

A Systematic Review of Externalisation on Writing Proficiency of Iraqi EFL Fifth Preparatory Students

Osama Badri Al-Ghazaly

bas840.a.badria@student.uobabylon.edu.iq

Prof. Dr. Chassib Fanukh Abbas AL-Jubouri

Ministry of Education /Open Educational College /Al Qadisiayh Governorate

Chassib@elearning.abu.edu.iq

مراجعة منهجية لتأثير استراتيجيات التخرج الذهني في كفاءة الكتابة لدى طلبة الصف الخامس

الإعدادي العراقيين من دارسي اللغة الإنجليزية لغة أجنبية

أسامة بدري مسلم الغزالي

أ.د. جاسب فنوخ عباس الجبوري

الكلية التربوية المفتوحة / مركز القادسية الدراسي

Abstract: This paper aims to investigate how externalization influenced the evolution of writing abilities. Externalization enables learners to turn implicit information into clear one that other individuals can understand. Fifth preparatory students of Al-Jihad preparatory school in Babylon, Iraq are chosen to be the study's participants. The study shows that the externalization strategy is very effective in improving students' writing abilities. Descriptive language, comparisons, role-playing, and narration among other techniques help to achieve this goal. The data are collected utilising a pre-test and post-test approach. This article illustrates how externalizing concepts in line with the literature might raise the writing level among EFL students.

Key words: externalizing, writing , tacit knowledge , implicit knowledge

المخلص:

يهدف هذا البحث إلى استقصاء تأثير استراتيجيات التخرج الذهني في تطور مهارات الكتابة. تتيح استراتيجيات التخرج للمتعلمين تحويل المعلومات الضمنية إلى معلومات واضحة يمكن للآخرين

فهمها. وقد اختير طلاب الصف الخامس الإعدادي في مدرسة الجهاد الإعدادية بمحافظة بابل، العراق، ليكونوا عينة الدراسة. أظهرت نتائج الدراسة أن استراتيجيات التخارج الذهني فعّالة جدًا في تحسين قدرات الطلبة الكتابية. وتُساهم تقنيات متعددة مثل الوصف، والمقارنة، ولعب الأدوار، والسرد في تحقيق هذا الهدف. جُمعت البيانات باستخدام اختبار قبلي وبعدي. توضح هذه الدراسة كيف يمكن لتطبيق مفاهيم التخارج الذهني، بما يتماشى مع الأدبيات التربوية، أن يساهم في رفع مستوى الكتابة لدى طلبة اللغة الإنجليزية بوصفها لغة أجنبية.

1.1.Introduction

Writing competency is an essential but a demanding ability for Iraqi EFL students, since national tests indicate that sixty-five percentage of fifth-year students achieve under competence in coherence and organisation (Al-Mamoori & Hussein, 2021). Externalisation tactics, based on Vygotsky's (1978) sociocultural theory and Flower and Hayes' (1981) cognitive process model, provide a viable answer by converting tacit information into clear, concrete processes. This analysis identifies three deficiencies: Firstly, little research on externalisation within Arab EFL settings. Secondly, variable outcomes across different forms of externalisation (e.g., verbal vs. visual), and thirdly logistical challenges in Iraqi classrooms (e.g., huge class numbers). The research seeks to consolidate information on the impact of externalisation on writing abilities and to provide a framework for Iraqi educators.

1.2 Definitions of Externalization

Externalization intelligently leverages our perceptual capabilities. Externalization transforms our mental procedures to an outside manner, enabling us to reintroduce information into our minds through an alternative channel, thereby granting access to supplementary cognitive

resources for processing the same information differently (Kaufman,2010).

In cognitive psychology Externalisation denotes the conversion of internal cognitive representations into tangible expressions, including verbal communication, written text, diagrams, or physical models (Kirsh, 2010).

According to Vygotsky (1978) paradigm, is a meditational technique that connects internal and social cognition.

According to Nonaka & Takeuchi(1995), Externalisation transforms tacit information, which is personal and experience-based, into explicit understanding that is codified and shared.

Externalization denotes the intellectual and educational act of rendering internalised, implicit thinking processes explicit and apparent via language, imagery, or interactive techniques. In language acquisition and writing pedagogy, externalization enables learners to express, structure, and enhance their concepts by transforming abstract cognition into tangible manifestations (Kellogg, 2008; Nonaka & Takeuchi, 1995)

1.3 Externalizing Tacit Knowledge

Michael Polanyi's seminal work on knowledge from 1966 served as the foundation for the distinction between implicit and articulated understanding. This classification of knowledge has become widespread in research on knowledge management (Lam, 2002 & Spiegler, 2000).

