

PalArch's Journal of Archaeology of Egypt / Egyptology

SCHEMES IN PRE-WRITING TEXT EXPOSITION TO SENIOR HIGH SCHOOL STUDENTS

Masayu Gay¹, Suyono², Heri Suwignyo³, Titik Harsiati⁴.

^{1,2,3,4}Universitas Negeri Malang, Indonesia.

E-mail: ¹masayugay@gmail.com, ²suyono.fs@um.ac.id, ³heri.suwignyo.fs@um.ac

⁴titik.harsiati.fs@um.ac.id

Masayu Gay, Suyono, Heri Suwignyo, Titik Harsiati. Schemes In Pre-Writing Text Exposition To Senior High School Students-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(4), 1993-2007. ISSN 1567-214x

Keyword: Schemata, Pre-Writing, Exposition Text

ABSTRACT

This study aims to reveal the pre-written schematic patterns of high school students' exposition texts. Three students as research subjects were selected according to the acquisition of high, medium, and low grades. A qualitative approach and analysis found a schematic pattern in the pre-written exposition text, namely functional patterns and patterns of development. Functional patterns, namely interrelated patterns of relationships. Students choose topics with consideration of mastery, controversy, and experience from the schemata regarding exposition text. Next, arrange the outline of the writing, find information material, and determine the purpose of writing. The relationship between the purpose of writing with the reader raises a plan to use straightforward and concise sentences, general terms, lowercase letters, capital, and punctuation appropriately in the text's contents. The development pattern consists of two, namely, direct and indirect development. The pattern is straightforward because students brainstorm, explore information sources, revise the writing outline, both theses, arguments, and recommendations. DF and ZR use this pattern. Both of them have used their schematics to understand new knowledge as a process of assimilation and accommodation in the exposition text's pre-writing activities. The pattern is indirect because it does not brainstorm, explore information sources, and revise the pre-writing stage as an assimilation and accommodation process. However, it will be done at the writing and revision stages. RB carries out this pattern. Thus, both the functional patterns and the development patterns are regulated and guided by the schemata as cognitive structures in the pre-written exposition text.

INTRODUCTION

Schemata is a theory of knowledge (Spiro dkk., 2018). In cognitive psychology, schemata is a relatively new science (Lakoff & Johnson, 1999;

Talmy, 2000; Johnson, 2009). Immanuel Kant was a psychologist who first introduced the schema theory in 1781 to explain mental processes in cognitive psychology (Rumelhart, 2017; Zamroni, Muslihata, dkk., 2020). Next, the schema was introduced to psychology and education by Frederic Bartlett (1886-1969) in his book *Remembering* (1932) and inspired modern schema theory. According to him, the function of past knowledge in knowledge is formalized as a schema theory. Besides, all new information is interconnected with past information described in the scheme (Bartlett, 1995). Furthermore, the schema theory was brought to the world of education by R. C. Anderson (Rumelhart, 2017; Zamroni, Hanurawan, Muslihata, dkk., 2020). The scheme is used to see the motor development of children (Piaget, 1971).

Piaget saw the scheme as a mental structure that organized past experiences and provided a way to understand future experiences (Gross, 2010). The schema is stored in memory in the form of cognitive building blocks. Schemas provide mental representations or frame works for understanding, remembering and applying information (Bartlett, 1995). Schemas have knowledge units called schemata (Rumelhart, 2017), a set of related concepts that are ready to be used when there is a stimulus (Lewis & Durrant, 2011). The knowledge is a structured information network that has been processed and accessed through semantic memory that functions to store facts and knowledge into the schemata through generalizations (Solso dkk., 2014). The schemata are meaningful information stored in long-term memory in interrelated facts and concepts (Slavin, 2009).

Writing is a complex process to allow the expansion of ideas and thoughts (Matsuda, 2003). In the writing process, the schemata function as the knowledge must be activated because it contains information (Flower & Hayes, 1984). Such knowledge as to topics, genres, conventions, and the ability to access, use, and organize (Montague & Leavell, 1994). The concept of knowledge is also interpreted as the 'knowledge of the world,' which is stored in mind (Abram & Wadlington, 1968), precisely on semantic memory (Tulving, 1984, 1986, 1989, 1992). World knowledge is gained from experience and is organized as a cognitive structure representing that knowledge (Howard, 1987; Mandler, 2014). One unit of cognitive structure is a scheme that contains general information (Hühn, 2014).

