

Cognition and Metacognition: Understanding the Second Language Learner from Various Perspectives

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Abstract

This paper has been situated within the framework of the interface shared by cognition and metacognition. While conventional classroom instruction aims at maximizing the learner's cognitive skills, this paper argues that if the metacognitive skills go neglected, still higher order potentials remain unnoticed and untapped. Instead of addressing language skills in isolation, the paper proposes to integrate higher order cognitive skills and skills of still higher order such as metacognitive skills, which are rarely taken into serious consideration while planning second language curricula.

Keywords: cognition, metacognition, feedforward, learner potentials, self-actualization.

Contribution/Originality: The paper points towards the possibilities of getting learners immersed in tasks and activities when three clusters of skills--linguistic, cognitive and metacognitive skills -- are integrated in second language instruction.

Introduction

This paper is an investigation into the possibility of getting learners more and more involved in the learning process both in the classroom where they are supported by teachers, and still more, while working at home independently. In other words, it is an inquiry about tapping the hidden potentials in the learner, which neither the learner is aware of nor the teacher makes use of. The basic assumption with which this paper begins is that every human being finds pleasure in self-actualization (Maslow, 1970).

One of the most discussed theoretical frameworks borrowed from psychology by pedagogy is Abraham Maslow's hierarchy of needs represented in the form of a pyramid. "Human life will

never be understood unless its highest aspirations are taken into account' (Maslow, 1970, p. XX). The highest aspirations get matured in the final stage of development, beginning with the bottom most part of the pyramid, namely, physiological needs, and after passing through the stages of safety, love or belonging and esteem.

Learning the learner, first

To begin with, why should I, the second language teacher, understand my learner, perhaps more than the other teachers do? Secondly, while doing so, which aspect of the multi-faceted learner must be given prominence? Finally, what are the available means of 'learning the learner'?

Let me begin with a quote by Erich Fromm, a German-American psychoanalyst and social psychologist (1900-1980).

Education is identical with helping the child realize his potentialities. The opposite of education is manipulation, which is based on the absence of faith in the growth of potentialities and the connection that a child will be right only if the adults put into him what is desirable and suppress what seems to be undesirable (Fromm,1956.p.124).

More than the quote, the footnote given at the bottom of the page seems to be more relevant in the context of this paper. It reads: "The root of the word education is e-ducere, literally, to lead forth, or to bring out something which is potentially present". This 'potentially present' defines the crux of the future of the learner; that is to say, future is not the natural evolution of the present; it is discovering and unearthing the potentials from the past unto the present and projecting them to meet the needs and aspirations of future. Future is vulnerable to a certain extent, and therefore it provides space for the teacher to intervene in the process of learning. In one way, a good teacher can stop 'teaching' just by intervening in the natural process of learning; she neither needs to impart knowledge, nor to worry about the tangible outcome in the form of marks and grades.

Are children not interested in having a brighter future? Can we come to such a conclusion just going by their lack of motivation? A cluster of reasons behind the lack of motivation on the part of children in learning a second language from the classroom, as opposed to picking it up from

the street and playground, led to this investigative study. The cluster includes (i) the forced alienation of language from the real world around, (ii) the fragmented bits and pieces that are offered to them in the name of language, (iii) the inability on the part of teachers to fuse language and communication, and (iv) the failure of second language classes in offering them anything cognitively challenging, something that they have been longing for long. This unstructured, informal study reports its results in the form of findings for smooth *functioning* in the class both for learning and teaching communities, provided, the latter is willing to change it by improving professionally.

Voyage from theoretical linguistics

The term *functioning* is crucial not only in selecting the issues listed in a cluster above, but in offering guidelines in pedagogical terms for generating classroom communication, to begin with and social communication later, as well. Differentiating precisely the fundamental principles that a formal and functional approach to language studies have been following, Geoffrey N. Leech (1983) states that formalism treats language as a mental phenomenon, while functionalism treats it as a social phenomenon. Consequently, the former traces the origin of language as the genetic inheritance of human species; for the latter, naturally the source is the speech community. Thirdly, formalists believe in a built-in human capacity that triggers language acquisition, whereas functionalists project the child's communicative needs. Finally, language is 'an autonomous system' for formalists; for functionalists, it is an inseparable part of social functioning. Since this social face of second language is going to be the focal point of the paper, a little more elaboration on it seems to be essential.

What is meant by a functional explanation? It means explaining why a given phenomenon occurs, by showing what its contribution is to a larger system of which it is itself a sub-system. As far as language concerned, a functional theory is one which defines language as a form of communication, and therefore is concerned with showing how language works within the larger systems of human society (Leech, 1983.p.48).

