REVIEW
Review of Writing-related Theories

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ARTICLE INFO	ABSTRACT
	Writing has a special position in language teaching meanwhile its accomplishment includes preparation and awareness of other three language skills. It seems crucial students set an objective for their writing, plan it sensibly, consider its design and rational arrangement. This paper reviews writing-related theories applicable in academic context. To this end some related sources have been reviewed. The findings highlighted that writing skills need mastering of other aspects, such as cognitive, metacognitive and collaborative skills. Besides, teachers' awareness of different writing theories merits further attention in educational context. Consequently, the results of the current study are useful for language practitioners, university students and educational administrators.

1. Writing Skills

Based on Lee (2003) the significant issue for teachers, researchers, textbook writers in the arena of teaching foreign language is noble writing [1]. The writing practice needs a wide range of cognitive and linguistic strategies which students are regularly unaware, thus, generating a text seems problematic for most ESL/EFL students [2]. According to Alsamadani (2010) writing is a complex and challenging process and the difficulty of writing task is due to determining a thesis, providing support for the thesis, unifying and editing the thesis for an error-free text [3]. Moreover, Nguyen (2015) considered writing skills as a thought-provoking, multifaceted and a "laborious" process

(p. 707) [4]. In this complex process, writers' metacognition plays an important role [5]. Concerning the approaches that are practiced to suit the instruction of writing, the role of writing theories regarding collaborative task implementation, Cooperative Learning (CL) and learners' metacognitive knowledge in writing classes merits consideration.

Process Approach

The process approach to writing was presented in 1980s. This approach comprises stages of the planning, writing and revising [6]. In this style L2 teachers inspire their students write multiple drafts of their papers with the support of peer appraisal and teacher's feedback through several activities such as brainstorming, outlining, peer

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responses and teacher-student communication. Process approach to writing is measured as the mode in which writers work on writing tasks from the beginning stage to the end of the written product [7]. Consequently, writing in this style can be understood as an active process [8].

Process approach highlights the cognitive feature of learning and admits the assistance that the student conveys to the learning context. This approach highlights that student should be taught organized thinking skills. Hence, planning, goal setting, drafting and creating ideas are part of teaching policies in L2 classroom, chiefly in the domain of writing. Process approach can be considered as a ground for Vygotsky's (1986) socio-cultural theory. Vygotsky's ideas have great influence in the field of instructive psychology and the field of schooling. Besides, this theory is grounded in the field of psychology concerning human consciousness [9].

2. Metacognitive Theory

Recent periods have observed a collective credit of metacognitive knowledge in cognitive events associated with language practice and acquisition [10-12]. John Flavell suggested metacognition theory in the 1970s. His distinct metacognition as an awareness that pays attention to or controls any part of cognitive action and recognized two general parts of metacognition such as knowledge and experience [11]. In this realm, Baker and Brown (1984) explain the idea of metacognitive knowledge by highlighting difference between static and strategic knowledge. Static knowledge, according to Baker and Brown (1894) is what people are able to express about cognition; while, strategic knowledge involves the strategies that people practice to control a specific cognitive motion [10].

These strategies involve planning, figuring out how to begin or undergo a process, foreseeing and guessing how much will be recalled or understood or how much time it will take to complete a particular cognitive task. In this realm, predicting, imagining an answer before attainment of cognitive explanation, perceiving and determining how well progress is completed toward the attainment of cognitive goal are reflected as crucial strategic knowledge. Perhaps the best explanation of metacognition is thinking about thinking [13]. In this regard, Cornoldi (1998) highlights the role of students' beliefs about their thinking [14]. Students feel confident when they can solve problems and complete the task. This metacognitive activity is an overall judgement about the creation of a learning experience which suggests feedback to the students on the selection and practice of the strategies which result in the development of one's metacognitive knowledge including students' person knowledge, task knowledge and strategic

knowledge [11].

2.1 Person Knowledge

Person knowledge refers to the overall knowledge that students have developed about themselves as learners, which may simplify or constrain the process of education. Wenden (1998) suggests that person knowledge involves cognitive and affective factors such as age, aptitude, motivation and precise knowledge students have developed concerning the function of these features in experience and knowledge [15]. Besides, it influences students' self-efficacy, beliefs about their overall ability, and beliefs about their own skill to attain definite learning goals.

