



Reading as an interactive process: collaborative and psycholinguistic interactions for reading literature in the EFL classroom

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Abstract

The main purpose of the present article is to situate the process of reading English literature in English as a Foreign Language (EFL) contexts within a perspective that integrates psycholinguistic and social constructivist views of language learning. Findings of second language acquisition (SLA) research in the past 20 years provided major accomplishments in the field. However, sociocultural perspectives were recently addressed as more effective. More specifically, this article views reading of literature in the EFL contexts as a process situated within the two contradictory fields: i. The positivist ontological view of psycholinguistic era that focuses the effect of the individual mind in learning. ii. The interpretivist paradigm of social constructivism that imposes the role of interaction and dialogic exchanges for learning. Accordingly, the article is organized in two parts. The first part manifests the views and issues of psycholinguistic era followed by the arrival of social constructivism in SLA. More specifically, the tension of the two debates is discussed followed by a complementary view of the two eras.

Keywords: Meaning making, dialogic exchanges, prior knowledge, text processing.

The reading processes

As a part of cognition, reading involves complex processes to construct meaning. It requires more than decoding graphic symbols of texts. In all languages, making meaning of texts while reading is shaped by the reader's prior knowledge which is influenced by cultural and social communities. When readers are dealing with texts not written in their first language, they may encounter difficulties in understanding the cultural and social contexts of the foreign language¹⁻³.

A review of EFL reading comprehension research

By the 1970s, information processing theory prioritizing the role of cognition dominated reading research. This is in line with broader language learning theories of the era. Larsen-Freeman considered research from 1970 to 1990 in second language acquisition (SLA) field as an attempt to explain second language acquisition. SLA is considered as a cognitive 'internalized' process. The cognitivist paradigm continued to dominate the SLA for more than 15 years. Dekeyser and Juffs argue that first and second language learning and development 'is an aspect of human cognition'⁴. During this period, cognitive processing was characterized by the construct of background knowledge based on Kant's philosophy, which stresses the role of previous experiences in processing new learning. Researchers investigated human language in the light of the interaction between a symbol system and the human mind. Readers' knowledge is considered as 'powerful, pervasive, individualistic, and modifiable'⁵. Schema theory

therefore emerged as one of the most important constructs of this era. However, there are different models contributed to the development of the theory.

In the area of reading processing, a range of models have been proposed for improving reading comprehension⁶. The literature indicates three main reading models including bottom-up, top-down and interactive processing reading models. Early work in the ESL field viewed reading as rather a passive process with little significance given to higher mental processes. Such models involve a 'lower-up' processing of texts in which readers manipulate the text on the basis of decoding the language alone regardless of any background information³. LaBerge, and Samuels⁷ stress the automaticity in the lower-up reading model. Automaticity refers to the ability of identifying the lexical items accurately and processing word recognition automatically while reading.

Accordingly, bottom-up models consider reading comprehension as a hierarchical process involves decoding individual words to form meaning of larger linguistic units. To decode meaning, readers automatically use their knowledge of the language system including phonetics, word forms, and grammatical analysis of the textual linguistic forms to make meaning of the texts. In other words, readers decode words of a text to relate their meanings and form phrases, which are related together to form sentences to construct the meaning of the whole text. In this sense, bottom-up models of reading give priority to lower-level componential elements of texts rather than higher-level comprehension processes².

However, Smuel and Kamil stress that bottom-up models oversimplify the complex reading comprehension process⁸. They explain that the principal problem of bottom-up processing model lies in its insufficient consideration of some factors such as the effect of contextual cues and prior experiences for meaning making. Additionally, reading in the lower-up model is viewed as independent process in which the stages of decoding are not related to each other. Alderson also adds that 'sub-processes higher up the chain cannot feed back into components lower down, for example, identification of meaning does not lead to letter recognition'⁹.

Other researchers emphasize the role of previous knowledge in processing new information^{8,10,11}. Ajideh recites Kant claiming that any new concepts and ideas make sense to individuals when they are related to learners' previously stored information¹². Anderson, Reynolds, Schallert and Goetz have restated this notion by saying: 'Every act of comprehension involves one's knowledge of the world as well'¹³. Such views have impacted on the process of reading comprehension, involving active participation of the reader using their background knowledge.

The active processing of reading is known as up-down processing models emphasizes mental processes based on previous background¹⁰. In other words, to comprehend texts, readers need to take into consideration their earlier learning and knowledge to understand the content of the reading content. Their understanding is consequently confirmed or rejected by the textual information during the reading process.

Goodman proposes an active processing reading model^{14,15}. He argues that reading is selective involving more than decoding information from the written text. Goodman describes reading as a 'psycholinguistic guessing game'¹⁶. In such a game, a 'reader reconstructs, as best he can, a message which has been encoded by a writer as a graphic display'¹⁶. In this sense, the term 'model' represents a group of psychological elements included in the process of meaning making¹⁷. It requires readers to use their existing syntactic and semantic knowledge of language, lessening the dependency on textual information⁸.

However, applying top-down models of active reading comprehension in EFL/ESL contexts also raises arguments. Samuels and Kamil stress that ESL readers usually lack sufficient background knowledge that enables them to make predictions of the text content¹⁸. Nassaji adds that when the content of texts used in the ESL classroom does not correspond to the readers' expectations or when the language used in the texts is simplistic, the comprehension process is affected². Therefore, learners need more than relying on their background structures for texts' reading comprehension. Rumelhart responds to the shortcomings of active processing models of reading comprehension by creating his own interactive model in which reading comprehension involves readers' engagement in cognitive processes to use readers' past knowledge and experiences. Such cognitive processes are often discussed in the light of schema theoretical supposition¹⁹.

Psycholinguistic interactive reading: schema theory

The schematic supposition conceptualizes the role of prior knowledge for reading understanding⁶. Nassaji proposes that schema theory deals with previous knowledge that readers already possess²⁰. According to this theory, reading associates text information with earlier knowledge. Such knowledge is inductive and reader-controlled²⁰. To put it simply, schema theory holds that different types of written texts are meaningless to readers, unless readers relate their previously acquired background knowledge to the text content^{9,10,21-26}. The essential stored information required for interpreting texts is known as 'text schemata', whereas the prior knowledge is known as 'the reader's background knowledge'²⁷.

