DIGITAL LITERATURE LITERACY (DLL) AND LITERATURE DIGITAL READING (LDR) IN EUROPEAN SCHOOLS

Alfabetización Literaria Digital (dll) y Lectura Digital de Literatura (ldr) en las escuelas europeas

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ABSTRACT

DILECTINGS (Digital Literature Educational Competences for Teachers: Intercultural Inclusive Good Practices) is a European Key Action 2 Project that explores digital literature teaching. Digital literature—literature intended as authentic materials with cultural value—is an engaging and interactive narrative form delivered via digital media, that encompasses the language of books, films, web pages, radio, among others. This paper aims to present a preliminary questionnaire to explore the needs of primary and secondary teachers in terms of digital literature literacy and literature digital reading. This article will show the questionnaire design process to carry out a proper needs analysis.

RESUMEN

DILECTINGS (Digital Literature Educational Competences for Teachers: Intercultural Inclusive Good Practices) es una Acción Clave Europea que explora la enseñanza de literatura digital. La literatura digital -literatura concebida como material auténtico con valor cultural- es una forma narrativa atractiva e interactiva que se ofrece a través de medios digitales y que abarca el lenguaje de los libros, las películas, las páginas web y la radio, entre otros. La primera necesidad que pretende cubrir este proyecto es la de proporcionar un cuestionario que responda a las necesidades de los profesores de primaria y secundaria en cuanto a la alfabetización literaria digital y la lectura digital de literatura. Este artículo explicará el proceso de creación del cuestionario a fin de llevar a cabo un análisis de necesidades.

1. Introduction

DILECTINGS is a European Key Action Project, which started in January 2022 and it is expected to finish in January 2025, that delves into digital literature and its pedagogical role to enhance reading in secondary education. Digital literature has been defined by most researchers as "digital born literature" (Hayles, 2008) that is created with and for the digital medium and that may offer reading or writing functionalities that cannot be found on paper. Bouchardon (2017) suggests a clear conceptualization of the term:

> It is intended to be read/acted on a digital medium and it could not be printed. This criterion distinguishes digitized and digital literature: the former refers to creations that could also be printed, the latter features works that would stop making sense on paper (due to their multimedia, animated or interactive dimension. (p. 3)

Koskimma (2007) defined it as the literary work that can be found in today's media landscape. According to Simanowski *et al*. (2015) digital literature attempts to offer an engaging and interactive narrative form delivered via digital media, which includes not only the language of books, but also films, web pages, radio postcasts, and so on. Its distinctive features imply that digital literary learning should go beyond hypertext reading and involve more multidisciplinary learning in terms of multimedia packaging and interactive aesthetics (Montoro, 2015). Indeed, digital instruments have changed the relationship between reader and the text since digital reading has allowed the students to choose from a wider range of materials that appear to meet their level of proficiency and interests more sharply (Ebrahimi, 2016). These above-mentioned changes imply new teaching methods. As Pardede (2019) summarizes:

> Whether current English teachers realize it or not, the changes brought by digital reading have made teachers understanding of reading different from those of their students. Such different understanding will likely emerge difficulties for teachers to facilitate reading to their students. Therefore, teachers need to familiarize themselves with digital reading nature and strategies (p. 78).

Thus, innovative educational strategies are badly needed. There is abundant literature that has studied digital literacy levels of language teachers (Stockwell, 2009; Son *et al*, 2011) and its impact on its use in the classroom (Huber & Shalavin, 2018), but there seems to be a paucity of studies that explore the need for a digital literary framework, including strategies and guidelines, to apply digital reading (reading texts from the technological apparatus such as the screen of smart phones, tablets, or computers either online or offline) to literature. Among those, Lim & Toh (2020) draft an attempt to put together a taxonomy of digital reading teaching. Their model embraces the knowledge of reading strategies, basic and critical information skills and more importantly multimodal semiotic awareness. On the other hand, Nanda & Susanto (2020) explore new strategies and advocate for activities such as role-based online discussions or literary blogs that should be incorporated into digital literature teaching. These authors also highlight the importance of specific digital unit design as "...the WWW as the media for literary hypertext needs some broad and various formats for the student to write their own idea, criticize and make a comment on cyber literature." (p. 7). In addition, they introduce the concept of "navigational linearity" that drives into a different reading experience where internet aids and multimedia resources go hand to hand.