There is a pre-writing phase in writing, which is a crucial phase (Zaid, 2011). In this phase, the authors make preparations such as searching, remembering, and finding experience or knowledge gained (Proett & Gill, 1986). Many researchers emphasize the importance of students expanding topics in this phase before writing concepts through journal review, brainstorming, group discussion, and freewriting (Ashwell, 2000a, 2000b; Matsuda, 2003; Davis, 2005; Crawford & Smolkowski, 2008). In pre-writing, planning efforts include thinking, anticipating, and predicting what will be written. Anticipation is in the form of content (what should be written) and linguistic form (how to convey) the text (Alamargot & Chanquoy, 2001). Planning has a positive effect on writing because there is a strategy (Saddler dkk., 2004; Zamroni, Hanurawan, Hambali, dkk., 2020); (Shin, 2008; Zheng & Dai, 2012). Writers

who use initial planning strategies tend to produce quality texts (Bereiter, 2013; De La Paz & Graham, 1997a, 1997b; Kellogg, 1988) and help them find topics and ideas (Pharr & Buscemi, 2009). Thus, the pre-writing phase is a strategic step in the writing process, which is undoubtedly related to the schemata.

Schema theory contributes a lot to language learning (Carrell, 1988; Eskey, 1988). Therefore, research with a schema theory approach continues to progress. However, in the past decade, research has often focused on aspects of reading. Some of these studies, for example, were carried out in 1983 to reveal the importance of schemata in the psycholinguistic model of EFL / ESL readers. The result shows the relevance of reading schemes' theoretical point of view with teaching reading in EFL / ESL students (Carrell & Eisterhold, 1983). The year 2005 was carried out with genre ideas, especially in formal schemata, considering that socio-cultural conventions are essential for measuring English reading comprehension (Toledo, 2005). In 2014 the content scheme was used to express its influence on reading L2 students at Universiti Teknologi Mara, Malaysia. As a result, content schemata influence students' reading texts (Radzi & Aziz, 2014).

In the aspect of writing, research with a schema theory approach has indeed been carried out. However, in general, the research is still focused on activating schemata or building schemata, mainly formal schemata with experimental methods. The research was conducted by Tan-de Ramos (2010) with the title *A study on schema activation, summarizing, and critical evaluation as predictors of writing proficiency*. He found that schemata activation techniques could improve students' writing skills at De La Salle University. 2011 was conducted by Maftoon & Babmiri (2011) with the title *The effect of building formal schemata on EFL students' writing achievement*. They found that the formal schemata built had a significant influence on writing in first-year EFL students at Azad University, Roodehen Branch. In 2014 there was a study titled *The role of formal schema in writing in an Iranian EFL context*. Research with this experimental method was conducted to write an overview of students in the context of Iran's EFL, Tabriz Islamic Azad University. As a result, through formal schemata, the experimental group has better performance than the control group.

In conclusion, formal schemata's application has a significant effect on writing summary skills (Hamed dkk., 2014). In 2014 there was a study entitled *The application of schema theory in teaching English English writing*. This research was conducted by applying the theory of schemes in learning English writing of Qingdao University of Science and Technology students. The experimental method proves that students' English proficiency increases after applying instruction oriented to schema theory (Sun, 2014).

Previous research shows that schema theory effectively addresses language problems and can improve them, both in reading and writing students and students. However, this research has not explicitly revealed the scheme of schemata, specifically in the exposition's pre-written text. Pre-writing is a

dynamic preparation stage. In this phase, the writer can prepare and do everything to produce quality writing. Exposition text was chosen because it expresses the author's perspective to the reader persuasively (Martin, 1990); (Yuliana & Gandana, 2018). Besides, the exposition text provides opportunities for students to explore their ideas freely.

METHOD

Research design

This study uses a qualitative design. The aim is to collect diverse data to be reviewed, given meaning, organized into categories or themes (Creswell, 2019). Research settings are done naturally (Willig, 2008); data is flexible (Silverman, 2016), interpretive, and naturalistic towards the subject under study (Denzin & Lincoln, 2011). Through qualitative design, patterns, or specific information related to schemata in the introductory text of student exposition will be revealed functionally, objectively and systematically. The disclosed schema is the pre-writing schema at the stage of selecting the topic of the problem, preparing the outline of the writing, obtaining information material, and determining the purpose of writing.

Participant

The research participants were grade X students in the Laboratory of Senior High Schools of Malang State University, amounting to 3 people. The three are Dihan Fadhila (DF), Rafian Bagusandy (RB), and Zanuba Rahmatullah (ZR). These three students have learned to write Indonesian exposition text in the 2020 school year, the initial semester. Therefore, they already have schemata regarding exposition text in their memory. They are chosen based on the high, medium, and low scores obtained during the writing schemata test. To get other information related to them, researchers also conducted interviews with an Indonesian language teacher. The aim is to find out the behavior and motivation of the three students in the class. These three students will be revealed schematic about the preparation of pre-written exposition texts.

