

Self-Literacy Synectic Writing Model and Challenge On 21st Century Skills

Dadang Sunendar*, Tri Indri Hardini, Iim Siti Karimah

Universitas Pendidikan Indonesia

*Corresponding author. Email: dadangsunendar@upi.edu

ABSTRACT

Writing is considered a difficult skill because it contains other ability variables that lead to writing activities. Writing in French also has the same tendency in terms of difficulty and is a subject that must have the full attention of students and teachers. Various difficulties for French teachers and students in the field of writing, especially during the Covid-19 pandemic, were increasing based on several studies and observations on writing skills. Learning to write Synectic-self-literacy is intended to overcome the problems mentioned and provide a wider creative space for teachers and students in the teaching and learning process of writing because this model is hypothetically able to increase the ability and passion of learning to write. The selection of this writing skill field is also correlated with the demands of 21st century skills which cover the four main skills, namely communication, collaboration, critical thinking, and creativity. The method used in this study was Research and Development. The result demonstrates the 21st Century Skill-Based Self-literacy Writing Learning Model containing six stages of its implementation.

Keywords: Writing, Synectic self-literacy, 21st century skills.

1. INTRODUCTION

Language learning is one of the fields of study that requires the utilization of various language learning strategies in learning Indonesian, local languages, and foreign languages. French as one of the official languages of the United Nations (UN) has been officially offered in the education curriculum in Indonesia since decades ago along with other foreign languages, such as German, Arabic, Japanese, and in the last decade there have also been Mandarin and Korean. The position of English is considered not as foreign language in the curriculum, although in *Peraturan Pemerintah Indonesia Nomor 57 (2014)* it is stated that foreign languages are languages other than Indonesian and regional languages (Government Regulation Number 57 Year 2014, article 1). Meanwhile, teaching foreign languages in universities has been carried out for almost the same duration as the implementation at the high school level. In addition, Dutch and Russian are also included in the seven foreign languages in the curriculum of universities. Thus, the teaching of foreign languages in Indonesia has a strong legal basis. It also has been stated in *Undang Undang Republik Indonesia Number 24 (2009)* concerning the flag, language, and symbol of the country, as well as Article 43 of the

National Anthem which states: Section (1) The government can facilitate citizens who want to have foreign language competence in the context of increasing the nation's competitiveness; Section (2) Further provisions regarding facilitation to improve foreign language competence as referred to in section (1) shall be regulated in a Government Regulation. This means that the above facilitation has been carried out through formal education in the High School, Vocational High School, as well as the Religious High School (SMA/SMK/MA) curriculum, foreign language education in universities, as well as outside formal educational institutions.

The presence of foreign languages in the education system in Indonesia has existed since the 1950s, even before the independence period in the realm of diverse learning. French is taught in Indonesia for various reasons, including French being used in more than 45 countries in the world, both as a first language and a second language, French is one of the six official languages of the United Nations, French can be the language of competitiveness of the nation in various fields of science. The implication of teaching French in universities is that it certainly demands the presence of appropriate learning strategies for students. Moreover, the students also deal with the challenges of 21st century

skills that focus on four main competencies, namely communication, collaboration, critical thinking, and creativity. Four competencies must also be realized in learning French to raise the competitiveness of graduates and also the nation.

The curriculum of Universitas Pendidikan Indonesia (UPI) in the field of French language education is generally sufficient to improve the performance of graduates, but these courses need to be accompanied by good lecture planning based on research results. From several studies that have been carried out, students' writing skills are still relatively poor and have not been adapted to current needs, which are mostly in the form of technology based. The current French language learning strategy needs to adapt to the challenges of the 21st century which relies entirely on technology, especially during a pandemic that utilizes information and communication technology. The learning model for writing Synectic-self-literacy was proposed because of the real need to develop writing skills in French to improve the quality standards of graduates. Basic literacy skills are not sufficient to compete regionally and globally but need to be supported by qualified self-literacy through Synectic models to further explore students' written argumentation skills. Therefore, the need for a Synectic-literacy learning model design with a focus on French writing skills for students who utilize information technology is urgently needed to enter a very competitive century.