The most influential work of interactive text processing is proposed by Rumelhart. The term interactive demands an involvement of the earlier knowledge and the textual content²⁸. Accordingly, Rumelhart bridges lower-up and higher-down interactions since both can happen simultaneously while reading thus engaging the reader in cognitive processes. This is known as schema theory. Accordingly, both bottom and top reading performances function responsively to process the text. Readers continue using the textual details ranging from symbolic to textual. They use their background knowledge to examine the text against their experiences.

Carrell confirms that both: upper-down and low-up models are integral for reading¹⁰. She points out that since the text content operated through low-up processing is compatible with the expectations of the reader through upper-down activation, text comprehension will be successful: Bottom-up processing ensures that the listener or reader will be sensitive to information that is novel or does not fit his or her ongoing hypothesis about the content or structure of the text; top-down processing helps readers to resolve ambiguities or select between alternative possible interpretations of the incoming data¹⁰.

Drawing on schema theory, reading research has focused on the interactive processing of texts by investigating the role of prior knowledge and experiences that readers use while reading²⁰. Most research studies investigated the influence of the interplay of lower-up and upper-down performances while reading^{23,29-31}. They all stress that background knowledge interacts concurrently or very close in time with the content of the passage in a psycholinguistic processing. They also confirmed that psycholinguistic interactive processing involves learners in investigating the content of the text against their schematic structures in order to interpret texts.

Working memory is integral in textual reading and understanding. It performs a set of cognitive activities. In psychology, Gathercole and Alloway define working memory as an individual's mental capacity that accounts for holding and

manipulating significant information within a specific period of time³². Working memory is considered a 'mental workspace' used for accumulating significant information as a part of performing individual mental activities³². Numminen adds that working memory represents a significant memory space for reading alongside the importance of long-term memory³³. Reading process requires a considerably sufficient memory space. When reading, students decode incoming textual data and relate it to their background knowledge. The two processes usually demand an additional load for the restricted extent of working memory³⁴. However, Nassaji maintains that the activation of background knowledge can reduce the overloading working memory²⁰.

There are three different kinds of the schematic knowledge that readers use while reading and processing a textual content including content, cultural and formal knowledge^{10,20,35}. Content schema involves familiarity of the textual content and includes earlier knowledge and familiarity of the topic content¹⁰. Background knowledge includes learners previously acquired information that is not necessarily included in the text content. Topic knowledge represents the knowledge that is explicitly included in the reading text content⁹. Ketchum further suggests cultural knowledge as one type of content schema²⁵.

Cultural knowledge represents the familiarity of readers with the cultural information provided in the text. Ketchum stresses the importance of cultural familiarity for full understanding of the text meaning intended by a writer²⁵. When the cultural information in a given text is different from the reader's own cultural background, text processing can result in a different interpretation from that intended by the writer^{24,25}. Since some texts, like short stories, impose the inclusion of readers with real individuals, actions, locations, and social and cultural attitudes, reader's knowledge of the cultural content while reading text contributes to an overall sense making of the writer's intention³⁵.

The other type of background knowledge includes formal or textual schema. Formal schema represents familiarity with the linguistic system. Additionally, it involves an understanding of text organization and the differences between one text genre and others³⁴. Textual knowledge embodies earlier acquired knowledge of textual organizations and rhetorical forms and structures of different types of texts¹⁰. Different text types such as informative articles, short stories, or poems present information distinctively. Readers' unfamiliarity with the formal organizations of texts result in difficulties for text processing and understanding^{3,9,10,27}.

The focus of schema theoretical supposition on the effect of earlier/prior learning views meaning making of texts as a combination of sources to support text comprehension. This view of reading comprehension is thought of as essentially relevant to EFL/ESL reading contexts^{19,20,23}.

Schema and literary writing

Literary texts involve readers in constructing a new text schema while reading. According to Cook and Weber, a literary text is a kind of 'schema refreshing' because literature does not necessarily conform to reader's schematic expectations^{36,37}. Semino³⁰ argues that a prevalent strand in research applying the effect of prior learning and experiences to literary texts claims that a literary content restricts the role of the reader's background experiences (i.e. modifies the role of the reader's existing knowledge). When reading a literary text, readers do not have the essential information, the 'frame of reference', to join the discourse³⁶.

In other words, readers may not have background knowledge that enable them to make predictions or relate the text content to their conventional knowledge. Metaphors, for instance, 'are neither linguistically nor conceptually conventional'³⁸. Therefore, readers need to continue reading to create the schemata within the literary discourse itself³⁹. In line with this perspective, Cook adds: Literary texts are not merely a category which needs to be included in an overall theory for the sake of completeness. It is rather that they are different in kind, representative of a type of text which may perform the important function of breaking down existing schemata, organizing them, and building new ones³⁶.

Before elaborating on the different nature of literary schema, a definition of the term deviation in relation to language needs consideration. Deviation is a linguistic phenomenon that describes specific linguistic forms. It represents the deployment of language which differ from the 'accepted' language system. Each item has its own characteristics in terms of meaning and grammatical functioning. Deviation includes spelling or pronunciation of a word or even the structural forms used in a different way from the language system. Deviation has an important psychological effect on readers or hearers. If the text in literary writing is deviant, it is 'perceptually prominent' (i.e. it attracts the readers' attention)⁴⁰.

Linguistic and structural deviations of literary language contribute to the construction of new schema^{6,39}. The deviated language requires readers to interpret meanings internally within the text. An example of deviations relates to grammatical categories. Readers regularly find sentence structures that differ from standard English grammar. Such alternative forms are interpreted within the literary discourse itself. Widdowson³⁹ exemplifies the following lines from Shakespeare's Antony and Cleopatra for the deviations: Shall be drunken forth, and I shall see, Some squeaking Cleopatra boy my greatness.

In a standard description of English, boy functions as a noun. In these lines, however, it is treated as a transitive verb. The writer extends the use of the word from the class of nouns to the class of verbs and specifically into the sub-class of transitive verbs. Such semantic and syntactic deviated forms of language use are

interpretable within the literary text itself creating their own schemata.

