

Learning with the School Library: Mapping Technology-Enhanced Learning Underpinnings

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Introduction

In Portugal, the School Libraries Network, of the Ministry of Education, plays an essential role in incorporating the digital component into pedagogical practices by promoting digital literacy among teachers, teacher librarians and students. It is, therefore, essential to analyse the foundations and guidelines of one of its main structuring documents - the *Learning with the School Library* Referential [1], showing how it reflects the creation of technology-enhanced learning environments and the promotion of digital literacy among students at all levels of education.

Objective

Our exploratory study aims to map the technology-enhanced learning underpinnings perceived in the *Learning with the School Library* Referential [1] through a content analysis that allows us to contribute to the definition of the state of the art in Portugal regarding the action of school libraries in the promotion of learning scenarios that enhance the development of essential literacies for 21st-century learners, namely digital literacy.

Learning with the School Library: Strengthening the Curriculum Through a Literacy-Based Approach

The Conceptual Framework: Knowledge, Skills and Values

- It is based on the assumption that the curriculum in all school years, from kindergarten to grade 12, is enhanced and enriched by its intersection with multiliteracies.
- It emphasises collaborative work between the teacher librarian and teachers of school curricular areas.
- It is grounded in a conceptual framework that defines the knowledge, skills and values associated with three areas of literacy – reading, media and information –, which are translated into descriptors of student performance at the end of each school cycle.
- The descriptors are formally presented in tables that allow a sequential reading across school cycles within a literacy domain or a holistic analysis of the expected performance across the three literacy domains in each school cycle.
- Digital literacy is regarded as a cross-cutting area to all the others, manifested both in the respective descriptors and in operationalization strategies based on learning scenarios characterised by digital environments and the use of tools and technologies in formal and informal learning contexts.

Empowering Students with Technology-Enhanced Learning

- The focus on innovative learning scenarios involving digital strategies, technologies and tools is evidenced in the proposed operationalisation strategies whose analysis allows us to draw some conclusions:
 - The diversity of purposes and educational contexts for using digital scenarios and tools is noteworthy;
 - Some of the strategies are associated with only one literacy area, and it is possible to recognise the adequacy between the suggested strategy and the specificity of the literacy competence to be developed;
 - Some of the strategies are common to two or more literacy areas;
 - Resorting to digital technologies favours strategies that involve operations of active use and elaboration;
 - In digital-based strategies, collaborative work is valued;
 - Some types of media, tools or multimodal products are suggested;
 - Most of the proposals presented require the active involvement of students in their learning process.

Designing Technology-Enhanced Learning Environments Through the Referential

The *Learning with the School Library* Referential [1], as of 2020, also counts on an online platform for interaction and exchange [2], where teacher librarians from all over the country can share their activity plans. Regardless of the focus of the joint activity, teachers and teacher librarians favour collaborative work and implement active learning methodologies, emphasising exploratory activities and experimentation, often framed in hybrid learning scenarios.

Collaborative practice is also at the core of the WEIWE(R)BE project, which is the result of a partnership between the School Libraries Network and the WEIWER® Network, based at the Laboratory of Distance Education and eLearning (LE@D) of the Open University (Portugal). This project, whose main objective is to develop the information literacy skills of secondary school students through the strategic articulation between the library and the classroom [3], also has the *Learning with the School Library* Referential as one of its main frameworks, focusing on aspects related to information literacy and to the transversality in the approach to digital literacy.

Conclusion

In the case of the Portuguese education system, the School Libraries Network programme has contributed to a dynamic of innovation in schools by relying on teacher librarians to apply in their local contexts the national guidelines, which focus on a literacy-based approach to the curriculum that integrates learning with multiple literacies. Through the national coverage of the libraries network, a significant number of schools have applied the *Learning with the School Library* Referential, whose conceptual framework and suggested practical activities have enabled the implementation of technology-enhanced learning based on active learning methodologies and centred on collaborative work and the strategic mobilisation of digital environments and tools [4,5], thus contributing to the digital empowerment of both students and teachers.

References

- [1] Rede de Bibliotecas Escolares: Aprender com a biblioteca Escolar. Referencial de aprendizagens associadas ao trabalho das bibliotecas escolares na educação pré-escolar e nos ensinos básico e secundário (2017). https://www.rbe.mec.pt/np4/AcBE.html?newsId=99&fileName=referencial_2017.pdf
- [2] Rede de Bibliotecas Escolares: Aprender com a Biblioteca Escolar: Atividades e Recursos. Portal RBE. <https://www.rbe.mec.pt/np4/AprendercBE.html>
- [3] Cardoso, T., Pestana, F., Cruz, A., Mota, E.: O Programa WEIWE(R)BE no ecossistema da escola digital. In: T. Cardoso (Org.) Educação: Saberes em Movimento, Saberes que Movimentam, Volume III, Capítulo 4, pp. 43–55. ARTEMIS Editora (2023). https://doi.org/10.37572/EdArt_2802237744
- [4] Rede de Bibliotecas Escolares: Referencial Aprender com a biblioteca escolar: Relatório de implementação 2021–22 (2022). [https://www.rbe.mec.pt/np4/%7B\\$cientServletPath%7D/?newsId=3317&fileName=relatorio_final_2021.22.pdf](https://www.rbe.mec.pt/np4/%7B$cientServletPath%7D/?newsId=3317&fileName=relatorio_final_2021.22.pdf)
- [5] Rede de Bibliotecas Escolares: Referencial Aprender com a biblioteca escolar: Relatório de implementação 2018–19 (2019). [https://www.rbe.mec.pt/np4/%7B\\$cientServletPath%7D/?newsId=99&fileName=relatorio_18.19_.pdf](https://www.rbe.mec.pt/np4/%7B$cientServletPath%7D/?newsId=99&fileName=relatorio_18.19_.pdf)