Data collection

Scheme data pre-written exposition text obtained from tests, interviews, and observations. These three techniques are used to collect pre-written exposition text schemata, which includes selecting a problem topic, compiling outline writing, obtaining information, and determining the purpose of writing. Prewritten schematic tests are conducted by giving the topic of the Existence of Technology in Life as the main topic. Next, students work on introductory exposition text on the topic. Interviews were conducted to express statements related to the stages in the pre-writing in depth. Interviews were conducted individually and loosely using recording devices. Next, make observations to find out what items students do when pre-writing exposition text.

Data analysis

Data analysis was performed with a flow model (Miles dkk., 2014). The model is data reduction, data presentation, and concluding/verifying. The reduction process is related to sorting/identification, which is to sort out the form of words and sentences from the results of tests and interviews transcribed. Sorting is done to obtain meaning/themes related to the pre-written schemata, including selecting problem topics, compiling outline writing, searching for information material, and determining the purpose of writing. The pre-written schematic results of the reduction are presented in the form of a work table and coded to be easily interpreted. After that, an inductive conclusion is drawn. The research findings are followed up by checking the validity through triangulation, member check, and audit trials (Creswell & Miller, 2000).

FINDINGS AND DISCUSSION

Finding

The pre-written schemata of students' exposition text on the choice of the problem topic, the compilation of the outline of the writing, the acquisition of information, and the determination of the purpose of writing are described as follows.

Selection of problem topics

The three students choose a topic with their respective arguments. DF chose the topic on pre-written text exposition because of the rapid development of information technology in the modern era, ZR chose the rise of online games among teenagers, while the topic chosen by RB was the rapid development of mobile phones. DF chose the topic because the issue was actual, comfortable, the impact was broad, and easy to develop because the source as a writing material was available. ZR chose the above topic because it often caused controversy among teenagers, especially students. Furthermore, RB's topic is because it is often discussed in the general public and according to experience. DF chose a topic that was mastered, in contrast to ZR and RB. Both assume that the chosen topic does not need to be mastered because mastery will emerge after analyzing and studying the relevant information sources.

Compilation of writing outlines

The three students compiled the outline of the writing based on (1) the function of the text structure (thesis, argument, and recommendation) that was understood by each and (2) arranged according to the topic of the problem. They understand the thesis as a statement of opinion of the author, so compile a thesis by writing the main points of his opinion according to the problem, understanding the argument as a part of the text that contains several reasons to strengthen the thesis. Therefore, they outline the writing of arguments by writing the subject matter on the topic. However, the argument's main points

are arranged based on information obtained, such as DF and ZR. Next, they understand the recommendation as a reaffirmation of the author's opinion with the main argument. The outlines of the text are arranged in sequence from the thesis-argument-recommendation and make revisions.

DF compiles the thesis part by writing down his personal view of the topic. From there, the outlines of his thesis writing are (1) the development of information technology, (2) the type of technology that is popular, and (3) the use of technology. In the argument section, DA writes the impact of technological development, divided into positive and negative impacts. In the recommendation section, DF writes about two things, namely (1) how to develop and (2) overcome the impact of technology. Both of these are the main points of affirmation of the argument.

ZR arranged the outline of the writing into two main points, namely (1) the development of technology supporting the development of online games and (2) games are games that must be connected to the internet. In the argument section, ZR writes four things, namely (1) the facilities provided by parents to children are not in line with supervision, (2) the majority of users of online games are students, (3) the impact of online games for addicted students, and (4) the effects of calming the mind, entertainment and business opportunities. The recommendation section, ZR, wrote three things, namely (1) the rapid development of online games among teenagers, (2) self-control, and (3) the role of parents. In contrast to DF and RB, ZR does concept mapping of problem topics.

The RB compiled the text's outline into two main points, namely (1) the change of handphone from time to time and (2) the use of handphones in general. In the argument section, RB writes two main points, namely (1) the impact of cellphone use and (2) the factor of the rapid growth of the handphone. In the recommendation section, RB wrote an outline of the problem; namely, the reader must be wise in using mobile phones. Unlike DF and ZR, RB did not make revisions to the outlines of the writings compiled. Because he has thought carefully to arrange the outlines of thesis writing, arguments, and recommendations according to the topic of the problem, the pattern that is used makes it not trace the source of information when compiling the outline of the text, unless it is at the stage of editing and revision.

DF and ZR chose to make revisions to ensure the adequacy, coverage, and suitability of the topic. The revision was made after reading the source of information about the topic and the outline of the compiled thesis writing. Revisions are made in sequence from the thesis-argument-recommendation. DF revised the outline of the subject matter in the thesis into two main issues from the original three. The omitted points are various kinds of technology that are popular because they have been included in the development of information technology, so that it becomes a form of information technology development, while the general outline of writing related to the use of technology continues to be used—in the argument section not revised. Recommendations were revised to be a way to overcome the impact of

information technology from how it was initially developed and overcome information technology. DF eliminates the word developing to be more focused on the topic of the problem.