In a previous study conducted by Aharony and Gazit (2018) regarding students' literacy self-efficacy, it was found that personality characteristics of openness to experience, as well as threat and challenge, and motivation predicted students' information literacy self-efficacy. Lam (2000) develops a study regarding the L2 literacy among Chinese students. The concept of textual identity is developed in this study to better understand how texts are generated and utilized to represent and reposition identity in networked computer media. In this age of globalization and transnational ties, it also poses important problems about literacy and cultural belonging. While Stehle and Burton (2019) researched on Developing student 21st Century skills in selected exemplary inclusive STEM high schools. The results of this study indicate that there is still room for competency development to improve capabilities in the 21st century. Based on these previous studies conducted in the field of literacy, especially writing skills, there has been no research that discusses self-literacy related to Synectic's and writing skills, especially the 21st century skills.

Among the four language skills, writing skill is seen as the most difficult skill and is considered as the estuary of various language skills, including in French. From the results of previous research studies, strengthening students' French writing skills needs to

get the attention of teachers and students because of the urgency of this type of skill in facing global competition in the 21st century. Consequently, this research is limited to the development of a learning model for writing in French. Meanwhile, 21st century competencies are limited to four main competencies, namely communication, collaboration, critical thinking, and creativity.

The literacy study proposed in this study is not based on basic literacy as agreed at the World Economic Forum in the city of Davos, Switzerland, in 2015, but proposes the development of basic literacy, namely self-literacy, which is combined with the Synectic model.

Based on the identification of the problems described above, this research is formulated in the following questions.

1. Which model is suitable with the self-literacy-Synectic-based writing learning that uses ICT to the achievement of 21st century skills?
2. What is the stage in implementing the Synectic self-literacy model for 21st century skills-based writing learning?

2. METHOD

The method used is Research and Development (R&D). Development research is carried out to develop new products or improve existing products. The model in development research is in the form of a procedure that follows the steps of development research as proposed by Sugiyono (2016). These steps include the identification of potential and problems, data collection, product design, design validation, product design revisions, product trials, product revisions, usage trials, product revisions, and mass production. The respondents were 29 students from the 5th semester of the French Language Education Study Program, FPBS UPI.

The first step is problem identification which is carried out to analyze factual problems that occur in the learning process, see the causes of problems, and propose alternative solutions. It is intended to collect as much information as possible about the field of study. This research field of study is focused on teaching writing that is integrated by raising global issues. Due to the Covid-19 pandemic, problem identification, data collection was carried out through questionnaires and tests distributed via google forms, and previous studies regarding writing skills. The second step is to develop a plan based on the findings gathered in problem identification. The purpose of planning is to define the principles of product development. The results of this stage will be used to complete the design of this research product. Thus, the researcher will take several steps, namely: defining the learning structure, defining

material specifications, and scheduling project activities. The third step is product development. The next stage is validation. Learning materials will be validated by experts. The experts involved in product validation are writing teaching experts and multimedia development experts. They have been asked for expertise to evaluate the usability, practicality, and feasibility of the model. The next step is to revise the model after receiving input from the validator. The sixth step is to pilot the model on a small scale. This is to obtain information about the practicality and application of learning materials in supporting the writing learning process in the classroom. The trial participants were students and lecturers. The seventh step is to revise the results of the trial on a small scale. The input from the trial will be the basis for revising the product. After being revised, the Synectic-self-literacy learning model was tested again on a wider scale. The results of this second trial became the basis for revising the model to make it more perfect. After revising, the final model of learning to write Synectic-literacy based on 21st century skills were produced.

