

Critical Thinking and Cognitive Presence in Digital Learning

Dr. P. Nagaraj

*Associate Professor, Department of English and Foreign Languages
Bharathiar University, Coimbatore*

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At the unprecedented time of a Pandemic, that has put a dramatic pause to the Educational and Knowledge systems with mass institutional closures, lock downs and quarantine, impacting the schools and Universities in the unfamiliar challenge to provide learning opportunities, the Online learning and Digital spaces hold its relevance. To get the higher education community of learners prepared to thrive into the magnitude of health crises and equipped to handle the challenges, skills are not just enough. Along with the technical expertise, they need the creative, contextual and cognitive skills that cannot be replaced by the machines. The recent research in education technology reaffirms the significance of critical thinking and cognitive improvement. A well designed pedagogical framework gives learners instructional, engaging, personalized learning experiences in digital learning. Apparently, the paradigm shift in language learning and teaching process focuses its shift from communicative methods to cognitive approaches. The digitally engaged learning spaces leads to inquisitive and constructivist, knowledge building rather than knowledge accumulation.

Tapsco (2005) implies that there is a need to change the pedagogy to fit the needs of the fast-paced world. The ability to think, acquire and identify information is more important than mastering and reiterating the subject knowledge. In the present educational scenario, what one knows is not that is really accountable. Rather, it is how one navigates into the repository of digital resources, and explores the relevant information. The chapter highlights

- The parallels between English Language Acquisition and Digital Literacy
- The affect of cognitive presence in Stand-Alone Learning Applications
- The significance of Critical Thinking to Information Revolution and Digital Learning
- The Mobile Learning Technologies and the need of Knowledge Configuration
- The Digital Learning in the times of Quarantine

The Parallels Between English Language Acquisition And Digital Literacy

In the scenario of developing global society and swiftly progressing technology, English Language Acquisition needs the aid of ICT. It helps to prepare the language classrooms for a future where learning will be an intuitive process. In the days ahead, technological developments may alter the process of teaching and learning in different ways. It will improvise the methods in which the information produced, transferred and interpreted. The digital environments have considered enormous level of opportunities for effective language practices.

Technology has transformed the learning practices, leading to the new dimensions in the perception of knowledge and content. Today, when the language learning will have to be shifted from classrooms to online forums, it requires new approaches and effective methodologies that support the social background of learners. It is significant to adopt instructional choices that empower learners as contributors and receptors of knowledge. The proposed chapter examines the issue from an asset perspective, instead of a deficit portrait.

In a globally interconnected world of the information age, the traditional language teaching methods, such as frontal teaching, or grammar translation and exercises are not the adequate mental shortcuts, to address the difficulties faced by the Digital learners. The changing world and educational settings accentuate the need to enhance student critical thinking skills in combination with foreign language competences.

Although, the ease and availability to the Internet empower people to be well informed, create appropriate decisions, and derive inferences, it can also make millenials vulnerable to shallow thinking, information biases, defective logic and reasoning. A good amount of information seekers are anxious about the quantity of unfiltered and disorganized digital information. Emotions associated with information overload can affect a learners' logic in determining the significance and validity of sources. It needs a calm, focused, un-distracted, and reasoned approach. The early research determined how educators perceive the literary and communicative yardsticks. It reveals the present day youth as capable users of portals, with respect to their social practice of language and communication. The learners need to be trained proficiently to synthesize online and offline information. This is possible only by allowing them to explore the right set of digital tools.

A Digital learner is an empowered digital citizen only, if he or she is a capable knowledge constructor, sound digital user, and a solid global partaker. Hence, it is apparent that internet has changed the literary definition of communication and language. Attributing it to the contemporary inequity, the inclusion of digital technologies equally raises challenges to the present language learning practices. One of these is a question of promoting active thinking and cognition. The digital interventions enforce the active participation of individuals in specific domains of personal and professional areas. The access to technology is not the only requirement. Rather, the efficacy to identify the appropriate digital resources is as significant as ever, in present times. The online language learning is undoubtedly developing, with respect to digital empowerment and the corresponding academic and non-academic orientations. The language learning practices following the digital mediums have significantly doubled. Among the skills, cognitive ability, free thinking, and comprehensive abilities are often upon in digital natives.