Moreover, declarative knowledge is considered as person knowledge, or understanding one's own competences. This kind of metacognitive knowledge is not precise. As an individual's self-assessment, it can be unpredictable too [11]. Regarding writing in English, person knowledge refers to the knowledge students have learned about themselves as writers, such as their outlook and inspiration, their beliefs about their writing proficiency and their apparent capability to attain writing goals.

2.2 Task Knowledge

Task knowledge includes three features such as learners' awareness of the task purpose and how it will encounter learning objectives. Here learners' knowledge about the nature of a specific task would be recognized through some features including information about task's demands, approaches to the task and talents needed to accomplish the task [15]. Besides, procedural knowledge is reflected as task knowledge, including content and length. Concerning writing skills, task knowledge comprises students' knowledge about the goal of writing task such as a good knowledge of English vocabulary, grammar, and a skillful mastery of developing ideas clearly and rationally.

2.3 Strategic Knowledge

Strategic knowledge mentions overall knowledge about the types and practicality of plans and specific knowledge about their usefulness for enactment. In SLE context, students' view point about their language learning tactics is considered as an indication of their strategic knowledge [15]. Strategic knowledge is measured as conditional knowledge, or one's ability to apply strategies for education as well as for adjusting strategies to novel circumstances. Likewise, it is related to the age or developing stages of the students [11]. Metacognitive strategies, are regarded as "an overall skill through which students accomplish, direct and regulate their learning through planning, mon-

itoring and evaluating" (p.519) [15]. Concerning writing ability, strategic knowledge refers to learners' awareness of pre-writing preparation, on-writing checking of errors, post-writing examination and reflection.

3. Collaborative Learning Theory

Collaborative learning is a notion that defines a theoretical framework for language teaching. The subject of intellectual cooperation has a long tradition in the arena of research for psychology and education [16,17]. Besides, it is associated with the idea of working in a group. During 80's and particularly the 90's, the impression gained a new incentive and led to new field of study recognized as collaborative learning. In this new account of cognitive co-participation, collaboration replaced the earlier expression cooperation. There is a convinced contract that describes cooperation as a separation of roles and sharing of the task. The collaboration would be a shared process from the opening, where all of the students are similarly involved for the presentation of task. It is worth noting that the collaborative learning is part of a social constructivist perspective or a social psychology of knowledge. Here, knowledge is distinct as a course of interaction or joint construction of meanings, and this is considered to the course of teaching [18].

3.1 Socio-cognitive Conflict Theory

The other dominant writing theory is socio-cognitive conflict theory which is known as interactionist paradigm of intelligence [19]. This situation must be explained based on Piagetian perspective. In this regard, it can be named as neo- Piagetian. Despite the rank allocated to the socio-cognitive interaction, it can be measured as a socio-constructivist style [19]. Concerning this theory, the socio-cognitive conflict is the conclusive feature of the students' intellectual development.

It can be emphasized in the core of the social communication, chiefly in the context of cooperation between peers. The variety of perspectives that arise in this social circumstances may result in an explicit social incongruity. The point is that the notion of cognitive conflict is embedded in the equilibration theory which is understood as subject-object relationship [19].

3.2 Inter-subjectivity Theory

The other dominant theory is called inter-subjectivity theory. Based on Roselli (2016) Vygotsky's perspective highlights the inter-psychological courses and genetically it precedes the intra-psychological courses [17]. This suggests that individual's awareness arises through commu-

nication with others. Through social interactivity signs of culture are internalized. In this case, semiotic mediation or cultural factors which are central to all human activity direct towards physical and social world. Concerning inter-subjectivity theory communication with others and the interaction of the subject with himself/herself is dialogic because it is an interaction assisted by language system [9].

3.3 Distributed Cognition Theory

According to Michaelian and Sutton (2013) the notion of distributed cognition does not happen inside the brain [20]. Frequently, it is distributed across various systems, including social and technological assets. The notion of distributed cognition rises as a critical stance in cognitive psychology and in cognitive discipline. The dominant point is that information processing will be accomplished on human scale and human cognition is pooled into the social and cultural setting. In this notion it is considered as situated cognition. According to Roselli (2016) cognitive functioning is distributed in the environment of tools which involves social mediators. This suggests that group can be considered as a unit of cognitive function in social context of classrooms [17].

