



Service-Learning Experience: diagnostic phase in the development of a Reader's Framework Project

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Abstract

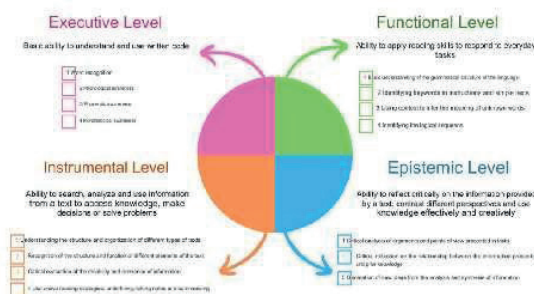
The development of reading skills is fundamental for the academic process of students since it enables the acquisition of other learning at all academic stages. In this experience based on the methodology of Learning and Service, 52 students of Double Degree of CAFyD and Primary Education have planned and directed a participatory process with 246 students of Primary Education with a denominative multicultural scenario for the diagnosis of the development of reading competence in a school center. The results show a significant improvement both in the declarative knowledge of the university students and in the development of the reading competence of the children in the school. The Learning and Service experience demonstrates that a contextually oriented learning structure can have a significant impact on learning, highlighting the importance of theoretical-practical training and collaboration between different agents of the educational community.

KEYWORDS: READING PROFICIENCY, INSTRUMENT, VALIDATION.

Introduction

The development of reading competence in primary education (PE) is essential for school success (Díaz-Iso et al., 2022). This has placed this competence at the center of the interest of the educational and research community (Robledo et al., 2019). Currently, it is understood as a multidimensional concept of skills that includes the knowledge, beliefs and processes necessary for reading (Kuzmina et al., 2020). In this study, we are based on the proposal of four levels (Freebody y Luke, 1990): executive, functional, instrumental and epistemic (Figure 1):

Fig.1. Levels and skills determined in the intervention.



It is essential that future teachers acquire a decisive role in the development of this competence and, to this end, it is important that they receive comprehensive training (De-Naeghel et al., 2014). Thus, this paper presents an intervention based on the Learning and Service (L&S) methodology (Musa et al., 2017). The intervention, in a multicultural setting, consisted of planning a diagnostic phase for the future implementation of a Reading Framework Project in a school. This intervention was carried out by teacher trainees from a Spanish university. The work has three objectives: to train university students in the conceptual understanding of reading literacy, to improve the development of reading literacy skills in school students, and to disseminate diagnostic data.

Methodology

Participants

The intervention involved 52 CAFyD and PE double degree students and 246 PE students from a school (Spain) distributed in six grades and 12 classrooms.

Intervention design

The intervention was structured in three phases: planning and design of the ApS, identification of needs, and evaluation and monitoring of the ApS. In the first phase, the university students began with training on the levels of reading proficiency acquisition and, in addition, with the analysis of the participating school's PISA results to identify specific needs. In the second phase, the students designed a multilevel test in which a total of 15 reading skills (Freebody and Luke, 1990) were analyzed (this was validated through an exploratory factor analysis and a confirmatory analysis).

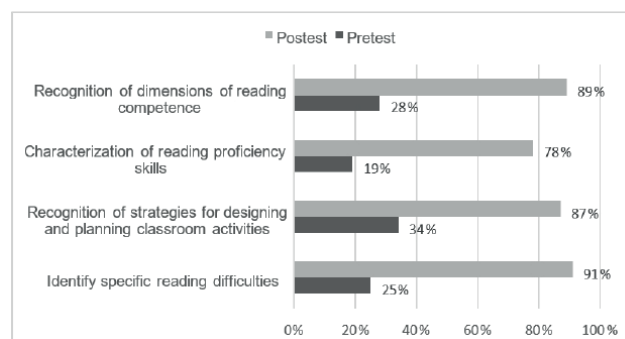
Previously, they applied the pre-test (previous acceptance of the participation consent), identifying the needs and difficulties by course and classroom. Next, they developed ad-hoc training sessions (through a control group and an experimental group) and, finally, the test was applied again (post-test) in the school. In the third phase, first, a report was made on the results of the multilevel tests and the response to the didactic sessions and, second, the experience was disseminated through a research article.

Results and Discussion

Conceptual understanding of reading proficiency in university students

The understanding of declarative concepts shows, as in similar studies, a considerable improvement after applying face-to-face training (Kuzmina et al., 2020), as well as after developing the APyS process (Lee et al., 2020). This was measured through a diagnostic test of such knowledge (Figure 2):

Fig. 2. Declarative knowledge regarding reading competence



Impact on the development of reading competence in PE students

To evaluate the differences between pretest and post-test scores, the Wilcoxon t-test (non-parametric test) was performed (Table 1):

Table 1. Results of the multilevel test scores.

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	Executive				Fuctional				Instrumental				Epistemic		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1°	*	*	*	*	*	*	*	*	*	*	**	*	**	**	*
2°	*	*	*	*	*	*		*	*	*	*		*	*	*
3°	*	*	*	**	*	*	*		**	*	*	*	*		
4°	*	*	*	*	*	*		*	*	*	*		*	**	*
5°	*	*	*	*	*		*	**	*	*	*	*	*	*	*
6°	*	*	*	**	*	*	*	**	*	*	*	*		*	*

The results show improvements in practically all of the skills analyzed. The first year shows the greatest progression (very considerable **, in three of them) due to the high receptivity of the students to the new PE strategies (Meng, 2009). Fifth and sixth grades improve significantly, only worsening one of the skills analyzed. Meanwhile, the third year shows the least progressive behavior. As for the levels analyzed, as in previous studies (Duarte et al., 2020), the executive and instrumental levels show the most relevant progression due to a greater permeability of contextual skills (Granado and Yubero, 2018).

Dissemination of the diagnosis both to the educational center and to the educational-research community

As the main result, a detailed report was delivered to the center, which includes the values obtained through the measurement carried out in the center. In it, specific values per classroom, course and cycle are added. Along with this, the university students have participated in the elaboration of a research article where the validation of the measurement instrument is offered.

Conclusions

The APyS experience shows significant improvements in the reading competence of PE students and in their conceptual comprehension. The theoretical and practical training provided significantly increased their knowledge of reading competence. The intervention shows the importance of collaboration between university teachers and students. The delivery of the detailed report to the educational center and the dissemination of the results obtained helped both the applicability and the transfer of the knowledge obtained through the publication of a scientific article and have helped the center to act. In summary, the APyS methodology has been shown to be effective in improving learning and demonstrates the need for its application in teacher training.

Limitaciones y future research

The study was carried out in the short term, so the effects of the APyS on reading proficiency and its maintenance could be limiting if sustainability of change is sought. As a future research, we intend to replicate the study in different contexts to evaluate the robustness of the methodology.

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