Being used interchangeably, critical thinking and communication has been used to indicate information technology in various social and linguistic aspects. The notion incorporates computational abilities that equip learners to explore digital resources in meaningful ways. The 'critical information literacy' means various ranges of skills, including the potential to critically receive data. The notion of online support on the language learning practices encompasses overlapping elements of digital literacy, critical thinking and communication. The optimal intersection of Digital skills and Language Acquisition reflects the impact of Critical Thinking and Cognition, in its scope in the context of foreign language instruction.

The Affect of Cognitive Presence in Stand-Alone Learning Applications

The present educational reforms had its shift focusing from the Teacher, Curriculum and Design to Learner- based portals and applications. Today, an ample number of research in ELT emphasize on learner-centric instruction enabling learners to gain knowledge by oneself. On contrary to the classroom pedagogic practices, the Digital learning tools stand surprisingly unique for its universality, timelessness and mode of practices. Unlike a classroom discussion that might last for an hour or two, the online portals offer the length of learning experience, continuously for a learner that may last forever. It not only enables the learners to improve the language skills but also, enhance self-learning behaviour, and certain level of independence in the process of acquiring knowledge. The continuity of learning and the freedom of experience, being the two remarkable features of Stand-alone learning platforms, it lifts them up to work on their own, develop and apply knowledge and equip them for a global competitiveness. Undoubtedly, the qualification fits into the standards of creating a knowledge-based society that cannot not be collapsed or disrupted by any sort of disasters, calamities or outbreaks. .

According to the report of All India Survey of Higher Education (2013), academic skills for present generation learners should consist of critical abilities, creative potential and applicative thinking. Hence, in the context of Indian education, the Stand-alone instructional practices for learning a foreign language can be considered mainly in two perspectives. The first one is the 'blended learning context', integrating the resources of digital learning and traditional teaching practices. Secondly, the lingo-literary practices in virtual learning environment that focuses on learner-centric instruction. The two perspectives are relevant and appropriate in the present day academic scenario. The virtual instruction provides the effect of old approaches and digital interface in information exchange, language learning acquisition, and assessment. Today these practices attained its spread and glory academic spaces because of the opportunities, it provides for teachers to advocate various tools of computation in terms of instructional process. The most appealing characteristic of these applications is certainly that, learners can access and learn a language, anywhere and anytime. They can actively participate in a discussion in the Google learning platform, and also chat with their companions in the social media, both at the same time.

Convenience matters. However, the desirable difficulties at the crossroads cannot be ruled out and ignored. Consequent to the ease and flexibility of various digital learning models, and its information explosion, the educators no more focus on transfer of knowledge, but to equip the learners to choose, the most appropriate knowledge. Knowledge production is no more a harder task for any learner. However, choosing the most appropriate piece of information would be the hardest. While stand-alone practices are regarded as the century-based elements of learning revival, the academicians also need to reinstate the transformation. The learners being the most important carriers of digital information, it also confronts their potential to locate the most relevant information in multiple ways. The English Language Acquisition in Digital portals not merely challenges the literary or technical skills, but also demands the reflective competence of a learner. As the coinage 'stand-alone' rightly implies, one cannot overlook the challenges, offered by comfortable digital learning zones at its end of freedom and convenience. In the scenario, the 'convenience of media and internet' also need to be reconceptualised as its desirable difficulties in its choice of inferences and decision making.

Nonetheless, the stand-alone may be redefined as the ability to understand the respective interfaces, to surf the accurate information, and effectively interact with fellow users. In order to acquire language competency in media-engaged learning forums, the cognitive presence of a learners' mind is apparent than his or her communicative ability. The learners stand alone in a digital platform, addressed by several challenging features, involving the logging into the repository

sources, the adaptability to rapidly varying digital interfaces, and the skill to adapt, originate and host unparalleled data. In order to identify oneself as an effective digital learner of 21st century, the learners need to possess immense amount of critical and cognitive capabilities.

Case Reviews: Critical Thinking and Information Revolution

The curricular rigidity, obsolete instruction and assessment patterns have to be essentially modified, in order to reform the learning practices. According to the Twenty First century educational context, knowledge has a triple meaning. Primarily, the content should develop the language proficiencies, the required digital skills, conversational and critical capabilities, creativity, team working and problem solving mechanisms. It not only means the acquisition of skills but also, the ability to adopt them effectively for personal and professional development. Secondly, the evaluation should not be limited to curriculum and textbooks; rather it should be based on specific contexts and real-life situations.