3. FINDINGS AND DISCUSSION

3.1. Literacy and Self Literacy

Literacy can be simply defined as something to do with the written thing, or specifically the ability to read and write. In the Great Indonesian Dictionary Edition V (Language Development and Cultivation Agency, 2017) literacy is defined by three things, namely the ability to write and read; knowledge or skills in a particular field or activity: --computers; and the individual's ability to process information and knowledge for life skills. It means that The Great Indonesian Dictionary places the ability to read and write as the definition of conventional literacy. This is in line with the opinion of world experts and institutions which state that someone is called literate by understanding reading and writing short statements about their daily lives (Elizabeth & Copeland, 2011).

Self-literacy is a development of basic literacy that has been agreed upon by the World Economic Forum (World Economic Forum in 2015) which consists of six types of literacy, namely reading and writing literacy, numerical literacy, scientific literacy, digital literacy, financial literacy, and cultural literacy as well as citizenship. A nation, society, or community can survive if they master the basic literacy above, including Indonesia. The term self-literacy is considered as the development of basic literacy which is used as one of the values of the Knowyourself institution. Howes (in Apriliya, 2018) as the co-founder stated that self-literacy is defined as covering literal, functional, psychological, and even metaphysical aspects. Thus, there is no one specific definition because it is lifelong

learning that never ends and, in her view, self-literacy is a path of self-discovery. Howes' concept of self-literacy is general and broad because it covers many aspects whose scope is unlimited. There is a tendency for this to emerge from a practical perspective without considering the long history of the concept of literacy. This is different from the idea of self-literacy in this study which pays attention to the concept of literacy in theory and practice and seeks to provide a specific formulation of self-literacy definition. Self-literacy as an entity refers to the knowledge and understanding of individuals about themselves so that they can accept themselves well and have an impact on optimal self-development and productivity. Self-literacy is important for any individual because the quality of a person's development and competence is based on the individual's knowledge and understanding of himself. In a broader context, self-literacy is the ability and willingness of individuals to access, manage, and utilize texts both in manual and digital forms, especially through reading and writing activities to increase knowledge, understanding, ability, and self-acceptance which has an impact on empowerment. and improvement of the individual's quality of life (Apriliya, 2018).

3.2. Synectic

Synectic is a very interesting and fun approach to developing innovations. The first step of Synectic procedures is to develop "creativity groups" within the organization, namely groups of people who are trained to work together to solve problems or develop products (Joyce, Weil, & Calhoun, 2009). They added that the Synectic model is used in an educational environment and the materials used to contain many Synectics activities that have been published, one of which is in "*Synectic's Education System, II Brattle Street, Cambridge, MA 02138*". Joyce et al. (2009) also explains that the main element in Synectic is the use of analogy. In Synectic exercises, students 'play' with analogies so that they can relax and begin to enjoy the task of making metaphorical comparisons, then they use these analogies to solve problems and come up with interesting ideas. Joyce et al., give an example when we are faced with a task, we consciously often act logically. We prepare writing by outlining important points as our guide in writing. We analyze the elements of the problem and try to think about them. We use our storehouse of words and phrases to design ideas; we use the storehouse of solutions we have learned to deal with problems.

Synectic is one model that belongs to the personal model family. The personal model is a teaching model that is oriented towards individual self-development. This model focuses on individual psychology and the development of creativity. This model was first

designed by Gordon (in Joyce et al., 2009) and developed in the industrial field for individual activities in groups so that they can solve problems (problem solvers) or develop production (product development). Synectic's Model which has developed in the industrial world was finally developed by Gordon school's usage. The goal is the same whether as industrial workers or as students, namely, to foster the expected creativity. At school, students are expected to be able to solve life's problems creatively. Gordon (in Joyce et al., 2009) argues that the Synectic basis is formed through four views as follows:

1. Creativity is a daily activity

Creativity is a part of everyday life and lasts a lifetime. The Synectic's model is designed to improve problem-solving skills through creative expression, empathy, and realizing the importance of social relationships in creative problem-solving efforts.