ZR revised the thesis by adding one main problem so that it became three main issues. He revised the development of technology to support the development of online games into technological developments to encourage communication facilities development. He replaces the word support to encourage because communication facilities in Indonesia are already sophisticated. For example, online games support and increasingly encourage the development of more sophisticated means of communication. He added the main problem, which is a form of communication, is an online game because it is one of the forms of communication facilities that are in high demand by students. The argument adds one main problem so that it becomes four main points from the original three. The majority of online game users are students revised to most online game users, because online games are no longer limited to games. However, also as a means of interacting with others. Other issues were not revised because they were on the topic of the problem and were very detailed.

Obtaining information

The information obtained is based on the outline of the writings in the compiled argument section. Information is obtained through internet browsing activities. Information is obtained by typing the main points of the writing that outline the writing, especially in the argument. The browsing activity is done until the information sought is enough to support his thesis as an argument. Information is obtained only from enter information taken as the source of writing only those parts relevant to the topic. Every source of information is written so that it can be accounted for. Besides, also for the need for clarity of further information, if needed. Besides, on the internet, students get information from interviews, as did ZR. The three did not use information sourced from books because they were not available.

Writing purpose

All three students have the same writing goal: to inform the problem written to the reader. However, the same goal has a different target audience. DF chooses the community as a reader so that it covers all levels of classes and classes. ZR and RB choose teenage readers, especially students. This article relates to their perspective in seeing the impact that occurs from a problem. DF chose the community because the topic of the problem chosen did not only occur in certain circles.

Furthermore, touching all components, both children/adolescents, adults, and the elderly. ZR and RB consider that student groups as groups have more impact on technology. Besides, students are more fond of technology and vulnerable to the impact it causes. To achieve this goal, students plan to use

useful, straightforward sentences, avoid complicated terms to understand, and use standard Indonesian spelling.

Useful sentences are realized in the form of the use of precise and straightforward sentences. That is, sentences whose subject and predicate are exact do not repeat the same word in the sentence and do not cause multiple interpretations. The use of straightforward language styles is intended to facilitate the reader's understanding (Fisher & Frey, 2013) related to spelling, i.e., the use of lowercase and capital letters, as well as punctuation correctly. Therefore, these components are functionally closely related to the purpose of writing. This relationship also occurs in other writing stages, such as the compilation of outlines of writing and searching for information sources.

DISCUSSION

Premenulis exposition text activities carried out by functioning schema owned, namely formal schemata, content, linguistics. Formal schemata regarding the understanding of texts and the structure of texts. Therefore, students choose a topic after functioning formal schemata. Students recall their knowledge (schemata) about what the text is exposed to and how it is structured. The content schemata function relates to mastery of the topic, both directly and mastery after reading. Related to the linguistic schema will be discussed on the purpose of writing. This supports the idea that the schemata serve as information in choosing the problem's topic (Torney-Purta, 1991). That is, the schemata functions in organizing information related to a problem topic. The consideration of choosing a problem topic shows that students use a congruent scheme with their considerations, especially mastery of the topic of the problem.

Another effort to understand the topic of the problem is made by structuring the concept. Equalization is carried out on the topic of the problem to get the concept details into sub-concepts. ZR carries out this strategy. In theory, concept mapping in pre-writing is a strategy that can improve student writing performance (Al-Shaer, 2014). The use of concept maps encourages students' attitudes, motivations, and participation in learning (Chularut & DeBacker, 2004; Nobahar dkk., 2013; Sabbaghan & Ansarian, 2013). Concept mapping is carried out to link different concepts (Novak, 1981). The concept map is a representation of knowledge about a subject and illustrates the relationship between ideas and concepts [12]. ZR does the mapping with the pattern of solving concepts into smaller units. The mapping was confirmed into the compilation of written outlines so that aspects of the problem's coverage and adequacy were met.

The experience aspect is a consideration for choosing a topic because it is considered more factual. That is, the experience experienced is formed like a schematic. This finding supports the idea that experience shapes knowledge (Schunk, 2012), which is processed to understand a particular world gives meaning to stimuli (Solso dkk., 2014). Knowledge enters information into the mind through the senses (Slavin, 2009). Experiences that are mentally organized as a network of ideas are interconnected. Here we see

the subject placing stimuli to different mental processing levels as a form of the schematic.

Internalization of experience in choosing a problem topic shows that the subject gives meaning to the experience in the form of frequent attention to the parts of the stimulus to be more likely to be remembered. Therefore, there is a representation of experience in selecting and developing topics. Experience in the form of social events forms a social scheme. This event is in line with the view that social schemata are mental representations of common knowledge based on previous experience (Pennington, 2000). In other words, students, as individuals, use the scheme they have to make conclusions about their environment (Morgan dkk., 2017).