The transmission of explicit information can be achieved through the use of information, logical formulas, requirements for goods, and guidelines. universal principles, and other formats in addition to being conveyed verbally and numerically. Through explicit media, this type of

information can be publicly and methodically shared among people with ease.

On the contrary, it is hard to share or convey tacit knowledge with others since it is very personal and difficult to formalize (Brooking, 1998; Geyer, 2001; Lee & Yang, 2000; Nonaka & Takechui, 1995). This type encompasses personal ideas, feelings, and emotions. Moreover, a person's behaviour, experiences, and the principles, beliefs, or feelings they hold dear are all important sources of tacit knowledge.

Tacit comprehension encompasses two additional dimensions as follows: the practical and the mental. The practical facet of tacit knowledge includes specific expertise, craftsmanship, and skill sets.

The mental aspect encompasses frameworks, opinions, opinions, and ideas that assist people with perceiving and defining their reality (Nonaka & Takeuchi, 1995).

The mental components of tacit knowledge pertain to a person's perceptions of fact and aspirations for the future (Nonaka & Takeuchi, 1995). It has been posited that tacit and explicit knowledge are not distinct objects; rather, they are continually mutually beneficial ideas that play a crucial role in the process of knowledge development.

Stenmark (2000) has synthesised both aspects of tacit knowledge, positing that they reside within individuals' hands and minds, and are expressed through their actions. This indicates that while the scientific and mental aspects of tacit knowledge serve as valuable theoretical frameworks, they prove challenging to differentiate in practical application.

1.4 The Development of Knowledge via the Relationship of Tacit and Explicit Knowledge

knowledge generation is a dynamic process that amplifies existing knowledge at several fundamental stratum (personal, organizational, and across organizational) via a continuous discourse between tacit and explicit knowledge. The framework is significant as it offers a valuable instrument for assessing knowledge generation within organizational contexts, while also formalizing a theory of knowledge formation grounded in the epistemological distinction between tacit and explicit knowledge (Nonaka & Takeuchi, 1995).

The SECI model, created by Nonaka and Takeuchi, provides a four-step procedure for transforming implicit information into explicit, communicative insights:

1.4.1 Socialization: (from tacit to tacit)

It is the process of exchanging experiences to create common understandings. Socialization encompasses the collective development and exchange of implicit knowledge among individuals. Hargreaves,(1999) acknowledged apprenticeships and hands-on training as methods to develop tacit knowledge. Trainees acquire tacit knowledge through mimicry, observation, and experience during their training in a nuanced style

(van Zolingen, Streumer, & Stoker, (2001:412); Tsoukas (2002:988).

Expanding on that notion, Jones & Sallis (2002) noticed that the socialization process fundamentally occurs within successful teams as well as intimate acquaintances. Nonaka (2001) argued that socialization represents constrained mode of knowledge generation, as the instructor

and the student do not acquire deliberate understanding of their skill, with the majority of learning occurring accidentally.

1.4.2 Externalization (from tacit to explicit)

It is the method of transforming implicit information into external forms, such as writing or diagrams. Externalization is defined as “the process of articulating tacit information into explicit concepts” (Nonaka & Takeuchi, 1995 p.64).

Barling and Kelloway (2000) explain communication denotes the process of rendering the 'unknown' comprehensible. Nonetheless, due to the inherent characteristics, internal information is not simply translated into external knowledge.

Tsoukas (2002) posits that tacit knowledge may be transformed into explicit knowledge by articulation using ideas designs, hypotheses, metaphors, and analogies. Hargreaves (1999) asserts that conversations and collaborative reflections kick start the process of externalization, but Kothuri (2002) observes that only a fraction of tacit knowledge can be captured by conceptualization, elicitation, and eventual articulation of information.

1.4.3 Combination: (From explicit to explicit)

Combination arises from the relationship of explicit knowledge with explicit knowledge. The combining of various bodies of information occurs from the systematization and elaboration of explicit knowledge by diverse individuals (Hargreaves, 1999). Combination involves the transfer of explicit information among individuals, best shown by the processes inherent in formal education (Kelloway & Barling, 2000; Tsoukas, 2002). Combination may occur through exchanges among

individuals via documents, meetings, telephone calls, or electronic interactions (emails, bulletin boards).