2. The creative process is not mysterious, but it can be learned

If individuals understand the basis of the creative process, they can learn to use it in enhancing creativity in which they live and work independently in their tasks as members of a group. Creativity can be developed by increasing awareness of analyzing to describe and create procedures for developing creativity exercises that can be applied at school or in other situations.

3. Creativity can be created in any field

This idea goes against the beliefs of people in general. Commonly, people limit creativity only in the field of art. In fact, creativity is created in all areas of life, such as art, science, language, or technology.

4. The process of discovering individual creativity will be supported by the discovery of group creativity.

Individuals and groups can find and develop creative ideas with the same results in several abilities. This ability can be obtained from individual discovery experiences which are supported by group discovery experiences.

3.3. Writing Skills

In the Great Indonesian Dictionary 5th Edition (*Badan Pengembangan dan Pembinaan Bahasa*, 2017) the word 'write' is defined as making letters (numbers

and so on) with pens (pencils), chalk, and so on, while in the sub-meanings both are mentioned as "generating thoughts". or feelings (such as composting, writing letters) with writing. Meanwhile, according to Iskandarwassid and Sunendar (2008), the meaning of the word writing is the process of perpetuating language with graphic signs, representation of linguistic expression activities, and activities of producing thoughts and feelings with writing. Furthermore, it was also stated that the learning objectives of writing skills are divided into three domains, namely for the beginner level, intermediate level, and advanced level. In this study, the writing skill targeted was level B1 as agreed by the Common European Framework of Reference for Languages (CEFRL) and has been recognized and implemented internationally in 28 countries.

Chabert and Debeuckelaere (2017) describes level B1 writing skills in French as the level where learners are able to understand the important points of a written or spoken discourse, which is expressed in a clear and standard language, while the themes are familiar (work, school, leisure time, tourism...). At this level, learners should also be able produce a simple and coherent discourse on the above themes, narrate an event, experience or a dream, describe a hope or a purpose and briefly present reasons or explanations for a project or idea.

3.4. 21st Century Skills

As we enter the 21st century, all potentials should be focused on strategies on how to win the global competition through demonstrating skills in developing critical thinking in various sectors and taking initiatives to show creativity. The ability to communicate is also the key to success in international competition through trading, education, health, defense, and others. Teachers and students should be encouraged to have creativity in the classroom and online learning. Breakthroughs are very important for teachers so that students are accustomed to participating in discussions that are comprehensive, complex, and full of reasoning energy. The ability to collaborate is one of the important aspects of 21st century competition because the success of a collaboration determines the advancement of various fields. The four skills above must also be integrated with the policy of implementing education which is the foundation of all success (Redhana, 2019).

The National Education Association (n.d.) has identified 21st-century skills as “The 4Cs.” “The 4Cs” include critical thinking, creativity, communication, and collaboration. King states that critical thinking skills are a set of skills to carry out various analyses, assessments, evaluations, reconstructions, decision-making that lead to rational and logical actions (Redhana, 2019). Papp mentions that thinking activities on subjects, content, and problems were carried out through analysis, assessment, and reconstruction activities (Redhana, 2019). Creativity is a skill to find new things that have not existed before, are original, develop new solutions for each problem, and involve the ability to generate new, varied, and unique ideas (Redhana, 2019). Communication skills are abilities to express new thoughts, ideas, knowledge, or information, both in writing and orally. Collaboration skills refer to the ability to work together effectively and show respect to diverse team members, exercise fluency, and willingness to make decisions needed to achieve common goals (Redhana, 2019).

The innovation of learning to write in French at the B1 level which is equivalent to the B1 level ability agreed by the Common European Framework of Reference for Languages (CEFR) is an internationally recognized standard for describing language proficiency. Up to this date, this standard has not been fully achieved by the (foreign) language learning model, including in learning French. The lagging behind in the ability to write foreign languages is generally due to the unfamiliarity of writing in their mother tongue, Indonesian, or foreign languages. Other influencing variables are vocabulary mastery and creative ability to convey written ideas. The aspect of writing unfamiliarity represents the weakness of writing literacy. This weakness can only be overcome through good self-literacy in writing. The role of students and lecturers is very important in self-motivating this writing activity. Meanwhile, the weakness of foreign language vocabulary mastery is directly related to routine reading literacy as well as providing the introduction of new vocabularies. Students’ linguistic practice both orally and in writing will determine the improvement of new vocabularies.