Outlining the students' writing is done to map the scope of the problem topic. The outline of the thesis writing is arranged based on the schematic of the thesis. Like a thesis, students compile the argument's outline, writing according to their knowledge, several statements to strengthen the thesis. Therefore, students brain storm and search for information via the internet and interviews to reinforce their arguments. However, the stages of brain storming and searching for information sources were not carried out by RB. He arranged the writing outlines according to the topic of the problem without first studying the source of information. Brain storming and information searching is done when it is at the writing stage. He did not revise the outlines of writing, such as DF and ZR. They made revisions to find out the aspects of the adequacy and coverage of the main problem in the writing outline with the chosen topic. The part that is not revised, if it covers the topic to be discussed. The pre-writing activities carried out by DF and ZR support the idea that in the pre-writing phase, brainstorming can help students find new ideas and collect data (Zaid, 2011). Therefore, brain storming is included as a preparation for writing (Al-Shaer, 2014). In brain storming, students prepare stationery to record necessary information at the source obtained. The things that are recorded are the main issues relevant to the topic.

Obtaining information in the pre-writing is done after the topic of the problem is selected. However, it is done after the material framework of the argument is prepared. This is because students have been given the main topic to work on in pre-written exposition text assignments. They are looking for information obtained from the internet and interviews. Sources that come from the internet are sought by typing the main points of the material in the argument, then read and take the essential parts that fit the topic of the problem. If the information obtained is deemed insufficient, browse again on the new website / Wikipedia. The information taken is written down in a link to be reopened and can be accounted for. The same pattern of obtaining information is carried out in interviews, asking the subject matter of the resource persons directly. However, using a recording tool. The results are transcribed, then selected as needed. Selected resource persons at least mastered the topic of the problem.

In general, the three students write intending to inform the reader of an event or event. The reader can understand the purpose of writing, the three students have planned the topic selection, which the reader is, how the linguistic aspects (words and sentences), and spelling (letters and punctuation), are used. The choice of topics is based on the impact caused and who is affected (the reader). Because of the problem and the reader, students will use the right choice of words (avoiding special terms), useful sentences (clear and straightforward), uppercase / lowercase letters, and proper punctuation. Therefore, goals, topics, readers, fundamental aspects, and spelling are functionally related.

Pre-writing activities with the stages and processes above also support the idea that there are motivations such as goals, attitudes, self-confidence, and self-efficacy (Hacker dkk., 2009). They developed the schemata they had. They attempt to incorporate new information into the existing schema knowledge and adjust the schema of knowledge to new information to understand reality. This supports the theory of assimilation and accommodation (Santrock, 2006; Schunk, 2012). Assimilation is entering new information into an existing scheme (Gross, 2010; Olson & Hergenhahn, 2009). Next, the adaptation process (adaptation) of the new schemata structure to the problem (accommodation). An accommodation that occurs is a process of cognitive development (Olson & Hergenhahn, 2009). In cognitive psychology, what is done is called an elaboration subject, namely efforts to produce additional and original information to understand a topic being studied (Tuckman & Monetti, 2011).

CONCLUSIONS

The three students used their schematic about what the exposition text was and how to write it as a first step to working on the pre-writing, namely selecting topics, compiling the outline of the writing, and looking for information material, and determining the purpose of writing. The pre-written schema uses two patterns: (1) functional patterns and (2) development patterns. A functional pattern is a pattern of linking one pre-writing stage to the next stage. From the schemata about exposition text, students relate to the choice of topics, the compilation of outlines of writing, the acquisition of information, and the purpose of writing. Therefore, the pre-written schema for students' exposition text becomes a functionally interconnected whole. This functional relationship is increasingly visible in the choice of problem topics and writing goals. Both relate to who the reader is; they relate to plans for using straightforward and concise sentences, terms that are easily understood, and proper use of lowercase, capital, and punctuation. In terms of choosing topics, DF prioritizes mastery aspects, while ZR and RB because of the impact factors that are caused by students.

The development pattern is a pattern in which students develop the initial schemata they have in working on pre-written exposition texts, including revising them. The development is carried out by exploring information materials, compiling the writing outline, revising it, and making concept mapping. The pattern of development is carried out so that the thesis can be

written with a strong argument. Besides, so that coverage and adequacy of topics are met, this development pattern was carried out by DF and ZR as a linear pattern, while RB did not make revisions in compiling the outlines of the text writing. He has thought carefully about the scope and focus of writing when outlining the writing of the writing. Writing material exploration will be carried out at the drafting stage, namely the writing stage. This pattern is called the indirect development pattern. Thus, this pattern of students adapts new information into the schemata they already have. Adjusting the schemata to new information is a process of assimilation and accommodation to develop the exposition text's pre-writing activities. Thus, the three students have an individual schematic structure that organizes and guides them in working on the exposition's introductory text.