4. Cooperative Learning (CL) Theory

Common terms for promoting students' interaction are collaborative learning and Cooperative Learning [18,21]. These expressions are used interchangeably in most cases. According to Johnson and Johnson (1975) from 1970 developments in education highlighted student-student interaction as a significant element in teaching and learning process [22].

Based on this viewpoint learner generates their own networks of knowledge by cooperating with others as they attach new evidence to the existing knowledge. This view point highlights group accomplishments as a scene for peer communication. Moreover, CL is defined as the principles and techniques for assisting students work together competently [23]. It is worth pointing that CL became predominant from1980s, with the advent of communicative language teaching approach, which emphasizes the communicative aspects of language and the task-based approach.

Components of Cooperative Learning

Cooperative Learning highlights active participation instead of passive listening in the class context. In this regard, Sharan (1980) mentions CL as devolution of teachers' authority and classroom focus [24]. This teaching framework does not suggest that instructors modify their

roles with their students or it does not consider the students as a dynamic participants and teachers as a passive recipient. It highlights that teachers plan and arrange useful teaching strategies in the classroom. The focus is not only on mastering the content knowledge of the subject matters but also teachers should try to put into practice the main features that lead to the success of CL implementation in academic setting [25]. In this case, Johnson and Johnson declare that, "there are five indispensable elements that must be organized in a CL lesson namely, positive interdependence, individual accountability, quality of group collaboration, teaching of cooperative skills and teaching of social skills" (p. 8) [26,27].

5. Vygotsky's Perspective

The Vygotskian perspective related to writing skills is highlighted in CL technique. It emphasizes the role of Zone of Proximal Development (ZPD), with focusing on the Krashen's Input Hypothesis. Vygotsky (1978) believes, "All good learning is in advance of development and involves the acquisition of skills just beyond the student's grasp. Such learning occurs through communication within the student's ZPD" (p. 29). Vygotsky claims that authenticity of the environment and the compassion between contributors are vital for learners to help them feel part of learning environment [28].

Vygotsky (1986) highlights the role of ZPD as "the distance between the actual development level, determined by independent problem solving and the level of potential development as determined through problem solving via adult guidance or collaboration with talented peer" (p. 86). Vygotsky used ZPD to define the learners' definite level of development which is attainable level through mediating semiotic and environmental factors. The central idea is that students learn through collaboration with others [9].

5.1 Zone of Proximal Development (ZPD)

Concerning writing task in academic setting the learner's (ZPD) can be extended through interaction with other learners. This type of interaction offers an opportunity for imitation, which is important for psychological functions. Vygotsky (1998a) emphasizes collaboration procedure and interpretation as a diagnosis instructional experiments for recognizing learners who have "greater or smaller" ZPD (p. 8) [29].

5.2 Zone of Proximal Development and Scaffolding

Based on Daniels (2001) socio-cultural theory of mind and the concept of ZPD are fundamental to the notion of scaffolding [30]. The descriptions of the way that scaffold-ing plays a role in learning are challenging. Stone (1998) highlights the limitations of scaffolding in interpreting the (ZPD) [31]. In this regard, Wells (1999) defines scaffolding as "a way of operationalizing Vygotsky's concept of functioning in the (ZPD)" (p. 127). He documented three important structures that give instructive scaffolding its specific character: Firstly, the dialogic nature of the discourse where knowledge is co-constructed. Secondly, the importance of activity where knowledge is entrenched. Thirdly, the role of objects that mediate learning [32].

In teaching writing scaffolding, considers the ZPD as transmission of accountability to the student [32]. It highlights the collaboration between the teacher and the student in creating knowledge and writing proficiency. Based on Stone (1998) scaffolding can lead to viewing the teacher-student interaction in the classroom as one-sided process in nature [31]. This perspective in classes might take educators back to traditional way of teaching via direct instruction [33]. It is worth pointing that the quality of teacher-student interaction is crucial when scaffolding learner's learning [34].

