Impact Study of the Teacher Librarian Specific Training on Educational Achievement: Current Situation at Integrated Elementary Schools (EBIs)

> Ana Novo PhD Student DCTI, ISCTE Portugal

José António Calixto Director Biblioteca Pública de Évora Portugal

This paper presents the current situation of the school library teams' specific training in the Portuguese Integrated Elementary Schools that in 2005 were already in the Portuguese School Libraries' Network. Other countries' studies, like the ones from the USA and UK, suggest that students achieve higher levels of literacy, learning and problem solving when teacher librarians have specific training to perform their duties. The analysis of data gathered from a questionnaire shows that 32% of the Portuguese school librarians do not have any kind of specific training. This scenario suggests that there hasn't been any significant improvement since 10 years ago especially in what school librarians' training is concerned.

Introduction

In Portugal, the academic year 1996/1997 was very important for school libraries due to the launch of the "Programa Rede de Bibliotecas Escolares". This Program followed the publication of the "Lançar a Rede de Bibliotecas Escolares" report (Veiga, 1996), which defines the school libraries' basis and principles. Besides other aspects, this report reveals that human resources set by law to the school libraries' organisation and management are poor both in quality and quantity.

Many authors, in diverse latitudes, like Calixto (1996), Silva (2002), Lance (1993, 2000 and 2000^a) and Williams (2001) agree that the school library manager, regardless of the terminology being used, either school librarian or teacher librarian, or BE/CRE coordinator, should ideally possess specific training to perform roles at the school library.

The conclusions of impact studies done in the USA (Lance, 1993, 2000, 2000a) and the UK (Williams, 2001), on school libraries, suggest that students achieve higher literacy, learning and problem solving levels when teacher librarians have received specific training to perform their roles and work closely with teachers. The authors of these studies conclude that students academic achievement is higher in any kind of school where there is a well trained school librarian, where the school library team spends more time on information literacy with

students, where there is a collaboration between school librarian and teachers and training of teachers in accessing information and where students make frequent visits to the library. The above authors also agree that school librarians working full time and thus more involved with students and teachers instruction also contribute to academic achievement, because this professional member of staff has the ability to keep the library open for longer hours, keep a close relationship with teachers, give students instruction on information literacy, promote frequent visits to the school library and build up a strong relationship with the public library and other organisations.

Contributions of this research

This research work, being under a PhD programme, aims at studying the school libraries (BE/CREs) of the Integrated Elementary Schools (EBIs), that in 2005 were already in the Portuguese School Libraries Network (RBE), which have a library team coordinator with and without specific training to perform his/her duties and tasks at the school library.

The aims of this research are:

- To define what could be considered as an educational achievement factor and relating it to a teacher librarian with specific training;
- To examine if students' marks are higher in schools whose libraries are open longer hours, where there is cooperation with the public library, where there is online access to information on the Internet and WWW and where there is a policy regarding books and other materials' selection.
- To study and analyse the current situation in the EBIs' school libraries, especially their human resources, mission, objectives and equipment.

In this research, the qualitative methodology was adopted both for data gathering and its analysis techniques. Qualitative methodologies have been frequently referred (Bogdan & Bliken, 1994) as been particularly suited for researching in librarianship and information studies. In this research, data will mainly be gathered through in-depth interviews to previously selected respondents.

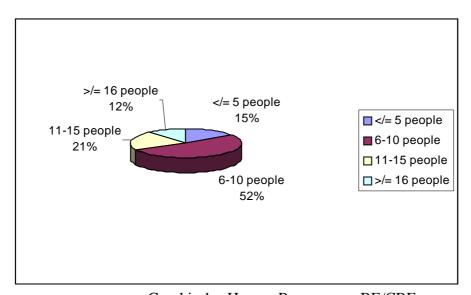
This work is divided into various phases. The first one, already concluded, was sending questionnaires, by mail, to the BE/CREs coordinators of the 49 EBIs, asking for factual information on "Human Resources and Equipment". These data allowed to select some schools, based on the maximum diversity criteria (specific training of the teacher librarian and his/her team, BE/CREs' and EBIs' own characteristics and geographical location) where the in-depth field work will take place. This paper is in its essence the outcome of this phase's data gathered analysis.