REFERENCES

- Abram, H. S., & Wadlington, W. (1968). Selection of patients for artificial and transplanted organs. *Annals of Internal Medicine*, 69(3), 615–620. <https://doi.org/10.7326/0003-4819-69-3-615>
- Alamargot, D., & Chanquoy, L. (2001). *Through the models of writing*. Kluwer Academic Publishers.
- Al-Shaer, I. M. R. (2014). Employing Concept Mapping as a Pre-writing Strategy to Help EFL Learners Better Generate Argumentative Compositions. *International Journal for the Scholarship of Teaching and Learning*, 8(2). <https://doi.org/10.20429/ijstol.2014.080210>
- Ashwell, T. (2000a). Patterns of Teacher Response to Student Writing in a Multiple-Draft Composition Classroom: Is Content Feedback Followed by Form Feedback the Best Method? *Journal of Second Language Writing*, 9(3), 227–257. [https://doi.org/10.1016/S1060-3743\(00\)00027-8](https://doi.org/10.1016/S1060-3743(00)00027-8)
- Ashwell, T. (2000b). Patterns of Teacher Response to Student Writing in a Multiple-Draft Composition Classroom: Is Content Feedback Followed by Form Feedback the Best Method? *Journal of Second Language Writing*, 9(3), 227–257. [https://doi.org/10.1016/S1060-3743\(00\)00027-8](https://doi.org/10.1016/S1060-3743(00)00027-8)
- Bartlett, F. C. (1995). *Remembering: A study in experimental and social psychology*. Cambridge University Press.
- Bereiter, C. (2013). *The Psychology of Written Composition* (1 ed.). Routledge. <https://doi.org/10.4324/9780203812310>
- Carrell, P. L. (1988). Some causes of text-boundedness and schema interference in ESL reading. Dalam P. L. Carrell, J. Devine, & D. E. Eskey (Ed.), *Interactive Approaches to Second Language Reading* (hlm. 101–113). Cambridge University Press. <https://doi.org/10.1017/CBO9781139524513.012>
- Carrell, P. L., & Eisterhold, J. C. (1983). Schema Theory and ESL Reading Pedagogy. *TESOL Quarterly*, 17(4), 553. <https://doi.org/10.2307/3586613>
- Chularut, P., & DeBacker, T. K. (2004). The influence of concept mapping on achievement, self-regulation, and self-efficacy in students of English as a second language. *Contemporary Educational Psychology*, 29(3), 248–263. <https://doi.org/10.1016/j.cedpsych.2003.09.001>

- Crawford, L., & Smolkowski, K. (2008). When a "sloppy copy" is good enough: Results of a state writing assessment. *Assessing Writing*, 13(1), 61–77. <https://doi.org/10.1016/j.asw.2008.05.003>
- Creswell, J. W. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (Sixth edition). Pearson.
- Creswell, J. W., & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory Into Practice*, 39(3), 124–130. https://doi.org/10.1207/s15430421tip3903_2
- Davis, M. (2005). *Scientific papers and presentations*. Academic Press. <http://public.eblib.com/choice/publicfullrecord.aspx?p=300906>
- De La Paz, S., & Graham, S. (1997a). Effects of dictation and advanced planning instruction on the composing of students with writing and learning problems. *Journal of Educational Psychology*, 89(2), 203–222. <https://doi.org/10.1037/0022-0663.89.2.203>
- De La Paz, S., & Graham, S. (1997b). Strategy Instruction in Planning: Effects on the Writing Performance and Behavior of Students with Learning Difficulties. *Exceptional Children*, 63(2), 167–181. <https://doi.org/10.1177/001440299706300202>
- Denzin, N. K., & Lincoln, Y. S. (Ed.). (2011). *The Sage handbook of qualitative research* (4th ed). Sage.
- Eskey, D. E. (1988). Holding in the bottom: An interactive approach to the language problems of second language readers. Dalam P. L. Carrell, J. Devine, & D. E. Eskey (Ed.), *Interactive Approaches to Second Language Reading* (hlm. 93–100). Cambridge University Press. <https://doi.org/10.1017/CBO9781139524513.011>
- Fisher, D., & Frey, N. (2013). Reading and Reasoning: Fostering Comprehension Across Multiple Texts. *IRA E-ssentials*, 1–10. <https://doi.org/10.1598/e-ssentials.8026>
- Flower, L., & Hayes, J. R. (1984). Images, Plans, and Prose: The Representation of Meaning in Writing. *Written Communication*, 1(1), 120–160. <https://doi.org/10.1177/0741088384001001006>
- Gross, R. D. (2010). *Psychology: The science of mind and behaviour* (6th ed). Hodder Education.
- Hacker, D. J., Dunlosky, J., & Graesser, A. C. (Ed.). (2009). *Handbook of metacognition in education*. Routledge.
- Hamed, L. A. A., Behnam, B., & Saiedi, M. (2014). The Role of Formal Schemata in the Development of Précis Writing in an Iranian EFL Context. *Procedia - Social and Behavioral Sciences*, 98, 207–211. <https://doi.org/10.1016/j.sbspro.2014.03.408>
- Howard, R. W. (1987). *Concepts and schemata: An introduction*. Cassell; Distributed in North America by Taylor and Francis.
- Hühn, P. (Ed.). (2014). *Handbook of narratology* (2nd ed., fully revised and expanded). De Gruyter.
- Johnson, M. (2009). *The body in the mind: The bodily basis of meaning, imagination, and reason* (Paperback ed., [9. print.]). University of Chicago Press.
- Kellogg, R. T. (1988). Attentional overload and writing performance: Effects of rough draft and outline strategies. *Journal of Experimental*