5.3 Constructivism

Constructivism perspective is highlighted as the other writing related framework. It has its roots in philosophy and it is practical in sociology and anthropology, as well as cognitive psychology and education [35]. Constructivism is fundamentally a theory based on observation and scientific study about students' learning. Based on this theory people hypothesize their awareness of the world, through reflecting on their own practices. To do this end, learners ask questions, explore the answers and measure their own understanding. Giambatista Vico (1710) as the first constructivist philosopher, mentions that students know something whenever they can explain about it [36]. Constructivist view of learning can be effective as a teaching practice in class setting. It typically means motivating students to apply active techniques for understanding and reflecting on what they are doing. In this case, students dynamically create knowledge, connect it to earlier knowledge, and make it theirs by constructing their own explanation [37].

6. Multiple Intelligences and Kagan's Structural Approach

Gardner (1993) is one of the noble scientists who has challenged the concept of fixed and unitary entity of intelligence. Gardner (1993) claims quite persuasively that we are not wedged with the similar level of intelligence given us at birth. He proposes that there is not one thing named as intelligence. Here, there are Multiple Intelligences

(MI) and numerous ways to be clever. Based on his outlook there are at least eight types of intelligences [38]. It is worth noticing that in line with Gardners' MI, Kagan and Kagan (1998) offered CL deeds that endorse MI features described by Gardner (1993). Here, through cooperative tasks implementation via music, assistance, drawing, categorizing, calculating, touching and demanding, students also experience interpersonal or intrapersonal behavior [39]. In this case, through MI structures, instructors manage all students' ability with all intelligence outlines. They practice an extensive range of MI constructions in courses. It is worth noting that with each MI construction the instructors tie some learners' intellects. Based on Kagan and Kagan (1998) with each MI, teachers try to change the curriculum [39]. In such a context the teaching can be striking and appealing to students with matching their intelligence. Teachers can assist the students contact the curriculum via ordinary medium based on their special talent.

According to Ciaramicoli and Ketcham (2000) the presentation of interpersonal intelligence and CL constructions empower the educators to target interpersonal efficiency as a cornerstone for students' development. This issue in turn assists them in creating dynamic social environments. On the other hand, intrapersonal construct is connected with positive human relations. Research findings confirm that people who do not comprehend themselves are unable to understand others. Thus, they are incapable of interacting and working properly with others [39-42].

7. Conclusions

The study of writing skills has grown over the last 40 years. Accordingly, writing became an interdisciplinary arena of review. As highlighted in this article writing encompasses an extensive scope of skills tangled to attain the final result. It comprises verbal knowledge, semantic knowledge and content knowledge [43]. Findings in learning process revealed that learners acquire multifaceted skills when they can think metacognitively about their presentation. Moreover, communication with peers in writing class requires students to have precise knowledge to generate ideas and support their thoughts [42]. Consequently, collaborative activities are effective procedure for achieving students' collaboration in evolving the cognitive expertise which can lead to peer feedback in class setting [44,46].

Likewise, learners should be given time to choice and convert information, construct their own hypotheses, and make decisions, rely on their cognitive structure and experience group task implementation in writing classes. In the process of writing students have to use their cognitive skills; they have to analyze their sources and prepare them in a compact piece of writing. Therefore, knowing how to write in L2 is an appreciated skill in academic setting [45]. In this regard, learners' cognitive structures and their metacognitive knowledge awareness via collaborative task implementation can help them in providing meaning, forming ideas for writing task and monitoring presentation in class. Consequently, teachers' awareness of writing related theories and approaches seems crucial in educational context.

All in all, theoretical frameworks deliver a context for investigation and educational practice. As highlighted in review, before the 1980s, writing study concentrated on grammar and mechanics of writing rather than students' cognitive developments in writing course. It was during the mid-1990s, where writing theories and models moved to a sociocultural perspective. Chiefly after the communicative trend writing found its true situation in language teaching [47]. Due to this paradigm shift, writing investigation focused on cognitive developments and social perspective in the writing process gained a new impetus. As it is highlighted in this review each writing theory brought an exclusive viewpoint to writing research. In this regard, cognitive and metacognitive theory was a comprehensive one that unified an in-depth look at writing as a product of mental processes in writing classes. In these viewpoints, writers do not move through linear stages before finalizing a product. On the other hand, they move through units of mental processes placed within a categorized structure with embedded components [48]. The dominant point is that these theories did not encounter the standards of sociocultural usefulness because they did not contain its transferability, association with society, the enclosure of community performance and their influence on the writing process [48]. Generally, cognitive and metacognitive perspectives are missing the collaborative spirit and presence of society's influence on the writing process. All in all, writing is a process which is formed in a context directed by the outlooks and feelings of the student as a writer as well as society and people engaged in that context; thus, the integration of social, cognitive, metacognitive and cooperative theory can be effective. Consequently, cognitive process, metacognitive skills and social context along with students' interactions in the context of class are dominant part of these highlighted theories that cannot be used alone to define writing skills.