Communication skills in the context of writing skills include the ability to convey thoughts clearly and persuasively both orally and textually, the ability to convey ideas in clear sentences, easy to understand, convey commands clearly, and can motivate others through speaking skills. In the context of learning to write in a foreign language, this variable is very important because it determines the level of understanding of speech. Collaborative interaction in writing is characterized by the existence of a common goal, symmetry of writing structure, and a high level of cooperation, interactivity, and interdependence in completing writing. This stage is passed before someone



Figure 1 21st century skill-based self-literacy writing learning model

becomes an independent writer who does not depend on direct interaction with other students. The independent author’s dependence is more on access to information from various sources. Therefore, Fullan and Scott (2014) state that collaboration refers to the capacity to work interdependently and synergistically in teams with interpersonal skills and is associated with strong teams including the effective management of team dynamics, making shared substantive decisions, and learn from and contribute with others. The ability to write based on Synectic self-literacy has criteria that are close to expectations. This model shows the ability of writers who are able to participate in groups during the co-writing process or during the exercise. The ability to think critically in writing is shown by the ability to identify and formulate questions, analyze arguments, as well as being able to ask and answer clarifying questions as well as answer difficult questions. In addition, when conducting the writing process, the writer can make deductions and inductions along with the results, so that the writing has a critical and not boring character. There are 6 creative abilities based on the componential model of creativity designed by Urban (Graleswski & Karwowski, 2012), namely:

1. divergent thinking,
2. general competences,
3. specific knowledge and abilities,
4. and task-oriented engagement,
5. motives,
6. tolerance of ambiguity

Based on the six criteria above, the ability to be creative in the context of learning to write must also have different ideas, adequate abilities in developing writing, special abilities in developing written composition, focus when writing, high motivation, and have a certain tolerance in dealing with problems. Things that are considered ambiguous. In other words, the courage to come up with ideas for thinking beyond what is usually one of the characteristics of the ability to be creative in the 21st century.

3.5. The Model and Stages of 21st Century Skill-Based Synectic Writing-Self Literacy Learning

Further, the implementation of model shown on Figure 1 is divided into 6 stages. Each stage has several things that need to be considered by both teachers and students. Below is an explanation of each step that needs to be done:

Stage One: Describing the current state

The lecturer asks students to describe themselves that can be appointed to hone their self-literacy skills as well as see the problems that exist in them.

Stage Two: Direct analogy process

Students put forward analogies directly on various possible problem-solving. One possible solution to the problem is selected and further developed.

Stage Three: Personal analogy

The students build an analogy on the problem-solving possibilities that have been selected in the second stage by disclosure into French according to their level.

Fourth Stage: Conflict Consolidation

The students try to understand what has been described in the second and third stages, then understand some of the conflicts that have been established and choose one of these conflicts.

Fifth Stage: Direct analogy

Students present and choose direct analogies based on conflicts that have been established by expressing them in French and honing their skills in the fields of Communication, Collaboration, Critical Thinking, and Creativity.

Sixth Stage: Testing the success of carrying out the task

The lecturer directs students to return to the original task or problem by using the last analogy or the whole process of Synectic's and self-literacy based on 21st century skills by uploading their writings to their Instagram account by writing the keyword #ecriturecreative.

