Digital literacy and information dissemination in ESP classes

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Abstract: The printed format of information has been replaced by digital tools which have acquired a particular importance for learners and information users in the 21st century. Developing digital literacy and encouraging information dissemination through various channels, videos, visuals etc., have also become a relevant part of the teaching environment, especially in higher education. The right selection of the communication content by means of digital tools is equally significant to provide a high-quality teaching act in ESP classes. The present work aims to highlight how digital literacy contributes to a better and more creative educational setting. At the same time, the variety of tools used to disseminate information is even more valuable as it helps to develop critical thinking and contributes to the engagement of students in a more inspiring and motivating learning environment.

Keywords: digital literacy, critical thinking, communication.

1. Introduction – Defining Digital Literacy

In the early 15th century, the word *literate* from Latin *literatus* referred to "being educated, instructed, having knowledge of letters." As a noun, *literacy* is "the ability to read and write" (dictionary.cambridge.org) or "knowledge of a subject or a particular type of knowledge." As emphasized by Barton, 2007: 24, "literacy can only be understood in the context of the social practices in which it is acquired and used." Eisenberg, 2008:39 defines *digital literacy* as "a set of abilities and knowledge that allows us to find, organize, understand, evaluate and use the information we need through digital technologies."

Today's word has a broader meaning and refers to our ability to work adaptably and strategically across tools, devices and platforms. The concept has become a mindset and encompasses a variety of digital tools designed to generate

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real-time thinking, develop social skills in a highly communicative era or to access sophisticated applications in an ever-changing living context.

The significant evolution of this concept in the last decade is eloquently reflected in the complexity of tasks generated, web designing or data processing which social environments make use of on a large scale. Large professional categories like economists, IT specialists, healthcare representatives, teachers etc., have created functional platforms and highly digitised settings with a view to getting flexibility and adaptability to learning. Online learning and knowledge dissemination have also been facilitated by digital literacy, especially in sharing syllabi or delivering course content.

The multitude of google applications designed for education were made available among students and helped them either to benefit from the already existing materials or to generate their own content. The teachers' interest was also stimulated, since the development of digital platforms contributed positively to the improvement of the teaching methods, to the updating of the curriculum as well as to the diversity of assessment methods, to the constant involvement of students in collaborative activities and to overcoming cultural barriers, which could sometimes lead to linguistic misunderstandings or conflict of ideas.

2. Challenges in creating and updating platforms

In reference to the idea of cultural heterogeneity, my experience as a teacher of applied English has shown me countless times that the cultural barriers experienced especially by foreign students can be overcome in the act of learning if there is openness to new ideas, acceptance of differences, understanding of the communication context and positive perception towards cultural divergences.

The hybrid or blended education that flourished in the post-pandemic period entailed a series of challenges both for those who had to create the framework conducive to this teaching-learning method, and for the beneficiaries of education. Creating and updating platforms was a long winding process, easy to implement but with many irregularities and technical blockages. The lack of ability in the use of platforms, misunderstanding of specific terminology or potential malfunctions are just a few of the aspects that have either affected the fluency of communication or made it difficult for the natural course of the specific learning stages.

Digital platforms were created to facilitate dissemination of information and access to as many learning sources as possible. From uploading the content of the syllabus depending on each specialization, to the formation of cohorts to access the information in real time, digital learning platforms have become essential tools for the educational institutions aimed at diversifying and increasing the users' information flow. At the same time, the digital transformations that have taken place in recent years, follow the exploitation of platforms to their true potential through students' adaptability to new learning formats.

It is equally important to accurately measure the learners' progress throughout this transformation. The Artificial Intelligence systems developed with the

digital platforms allow teachers to discover students' weaknesses, diagnose possible errors and customize materials according to the needs of the learners. The acquisition of domain-specific and cognitive knowledge by means of computer programmes is an evolutionary step in education.

For example, a student's responses construct a multidimensional pattern of his psychological profile. By using AI programmes, teachers will be able to disclose students' awareness of different cultural contexts, knowledge, learning strategies, motivations and emotions. Such an insight into the students' learning world may help to observe, relate and interpret behaviours and attitudes.

3. Handling the new digital content

Computer-based learning has got a prominent role in the educational setting, learners being able to access authentic and rapid information through digital tools. As Yang, et.al.:2014:267 states "Digital teaching materials combine the words, pictures, cartoons and audio-video films, transferring information to digitization form."

Compared to previous decades, when learning was almost exclusively based on the information included in the textbook, corroborated with the explanations in the classroom, today's learning process extends over a much wider and varied dimension and includes elaborate digital technologies, multiple channels to transmit the content and increased receptivity to novelty and originality.

Learning is no longer bounded to a brief, repetitive and distressing content, but is based on varied approaches aimed to open new horizons of knowledge. Meeting the students' learning needs requires a constant search for innovations in the field of science and technology, so that they can be provided with updated and easily accessible information.

Heterogeneity of student groups involves a rigorous selection of channels to benefit from a rich learning content. For example, students in engineering prefer YouTube video sharing service, whereas the fields of humanities opt for more academic texts or only websites with specific terminology and adapted content. However, any topic, more or less technical can be extended and approached from different angles by means of YouTube.

It is not only the informational flow that validates learning, but also the visual load which is sometimes more impactful than the content itself. Documentaries, tutorials, science shows, podcasts, lectures etc., are constantly updated and provide valuable material in the constructivist system of ESP teaching. Academic progress is highly correlated with students' craving for the latest technology and exploring the most suitable resources based on their field of study or career goals.