Conflict of Interest

There is no conflict of interest.

References

[1] Lee, S., 2003. Teaching EFL writing in the universi-

ty: Related issues, insights, and implications. Journal of National Taipei Teachers College. 16(1), 111-136.

[2] Luchini, P.L., 2010. Evaluating the effectiveness of a complimentary approach to teaching writing skills. International Journal of Language Studies (IJLS). 4(3), 73-92.

[3] Alsamadani, H.A., 2010. The relationship between Saudi EFL students' writing competence, L1 writing proficiency, and self-regulation. European Journal of Social Sciences. 16(1), 53-63.

[4] Nguyen, L.T.C., 2015. Written fluency improvement in a foreign language. TESOL Journal. 6(4), 707-730.

[5] Stevenson, M., Schoonen, R., De Glopper, K., 2007. Inhibition or compensation? A multidimensional comparison of reading processes in Dutch and English. Journal of research in language studies. 57(51), 115-154.

[6] Hyland, K., 2003. Second language writing. Cambridge: Cambridge University Press.

[7] Tangpermpoon, T., 2008. Integrated approaches to improve students writing skills for English major students. ABAC Journal. 28(2) ,1-9.

[8] Tribble, C., 1996. Writing. Oxford: Oxford University Press.

[9] Vygotsky, L., 1986. Thought and Language. Cambridge, MA: MIT Press.

[10] Baker, L., Brown, A.L., 1984. Metacognitive skills and reading. In P. D. Pearson (Ed.), The handbook of reading research. New York: Longman.

[11] Flavell, J.H., 1979. Metacognition and cognitive monitoring: A new area of cognitive developmental inquiry. American Psychologist. 34, 906-911.

[12] Vandergrift, L., 2002. It is nice to see that our predictions were right: Developing metacognition in L2 listening comprehension. The Canadian Modern Language Review. 58, 555-575.

[13] Flavell, J.H., 1999. Cognitive development: children's knowledge about the mind. Annual Review of Psychology. 50, 21-45.

[14] Cornoldi, C., 1998. The impact of metacognitive reflection on cognitive control. In Mazzoni, G. and Nelson, T. (Eds.). Metacognition and Cognitive Neuropsychology. Mahwah, NJ: Lawrence Erlbaum Associates. pp. 139-159.

[15] Wenden, A.L., 1998. Metacognitive knowledge and language learning. Applied Linguistics. 18(4), 515-537.

[16] Roselli, N., 1999a. La Construcción Sociocognitiva entre Iguales. Rosario: IRICE.

[17] Roselli, N., 2016. Collaborative learning: Theoretical foundations and applicable strategies to university. Propósitosy Represen-taciones. 4(1), 219-280.

[18] Bruffee, K.A., 1993. Collaborative Learning: Higher education, interdependence, and the authority of knowledge. Baltimore, MD: Johns Hopkins University Press.

[19] Dillenbourg, P., Baker, M., Blaye, A., et al., 1996. The Evolution of Research on Collaborative Learning. In P. Reimanny &H. Spada (Eds). *Learning in Humans and Machines.* Towards an Interdisciplinary Learning Science. London: Pergamon. pp. 189-211.

[20] Michaelian, K., Sutton, J., 2013. Distributed cognition and memory research: History and current directions. Review of Philosophy and Psychology. 4(1), 1-24.

[21] Cohen, E., 1994. Designing group work: Strategies for the heterogeneous classroom (2nd ed.). New York, NY: Teachers College Press.

[22] Johnson, D.W., Johnson, R.T., 1975. Learning together and alone: cooperation, competition, and individualization. Englewood Cliffs, N.J: Prentice-Hall.