Another element that appears in the literature is the need for intertwined cultural, operational and critical principles. Tamam & Asbari (2022) claim that digital literature should tackle global topics as "transcultural phenomena" in different genres (narration, poetry, essays). These literary genres should be more flexible and need to foster evaluative comments that interpret the work and help students develop critical ways of analyzing and enjoying literature.

The field of research addressing the impact of digital literature on students' reading skills, though more and more appealing, is even more under investigated (Carioli & Peru, 2016). Existing studies have basically focused on how the internet and other communication technologies can be embedded into literacy education (Hutchison & Woodward, 2014; Larson, 2010). Hutchison & Woodward (2014) have gone a bit further and have elaborated a guide to make appropriate instructional decisions to assist "literacy teachers consider whether their planned instruction contributes to both digital and nondigital literacy development" (p. 462). Their findings demonstrate that tablets and digital apps can enhance traditional literacy and develop a new relationship between reader and the text that fosters some reading skills. In the same vein, Coiro *et al*. (2014) carried out specific research at primary, secondary and high school levels which revealed that in online reading environments readers use some strategies for inquiry such as concept identification or critical evaluation more frequently) and these skills favour independent thinking particularly among elementary school students:

The picture that has emerged thus far with data presented in this study demonstrates that pairs of third, fourth, and fifth graders working collaboratively to complete a structured online inquiry task were able to provide responses to the information problem about environmentally friendly toys, and that these dyads exhibited varying characteristics of more or less productive social and cognitive engagement. (p. 11)

All in all, digital skills and competences seem to have been considered key to enhancing teaching in the 21st Century (INTEF, 2017). However, technology integration to their full potential in language classrooms has not been reached yet as a number of large-scale surveys across Europe demonstrate (Digital Agenda for Europe, 2010; Eurydice, 2012) and teachers' beliefs may have an impact on favouring or not its implementation.

Teachers' beliefs are paramount to implementing any methodology in the classroom. Literature has thoroughly examined their role in terms of teaching context, teaching experience and the biography of the teacher (Beijaard et al., 2000) and how these beliefs may change or not according to the content and nature of influences that the educator is exposed to. Focusing on digital literacy, Nugroho & Mutianingrum (2020) mention two obstacles that prevent educators from exploring it fully: first-order barriers which focus on environmental readiness factors and second-order barriers that relate to teacher's cognitive beliefs. As research points out, the mastery of digital technology does not guarantee effective integration and teacher's values tend to be more dominant than pedagogy knowledge (Kim et al., 2013). Hence, the first step that a project on Digital Literature Literacy should undertake is to explore the needs and beliefs of educators and this will be carried out through online questionnaire distributed to teachers from the project's participating countries.

Over the past twenty years one of the main objectives of educational research has been to analyze the teachers' attitudes and perceptions of the use of technology in their practice. Windschitl & Salh's (2002) study traces the activities of three teachers as they construct, with peers, a range of uses for laptop computers in the classroom and reconcile those decisions within the context of their institutional culture. This study also demonstrates how complex is the idea of technology integration in the classroom is, even if they wisely point out that there are some powerful influences:

(a) institutional expectations for technology use; (b) teachers' beliefs about learners and learning, which are mediated by the specific character of the school community; and (c) the host of informal ways in which teachers learn to use technology. (p. 166).

In this sense, the inevitability of students' usage of computers in the classroom raises the need for a better understanding of how this affects teachers and how they push the institutions "to make informed recommendations that will allow good teaching to flourish-with or without technology" (p. 203). Similarly, Tondeur (2008) aims to determine which teacher beliefs are connected to different types of computer use. The study examines whether profiles can be developed in such a way that they reflect a typical set of beliefs adopted by teachers. Finally, Fullan & Donnelly (2013) assert that although digital technology is ubiquitous in the lives of young adult students, its place in education has been less prominent than anticipated in some countries. They identify the unequal development of three essential linked strands as the reason for the lack of progress, which are the technology itself, appropriate pedagogies and the necessary system change.