According to Loh (2013), the revision of Malaysian educational practices on a student-based curriculum, consists of multidimensional learning aids such as the robotic kits. The interdisciplinary works integrating reading, computation, and arithmetic equip both digital literacy and higher-order thinking skills. However, these methods impact not only the learners' intellectual growth, but also their affective psychology and behaviour. He reminds that virtual learning environments are in shift towards a constructivist paradigm. It involves a range of interactive visual-spatial domains through familiar interfaces, possibly creating a collaborative knowledge experience.

It is apparent that virtual integration induces inquiry-activated learning, thereby improving learner's thinking potential. The Internet holds a significant place in knowledge production and transmission, if with accurate pedagogical principles and objectives. The online activities initiate collaborative as well as individualized learning experiences, with self-assessment strategies. Syuga (2012) delivers the Thinking evoked Games, as an artificial measure, to evaluate gamers' intelligence, cognition and critical composition in the process of stage-wise performances. The classification of thinking patterns is derived from the analysis of instructors by means of quantitative scores. It is based on neurological patterns, composing three cognitive types, excellent (outstanding and experienced), satisfactory (analytical players) and poor (amateur). This type of cognitive behavior can be accommodated in virtual learning, in order to maintain learners' attention and interest

In the 21st Century learning scenario, ICT has offered profound adaptations to promote content instruction and language acquisition of English language learners. Tools such as infographics, online word walls, and digital storytelling are some of the commonly used tools to build a strong foundation and deepen the familiarity of language, and content through varied interactions. It also promotes collaboration and communication among the peer groups with multiple discussions. Information graphics that implies visual with text can be composed and used by both, the teacher and learners. The visual components of infographics can help the learners to access quick and accurate information and to better perceive the content. The tool also provides an effective format to communicate information in diverse modalities. Some of the easy-to-use infographic makers include Smore, Easely, and Piktochart.

The virtual storytelling aids second language acquisition by integrating practices that include reading, writing, speaking, and listening. The literary tools such as Voice Thread, Puppet Pals, and Book Creator enable the learners to compose and share resources using various visual and audio formats. These tools benefit the learners from acquiring authentic literacy experiences, while also collaborating with their peers. It helps them to practice the required language and literacy skills by both the ways, i.e., traditional method of reading and understanding, while also simultaneously applying and exercising them at digital spaces.

The Mobile Learning Technologies and the Need of Knowledge Configuration

The mobile instructional technologies centre the learning empowerment, helping the learners to become beneficial producers, capable information consumers, and potential citizens of the networked communities. A group of American Scholars at Harvard (2012) developed a design that segregates the cognitive and social attributes associated with e-learning into three components: (a) locating and identifying the appropriate online websites, (b) creating and sharing relevant content, and (c) communicating effectively in digital interactions. The framework implies that in an authentic digital learning context, a learner is not only focused on one component of a digital activity, but also traverses among the activities, in recursive ways.

Tetras (2003) reveal the psychological context of hand held technology instruction, as its application among learners constitutes plenty of challenges in monitoring. The outcome of mobile learning is determined by the effective involvement, the balance of focus and concentration by the learners. Indeed, it shall be presupposed that hand held virtual technologies shall have deeper influence upon learners' free will and critical thinking. Specifically, learners' attention span, long-term memory, mental regulatory abilities and decision making skills have an impact in the usage of mobile-learning technologies. Technology is not always smooth and trustworthy. There are also several obstacles confronted by learners in the process of mobile-mediated learning. The apparent cultural notions of digital divides that prevail among native and regional learners cannot be overlooked. The tailor-made learning context shall further bring forth issues related to learners' temperament and technical attributes.

An intense mobile learning game was developed by Moon(2003) with an objective to adapt an instructional configuration design. The project was assessed in the operation of cognitive performance and thinking skills. The users were supposed to be classified as individual performer or team performers. The division impacted pace of coordination, substantiating the independent gaming and co-existent performance. The scores proved that individuals were efficient of delivering cognitive behaviour in the play, while the group indulgence enabled them through contentious and exciting experiences.