[23] Jacobs, G.M., Power, M.A., Loh, W.I., 2002. The teacher's sourcebook for cooperative learning: Practical techniques, basic principles, and frequently asked questions. Thousand Oaks, CA: Corwin Press.

[24] Sharan, S., 1980. CL in small groups: Recent methods and effects on achievement, attitudesand ethnic relations. Review of Educational Research. 50(2), 241-271.

[25] Cosio, M., 1998. Implementation of CL in Mexican high schools. Unpublished doctoral dissertation, University of Arizona.

[26] Johnson, D.W., Johnson, R.T., 1994a. Professional development in CL: Short-term popularity vs. long-term effectiveness, CL. 14(2), 52-54.

[27] Johnson, D.W., Johnson, R.T., 1994b. Positive interdependence: Key to effective cooperation. In R. Hertz-Lazarowitz & N. Miller (Eds.), Interaction in CL: The theoretical anatomy of group learning. Cambridge: Cambridge University Press. pp. 174-199.

[28] Vygotsky, L., 1978. Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press.

[29] Vygotsky, L.S., 1998a. The Problem of Age. In L. S. Vygotsky& R. W. Rieber (Ed.). Child Psychology. New York: Plenum.

[30] Daniels, H., 2001. Vygotsky and pedagogy. NY: Routledge.

[31] Stone, A., 1998. The Metaphor of Scaffolding: Its utility for the field of learning disabilities. Journal of Learning Disabilities. 31(4), 344-364.

[32] Wells, G., 1999. Dialogic inquiry: Towards a socio-

cultural practice and theory of education. New York: Cambridge University Press.

[33] Verenikina, I., 2008. Scaffolding and learning: Its role in nurturing new learners. In P. Kell, W. Vialle, D. Konza, & G. Vogl (Eds.), Learning and the learner: Exploring learning for new times. Wollongong: University of Wollongong, Australia. pp. 161-180.

[34] Bodrova, E., Leong, D.J., 1996. Tools of the mind: The Vygotskian approach to early childhood education. Englewood Cliffs, NJ: Merrill/Prentice Hall.

[35] Bruner, J., 1973. Going beyond the information given. NY: Norton.

[36] Yager, R., 1991. The constructivist learning model: Towards real reform in science education. The Science Teacher. 58(6), 52-57.

[37] Brooks, J., Brooks, M., 1999. In search of understanding: The case for constructivist classrooms. Alexandria, Virginia: A.S.C.D.

[38] Gardner, H., 1993. Intelligence and intelligences: Universal principles and individual differences. Archives de psychologie. 61(238), 169-172.

[39] Kagan, S., Kagan, M., 1998. Multiple intelligences: The complete MI book. San Clemente, CA: Resources for Teachers. In S. Kagan& J. High. Kagan structures for English language learners. San Clemente, CA: Kagan Publishing.

[40] Ciaramicoli, A.P., Ketcham, K., 2000. The power of empathy. NY: Plume.

[41] Goodman, H., 2002. Emotional literacy. The Teacher Trainer. 16(1), 1-23.

[42] Franken, M., Goleman, D., 1995. Emotional intelligence: Why it can matter more than IQ? NY: Bantam.

[43] Tufekci, D., Sapar, V., 2011. Social constructivist approach: Transformation of "Little Red Riding Hood" for writing course. E-journal of New World Sciences Academy. 6(2).

[44] Richards, J., 1990. New trends in the teaching of writing in ESL/ EFL. In Wang Z. (ed.), *ELT in China*. Papers Presented in the International Symposium on Teaching English in the Chinese Context, Foreign Language Teaching and Research Press, Beijing. Journal of Learning Disabilities. 3(4), 344-364.

[45] Klimova, F.B., 2014. Teaching formal written English. UHK: Gaudeamus.

[46] Franken, M., Haslett, S., 2002. When and why talking can make writing harder. In New directions for research in L2 writing. Springer, Dordrecht. pp. 209-229.

[47] Rashtchi, M., Keyvanfar, A., 2007. ELT quick'n'easy (3rd ed.). Tehran: Rahnama Press.

[48] Flower, L., Hayes, J.R., 1981. A cognitive process theory of writing. College Composition and Communication. 32(4), 365-387.