571.

Sicard, V., Stephenson, D. D., Hergert, D. C., Dodd, A. B., Robertson-Benta, C. R., Reddy, S. P., Yeates, K. O., Cromer, J. A., Meier, T. B., Campbell, R. A., Phillips, J. P., Sapien, R. E., & Mayer, A. R. (2022). Investigating the Diagnostic Accuracy of a Paper-and-Pencil and a Computerized Cognitive Test Battery for Pediatric Mild Traumatic Brain Injury. *Neuropsychology*, *36*(6), 565–577. https://doi.org/10.1037/neu0000803

Singh, A., Rao, R., Chatterjee, B., Mishra, A. K., Kaloiya, G., & Ambekar, A. (2021). Cognitive Functioning in Patients Maintained on Buprenorphine at Peak and Trough Buprenorphine Levels: An Experimental Study. *Asian Journal of Psychiatry*, *61*. https://doi.org/10.1016/j.ajp.2021.102697

Sinha, A., Panchamia, J., Sachan, A., & Guru, S. (2021). Choice of Electives among Management Students in India: A Conjoint Analysis. *International Journal of Management Education*, *19*(3). https://doi.org/10.1016/j.ijme.2021.100557

Tasci, A. D. A., Wei, W., & Milman, A. (2020). Uses and Misuses of the Case Study Method. *Annals of Tourism Research*, *82*(4), 102815.

Temitayo-Oboh, A. O., Sherif Azees, A., Ohunene Amin, J., & Omobuwa, O. (2022). The Burden of TB/HIV Co-Infection among Clients Attending DOTs Clinic in a Tertiary Centre in Southwestern Nigeria: A 5-Year Retrospective Study. *Journal of the Royal College of Physicians of Edinburgh*, *52*(4), 307–312. https://doi.org/10.1177/14782715221142326

Tuygar Okutucu, F., Kirpinar, İ., Deveci, E., & Kiziltunç, A. (2023). Cognitive Functions in Obsessive Compulsive Disorder and Its Relationship with Oxidative Metabolism. *Noropsikiyatri Arsivi*, *60*(2), 134–142. https://doi.org/10.29399/npa.28122

Wang, X., Yu, X., Guo, L., Liu, F., & Xu, L. (2020). Student Performance Prediction with Short-Term Sequential Campus Behaviors. *Information (Switzerland)*, *11*(4). https://doi.org/10.3390/INFO11040201

Ward, J. L., & Vengrin, C. A. (2021). Comparison of Graphic Organizers Versus Online Flash Cards as Study Aids in an Elective Veterinary Cardiology Course. *Journal of Veterinary Medical Education*, *48*(4), 451–462. https://doi.org/10.3138/jvme.2019-

0136

Yılmazel, G. (2023). Readiness for Emergencies and Disasters, and Health Competencies among People with Epilepsy. *Bangladesh Journal of Medical Science*, *22*(2), 341–347. https://doi.org/10.3329/bjms.v22i2.64993

Zhou, C., Yan, B., Chen, L., & Huo, S. (2023). Clinical Application of Rigid Gas Permeable Contact Lens in 5 Infants and Toddlers after Cataract Surgery. *Journal of Army Medical University*, *45*(23), 2490–2494. https://doi.org/10.16016/j.2097-0927.202305119