Navigating through psychology

If we look at learning as an effort of making connections --between the accumulated past and the newly acquired present, between parts and the whole, and among fragments, the role of teaching is to lead the learners through these trajectories, so that they can observe the relations. By establishing relations among the familiar, a learner may proceed to the unfamiliar by hypothesizing that there would be some undercurrents connecting fragments and components.

Language and thought are intertwined; though controversies still prevail in the nature of their mutual dependence, the chick-or-egg dominance, and the hypothetical situations of language without thought and thought without language. Let the Sapir-Whorf hypothesis may trigger more debates among language philosophers; language teachers can simply start working with the primary interconnection between them.

In the process of developing the ability to think, it is extraordinarily important to establish in the student's consciousness that general relation, that ultimate goal, which is the governing propensity of the entire process of thinking. What is the reason for my thinking--to this question, an exact and satisfactory answer has to be given from the very start (Vygotsky, 1997. p.176).

When learners are shown the direction of how cognition proceeds toward metacognition, they tend to become better or independent learners. If the pedagogic notion of learner-centredness to be actualized, learner autonomy is essential; learner autonomy is possible only if learners are capable of working independently.

Anchoring in Applied Linguistics

How can we make our learners perceive the world better and faster by connecting cognition, language, metacognition and second language learning? How can the better understanding of the world be transformed to better communication with the world? The words 'communication' and 'communion' may have something in common, going by etymology. The Latin root of 'communion' is 'communione' meaning 'fellowship, mutual participation or sharing'. If language is added to these elements, it may result in communication. Therefore, a (second)

language teacher may inquire how positive communion can result in effective communication, so that the ritualistic teaching-learning may be replaced by self-involved or self-engaged act of meaningful communication.

Learner's thinking situated at the centre of instructional processes

The term 'learner-centred pedagogy' has been used these days casually, without paying much attention to the cognitive processes behind learning; but just by getting learners engaged in some activities without teacher-initiative or control, as it used to be in conventional teaching. The teacher being side-lined as facilitator alone does not make a classroom learner-centred, it is the learner's individual and collective cognitive efforts that make instruction learner-centred. Though the term became popular in second language instruction along with the spread of communicative language teaching (CLT) methodology in the last decades of the last century, the pedagogic construct was already there much earlier. For instance, the anthropologist Margaret Mead said, "children must be taught *how* to think, not *what* to think" (1928, p. 246). Training in metacognitive skills tells children to observe themselves in action and find how they are thinking while at work. Work, in their case learning, progresses along with thinking; but usually we are bothered only about the progress of the work, not the process of thinking. When children are taught to observe both the progress--work or learning and thinking--at next higher stage of learning, they employ their thinking skills in a focused, manner rather than the the way thinking goes freely. Metacognition, in other words, may be called as manipulated thinking, thinking with a specific purpose, shaping the future course of action by reflecting on the past and observing the present. This voluntary thinking needs special training.

Metacognition at Work in Second Language Learning

John Flavell (1979) who coined the term 'metacognition' states that while attempting to learn a second language, learners may have certain beliefs about the routes they followed and the options ahead of them that they are also capable of tracing their mental processes. This awareness, and these beliefs, are collectively called 'metacognitive knowledge'.

Metacognition means awareness about one's own cognition and how it works. To use a simple simile, the difference between cognition and metacognition may be something like remembering something and reminding oneself of something. Reminding embeds in itself remembering or the faculties of memory. Such alertness, naturally leads to successful performance.

Perhaps, this awareness is more in the learning of a second language than in the first, because of the conscious effort on the part of the learner while communicating, and secondly following the routes of metalinguistic knowledge. In the first language, the learner rarely encounters metalinguistic terms and rules, whereas in a second or foreign language, usually they form the guidelines. As a result, when non-native learners of English notice the difference in subject-verb agreement in terms of number (e.g., *She goes* and *They go*), which is absent in their mother tongue, they follow the routes of language awareness consciously. English has a prestigious reputation and is taught almost everywhere in the world (John, 2021). In a parallel process, they are likely to follow the metacognitive awareness too; by asking oneself, 'how did I arrive at this stage' or 'where did I get this point from'. On the basis of the self-generated answers to these questions, the learner proceeds to the next stage by soliloquizing, 'in that case, let me try this one' or 'let me go this way'. Thus, metacognition is at work in second language learning, as a parallel to metalinguistic awareness.

Metacognition supervises and regulates cognition

Isn't it enough to promote cognitive skills in learners, apart from imparting content knowledge? What is special about metacognition in second language instruction? Or how does metacognition bring in behavioural changes in second language learners? Flavell's (1976) statement, who first proposed the added advantage of promoting metacognitive skills, answers these questions in general terms.

Metacognition refers among other things, to active monitoring and consequent regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear, usually in the service of some concrete goal or objective (p. 232).