On the 2nd phase and at the selected schools, data will be gathered through interviews to library coordinators, direct observation of BE/CREs' activities and document analysis. During the 3rd phase, a comparison analysis of the data obtained through the questionnaires, interviews, observation and document analysis will be done. The 4th and last phase will be devoted to the writing of a report on the whole research, which will also put forward some suggestions and recommendations that would justify specific training for teacher librarians.

Preliminary results

From the 49 questionnaires sent to schools to be completed by the BE/CREs coordinators, 37 (75.5%) were returned, but after their verification only 34 turned out valid, which is a 69.4% response rate that can be considered as a very good one and representative enough to draw some conclusions on the safe side.

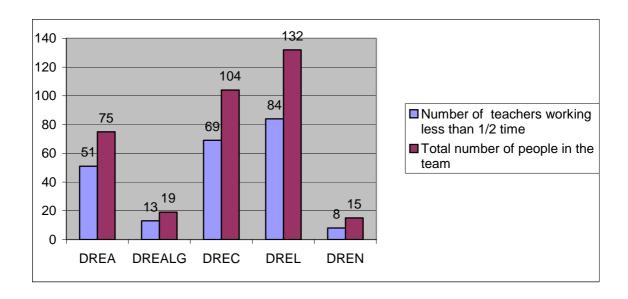
Human Resources. The questionnaire has nine questions about human resources, equipment and EBI characteristics. The first question asks for data on school library human resources and has been subdivided into another two to gather data on the number of elements belonging to the library team and total number of hours on the timetable devoted to tasks and duties in the library. The answers to these questions were analysed and grouped into intervals of 5 to better understand their meaning.



Graphic 1 – Human Resources – BE/CREs

Graphic 1 shows the results of the data analysis: more than half (52%) of the teams have between 6 and 10 people, 21% has between 11 and 15, 15% less than 5 and 12% of the teams have more than 16 people on library duties.

The number of teachers working less than half time in the BE/CREs, that belong to the five Education Authorities (DREs), is very meaningful, especially if we take into account the total number of people in those library teams. This comparison can be visualised on Graphic 2.



Graphic 2 – Relationship between teachers working less than half time and total number of people in the BE/CREs' teams (by DRE)

Data showed in Graphic 1 and 2 are clear evidence of big school library teams, with a lot of people involved in the library work. A library school was even identified having a team of 38 people, a number obviously out of any reasonable limit for a team in this context.

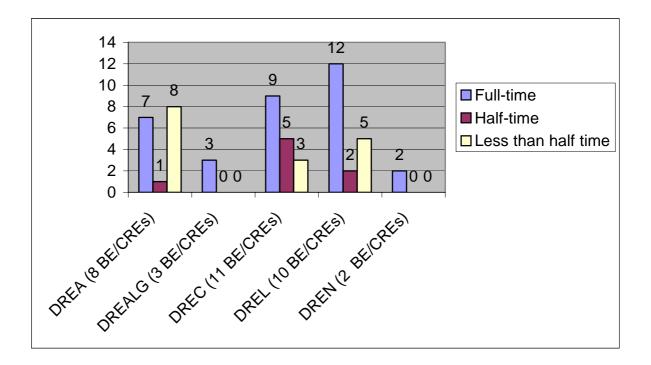
Teams made of a quite large number of people could not be considered a problem per si and could even be a positive factor, meaning that a big investment in human resources was being done at the school library. In reality what happens is that the bigger the number of people the smaller the number of hours each one dedicates to the library work. This scenario turns into more complex when we see that the majority are teachers working less than half time thus not having enough time to get on with tasks and collaborate in an effective way.

This situation arises many questions, particularly if it is brought face to face with some documents and guidelines and even with the Portuguese Ministry of Education's indications.