Thus, literary writers develop their specific mode of communication by manipulating language. They usually express concepts using forms that have been constructed to convey familiar and acceptable concepts. They do so by attributing new connotations to ordinary words. For example, time is often thought of as an abstract phenomenon. A literary writer may treat time as a materialistic content. In the following lines, Marvell presents time as a physical entity identified with chariot:

But at my back I always hear
Time's winged chariot hurrying near

Time remains time according to the familiar sense, but in literature can become something else⁴¹. In other words, specific and distinctive ideas of the language when related to intricate discovered ideas in literature may result in perceptions of a reality different from those which are accepted as normal⁴¹.

Apart from the effect of the specific deviated language use in creating internal literary schema is the internal context of literature. In literary discourse, the literary writer himself/herself creates contextual details in which the interaction takes place. 'Its mode of communicating is really neither spoken nor written in any straightforward way but a combination of both'³⁹. Details about the participants and the settings of a given literary work are presented within the work itself. For this reason, it is noticeable that in prose fiction a detailed description of people and settings is introduced. The essential context in which the participation of the characters occurs, including verbal participation, is created internally. In short stories, for example, it is common to find information of this type introduced at the beginning of the work³⁹. The following quotation from Raold Dahl, *Lamb to the Slaughter* reflects the idea:

The room was warm and clean, the curtains drawn, the two table lamps alight ...³⁹

The schemata need not be 'true' or connected to the actual world but may be comprehensible within the literary world⁴². Pleydell-Pearce explains the reality of literary references by exemplifying Shakespeare's character Henry V⁴³. He illustrates that knowledge about Henry V is what the reader constructs through the words and the sentences of the writer presented in the play. This knowledge was not necessarily part of the readers' schema before reading the literary text. Instead, it places an involvement on the part of the reader for processing the text: One effect of this is to make the reader process the discourse as though the relevant schema were shared with the narrator or characters when in fact it is unknown. This achieves both a degree of involvement, by assuming a kind of unwarranted intimacy, and also drives the reader forward to construct the necessary schema as quickly as possible. In

addition it produces the sensation of entering into a mental world other than one's own, in which the reader is simultaneously an outsider and intimately involved³⁶.

Consequently, reading and interpreting literature involves highly interactive processing on the part of the reader. Understanding a literary text involves an understanding of the patterns created by the writer and the schemata used to communicate the text. It also requires understanding the 'communicative value' i.e. the linguistic forms and lexical items in the literary context³⁹. In addition, readers need to realize that although the outside world is not directly referred to, it is potentially used in building up the relevant fictional world⁴⁴. According to Byram and Fleming, the created world in literature provides readers with a vivid context of thoughts, beliefs, habits, values and attitudes of the real society⁴⁵.

However, it must be noticed that psycholinguistic-processing reading research focused on individual mind. There was not a focus on socio cultural or contextual factors on the processing of texts. Psycholinguistic research maintained individualistic comprehension of written texts. Moreover, research activities demonstrated that learner' knowledge is modifiable through training and explicit instruction⁵. Therefore, researchers included text-processing strategies in their investigation (for example, predicting, summarization, and self-questioning) besides a consideration of the instructional settings and pedagogical tools that improve the comprehension of the texts⁴⁶.

In reading education, applying information-processing through cognitive training yielded disappointing results^{5,47}. Explicit instruction of strategies benefited only a few students. More specifically, the advantages did not lead to development or transfer. while for the others 'the benefits did not endure or transfer'. These findings support the case made by Zuengler and Miller for a need for change which was influenced by perspectives outside cognitive psychology⁴⁸

Firth and Wagner criticize the cognitivists individualist orientation for the prioritization of the internal mental processes of individuals⁴⁹. According to them, meaning making cannot be performed in an individualistic thinking manner transferring from one person to another. Instead, it occurs as a result of social interaction beyond individual responses and behaviour. Accordingly, learners of a language should be gaged as active agents using language in social interaction. Additionally, they argue that there should not be a division between language use (the social) and language acquisition (the individual cognition) because acquiring knowledge as a part of cognition is actually affected by social activities and engagements. Similarly, Kramsh stresses that social interaction cannot be parted from language development⁵⁰. However, Kasper maintains that even the fact that social interaction affects the process of language acquisition, second language learning is to some extent a part of cognition⁵¹.

Gee also criticizes the narrow psycholinguistic perspective of reading⁵². He claims that the main function of human linguistic communication is not only for conveying or for representing some information. Such traditional perspective, Gee argues, views language as a closed system. To make sense of a language text then it should be related to 'some equivalent representational system' represented in other language (For example, the individual's own language). However, comprehending language involves a number of perspectives that include experiences of the world as well. For Glenberg, the meaning of a specific piece of language involves what an individual can perform with that linguistic part⁵³. This means that meaning of a piece of language is not abstract. Rather, meaning involves individuals' experiences of the materials and social worlds. Such experiences are stored in the brain as changeable and developing representations related to the view of the external world, personal states as well as feelings⁵². Accordingly, we use experiences, which are dynamic in nature, to give meaning to the world. According to Gee, these experiences are not languages, instead, they are perspectives in the mind⁵².

Based on this perspective, meaning of language is determined by actual contexts. Such contexts include not only surrounding words but also purposes, values, and social interactions that are most related to understand the current contexts. In this case, reading comprehension needs to go beyond internal relations of words within the text. It must be rooted in the simulations of deeds and interactions of the real social worlds⁵². Thus, the meaning of language forms involves inter-subjective dialogic interactions. Inter-subjectivity involves interaction with a more capable peer to enable individuals to take a different perspective from that they already have.

It must be stressed that human language is not a universal object. English, for example, comprises a different genres, styles and social forms. Variant forms of syntactic forms and vocabulary constitute different genres, which are distinguished by the use of specific discourse markers and syntactic forms. Different versions of a language integrate specific social purposes and activities. A consideration of social purposes of language views reading as 'a semiotic meaning-making process'⁵². Social languages are meaningful within their discourses. A discourse integrates means of reading, interacting, valuing and feeling in the process of meaningful social activity. Accordingly, the role of socialization for reading texts is important.