- Psychology: Learning, Memory, and Cognition, 14(2), 355–365.
<https://doi.org/10.1037/0278-7393.14.2.355>
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to Western thought*. Basic Books.
- Lewis, P. A., & Durrant, S. J. (2011). Overlapping memory replay during sleep builds cognitive schemata. *Trends in Cognitive Sciences*, 15(8), 343–351. <https://doi.org/10.1016/j.tics.2011.06.004>
- Mandler, J. M. (2014). *Stories, scripts, and scenes: Aspects of schema theory*. <http://site.ebrary.com/id/10828745>
- Martin, J. R. (1990). *Factual writing: Exploring and challenging social reality* (2. ed., 2. impr). Oxford Univ. Press.
- Matsuda, P. K. (2003). Process and post-process: A discursive history. *Journal of Second Language Writing*, 12(1), 65–83. [https://doi.org/10.1016/S1060-3743\(02\)00127-3](https://doi.org/10.1016/S1060-3743(02)00127-3)
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (Third edition). SAGE Publications, Inc.
- Montague, M., & Leavell, A. G. (1994). Improving the Narrative Writing of Students with Learning Disabilities. *Remedial and Special Education*, 15(1), 21–32. <https://doi.org/10.1177/074193259401500105>
- Morgan, G. P., Joseph, K., & Carley, K. M. (2017). The Power of Social Cognition. *Journal of Social Structure*, 18(1). <https://doi.org/10.21307/joss-2018-002>
- Nobahar, B., Tabrizi, A. R. N., & Shaghghi, M. (2013). The Effect of Concept Mapping on Iranian Intermediate EFL Learners' Self-efficacy and Expository Writing Accuracy. *Theory and Practice in Language Studies*, 3(11), 2117–2127. <https://doi.org/10.4304/tpls.3.11.2117-2127>
- Novak, J. D. (1981). Applying Learning Psychology and Philosophy of Science to Biology Teaching. *The American Biology Teacher*, 43(1), 12–42. <https://doi.org/10.2307/4447108>
- Olson, M. H., & Hergenhahn, B. R. (2009). *An introduction to theories of learning* (8th ed). Pearson/Prentice Hall.
- Pennington, D. C. (2000). *Social cognition*. Routledge.
- Pharr, D., & Buscemi, S. V. (2009). *Writing today: Contexts and options for the real world* (2nd ed). McGraw-Hill.
- Piaget, J. (1971). *Biology and knowledge: An essay on the relations between organic regulations and cognitive processes*. University of Chicago Press.
- Proett, J., & Gill, K. (1986). *The writing process in action: A handbook for teachers*. National Council of Teachers of English.
- Radzi, A. H. M., & Aziz, N. H. A. (2014). Exploring Content Schemata Influence on L2 Learners' Comprehension of Zuraidah Omar's, Twelve and not Stupid. *Procedia - Social and Behavioral Sciences*, 155, 215–222. <https://doi.org/10.1016/j.sbspro.2014.10.282>
- Rumelhart, D. E. (2017). Schemata: The Building Blocks of Cognition. Dalam R. J. Spiro, B. C. Bruce, & W. F. Brewer (Ed.), *Theoretical Issues in Reading Comprehension* (1 ed., hlm. 33–58). Routledge. <https://doi.org/10.4324/9781315107493-4>