In line with the 2020 Commission's Communication on Achieving the European Education Area by 2025, and the Commission's Digital Education Action Plan (2021-2027), DILECTINGS attempts to promote and scale-up Digital Literature Literacy (DLL) and Literature Digital Reading (LDR) Skills. Roughly speaking, the project's teaching pedagogy encompasses three key goals: to foster the teaching of reading as a source of pleasure that promotes self-reflection; to contribute to intercultural understanding and social inclusion through the written word and eventually to consolidate ICT competences and skills that apply to literature reading. These lines of inquiry intersect the main issue of the making of the readers, and of what feeds and shapes their imaginary, their capacity of making hypothesis, predicting, figuring the world from a different perspective, imagining, but also decoding their actual context and expanding their learning and competences (Unesco, Human Learning in the digital era, 2019).

2. Methodology

The survey presented in this paper was designed to shed some light on the teachers' beliefs on digital competences and digital literature. The target group was in-service teachers who work in the area of language learning and the sample of participants came from Italy, Spain, Romania and Ireland since these countries are part of a European consortium within the framework of the above-mentioned Erasmus+ Project (KA2).

The survey has been structured in 28 questions, preceded by an informed consensus following the indications of Roma Tre Ethical Commission guidelines and, subsequently, the questionnaire has been approved by the ethical committee of all participating institutions. Questions about the personal and professional background were included at the beginning for classification purposes.

As for the content questions themselves, they have been divided into 2 sections: the first part is composed of 8 multiple choice questions (a-h) and concerns the type of user that responds to the questionnaire; the second one

accounts for 20 items (the last one sub-divided into two possible answers) that are meant to be answered on a Likert scale, except for question 20 (a binary one), which requires an open answer.

The survey will be administered to a number of EFL secondary school teachers in the 4 partner countries to investigate the knowledge on DL and LDR by educators. Results will then be analyzed to draw guidelines on DLL and LDR, and these recommendations will then serve to create the online modules that will be hosted in the DILECTINGS platform. The modules endeavor to train teachers in the use of DL tools and strategies, and to assist them in setting up an eTwinning project.

3. Objectives

In terms of specific objectives, as stated before, DILECTINGS aims to promote and scale-up Digital Literature Literacy (DLL) and Literature Digital Reading (LDR) Skills in European schools through achievement, assessment and exchange of specific digital competences in both educators and students. The project will implement sustainable infrastructure, resources and guidelines for the enhancement of DLL and LDR Skills in European schools. It will enhance DLL and LDR by improving ICT Skills, along with reading, language and culture competences in both teachers and pupils at the primary and lower-secondary level, possibly to smooth the passage from the Primary to the Secondary cycle of education.

As for the project outcomes, DILECTINGS will set a basis for a pedagogic framework of best practices for DLL, leading to the drafting of guidelines possibly by integrating in the DIGICOMP (see http://www.digital-competences-for-teachers.eu/) and in the European platforms for teachers and schools, such as eTwinning and School Gateway. It will also create a European DLL and LDR Lab for Digital Literature Skills and competences. Additionally, DILECTINGS will put together a Moodle-based distance education platform that will host online training modules for the training of teachers, and a space for interactive intercultural digital activities (authors' materials, stories, debates groups, book-clubs, writing workshops).

While designing the survey three main objectives were pursued, namely, to find out how teachers perceive digital technologies in their practice, to learn what their digital literacy level is and to map their background on Digital Literature and its role to deal with mixed-ability in the classrooms. These main goals were transformed into four main topics of the survey:
- What attitude language teachers have towards the use of digital technologies
- How language teachers assess their digital competence level
- What language teachers know of Digital Literacy
- To what extent and why they have used Digital Literacy in their teaching practice

4. Analysis

Before answering the questionnaire, participants are clearly informed about the scope of the project by means of a short summary of its content and main objectives. Next, teachers are reminded that they take part in the survey on a volunteer basis and their consent may be withheld at any time without the need to explain why. Then, participants are told that their identities will be protected since their responses will be anonymous and the results will only be used for scientific purposes. In addition, surveyed teachers have the right to know about the final results of the study, which will be disseminated in research articles and other international events. Eventually, all participants will need to give their informed consent so as to start answering the questions.

As for the survey itself, it starts with some background questions in which participants are asked about their gender, age, teaching experience, current teaching status and general use of technology in their classes. The survey consists of 20 Likert-scale questions in which respondents must choose if they totally disagree, disagree, are not sure, agree, quite agree or do not understand the question. The first 4 questions refer to the need to incorporate digital competences into both teacher training and students' curricula. The next statements focus on Digital Literature and they collect information about its role after the pandemic and its relevance to meet all students' cognitive and cultural needs. The last item goes directly to the extent of teachers' implementation of Digital Literature in the classroom and asks educators whether they use it in their teaching and why they do or do not it.