Social interaction and individual development: social constructive theory

The argument made in the previous section promote the effect of schematic knowledge in reading sense making. They imply the need for readers or learners in the ESL/EFL contexts to construct meaning i.e. learn how to learn. This section

investigates how learners' schematic activation by the teacher/researcher through cooperation the learners and the researcher and the cooperation among the learners themselves supports comprehension of literary texts. Therefore, the following section presents a theoretical supposition of interactive learning.

In the mid-1980s, there was a significant SLA research towards social constructivism perspectives of learning. Social constructivism stresses using language in real life situations for learning. From this perspective, language represents both the resulting and the operating part of learning through socialization⁴⁸. This epistemological view of learning has emphasized the active role of learners for their own learning and development⁵⁴⁻⁵⁸. Social constructivists emphasize the social context for learners' construction of knowledge. Such focus on the active role of learners for their own development has been attributed to the earlier works of Piaget and Vygotsky. Piaget, for instance, gives prominence to the interaction with the external environment in constructing meaning of the world. Vygotsky, on the other hand, priorities the role of social interaction for learning⁵⁹. Social constructivist views of learning and development have widely influenced learning contexts, transforming learning into student-centred contexts⁶⁰. Instructional practices, for example, have moved towards using cooperative and collaborative learning as teaching strategies. They focus on the joint work of learners to share their concepts, views, understanding and negotiate proposed perspectives. Thus, the learners are engaged and active participants and they are part of their own learning⁶¹. Such views gave reading research a more holistic perspective. The goal of learning is no longer the knowledge held by individuals rather the intention is on meaning making arising from individuals' interaction with each other and the teacher.

Social interaction for learning

Being inspired by the social constructivist paradigm, the role of social interaction has been the focus of many of ESL studies^{62,63}. In such studies, social interaction in the classroom takes the forms of 'dialogic exchanges' and 'negotiation of meaning' for learning. Social constructivism assumes that knowledge development is not separately embodied within individuals⁶⁴; instead, it happens as a result of being engaged with others in a social interactive environment⁵⁸.

It is assumed that learners have to construct their own knowledge individually and collectively. Each learner has a tool kit of concepts and skills with which he or she must construct knowledge to solve problems presented by the environment. The role of the community - other learners and teacher - is to provide the setting, pose the challenges, and offer the support⁶⁵.

According to Matusov and Hayes, the early works of Piaget focus primarily on the active role of individuals for their own development⁶⁶. They suggest that knowledge development

involves active participation, and understanding different events and concepts demands integrating the mental real life situations⁶⁷. For Piaget, learning new concepts occur when they are actively engaged into prior experiences. For Piaget, the stances of social constructivism are represented by the notion that by being exposed to new experiences, understanding is regularly reviewed and re-constructed through time. Jones and Brade cite Piaget: What remains is construction as such, and one sees no ground why it should be unreasonable to think it is ultimate nature of reality to be in continual construction instead of consisting of an accumulation of readymade structures⁶¹.

Vygotsky prioritizes active involvement and participation during the social interaction in support of individual's learning and development. Mental activities develop into higher functions through social interaction⁶⁸. Therefore, cognitive development is not only a matter of a systematic internal processing; rather individual cognitive development is a result of socially meaningful engagements⁶⁸. New concepts are acquired through social interactions. Accordingly, the Vygotskian perspective emphasizes social and cognitive development. In this respect, it is similar to traditional cognitive approaches discussed in the previous section. However, its distinctiveness lies in stressing the social dimension. For Vygotsky, the social aspect of cognitive processing is crucial for the individual development which is derivative⁶⁹. Accordingly, the socio cultural theoretical presupposition does not refuse the innate natural capacities. Lantolf and Pavlenko add: Development does not proceed as the unfolding of inborn capacities, but as the transformation of innate capacities once they intertwine with socioculturally constructed mediational means⁷⁰.

Vygotsky's genetic law of development describes the process of cognitive progress in a child: Every function in the cultural development of the child comes on the stage twice, in two respects: first in the social, later in the psychological, first in relations between people as an interpsychological category, afterwards within the child as an intrapsychological category (...) All higher psychological functions are internalized relationships of the social kind, and constitute the social structure of personality⁷¹.

This process of cognitive development through social interaction corresponds to the development process of adult learners. That is, learning new concepts requires social interaction⁷². However, transforming and progressing into a new cognitive stage involves learning to be supported and manipulated through mediation⁷³.

Mediation involves the deployment of different devices in the learning setting. Vygotsky maintains that individual cognition is essentially an interdependent process⁷⁴. Additionally, Vygotsky views linguistic communication a principal device of mediation. He argues that language is the psychological tool that guides children's behaviour and directs their learning and thinking.

Language is an essential mean of communication as well as a mediational device in directing active learning. In other words, language as a symbolic tool allows collaboration among participants to achieve their goals. Children's speech and actions are essential elements in accomplishing goals. According to Vygotsky, they are part of one and both should be directed to solve the problem at hand⁷⁴. Since complex concepts are conveyed to the child through language, Vygotsky stresses that learning always involves an external experience to mediate learning and transform new experiences into internal processes through language as a mediational tool⁶¹.

Williams and Burden add that individuals as mediators play an essential role in selecting and shaping experiences presented to learners⁷⁵. Therefore, interaction with experts of higher levels, such as parents or instructors, is important for effective learning. It progresses learning. In addition, mediators are not merely knowledge providers; they provide learners with the knowledge, skills and understanding that supports them to become self-directed learners. Thus, learning involves interaction between learners, learning materials and mediators to support active participation and learners' knowledge co-construction. Accordingly, learning as a socially mediated experience involves the use of psychological tools (e.g. language) as well as interaction⁷⁶. In adult learning settings, for instance, language exchanges can be used to guide learners' interaction towards development and understanding. However, such mediational process, for Vygotsky, is more successful when it is provided just beyond the learners' zone of proximal development.

Zone of Proximal Development (ZPD)

With an emphasis on the role of socialization in the learning process and the prominence of linguistic communication as a mediational device, Vygotsky introduces the zone of proximal development to determine where beneficial instruction through mediation by more knowledgeable peers should be positioned. The zone of proximal development refers to the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers⁷⁴.