- The "School Library Manifesto" (UNESCO, 1999), does not specify the number of people that a team should have but says it should be " as much adequate as possible";
- The "Lançar a Rede de Bibliotecas Escolares" report (Veiga, 1996), suggests that school library human resources should vary according to the number of students and the schooling levels. In the case of schools with Elementary 2nd and 3rd cycles and Secondary Education and more than 1000 students, being this the extreme situation presented, the team library should have 5 people in it (one Teacher Librarian, one other teacher and three Library and Documentation assistants).
- According to Portuguese law (Despacho Interno Conjunto nº 3-I/SEAE/SEE/02 from 15th March), which regulates the management of school library human resources and the guidelines from "Gabinete da Rede de Bibliotecas Escolares", who have since 2002 been putting forward some

advices regarding the BE/CRE teams: "a team should be made of a reduced number of people (3/4), so it can be a functional and agile structure, and each one should have enough time to develop a consistent work" (RBE, 2006, bold in the original).

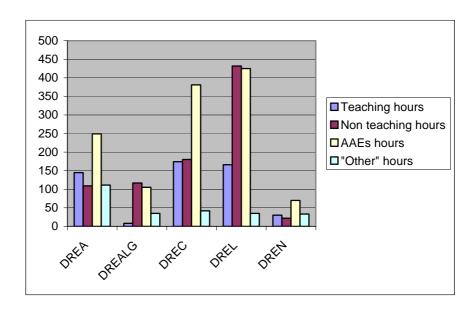
School admin staff (AAEs) also integrate the majority of the BE/CREs' teams either on a full time or part time or even less than part time basis. This fact is shown in Graphic 3.



Graphic 3 – Number of school admin staff in the BE/CREs' teams (by DRE)

We have also found "Other" people, external to the EBI, in the library teams, like "Auxiliares Técnicos de Educação", teachers of other schooling cycles and on a full time basis as they are at the pre-retirement period and "Animadores Culturais".

In what refers to the total number of hours on the timetable dedicated to the BE/CRE (Graphic 4), it is clear the superiority of hours spent by the AAEs' when compared with the teachers' ones. It is also important to highlight the number of hours of the "Other" people, which in 3 BE/CREs are more than the teaching and non-teaching hours together.



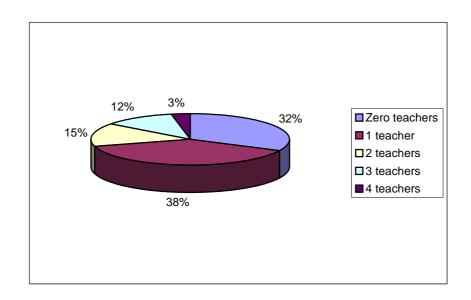
Graphic 4 – Total number of hours on the timetable to work in the BE/CRE

After analysing Graphic 4, it can be concluded that what is offered by the BE/CRE, including the support and guidance of students is most of the time an AAEs' job. These people, together with the "Other" group keep the BE/CREs going. The total number of hours dedicated by these two groups to the BE/CRE is bigger when compared to any of the other ones.

This documented scenario raises serious questions to the functioning efficacy of the big teams, as each one of these people only have a reduced number of hours to work in the school library. The interviews will hopefully bring some light upon this situation and will allow a detailed analysis of its consequences on a supposed well-performed library duties.

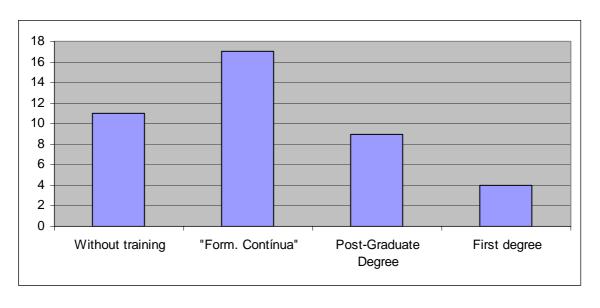
Human Resources Specific Training. After analysing the data regarding BE/CREs human resources training, one can say that there is a very reduced number of team members who have undergone some specific training: from 256 teachers belonging to all the school library teams only 39 (15.2%) had some kind of training.

Graphic 5 shows the characteristics of the 34 teams in terms of number of specifically trained teachers. There are eleven teams, i.e. 32% of the whole, who do not have any trained teacher and 38% said they had at least one teacher with some kind of training.