5. Results

This study has used a self-compiled online questionnaire for several reasons. Firstly, it is faster to be completed and response time is almost instant, and it tends to be more accurate since the margin of error is greatly reduced. Also, responses tend to be more honest because it is confidential and user-friendly because participants may answer it through different digital devices. In addition, data can be easily compiled and analysed given the fact that online survey programs offer advanced statistical tools that determine validity, reliability and significance. However, it is possible to identify several drawbacks too, such as the absence of feedback, a high rate of sample mortality, problems of possible computer illiteracy (for online interviews), and visualization problems linked to the use of some devices. In addition, close-ended questions tend to limit the information that participants

may provide, and this fact may result in more superficial answers. One final con would be that a face-to-face interviewer may be able to coax answers out of a participant who is reluctant to elaborate.

As for the basic principles for drafting a questionnaire they are the following: formulate the questions in such a way as to represent the same stimulus for all respondents; establish the logical sequence of topics; prepare the filter questions; define the sequence of questions on the same issue; and decide how the answers are to be organized. Questions ought to capture three groups of information: basic sociographic properties (i.e., description of socio-demographic and economic characteristics); behaviors and attitudes. With regards to behaviors, they are measured through what the sample does or says it has done. Unlike attitudes, behaviors are in principle unequivocal (there is an 'exact' response) and observable (externally controllable). As far as attitudes are concerned, the survey measures what the respondent thinks: opinions, motivations, orientations, feelings, evaluations, judgements. These tend to be the most difficult questions to interpret because attitudes are complex, multidimensional, of different intensities, changeable and conditional.

With regards to the question order, questions involving a memory effort should be placed towards the middle of the questionnaire to avoid that at the beginning the respondent is not yet available for such an effort and that at the end he/she is too tired. Questions on sensitive topics should be placed just before the last part of the questionnaire, in order to take advantage of the increased confidence and willingness now acquired and in order not to risk that a refusal to answer which might compromise the acquisition of information. The questions of a socio-demographic nature, those which respondents answer most easily, can be allocated at the end.

During the questions scripting, attention should be drawn to the social desirability and to the lack of opinions (or so-called pseudo-opinions). Social desirability is the socially shared evaluation that is given to a certain individual attitude or individual behavior in a certain culture. If this behavior or attitude is strongly characterized in a positive or negative sense, questions on these issues may give rise to strongly distorted answers (affected by concealment or exaggeration). Moreover, on some issues that are seen as complex or that are not known by the respondents, they may end up by choosing one of the answers at random. Sometimes, such questions produced pressure that leads to answering without a proper opinion.

The standardized question detects opinion but not its intensity or its entrenchment. In a survey, it is impossible to distinguish intense and stable opinions from weak and fickle ones. Already in the 20th Century, Dahl (1956) questioned precisely what would happen if the minority preferred their own alternative much more passionately than the majority preferred the opposite alternative. Eventually, there is another challenge related to the sequence of questions (and overdetermination) as Schuman and Presser (1981) already pointed out many years ago. They stated that the sequence of questions itself can have an impact on the expressed opinions regardless of their survey placement.

6. Conclusions

This paper has started by defining Digital Literature as a genre of literature where the computerized literary text may be available in digital devices like laptops, tablets, mobile etc. With the advancement of technology and digitization, literature has become much more available, flexible, and in a matter of milliseconds, information may be found 24/7. This easy access has resulted in making learning easier, faster and more efficient. The importance of Digital Literature is highlighted by a number of recent documents such as the 2020 Commission's Communication on Achieving the European Education Area by 2025, or the Commission's Digital Education Action Plan (2021-2027), whose main aim is not only to raise awareness on its relevance or to elaborate a conceptual framework, but mainly to provide teachers with clear guidelines that facilitate its implementation in our European classrooms.

Nevertheless, it is crucial to bridge the gap between the learners' experience of literature in the digital world and their classroom experience. Indeed, educators need access to pedagogic frameworks such as online contexts for developing understanding of online literary experience or management resources for implementing learning activities that allow digital reading skills to be enhanced in the class (Tamam & Asbari, 2022).