4. CONCLUSION

The 21st century is marked by increasingly tight competition in various fields that demand creativity from every individual. For students of foreign language study programs, these demands can be made in the form of making good writing in the language being studied. Creativity in making foreign language writings automatically shows the best performance that contains

pithy, measurable, well-structured ideas, and has a standard composition of writing. Self-literacy can be positioned in one of the educational strategic plans as the ability to recognize, understand, handle, and appropriately express oneself. The purpose of self-literacy is that students, in general, can respect others, respect each other, so that they feel safe to express themselves. Specifically, the aspect of self-literacy referred to in this study is limited and focused on three things, namely physical, personality (character/nature), and self-role. These three aspects are easier and can be identified by students themselves. This is indicated by the frequent physical characteristics, certain traits, or the role of self in its social scope to be the center of attention of people, especially their peers around them. Students need to know, understand, and accept their physical characteristics, characteristics, and roles so that they can optimally develop themselves, including in writing activities, which is one measure of one's creativity. Collaboration with fellow students can improve self-literacy and avoid the opposite behavior. Hence, it can be concluded that 21st Century Skill-Based Self-literacy Writing Learning Model is an option to answer the current challenge on developing students' writing skills along with their self-literacy in accordance with the demand of the latest situation.

REFERENCES

- Aharony, N., & Gazit, T. (2020). Students' information literacy self-efficacy: An exploratory study. *Journal of Librarianship and Information Science*, 52(1), 224-236.
- Apriliya, S. E. (2018). Social Identity in Indonesian Children's Literature: Materials of Self-Literacy for Elementary Students. *Proceedings of the 5th International Conference on Community Development (AMCA 2018)*. Atlantis Press.
- Badan Pengembangan dan Pembinaan Bahasa. (2017). *Kamus Besar Bahasa Indonesia Edisi Kelima*. Kementerian Pendidikan dan Kebudayaan.
- Chabert, C., & Debeuckelaere, A. (2017). *Préparer le DELF B1 et B2: méthodologie de l'épreuve de production écrite, entraînement, corrigés*. Presses universitaires de Grenoble.
- Fullan, M., & Scott, G. (2014). *New Pedagogies for Deep Learning Whitepaper: Education Plus*. Retrieved from www.newpedagogies.org
- Gralewski, J., & Karwowski, M. (2012). Creativity and school grades: A case from Poland. *Thinking Skills and Creativity*, 7(3), 198-208.
- Iskandar, W., & Sunendar, D. (2008). Strategi Pembelajaran Bahasa. *Bandung: PT Remaja Rosdakarya*.

- Joyce, B., Weil, M., & Calhoun, E. (2009). *Models of Teaching*. New Jersey: Prentice/Hall International, Inc.
- Elizabeth, B. K., & Copeland, S. R. (2011). What is literacy the power of definition, research & practice for person with severe. *Disabilitas*, 36(3), 92-99.
- Lam, W.S.E. (2000). L2 Literacy and the Design of the Self: A Case Study of a Teenager Writing on the Internet. *TESOL Quarterly*, 34(3), 457-482. <https://doi.org/10.2307/3587739>
- Peraturan Pemerintah, R. I. Nomor 57 Tahun 2014, tentang Pengembangan. *Pembinaan, dan Pelindungan Bahasa dan Sastra, Serta Peningkatan Fungsi Bahasa Indonesia*. LN. 2014 No. 157, TLN No. 5554, LL SETNEG: 23 HLM. Jakarta.
- Redhana, I. W. (2019). Mengembangkan Keterampilan Abad ke-21 dalam Pembelajaran Kimia. In *Jurnal Inovasi Pendidikan Kimia*, 13(1), 2239-2253.
- Stehle, S.M., & Burton, E.E. (2019). Developing student 21st Century skills in selected exemplary inclusive STEM high schools. *IJ STEM Ed* 6, 39. <https://doi.org/10.1186/s40594-019-0192-1>
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT Alfabet.
- Undang-Undang Republik Indonesia Bendera, Bahasa, dan Lambang Negara, serta Lagu Kebangsaan. 9 Juli 2009. LN. 2009/ No.109, TLN NO. 5035, LL SETNEG : 29 HLM. Jakarta.