The actual level of learning advancement represents learners' ability for achieving or solving problems independently. On the contrary, the potential level of learning advancement represents an assisted performance: it reflects the level of what learners can perform independently in the near future⁷⁷. Vygotsky believes that interaction with others and the socio-cultural environment contributes to learner's potential development. Newman, Griffin and Cole also emphasize that cognitive changes occur when learners are involved in activities which are socially mediated and then become internalized⁷⁸.

In language learning contexts, therefore, instructors are required to consider the level of their learners' competence to mediate

learning adequately and properly⁷⁹. In other words, this requires the difficulty of literary texts to be of the appropriate level. The texts should be beyond the learner's actual level, demanding negotiation whilst having the potential to support their learning and development. If the literary texts to be used are identical or close to the learner's level, they might not lead to progression. In addition, if the texts are too difficult, learning may be impeded. Thus, understanding learners' ZPD supports more purposeful instruction.

Since the ZPD involves the consideration of social mediation for learning and the active position of a learner in the learning environment, teacher's mediation and support is essential for the success of learning which involves dialogic exchanges among learners, peers and an expert for negotiable learning. This provides learners with support which responds to their needs⁷⁹. A social constructive approach to learning context requires different techniques to mediate and support learning.

Scaffolding

The metaphor of scaffolding is first defined as a process by which an expert supports learners to perform a task beyond their individual capabilities^{63,80}. Originally, it was studied in cognitive psychology as a way to support the learning of young children to provide help by a more experienced person such as parents⁸⁰. According to Lantolf and Thorne⁸¹, scaffolding is a dialogical support to internalize new learning which co-constructed with experts and peers. By investigating social interaction between parents and children, Bruner views the notion of scaffolding as a process that involves adults in 'setting up' situations to facilitate children's learning and then gradually handing over the responsibility when they become able to achieve the task on their own⁸². In learning contexts, scaffolding represents the assistance that instructors and experienced peers provide for less experienced learners to involve them in collaboration for completing a specific task or developing understanding. Such assistance often involves learners in negotiating their ideas and interpretations throughout their interactions with others⁸³. At later stages, learners will be able to achieve similar tasks on their own. Expert assistance and intervention (i.e. scaffolding) is temporary to enable mentoring learners' development and achievement. Learners should be encouraged to increasingly reflect more with less intervention and guidance by the expert. Damon maintains that the type of scaffolding varies according to the types of learning required by learners⁸⁴. Interaction with peers can be sufficient, when learners need to modify existing knowledge to develop new perspectives. However, Damon suggests that developing new knowledge involves interaction with an expert for increasing learning opportunities⁸⁴.

Vygotsky stresses the role of language in cognitive development⁸⁵. He argues that by collaborating in guided interaction with a more experienced adult or peer children acquire the 'mental tools' of their own cultural context.

Vygotsky stressed that tools begin as social products before being internalized by individuals - as articulating learning externally, language becomes thought.

Social constructivism and reading research

By the mid-1990s, SLA research applied socialization approaches to adult learners in second language learning contexts^{86,87}. Research studies revealed how learners can be enabled to become culturally and socially competent in the communicative contexts. As previously indicated, such a focus indicates a shift from the cognitivist paradigm to the role of socialization. For Lantolf, the shift from the limited role of learners in SLA acquisition contexts to full participation using the second language involves an acceptance of the field as continuously controversial⁸⁸. Wenger maintains that socialization in communicative contexts usually includes developing unintended learning⁸⁹.

Reading research then focused on readers' engagement in constructing meaning as active participants. However, engagement focuses on the individual learner within the learning setting. While learners are active participants in the sociocultural learning setting, attention focused on individual participation for developing worth knowledge⁵. Accordingly, the engagement of readers in their own learning draws on both individual and collective dimensions. For Alexander and Fox⁵, this reflects a restoration of the perspectives of psycholinguistic processing and social constructivism of past decades.

Strategic reading in the era of actively engaged readers involves effective use of strategies. It requires the appropriate choice of skills, performance and reflection. Strategic reading requires readers to engage and use knowledgeable responses according to the demands of a specific situation thereby having a broader active participation in reading. To put it another way, readers are progressively engaged in learning how to read efficiently and have an active role of their development. Accordingly, learners continue to develop as their knowledge of language, subject matter and strategies grows⁵.

From a social constructivist perspective, investigating learners' development of strategy use during language learning process involves an investigation of classroom interaction rather than individual activity. A classroom has its own culture that involves distinctive practices, habits, mediation, behaviours and social relations of teachers and learners in the learning setting. In the field of second language acquisition research, the evidence that strategic language learning is individual and cognitive is a substantial claim. Similar to higher mental processes, language cannot be taught directly to learners with a 'uniform success'⁹⁰.

Hence, there is an urgent need to call for a trend that integrates cognitive-sociocultural perspectives in SLA field⁹¹. It has been argued that SLA is a complementary process involving views of

cognitive and sociocultural perspectives⁹². Bolck advocates a 'multidisciplinary and socially informed future' in which social contexts are considered as an integral element of cognitive development^{92,93}. Alexander and Fox call for a developmental theory of reading that considers the different conflicting views of reading in the past⁵. Different perspectives of reading need to be viewed as combined, not as opposing or inconsistent, in a complex whole. The main goal of social constructivism is to indicate how learner's psychological processes, such as intentional memorizing or the process of making important decisions, rely on a social and cultural context of mediation. Social constructivists maintain that language learning strategies as a psychological phenomenon are understood in 'culturally-specific situated activity'⁹⁰.

Conclusion

Perspectives of social constructivist theory offer a number of advantages in the field of reading. Conceptualizing reading as something one does, rather than an ability that one has supports understanding the 'real-world ways' in which individuals engage with real texts, ultimately supporting educators to achieve meaningful reading instruction relevant for learners. Moreover, conceptualizing reading as a social activity provides an understanding of the ways in which activities change according to different social settings revealing that social settings are dynamic. It helps interpreting different manners of social communication, leading to implications for language and reading instruction⁹⁴. According to Jacobsen, Degener, and Purcell Gates, in active learning settings different devices are used in a way that the learner can exploit outside the learning setting⁹⁵. In other words, teachers make use of texts reflecting real-life situations and experiences for real-life requirements rather than for developing reading and writing skills.