- Sabbaghan, S., & Ansarian, F. (2013). Do they know that they know? EFL learners' attitude towards concept mapping in listening comprehension. *International Journal of Research Studies in Educational Technology*, 2(1). <https://doi.org/10.5861/ijrset.2013.383>
- Saddler, B., Moran, S., Graham, S., & Harris, K. R. (2004). Preventing Writing Difficulties: The Effects of Planning Strategy Instruction on the Writing Performance of Struggling Writers. *Exceptionality*, 12(1), 3–17. https://doi.org/10.1207/s15327035ex1201_2
- Santrock, J. W. (2006). *Educational psychology (Classroom update, preparing for PRAXIS and practice, 2nd ed)*. McGraw-Hill.
- Schunk, D. H. (2012). *Learning theories: An educational perspective (6th ed)*. Pearson.
- Shin, Y. (2008). *The effects of planning on L2 writing: A study of Korean learners of English as a foreign language [PhD, University of Iowa]*. <https://doi.org/10.17077/etd.4de02eme>
- Silverman, D. (2016). *Qualitative research*.
- Slavin, R. E. (2009). *Educational psychology: Theory and practice (9th ed)*. Pearson/Allyn and Bacon Publishers.
- Solso, R. L., MacLin, O. H., & MacLin, M. K. (2014). *Cognitive psychology*. Pearson Education Limited.
- Spiro, R. J., Bruce, B. C., & Brewer, W. F. (2018). Theoretical issues in reading comprehension: Perspectives from cognitive psychology, linguistics, artificial intelligence and education. <http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlabk&db=nlabk&AN=1625518>
- Sun, F. (2014). The Application of Schema Theory in Teaching College English Writing. *Theory and Practice in Language Studies*, 4(7), 1476–1482. <https://doi.org/10.4304/tpls.4.7.1476-1482>
- Talmy, L. (2000). *Toward a cognitive semantics*. MIT Press.
- Toledo, P. F. (2005). Genre analysis and reading of English as a foreign language: Genre schemata beyond text typologies. *Journal of Pragmatics*, 37(7), 1059–1079. <https://doi.org/10.1016/j.pragma.2005.01.002>
- Torney-Purta, J. (1991). Schema Theory and Cognitive Psychology: Implications for Social Studies. *Theory & Research in Social Education*, 19(2), 189–210. <https://doi.org/10.1080/00933104.1991.10505636>
- Tuckman, B. W., & Monetti, D. M. (2011). *Educational psychology*. Wadsworth/Cengage Learning.
- Tulving, E. (1984). Précis of Elements of episodic memory. *Behavioral and Brain Sciences*, 7(2), 223–238. <https://doi.org/10.1017/S0140525X0004440X>
- Tulving, E. (1986). What kind of a hypothesis is the distinction between episodic and semantic memory? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 12(2), 307–311. <https://doi.org/10.1037/0278-7393.12.2.307>
- Tulving, E. (1989). Memory: Performance, knowledge, and experience. *European Journal of Cognitive Psychology*, 1(1), 3–26. <https://doi.org/10.1080/09541448908403069>

- Tulving, E. (1992). *Elements of episodic memory* (Reprinted). Clarendon Press.
- Willig, C. (2008). *Introducing qualitative research in psychology: Adventures in theory and method* (2nd ed). Open University Press.
- Yuliana, D., & Gandana, I. S. S. (2018). WRITERS' VOICE AND ENGAGEMENT STRATEGIES IN STUDENTS' ANALYTICAL EXPOSITION TEXTS. *Indonesian Journal of Applied Linguistics*, 7(3), 613. <https://doi.org/10.17509/ijal.v7i3.9812>
- Zaid, M. A. (2011). Effects of web-based pre-writing activities on college EFL students' writing performance and their writing apprehension. *Journal of King Saud University - Languages and Translation*, 23(2), 77–85. <https://doi.org/10.1016/j.jksult.2011.04.003>
- Zamroni, E., Hanurawan, F., Hambali, I., & Hidayah, N. (2020). Android-based Decision Support System for Career Decision Making of Junior High School Students in Specialization Program Preparation. 82, 7.
- Zamroni, E., Hanurawan, F., Muslihati, Hambali, I., Hidayah, N., & Triyono. (2020). Existential Counseling Framework from a Spiritual Perspective: A Meta-Analysis. *Journal of Critical Reviews*, 7(09). <https://doi.org/10.31838/jcr.07.09.103>
- Zamroni, E., Muslihati, Lasan, B. B., & Hidayah, N. (2020). Blended Learning based on Problem Based Learning to Improve Critical Thinking Ability of Prospective Counselors. *Journal of Physics: Conference Series*, 1539, 012039. <https://doi.org/10.1088/1742-6596/1539/1/012039>
- Zheng, S., & Dai, W. (2012). Studies and Suggestions on Pre-writing Activities. *Higher Education Studies*, 2(1), p79. <https://doi.org/10.5539/hes.v2n1p79>