The reorganization of knowledge can occur through the sorting, enhancing, combining, and grouping of explicit knowledge, resulting in the creation of new knowledge.

1.4.4 Internalization: (from explicit to tacit)

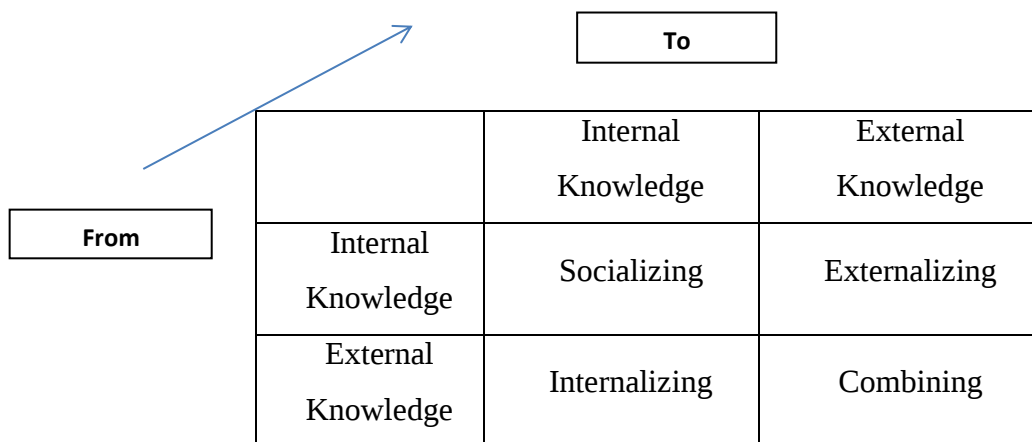
Internalization refers to using practice to assimilate explicit information into one's own implicit knowledge (Farnese et al. 2019).

Internalization denotes the transformation of explicit knowledge into tacit knowledge. Explicit knowledge transforms into tacit knowledge when assimilated by the individuals concerned (Tsoukas, 2002). To act on information, humans must comprehend and internalize it, leading to a transformation from explicit knowledge to tacit knowledge (Kothuri, 2002). The process of internalization is initiated by experiential learning (Nonaka, 1996; Hargreaves, 1999) and fosters the development of collective mental frameworks or technical expertise (Nonaka & Takeuchi, 1995).

1.5 Externalization of Tacit Knowledge

According to Kristiansen et al (2009:77) Externalization is one of the most difficult aspects of dealing with complicated information and situations. In many circumstances, people limit themselves to spoken language as a medium of expression. However, the spoken language has a great number of restrictions, thus successful communication requires numerous supplements to provide both richness and subtleties in articulation and perception. Articulation or (externalization) of tacit knowledge refers to the process of expressing internal, intuitive, and

unspoken knowledge in a form that can be understood and shared. Tacit knowledge is personal, experiential, and context-specific, often residing in individuals' minds in the form of insights, instincts, and expertise. Articulating this knowledge involves translating these complex, often subconscious understandings into more tangible and explicit forms, enabling others to access and understand it. Articulation or externalization is challenging, as it requires finding ways to express deeply ingrained knowledge that may not be easily verbalized (Hargreaves, 1999).



1.6 The Underpinning Strategies of Externalization in Writing

Writing is one of the hardest things for English as a Foreign Language (EFL) students to do, even though it is an important skill for learning any language. Numerous EFL learners persist in encountering difficulties in generating logical and well-organised writings, despite extensive training. This is ascribed to a restricted lexicon, grammatical errors, and challenges in structuring concepts (Hyland, 2016).

The cognitive requirements of writing pose further difficulties, as students must simultaneously develop ideas, structure their thoughts, and adhere to language norms (Flower & Hayes, 1981).

Numerous methodologies have been examined by educators and scholars to enhance the writing skills of EFL learners. Externalisation strategies have shown effectiveness in enhancing writing proficiency using tools such as brainstorming, outlining, and peer discussions that articulate internal cognitive processes (Al-Jarf, 2009).

Despite extensive research on externalization strategies in first-language writing contexts, their use in EFL settings has received little attention. Current research focuses primarily on native English speakers, leaving little insight into how these strategies can be tailored to meet the unique needs of EFL learners (Kellogg, 2008).