However, socio cultural perspectives have been criticized for different limitations⁹⁶. Firstly, realizing the unique ways in which contexts form literacy practices limits the ways of communication across contexts. In other words, taking each context in terms of its unique characteristics leads to apart local contexts from the universal, organizations from societies, and reading and writing and its technological tools⁹⁷. In addition, social constructivist presuppositions are restricted in the proficiency to provide a clear understanding of the way individuals learn to read (i.e. how learners learn to decode, encode, and make sense of written texts). Although socio cultural perspectives contribute to our understanding of reading nature, no one theory can provide a full account of the phenomenon.

Additionally, scholars of psycholinguistic era criticize the sociocultural views for refusing the essential role of cognition in reading and for providing few instructional practices. However, Perry concludes that although it is true that social constructivist theory poorly explains the way by which individuals develop reading and provides limited practical implications for reading

instruction, it is also essential for educators to understand reading in different contexts not only schooling⁹⁷. Additionally, educators also must understand social practices shape cognition. Educationalists need to understand that literacy development happen in different settings including schools. Perry concludes that separating reading from the social context is 'hegemonic'⁹⁷.

By drawing on the limitation and strengths of the individualistic cognitivist paradigm through psycholinguistic processing of the texts and the socio cultural perspectives, the present article considers the two fields as complementary. In other words, as the present paper considers reading in the EFL settings as a social constructivist activity that involves learners' psycholinguistic processing of the texts for co-construction of the text meaning.

References

1. Pardo L.S. (2004). What every teacher needs to know about comprehension. *The Reading Teacher*, 58(3), 272-280.
2. Nassaji H. (2003). Higher-Level and Lower-Level text processing skills in advanced ESL reading comprehension. *The Modern Language Journal*, 87(2), 261-276.
3. Carrell P.L. (1987). Content and formal schemata in ESL reading. *TESOL Quarterly*, 21(3), 461-481.
4. DeKeyser R. and Juffs A. (2005). Cognitive considerations in L2 learning. In *Handbook of research in second language teaching and learning*, Routledge, 461-478. <https://www.taylorfrancis.com/books/e/9781135636463/chapters/10.4324/9781410612700-3610/06/2017>.
5. Alexander P.A. and Fox E. (2004). A historical perspective on reading research and practice. *Theoretical models and processes of reading*, 5, 33-68. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.472.2859&rep=rep1&type=pdf> 20/12/2018.
6. Hedge T. (2001). Teaching and learning in the language classroom. Oxford, England: Oxford university press, 106, 1-464. ISBN-13: 978-0194421720.
7. LaBerge D. and Samuels S.J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6(2), 293-323.
8. Carrell P.L., Devine J. and Eskey D.E. (1988). Interactive approaches to second language reading. *Cambridge University Press.*, 1-304. ISBN-13: 978-0521358743
9. Charles Alderson (2000). Assessing reading. Cambridge university press, England, 1-371. ISBN 052159000 0.
10. Carrell P.L. and Eisterhold J.C. (1983). Schema theory and ESL reading pedagogy. *TESOL Quarterly*, 17(4), 553-573.
11. Smith F. (1972). Understanding reading: A psycholinguistic analysis of reading and learning to read. *American Educational Research*, 1(9), 165-168.