Goal settings, splitting the general goal into specific objectives, sequencing them as interim targets etc. are vital metacognitive skills. Neither in learning the first language, nor learning

subjects through the first language, these skills function as decisive factors as in learning a second language in a formal set up like classrooms. The success of learning a new language is basically linked to the attitude of the person (John, 2020). A classroom, by its very structure, keeps the learners alert about their obligations and duties. It is into this matrix, a well-trained teacher introduces metacognitive skills so that the learners rely on their own resources for solving problems. To draw a metaphor from the field of medicine, metacognitive skills act as immunity-promoting agents in the academic body of the learners; no alien element in the form of medicine is injected into their body.

A good rationale for integrating explicit instruction of language learning strategies into the language curriculum has been provided by Nunan (1996). “Language classrooms should have a dual focus, not only teaching language content but also on developing learning processes as well” (p. 41). How does metacognition intervene in a learning task? For example, in a poster preparation session, the learner sets the final goal (to raise funds to help a poor classmate who is hospitalized), works out interim goals (how to keep anonymity about that classmate), begins with collecting source materials (collecting copies of his hospital bills), decides on the course of action (preparing a collage of the heavy medical bills, as a part of the poster), anticipates certain hurdles (unwillingness to contribute by some classmates, since the patient’s name is not disclosed), thinks of how to overcome those hurdles (talking in private to those who doubt about the effort), decides on how to bring the effort to success (publishing the details of the contribution then and there on the class wall magazine and through Whats app group), and final thanksgiving.

Metacognitive experiences include those cognitive or affective experiences that we associate with learning. Goals are highlighted as the primary objective of a cognitive activity and actions are the specific steps we take to achieve those goals. When individuals have a greater awareness of these variables, they are in greater control of how they learn and how they react to successes and setbacks in learning (Anderson, N.2012 p.170).

Feedforward as a metacognitive device

The notion of feedforward, which is part of management and business studies, may not be as familiar as feedback to teachers. Feedforward can be defined as providing guidelines or suggestions for the future, learning as much as we can from them, so that a positive change in behavior can be achieved. Introducing the notion of feedforward in the context of business and industry, Marshall Goldsmith (2007) points out that feedback is static, limited and it focuses on past; but past can never be changed; whereas feedforward focuses on future, which is open for change.

As a psychological protective device, feedforward enables us to anticipate things that are likely to happen in future by adopting ‘a mental stance’ (Binet and Simon,1916). Binet-Simon intelligence test was the first of its kind meant for measuring human intelligence. In practical life, anticipation reduces anxiety, an element that pulls down the intensity of leaning processes and products. If anxiety can be encountered by adopting a mental stance of readiness, and if learners are made alert of such potentials in them for avoiding deviant forms, errors and less serious mistakes, learning output is likely to be more. Unanticipated obstacles may result in, as Vygotsky points out, ‘absence of readiness and inadequacy of reaction’. Situating the psychological notion of anticipation in educational contexts, Vygotsky argues that

In precisely the same way a stance arises as a result of certain movements and serves as a starting point for subsequent movements, these mental states of anticipation arise as a result of certain reactions and create a foundation for the emergence of subsequent states (Vygotsky, 1997. p.122).

Feedforward need not be mistakenly identified with caution or warning of a possible obstacle or danger ahead on a course of journey. Goldsmith lists a few modes of operating while working as a team in industry, business and so on. According to him, we can only reflect on the past; but can't alter our past. Guiding in the right direction is more productive than proving someone wrong in the past. It is human nature to welcome guidance and support in advance. Feedforward can come from any person--team mates, team head, subordinates and so on-- not just from the

supervisor or teacher. Feedforward is not taken as a personal reference, but as a general guideline. It provides multiple options when one encounters an obstacle. The negative hate elements inherent in feedback are absent in feedforward.

Classroom learning has ceased to be an individualized activity; it has become an experience of collaboration. Learning is no more an individual endeavour; it is a collective effort. Classrooms, these days have been elevated to the status of rehearsal rooms wherein learners collectively prepare and practise to put up a good show of career and real life, through team work. In this changed environment, Goldsmith's suggestions blend education, career and life, all in one.

Conclusion

Perhaps, the first agency that is responsible to respond to the fast-changing sociocultural needs and demands of the stakeholders must be educational institutions. They may be doing so by reading the signposts from all walks of life such as business, industry, art, science, technology and so on. Gone are the days in which the learner's cognitive growth alone was supposed to be taken care of by education. Again, conventional practices of curricular segmentation such as languages, liberal arts, science and technology too have been proved outdated. The need of the hour is integration of all the human potentials inherent in the individual learner so that such an education enables the young learner shape his/her future.

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