Another aspect that has been explored is the role of teachers' beliefs in promoting digital literature learning in an EFL context and an array of studies demonstrate that discrepancies arise between the teachers' beliefs and their classroom practices (Nugroho & Mutiaraningrum, 2020). Besides, the use of technology in literature implies an innovative pedagogical approach that embraces multimediality interaction to favor creation, collaboration and connection making, as the Unesco documents advocate for.

In this paper, we have also described a model teacher's questionnaire that could support primary and secondary school teachers in knowing their digital competences and their students', but also planning online reading lessons. The survey has been elaborated to be self-administered in an online context and attempts to gather information about their skills in utilizing digital technology effectively and their assumptions regarding its benefits, availability and compatibility to their teaching. Hence, the questions delve into the opinions of educators regarding the role of digital literacy learning in their teaching and their experience on putting together such experiences in their language classrooms. The final questionnaire can be seen below in its English translation:

Figure 1. Questionnaire

QUESTIONNAIRE

This online questionnaire is part of a need analysis initiative for an Erasmus KA2 project called DILECTINGS (Digital Literature Educational Competences for Teachers: Intercultural Inclusive Good Practices). Participation in this study is free and voluntary, therefore one may refuse to give consent. If a person decides to accept, he/ she will be asked to indicate his/her consent to participate in the research and his/her consent to the processing of the data collected through his/her participation. Consent can be withdrawn at any time, without any negative consequences, and without the need to specify the reason. No direct benefits are expected from participation in this research. Nonetheless, the results that will emerge will be shared in publications and via other dissemination instruments. The overall aim is to help to deepen the object of study and implement related educational policies and practices.

This online questionnaire will be submitted to thirty primary and secondary teachers from Ireland, Romania, Italy and Spain since these countries take part in this Erasmus KA2 project. The results will be used to have a complete needs analysis of Digital Literacy and Digital Literature Learning to create the tools and specific instruments to be used with primary and secondary students.

Kindly answer the following introductory questions, which are necessary to frame the type of users of the questionnaire:

BACKGROUND QUESTIONS

a. Male/Female/non-binary/does not wish to answer

b. 24 years old or younger / 25-29 years old / 30-40 years old / 41-50 years old / over 50 years old

c. Currently serving / on leave / retired

d. Are you tenured? yes/no/not applicable

e. In what grade of school do you teach or have you taught? Nursery school / Primary school / Secondary school / University

f. How many years have you been teaching? 2 or less/ 3-5/6-10/11-15/16-20/ more than 20

TECHNOLOGY QUESTIONS

g. To what extent do you use technologically advanced equipment in your professional activity? Very much/ Somewhat/ Very little/ Not at all

h. Have you ever had to change the way you work or study as a consequence of technological developments? Yes, more than once / Yes, once / No, never

Please explain to what extent you agree with with the following survey items. Possible answers are:

[not at all agree/disagree/do not know/agree/fully agree/the question is not clear].

1. It is necessary to train teachers in digital competence

2. It is necessary to train teachers in a structured digital competence according to their disciplines of interest

3. Students need to be trained in digital competence

4. It is necessary to train students in a digital competence according to the different learning disciplines

5. Digital Literacy (DL) is a necessary competence in the light of the new (post)pandemic set-up

6. Digital Literature may be an effective resource in Second Language Teaching

7. Thanks to DL and LDR (Learning Digital Reading) the problems of access to learning for people with special educational needs or educational fragilities such as perceptual or motor difficulties have been reduced

8. Thanks to the DL and LDR access to learning for people with special educational needs related to cultural differences may be favoured

9. DL and LDR can replace traditional ways of using texts

10. DL and DLR can complement traditional ways of using texts

11. The impact of DL on teaching may be considered to be beneficial

12. DL and DLR are well integrated into our education system

13. In my personal work experience, I have found that the impact of DL and LDR on teaching is significant

14. Learning is enhanced when text and images are integrated in a multimedia environment

15. DL resources should be OPEN to ensure democratic access to knowledge

16. There is no educational difference between reading on paper and reading digitally.

17. DL does not achieve the same level of effectiveness in teaching as traditional lecture.

18. The digital divide does not allow the use of DL in our context.

19. Have you already experimented with DL and LDR in your teaching? Yes/No

20a. If so, what has been the response of learners to the introduction of DL/LDR? (Open-ended question. 50 words max)

20b. If no > for what reasons? (Open -ended question. 50 words max)

7. Acknowledgements

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