Graphic 5 – Characteristics of the teams in terms of number of trained teachers

The domain, type and number of hours of training of the BE/CREs' coordinators are varied. The majority of the coordinators who have said that had some training also said it was a "Formação Contínua" type one, which is clearly the type of training most undertaken. This training lasts most of the times between 50 and 150 hours and the preferred ones are: "Library Management/Documentation" (13 school librarians), "ICT" (6 school librarians) and "Animação Cultural" (5 school librarians). The second most adopted type of training is the Post Graduation degree. There are 9 school librarians with a Post Graduated degree, 5 of which are in Librarianship and the others on "Animação Cultural", "ICT", "Library Management/Documentation" and "Master in Education, Communication and Language". In the third place are the First Degrees and 4 school librarians have degrees in "Multimedia Educational Communication", "Animação Cultural", "ICT" and "Kindergarten and Sciences Education".



Graphic 6 – School librarian's type of training

Graphic 6 shows the type of training undertaken by the 34 school librarians: 11 (32%) reported not having any kind of training, 17 (50%) said they had some "Formação Contínua"

in eight different areas, 9 (26.5%) have a Post Graduate degree in five distinct domains and 4 (11.8%) said they have a First Degree in four other areas. It is important to highlight that 7 school librarians have more than one training type and domain.

In what refers to school librarian hours spent at school, 3 of them did not provide an answer, but the other 31 complete answers enabled us to say that these school librarians spend an average of 26 hours per week at school, being 11, in average, set on the timetable to work in the school library, 13 are teaching hours and the remaining are set to "other" duties. It is also relevant to point out that 29 (85.3%) had their teaching hours reduced to be able to perform their school librarian tasks.

Equipment and infrastructures. The current situation in terms of equipment and infrastructures is presented in the following table.

			DREC	DREL	
	DREA (8)	DREALG (3)	(11)	(10)	DREN (2)
Computers	51	21	54	71	9
Audio	21	5	26	39	9
Video	16	5	18	27	2
Printer	8	6	13	14	2
Photocopy machine	4	3	6	6	1
Local-Network - BE/CRE	3	2	5	5	0
Local-Network - Other	3	1	5	6	2
Internet	8	3	11	10	2
Intranet	2	0	2	1	0

Table 1 – Equipment and infrastructures at BE/CREs (by DRE; digit between () refers to number of BE/CREs in that DRE);

All the BE/CREs are very well equipped as it can be seen from Table 1 above. But this is even more evident if we take into account the indicative proposal for calculating quantities suggested in the "Lançar a Rede de Bibliotecas Escolares" report (Veiga, 1996, p.49): 2 computers in the BE/CRE when schools have between 201 and 500 students and 3 for schools having between 500 and 1000 students. The current BE/CREs scenario at the EBIs, concerning number of computers by number of students is presented on Table 2 below.

	DREA	DREALG	DREC	DREL	DREN
Average students/school	383	274	524	935	725
Average computers/school	6	7	4	7	4

Table 2 – Average of students and computers per school (by DRE)

Looking at Table 2 and having in mind the cited report's indicative proposal, one can say that all the BE/CREs have more than enough computers, as their quantities are two or even three times higher than the suggested ones.

All the BE/CREs have audio and video equipment in various quantities, except for the photocopy machine that is only available at 2/3 (23) of the school libraries. The technological infrastructures are in place in all the BE/CREs: all of them provide Internet access, 5 have already Intranet, 15 have a local network only for the library and 17 have it already connected to other school services.

Conclusions and some questions

On the whole and in what human resources and its training are concerned, the data gathered from the 34 BE/CREs coordinators, belonging to the public EBIs that are already in the School Libraries Portuguese Network and which were the target group for this first research phase, indicate that teams have many people, being mainly teachers working less than half-time. Is it possible for 38 teachers working in the library less than half time to actually do some work? What can they do with about half an hour per week for each of them?

Almost all BE/CREs have one or two full time school admin staff (AAEs) working there and they are who keep the library going and give support to students. The total number of hours "given" to the BE/CRE by the "Other" group of people external to the EBI, is also high and in three specific cases is higher than the teaching and non-teaching hours together, i.e. those set for teachers to work in the library. What does this mean? Does the assignment of such important functions as the development of literacy competencies, collaboration between school librarian and teachers and training of teachers in accessing information, just to name a few, to AAEs and "Other" people mean that there aren't enough available teachers?