In experimental research about computational technologies and stand alone applications by Hiu (2003) discusses the virtual learning in four levels of upper primary language learners. The instructional activities initiated informational outcomes by the integration of cyber data bases. It further benefitted scientific inquiry skills by allowing the learners explore an online narrative book template, few spreadsheets and a social networking tool. It was identified that, hand-held technologies initiate effective learner –centred instructional practices in combination with the improvement of logical thinking, such as selection, reasoning, integration, assessment and expressing the information in the most authentic ways. Hence, the virtual process of learning a language, as far as the concern of cognitive abilities and critical thinking is multi-faceted phenomenon. The gadget mediated learning provides the scope for effective instruction within its potential to incorporate customised tools that further, reassures learners' thinking and cognitive presence. These applications deal with learners' need for knowledge construction and cognitive improvement with multiple and intriguing learning contexts. The intrusions combine the way for interactivity, cognitive flexibility, adaptability and self-generated knowledge acquisition.

The Digital Learning in the Times of Quarantine

Desperate times call for extraordinary measures. May be, quarantine is the time, where educators need to once again believe in the power and impact of technology. It is the timely need to devise creative and democratic ways of engaging the learners. The lockdowns and quarantines can have certain psychological impact upon the learners, including infection fear, frustration, boredom,

inadequate information and stigmas. A growing amount of information becomes an undisputable reality. In such a scenario, it is essential to tap the influence of technology and popular culture in young learners, into the process of learning and knowledge creation. The technology and digital spaces can transform even the most complex content into play and entertainment.

The overarching theme of digital learning is autonomy and ownership of learning. The cognition, critical thinking, technical capacities and the operational language competencies of learners, manifests itself into instruction in the process of digital interactions. Subsequently, the amalgamation of online technologies in the instructional methods shall leverage to re-establish the monotony and learning hierarchy of an English language teaching.

The ability to locate and identify the right information is the pathway to achieve, while using the Internet. The allure of online learning is partly from the sovereignty learners are experiencing when they access through the vast repository of content and information. It familiarises them how to be real and autonomous, while searching methods to address one's own hypothetical questions. It helps learners develop scepticism about the surfed resources, and identify the most authentic information, rather than being lethargic receptors. In the process, the learners also equip themselves on how to deal with the unreliable and false information. They are also taken through the choice-making practices, which help them to work with the resources; those are suitable for their language competency. It trains them to understand less about the world and more about oneself, through the course of reflection. Through the process of sifting through unreliable or irrelevant information and discerning which resources complement their purposes, language learners are also inherently free to choose to work with texts that are most appropriate for their current language proficiency. Having attained the ability to choose the texts that they really need, the learners start to think little of the quantity of knowledge, and partake in a real and quality exchange of knowledge.

The Chapter Dispositions and Conclusion

At the juncture, where education is at crossroads of uncertainty and learning is undergoing innumerable levels of transition, the integration of ICT in language developing pedagogies is significant than ever. The digital interfaces propagate quality learning that fosters learners to collectively and independently formulate information, enhance their cognitive and reflective capabilities. The online forums that initiate commercial exchange and related discussions can also facilitate the empowerment and self-sustenance of learners. In order to endorse that learners are benefitted by the merits of ICT learning, the instructors also need to possess certain level of mastery in technical expertise and digital literacy. Consequently, the educators and proponents of the country need to implement adequate measures to support instructors' orientation and access towards digital content. It is significant to undertake guidance to familiarise informational modules that can be utilised for both content delivery and language learning.

The impact of an outbreak on learners' performance can be severe. As proven by early research, long breaks can have a detrimental effect on learning outcomes (Harris Cooper, 1996). Though digital learning has its merits and demerits, in times of emergency, it might be the only viable option for learners to have a continuous access to learning. It also creates the possibility to understand the varying temperaments of learner communities, in terms of their cognitive ability, critical thinking and learning inclination. The digital interfaces in everyday curriculum and syllabi also help the educators to reconceptualise the learning content and re-examine the pedagogical relevance. Quarantine time may be an opportunity for the educators to reassess the overall instructional setting, and to locate and reiterate the enormous scope of ICT in a learners' educational journey.

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