All audio-video resources have a significant impact on developing cognitive abilities, compared to more conventional text-based materials. As Ode, 2014:195 argues, audio-video resources "make abstract ideas more concrete to learners." They also allow students "to develop a holistic understanding that the words cannot convey." Retention of information is much more effective when it is heard, felt or seen, than when it is merely heard. Both students and teachers have frequently noticed

the emotional balance created in learning through audio-video methods. A quick interest in learning was also developed, especially by sharing experiences with other cultures. The improvement of civic social behaviour and human connectivity were motivated by the use of digital sources.

Another important contribution to diversified learning is given by social media which brings valuable knowledge and insights on issues that learners are highly interested in. Beyond the connective side of social networks, they provide an impressive support for the generation of expert content, by which students benefit not only from current information, but also from engagement in useful communication mechanisms.

Simultaneously, learners create and disseminate valuable content both for the institutions they belong to and for other communities they collaborate with. The exchange of learning practices is essential for academic progress. Making decisions independently, increasing critical thinking and shaping information help students identify their real-world predispositions.

Despite the positive aspects of learning through various virtual resources, there are potential negative sides and psychological implications of excessive exposure to media content. Contrary to popular belief, academic performance of learners decreases with prolonged adherence to digital resources. The alleged responsiveness to digital content is actually distraction from the correct development of learning, since students use the online environment for superfluous discussions, devoid of academic meaning.

Although social networks aim to bring people together, in reality, they contribute substantially to isolation, individualism, desensitization or distorted perception of the surrounding world. The disorganized and ineffective filtering of information, identification with patterns promoted in the virtual setting and inability to rigorously select the content meaningful to learning, are just a few of the psychological effects that contribute to alienation from the values essential for our evolution.

Moreover, lack of focus, incapability of submitting tasks in specific time frame or hindrance of mind are only detrimental to continuous and successful learning. Even if it is almost impossible to avoid the virtual world, learners of all levels are recommended to become more aware of their social media habits. Mindful scrolling, establishing patterns, managing time and filtering resources assiduously will help learners reduce anxiety and counteract the negative effects of fake information.

3. Disseminating information in ESP classes

Transmission of information is not uniform but differs depending on the type of language that students access in various specializations. Those in engineering or humanities are more or less practical in relation to the materials they incorporate in their learning process. In today's educational setting, we are witnessing a renewal of interest in teaching and learning of English as a global language. At the same time,

increased use of technology in all professional areas has fuelled interest in computer-assisted language learning. English is applied and approached from broader perspectives that include linguistic, cultural, stylistic or sociological aspects. Language is no longer a simple communication tool in education, but has extended to multidisciplinary areas, in a tight connection with all social media. The relatively narrow framework of learning and teaching has acquired new dimensions, in the sense that students are not only receivers of information, but also active participants in the knowledge process.

The teacher's intervention is now limited to mediating the act of teaching, leaving more freedom to autonomy, self-learning and self-assessment. Discovering the needs and goals of learners no longer depends on a single actor but includes a series of factors focused on the beneficiaries of learning. The creation of this independence brought a lot of benefits including flexibility, self-motivation, discernment, a strong sense of purpose, effective questioning and dialogue, more control over academic performance, engagement in collaborative work etc.

Information dissemination in ESP classes is a combination of methods meant to develop new easily integrative skills both in the academic environment and outside it. From this perspective, blending traditional teaching with audio-video resources "help the teacher to clarify, establish, correlate and coordinate accurate concepts, interpretations and appreciations and enable him to make learning more concrete, effective, interesting, inspirational, meaningful and vivid." (Mannan, 2005:108)

Given that teaching materials are mostly ambiguous and abstract, we need a concretization of the content, so that it becomes accessible and comprehensible to students. The ease of learning is correlated with exposure to authentic language that helps learners to transform abstract notions into intelligible elements in vivid life-related contexts. Digital resources are constructive through their range and provide an easy retention of language. However, total reliance on these resources does not complete the true picture of the teaching act. Intervention, mediation, additional explanations and physical presence with the arsenal of gestures and attitudes are equally valuable and define education in its entirety.

4. Overcoming failure and learners' lack of adaptability

Do students fail to adapt to blended learning? Do they find it difficult to use digital technologies in the classroom? These questions are perfectly justifiable considering the dynamics of learning and the need to adapt to novelty, especially through technology?

Failure is explained by learners' being easily distracted or incapable of developing an in-depth analysis of the subjects studied. 'Mining for data' has become superfluous giving way to a tendency toward skimming. The ready-to-use information or the instantaneous answers provided by the Internet have only contributed to a highly disorganized memory and learners' incapacity to stay focused.

On the other hand, technology glitches such as slow Internet access, uninstalled programs, blocked websites, faded projection or distorted sounds may also

be regarded as a type of failure. They are complications which teachers can never anticipate but turn them into learning opportunities. Coping with failure in a constructive way or seeing it not as a sign of incompetence, but as a chance to improve performance, may become the safest way to adaptability, innovation and collaboration.

5. Conclusions

Learning with technology should become an integral part of education, even if sometimes this tool fails to perfectly satisfy students' needs. Digital literacy is no longer an isolated term but a universal, encompassing technical, psychological and cultural dimensions.

Digital literacy empowers learners to develop communication skills, thinking, technical abilities, to study more effectively and enhance their career prospects. It also increases a positive mental attitude among students who approach technology purposefully, creatively and actively. Digital frameworks encourage openness to variation based on cultural differences.

By creating useful content for the academic community, by setting boundaries and establishing clear limits to access information, students and teachers will give a well-oriented meaning to learning as a global phenomenon.

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