The importance of this gap is amplified by the increasing prominence of English as a global lingua franca and the expanding demographic of EFL students requiring proficient writing skills for academic and professional success. Without effective strategies for externalising ideas, EFL students may struggle with writing fluency, coherence, and organisation, which could hinder their academic and professional growth.

1.6.1 Cognition Process Theories of Writing

Hayes and Flower (1981) argue that the mental underlying writing provides an essential framework for understanding how writers express their ideas to the outside. In this view, handwriting is a complex, repeated activity with three main parts:

- Preparation: Developing and organizing concepts.
- Translating: Converting ideas into written expression.
- Reviewing: Evaluating and revising the text.

Externalization strategies are intricately linked to planning and evaluation processes. For example, brainstorming and outlining assist

students in externalizing their ideas during the planning phase, whereas peer feedback and think-aloud methods encourage introspection during the reviewing stage. Externalization tactics aid EFL students in overcoming the cognitive challenges of writing by clarifying these cognitive processes (Kellogg, 2008).

1.6.2 Sociocultural Theory

Vygotsky's (1978) sociocultural paradigm underscores the significance of social interaction and external instruments in cognitive development. Vygotsky posits that learning is an indirect method in which tools like signs, language, and collaborative activities aid in the internalization of information. Externalization tactics, such as peer conversations and collaborative brainstorming, correspond with this notion by offering students avenues to articulate their concepts via social engagement (Lantolf & Thorne, 2006).

Creating a supportive atmosphere for language practice is very advantageous for EFL students, therefore these tactics are a great fit. Externalizing their ideas using conversation or visual tools allows students to clarify their thinking and get instant feedback, so improving their writing abilities. (Min, 2006).

1.6.3 Metacognitive Theory

The knowledge and management of one's own thoughts is metacognition. There are two main parts of metacognition that Flavell (1979) pointed out:

- Metacognition Knowledge: Understanding cognitive processes.
- Metacognitive control: Plan, monitor, and evaluate learning.

Externalization strategies increase metacognitive awareness by prompting students to think about their writing processes. Think-aloud protocols, for instance, force students to express their ideas aloud while writing, therefore making their decision-making procedures clear (Hayes & Flower, 1980).

By doing so, students are able to better understand where they are as writers and how to strengthen their weaker areas.

1.6.4 Scaffolding and the Zone of Proximal Development (ZPD)

Vygotsky's notion of the Zone of Proximal Development (ZPD) establishes the gap between an individual's self-reliance and their potential accomplishments with assistance. Externalization tactics, such as graphic organizers and instructor modeling, function as scaffolds tools that assist students in closing this gap. A teacher may use a mind map to assist students in organizing their thoughts prior to writing, progressively diminishing assistance as students gain proficiency (Wood, Bruner, & Ross, 1976).

In EFL writing instruction, scaffolding through externalization strategies is particularly important because it provides students with the support they need to overcome language barriers and develop their writing skills (Gibbons, 2002).

1.6.5 Dual Coding Theory

Paivio's (1986) dual coding theory asserts that data passes through via two separate but interrelated systems: spoken and unconscious. Externalization strategies, such as mental mapping and image organizers, use this principle by integrating written and visual representations of concepts. A mind map, for example, helps pupils to externalize their

concepts via the use of words and visuals, which improves understanding and recall.

For EFL students, dual coding via externalization procedures may be very productive as it offers numerous options for comprehending and structuring material (Ellis, 2004).

1.6.6 Collaborative Learning Theory

According to the principles of collaborative learning theory, students learn best when they work together on tasks. This approach is in line with externalization tactics like brainstorming in groups and peer debates, which encourage students to collaborate and share ideas in order to develop them (Johnson & Johnson, 1999). Students of English as a foreign language (EFL) might benefit from improved writing abilities and self-assurance by participation in collaborative externalization activities, which allow them to practice their language skills in a safe and encouraging setting (Min, 2006).

1.7 Conclusion

From what has been mentioned earlier one can conclude, a good basis for grasping the link between externalisation methods and the development of writing abilities. While process writing and scaffolding theories stress the need of organised assistance in writing education, cognitive and sociocultural theories underline the need of making internal thinking processes apparent.

Including these ideas into educational setting will help teachers to create a strong case for the efficacy of externalisation techniques in enhancing the writing abilities of Iraqi EFL fifth preparatory students.

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