There are few teachers who have been specifically trained to perform their duties in the BE/CREs and about a third of the teams do not have a single teacher who have had some training. BE/CREs coordinator's training area, type and length is quite varied and there are 5 of them who have a Post Graduate Degree in Librarianship. Having said this and taking into account that:

- 1. International studies concluded that students achieve higher levels of literacy, learning and problem solving when school librarians have had specific training to perform their duties in the library;
- 2. According to PISA 2003 (OECD, 2004), in all evaluated areas reading, maths, sciences and problem solving Portuguese 15 years old students have had a modest performance, when compared with the correspondent average values of OECD countries; on maths literacy, PISA's 2003 main area, there was a too high percentage of Portuguese 15 years old students with a less than 1 proficiency level, which is a worrying situation for about 1/3 of our students, and in problem solving Portuguese 15 years old have had in average a significantly poorer performance compared with the OECD's average;

Shouldn't then the school librarians' specific training turn into a top priority?

In average, BE/CREs coordinators spend 26 hours per week at school, 11 of which are set to BE/CREs tasks and the majority have had their teaching hours reduced. Do these school library coordinators have the right competencies so that those 11 hours are really for

students' benefit? What are the consequences of this timetable fragmentation in the quality of the services offered by the BE/CRE?

The BE/CREs are all very well equipped and have the right infrastructures already installed as there are enough computers and access to the Internet is available in all of them. Video and audio equipment is also at students' disposal. In conclusion, ICT is already a reality in our schools and ready to use and be accessed by all students. But the BE/CREs teams shouldn't also have to have the right competencies to, for example, give support and guide students on the access and selection of relevant information, at their disposal from the same ICT?

After presenting all these facts and figures, it is fair to say that the current BE/CREs situation and especially in terms of its human resources training has not positively evolved since ten years ago. As back as in 1996, the "Lançar a Rede de Bibliotecas Escolares" report (Veiga, 1996) already highlighted BE/CREs human resources poor quality and quantity. It is thus urgent that this situation is rapidly changed and that it should be given the chance to the BE/CRE coordinator to receive specific training according to the school library duties. This training could have a positive impact on the academic achievement of our students.

The answers to the questionnaire, apart from gathering data that enabled a clear and current view of the BE/CREs scenario, raised some other questions, like for example the reason for the existence of such big teams, the lack of specific training and the strong presence of AAEs and "Other" people in the teams. We will be looking for answers to these and other questions at the second phase of this research when the interviews to the BE/CREs' coordinators, direct observation and document analysis take place at the selected schools.

References

Baumbach, Donna (2003). Making the Grade: the status of school library media centers in the Sunshine State and how they contribute to student achievement. Florida: University of Central Florida.

Bento, Isabel (1998). Como incentivar e apoiar a pesquisa de informação: desenvolvimento de projectos no 2º ciclo do ensino básico. Lisboa: Ministério da Educação, Dep. De Avaliação Prospectiva e Planeamento.

Bogdan, R & Biklen, S. (1994). Investigação qualitativa em educação : Uma introdução à teoria e aos métodos. Porto: Porto Editora

Calixto, José António (1996). A biblioteca escolar e a sociedade de informação. Lisboa: Caminho.

Canário, Rui (1998). Desenvolvimento de bibliotecas escolares e formação contínua de professores. Lisboa: Departamento de Avaliação Prospectiva e Planeamento do Ministério da Educação.

Gonçalves, Maria José Vitorino (1998). Bibliotecas, mediatecas, centros de recursos nas escolas – com quem?: Orientações de apoio à concepção e gestão de formação contínua de professores. Lisboa: [s.n.].

Krashen, Stephen D. (1995). "School libraries, Public Libraries and the NAEP Reading Scores". In *School Library Media Quarterly*. Vol. 23, n.° 4, p. 235-237.

Lance, Keith Curry (2000). Information Empowered: the school librarian as an agent of academic achievement in Alaska schools. Juneau: Alaska State Library.