12. Ajideh P. (2003). Schema theory-based pre-reading tasks: A neglected essential in the ESL reading class. *Reading Matrix: An International Online Journal*, 3(1), 1-14.
13. Anderson R.C., Reynolds R.E., Schallert D.L. and Goetz E.T. (1977). Frameworks for comprehending discourse. *American educational research journal*, 14(4), 367-381.
14. Kenneth Goodman (1975). The reading process. Cambridge university press, England, 1-304. ISBN-13: 978-0521358743.
15. Kenneth Goodman (1968). The psycholinguistic nature of the reading process. Wayne State University Press, Detroit, 1-274. ASIN: B0006BRKBK.
16. Kenneth Goodman (1971.). Psycholinguistic universals in the reading process. Cambridge University Press, Cambridge, 1-206. ISBN-13: 978-0521082365
17. Goodman K. (1967). Reading: A psycholinguistic guessing game. *Literacy Research and Instruction*, 6(4), 126-135.
18. Goldman S.R., Golden R. and van den Broek P. (2007). Why are computational models of text comprehension useful. *Higher-level language processes in the brain*, 27-51. <http://www.utd.edu/~golden/arcade/GoldmanGoldenVanDenBroek.pdf>, 25/11/2018.
19. Rumelhart D. (2018). Toward an interactive model of reading. https://s3-eu-west-1.amazonaws.com/s3-euw1-ap-pe-ws4-cws-documents.riprod/9781138087279/29_Rumelhart%2C_Toward_an_Interactive_Model_of_Readin g.pdf 10/05/2018.
20. Nassaji H. (2002). Schema theory and Knowledge-Based processes in second language reading comprehension: A need for alternative perspectives. *Language Learning*, 52(2), 439-481.
21. Alptekin C. (2006). Cultural familiarity in inferential and literal comprehension in L2 reading. *System*, 34(4), 494-508.
22. Anderson N.J. (1999). Exploring second language reading: Issues and strategies. *Heinle & Heinle., Boston*, 1-144. ISBN 0-8384-6685-0.
23. Grabe W.P. and Stoller F.L. (2002). Teaching and researching reading. *Reading in a foreign language*, 14(2), 155-157.
24. Johnson P. (1981). Effects on reading comprehension of language complexity and cultural background of a text. *TESOL Quarterly*, 15(2), 169-181.
25. Ketchum E.M. (2006). The cultural baggage of second language reading: An approach to understanding the practices and perspectives of a non-native product. *Foreign Language Annals*, 39(1), 22-42.
26. McKay S. (1987). Cultural knowledge and the teaching of reading. In *English Teaching Forum*, 25(2), 18-20. <https://eric.ed.gov/?id=EJ838389> 20/11/2018.
27. An S. (2013). Schema theory in reading. *Theory and Practice in Language Studies*, 3(1), 130-134.
28. Grabe W. (1988). Reassessing the term “interactive”. *Annual review of applied linguistics*, 10, 145-162.
29. Nancie Atwell (1998). In the Middle: New Understandings about Writing, Reading, and Learning. National Council of Teachers of English, Boynton. ISBN0-86709-374-9, 1-546.
30. Semino E. (1995). Schema and the analysis of text worlds in poetry. *Language and literature*, 4(2), 79-108.
31. Wilcox C. and Williams L. (1990). Taking stock of schema theory. *The social science journal*, 27(4), 373-393.
32. Gathercole S. and Alloway T. (2019). Understanding working memory: A classroom guide. <https://www.mrc-cbu.cam.ac.uk/wp-content/uploads/2013/01/WM-classroom-guide.pdf>. 01/01/2019.
33. Numminen H. (2002). Working memory in adults with intellectual disability. *Research in Development disabilities*, 23(2), 105-118.
34. Erten I.H. and Razi S. (2009). The effects of cultural familiarity on reading comprehension. *Reading in a Foreign Language*, 21(1), 60-77.
35. Oller J.W. (1995). Adding abstract to formal and content schemata: Results of recent work in Peircean semiotics. *Applied Linguistics*, 16(3), 273-306.
36. Guy Cook (1995). Discourse and literature. Oxford university press, England, 1-285. ISBN0194371859.
37. Weber J.J. (1992). Critical analysis of fiction: essays in discourse stylistics. 85, Rodopi. [https://books.google.com.ly/books?hl=en&lr=&id=aLyKKRghunMC&oi=fnd&pg=PA1&dq=Weber,+J.+J.+\(1992\).+Critical+analysis+of+fiction:+Essays+in+discourse+stylistics.+Rodopi.&ots=AApLxAzn7_&sig=Nv-JmCcnld-Y3M59Nq-iH1oYLPk&redir_esc=yv=onepage&q&f=false](https://books.google.com.ly/books?hl=en&lr=&id=aLyKKRghunMC&oi=fnd&pg=PA1&dq=Weber,+J.+J.+(1992).+Critical+analysis+of+fiction:+Essays+in+discourse+stylistics.+Rodopi.&ots=AApLxAzn7_&sig=Nv-JmCcnld-Y3M59Nq-iH1oYLPk&redir_esc=yv=onepage&q&f=false). 06/02/2019
38. Picken J. (2007). Literature, metaphor and the foreign language learner. Springer. ISBN 10: 1349353262, 1-174.
39. Henry Widdowson (1975). Stylistics and the teaching of literature. Longman, London. ISBN0 582 5507, Pp1-140.
40. Richards J., Platt J., Weber H. and Inman P. (1986). Longman dictionary of applied linguistics. *RELJ Journal*, 17(2), 105-110.
41. Widdowson H.G. (1974). Literary and scientific uses of English. *ELT Journal*, 28(4), 282-292.
42. Mooij Jan (1976). A study of metaphor: On the nature of metaphorical expressions, with special reference to their reference, North-Holland Publishing Company, Amsterdam. ISBN: 0720462096, pp1-190.
43. Pleydell-Pearce A. (1967). Sense, reference and fiction. *The British Journal of Aesthetics*, 7(3), 225-236.

44. Lee J.F. and Musumeci D. (1988). On hierarchies of reading skills and text types. *The Modern Language Journal*, 72(2), 173-187.
45. Michael Byram M. and Philip Fleming (1998). Language learning in intercultural perspective: Approaches through drama and ethnography. Cambridge University Press, England. ISBN-10: 0521625599, 1 1-320.
46. Pearson P.D. (2019). Direct explicit teaching of reading comprehension. https://www.ideals.illinois.edu/bitstream/handle/2142/17914/ctrstreadtechrepv01988i00427_opt.pdf?sequence=08/04/2019.
47. Thorndyke P.W. and Yekovich F.R. (1980). A critique of schema-based theories of human story memory. *Poetics*, 9(1-3), 23-49. <https://www.sciencedirect.com/science/article/abs/pii/0304422X8090011X>
48. Zuengler J. and Miller E.R. (2006). Cognitive and sociocultural perspectives: Two parallel SLA worlds?. *Tesol Quarterly*, 40(1), 35-58.
49. Firth A. and Wagner J. (1997). On discourse, communication and (some) fundamental concepts in SLA research. *The Modern Language Journal*, 81(3), 285-300.
50. Claire Kramsch (2002). From Practice to Theory and Back Again. *Taylor & Francis*. ISSN: 0790-8318, 1-320.
51. Kasper G. (1997). A stands for acquisition: A response to Firth and Wagner. *The Modern Language Journal*, 81(3), 307-312.
52. Gee J.P. (2001). Reading as situated language: A sociocognitive perspective. *Journal of Adolescent & Adult Literacy*, 44(8), 714-725.
53. Glenberg A.M. (1997). What memory is for: Creating meaning in the service of action. *Behavioural and Brain Sciences*, 20(01), 1-19.
54. Yakovleva N.O. and Yakovlev E.V. (2014). Interactive teaching methods in contemporary higher education. *Pacific Science Review*, 16(2), 75-80. <https://www.sciencedirect.com/science/article/pii/S1229545014000175>.
55. Anna Chamot, Sara Barnhardt, Pamela El-Dinary and Jill Robbins (1999). The learning strategies handbook. Longman: New York. ISBN-10: 020138548, 1-249.
56. Rubin J. (2001). Language learner self-management. *Journal of Asian Pacific Communication*, 11(1), 25-37.
57. Wang Yu-Chun (2014). Using wikis to facilitate interaction and collaboration among EFL learners: A social constructivist approach to language teaching. *System*, 42, 383-390.
58. Palincsar A.S. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology*, 49(1), 345-375.
59. Harry Daniel (2001). Vygotsky and pedagogy. Routledge Falmer, New York. ISBN10: 041523767X, 1-208.
60. Anton M. (1999). The discourse of a learner-centred classroom: Sociocultural perspectives on teacher-learner interaction in the second-language classroom. *Modern Language Journal*, 83(3), 303-318.
61. Jones M.G. and Brader-Araje L. (2002). The impact of constructivism on education: Language, discourse, and meaning. *American Communication Journal*, 5(3), 1-10.
62. Gunduz N. and Hursen C. (2017). Constructivism in Teaching and Learning; Content Analysis Evaluation. <https://cyberleninka.org/article/n/873599>. 13/8/2017
63. Leo Van Lier (2014). Interaction in the language curriculum: Awareness, autonomy and authenticity, Routledge. United Kingdom. ISBN-10: 0582248795, 1-260.
64. Tobin K. and Tippins D. (1993). Constructivism as a referent for teaching and learning. *The Practice of Constructivism in Science Education*, 1, 3-22.
65. Davis R., Maher C. and Noddings N. (1990). Constructivist views on the learning and teaching of mathematics. *Journal for Research in Mathematics Education*, 4, 1-3.
66. Matusov E. and Hayes R. (2000). Sociocultural critique of Piaget and Vygotsky. *New Ideas in Psychology*, 18(2), 215-239.
67. Von Glasersfeld E. (2018). An interpretation of Piaget's constructivism. 36(4), 1-18. <http://www.vonglasersfeld.com/07710/10/2018>.
68. Lantolf J.P. and Appel G. (1994). Vygotskian approaches to second language research. *Greenwood Publishing Group*, United States. ISBN-10: 1567500250, pp1-220.
69. Vygotsky L.S. (1979). Consciousness as a Problem in the Psychology of Behavior. *Soviet Psychology*, 17(4), 3-35. DOI: 10.2753/RPO1061-040517043.
70. Lantolf J. and Pavlenko A. (1995). Sociocultural theory and second language acquisition. *Annual Review of Applied Linguistics*, 15, 108-124.
71. Jan Valsiner (1993). Culture and human development: A constructivist perspective. Plenum, New York. ISBN-10: 0306413272, 1-326.
72. Pressley M., Harris K.R. and Marks M.B. (1992). But good strategy instructors are constructivists!. *Educational Psychology Review*, 4(1), 3-31.
73. Lantolf James (2000). Sociocultural theory and second language learning. Oxford: Oxford University Press, 1-296. ISBN-10: 0194421600.
74. Lev Semyonovich Vygotsky (1978). Mind and society: The development of higher mental processes. Cambridge, Harvard University Press, 1-159. ISBN-10: 0674576292.