Lance, Keith Curry (2000a). Measuring Up to Standards: The Impact of School Library Programs and Information Literacy in Pennsylvania Schools. Camp Hill, PA: Pennsylvania Citizens for Better Libraries.

Lance, Keith Curry (1993). The Impact of School Library Media Centers on Academic Achievement, (The original 1993 Colorado Study). Castle Rock, CO: Hi Willow Research.

Magalhães, Ana Maria [et al.] (1998). A biblioteca da escola e o prazer de ler. Lisboa: Ministério da Educação, Dep. de Avaliação Prospectiva e Planeamento.

Maia, Mário (1998). As tecnologias de informação como recurso educativo. Lisboa: Ministério da Educação, Departamento de Avaliação, Prospectiva e Planeamento.

- Manifesto da UNESCO sobre Mediatecas Escolares. In CONGRESSO NACIONAL DE BIBLIOTEÁRIOS, ARQUIVISTAS E DOCUMENTALISTAS, 4, Braga, 1992. Informação ciência cultura: bibliotecas e arquivos para o ano 2000: actas. Braga: BAD, 2º vol., p.512-513.
- Novlijan, Silva (1998). "Pupil's reading is better in schools with a librarian". In *Journal of Research in Reading*, vol. 21, n°3, p. 228-231.
- OCDE (2004). PISA 2003, Programme for International Student Assessement: Conceitos fundamentais em jogo na resolução de problemas. Lisboa: Ministério da Educação. Gabinete de Avaliação Educacional.
- Offenberg, Robert M.; CLARK, Thomas J. (1998). Library Power: impact on student achievement as measured by the Stanford Achievement Test, 9th Edition. Report prepared by the Office of Research and Evaluation, The School District of Philadelphia.
- Que posso fazer na biblioteca da escola?: ficheiro para autonomia dos utilizadores (1998). Coord. Cristina Barroso. Lisboa: Ministério da Educação, Dep. de Avaliação, Prospectiva e Planeamento.
- RBE (2006). Orientações sobre a gestão de recursos humanos no contexto das bibliotecas escolares. (acedido a 14.02.2006 em
- http://www.rbe.min-edu.pt/programa/legislacao/orientacoes_equipas_BE.doc)
- RELATÓRIO DO QUESTIONÁRIO DE AVALIAÇÃO: ANO LECTIVO 2000/2001 (2002). Lisboa: Gabinete da Rede de Bibliotecas Escolares.
- Silva, Lino Moreira da (2002). Bibliotecas escolares e construção do sucesso educativo. Braga: Universidade do Minho, Instituto de Educação e Psicologia.
- UNESCO (1999). Manifesto da Biblioteca escolar: a biblioteca escolar no contexto do ensino-aprendizagem para todos. Lisboa: Ministério da Educação, Gabinete da Rede de Bibliotecas Escolares.
- Veiga, Isabel [et al.] (1996). Lançar a rede de bibliotecas escolares: relatório síntese. Lisboa: Ministério da Educação.
- Williams, Dorothy (2001). The impact of the school library resource centre on learning, Research Report 9. The Robert Gordon University, Faculty of Management, School of Information and Media.

Additional Bibliography

- Bell, J. (1997). Como fazer um projecto de investigação. Lisboa : Gravida.
- Foddy, W. (1996). Como perguntar : teoria e prática da construção de perguntas em entrevistas e questionários. Oeiras: Celta.
- Gorman, G. E. & Clayton, P. (1997). Qualitative research for the information professional. London: Library Association Publishing
- Patton, M. Q (1990). Qualitative evaluation and research methods. London: Sage
- Slater, M (ed.). (1990). Research methods in library and information studies. London: Library Association Publishing

Author Note:

Ana Novo, PhD student at DCTI, ISCTE, Lisbon, Portugal. Has a Post-Graduated Diploma in Library and Information Studies and an MA in Library and Information Studies both from The Manchester Metropolitan University, UK. Has served as a Librarian in The British Council, Library and Information Services, Lisbon and in UIED - Unidade de Investigação Educação e Desenvolvimento, FCT-UNL.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission	n.