75. Marion Williams and Robert Burden (2004). *Psychology for language teachers*, Cambridge university press. Cambridge, 1-252 ISBN-10: 0521498805.
76. Rosamond Mitchell, Florence Myles and Emma Marsden (2013). *Second language learning theories*. Routledge, England, 1-400. ISBN-10: 1444163108.
77. Lantolf J.P. and Pavlenko A. (1995). Sociocultural theory and second language acquisition. *Annual Review of Applied Linguistics*, 15, 108-124.
78. Newman D., Griffin P. and Cole M. (1989). *The construction zone: Working for cognitive change in school*. Cambridge University Press., England, 1-167. ISBN - 0521389429.
79. Lantolf J. and Aljaafreh A. (1995). Second language learning in the zone of proximal development: A revolutionary experience. *International Journal of Educational Research*, 23(7), 619-632.
80. Wood D., Bruner J.S. and Ross G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17(2), 89-100.
81. Bill Van Patten and Jasica Williams (2009). *Theories in second language acquisition*. 1-272. ISBN-10: 0805857389.
82. Bruner J. (1985). Child's talk: Learning to use language. *Child Language Teaching and Therapy*, 1(1), 111-114.
83. De Guerrero M.C. and Villamil O.S. (2000). Activating the ZPD: Mutual scaffolding in L2 peer revision. *The Modern Language Journal*, 84(1), 51-68.
84. Damon W. (1984). Peer education: The untapped potential. *Journal of Applied Developmental Psychology*, 5(4), 331-343.
85. Lev Semyonovich Vygotsky (1962). *Thought and language*, MIT Press: Cambridge. 1-344. ISBN-10: 9780262720106.
86. Duff P.A. (1995). An ethnography of communication in immersion classrooms in Hungary. *Tesol Quarterly*, 29(3), 505-537.
87. Harklau L. (1994). ESL versus mainstream classes: Contrasting L2 learning environments. *TESOL Quarterly*, 28(2), 241-272.
88. Lantolf J.P. (1996). SLA theory building: "Letting all the flowers bloom!". *Language learning*, 46(4), 713-749.
89. Wenger E. (2016). *Communities of practice: Learning, meaning, and identity*. <http://dx.doi.org/10.1017/CBO978051180393215/5/2016>.
90. Donato R. and McCormick D. (1994). A sociocultural perspective on language learning strategies: The role of mediation. *The Modern Language Journal*, 78(4), 453-464.
91. Larsen-Freeman D. (2002). Language acquisition and language use from a chaos. *Language acquisition and language socialization: Ecological perspectives*, 33. <https://books.google.com.ly/books?hl=en&lr=&id=eotvNL4x7t0C&oi=fnd&pg=PA33&dq=Larsenv=onepage&q=Larsen&f=false>
92. David Block (2003). *The social turn in second language acquisition*. ERIC, United States, pp-124. ISBN-10: 087840144X.
93. Lantolf James (2005). *Sociocultural and second language learning research: An exegesis*. Lawrence Erlbaum: Mahwah, NJ, 1-1168. ISBN- 13: 978-0805841817.
94. Young R and Collin A. (2004). Introduction: Constructivism and social constructionism in the career field. *Journal of vocational behaviour*, 64(3), 373-388.
95. Jacobson E., Degener S. and Purcell-Gates V. (2003). *Creating Authentic Materials and Activities for the Adult Literacy Classroom: A Handbook for Practitioners*. <http://www.ncsall.net/fileadmin/resources/teach/jacobson.pdf10/10/2018>.
96. Mooney M. and Nolan L. (2006). A critique of Freire's perspective on critical social theory in nursing education. *Nurse Education Today*, 26(3), 240-244. <https://www.sciencedirect.com/science/article/pii/S026069170500184X>. 15/11/2018.
97. Perry K. (2012). What is Literacy? – A Critical Overview of Sociocultural Perspectives. *Journal of Language and Literacy Education*, 8(1), 50-71.