This paper reports on a two-month study of the information literacy of 26 grade seven teachers within a circuit of 17 primary schools in Cape Town (South Africa), comprising three historically advantaged schools situated in a historically white suburb and 14 disadvantaged schools in adjacent historically black townships. The focus of the study is project work, which an earlier ethnographic field study confirmed to be a useful window through which to view teachers' information literacy. Preliminary analysis of the data shows that most of the teachers, even in the relatively well-endowed schools of the circuit, use very few resources. Very few plug into the library and other information networks of the city. It is suggested that some of the projects are projects in name only, because teachers filter new concepts and methodologies through their own conceptions of what good teaching and learning are. Moreover, it seems that an understanding of the philosophy of project work is as important as the availability of a wide range of learning materials. One of the lessons for information literacy education is the realization that some of the more exciting work uncovered in the study exploited resources within the surrounding community, however impoverished that might be. The paper concludes with some suggestions for teacher development programs. (Contains 17 references.) (MES)
Project work as a vehicle for information literacy education in a circuit of South African primary schools

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Abstract

Information literacy, the development of which is accepted as the central mission of school librarians, is a necessary prerequisite for successful participation in the global information society. South Africa’s new curriculum, Curriculum 2005, explicitly lists information skills as a crucial outcome of schooling - and has accordingly introduced new methods of assessment, encouraging continuous evaluation by means of portfolios and project work for example. There is already evidence however that teachers are struggling to implement the new methods - owing to gaps in their training, lack of support, and shortages of resources. Since only a tiny minority of South African schools have qualified school librarians (indeed less than a third have any sort of library), the successful development of information literacy depends on classroom teachers. The need to investigate their capacity to take responsibility for information literacy education is thus clear.

This paper reports on a two month study of the information literacy of 26 Grade Seven teachers within one circuit of 17 primary schools in Cape Town - comprising three historically advantaged schools situated in a historically white suburb and 14 disadvantaged schools in adjacent historically black townships*. The study builds on an ethnographic field study of project work within one school in the circuit which has already been reported on (Hart,
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1999). The focus of this larger investigation is still project work - as the earlier ethnography confirmed it to be a useful window through which to view teachers' information literacy. The common ground between the so-called project method and information literacy education has been well documented. Good project work adopts a constructivist approach to learning in which learners define a problem or question and then work through a process (not always linear) of finding, interpreting, synthesizing and creating information to solve the problem.

Preliminary analysis of the data shows that most of the teachers - even in the relatively well-endowed schools of the circuit - use very few resources. Very few plug into the library and other information networks of the city. It is suggested that some of the projects are projects in name only because teachers filter new concepts and methodologies through their own deeply held conceptions of what good teaching and learning are. Moreover, it seems that an understanding of the philosophy of project work is as important as the availability of a wide range of learning materials. One of the lessons for information literacy education is the realisation that some of the more exciting work uncovered in the study exploited resources within the surrounding community - however impoverished that might be. The paper concludes with some suggestions on the need for teacher development programmes that start "where teachers are" and that encourage teachers to reflect on their long-held beliefs and the implications of these for the introduction of new methodologies.

* Although apartheid has gone, its legacy means that we still have to use such terms


Paper

The paper reports on the second phase of an investigation I conducted in 1998 into the capacity of South African teachers to take on information literacy education by means of their project work.

Background

South Africa's new curriculum, Curriculum 2005, has followed the example of other countries in explicitly recognising information literacy as a critical outcome of schooling. An Information Skills Learning Programme has been developed and the Western Cape Education Department (WCED) has appointed three information skills advisors to promote it. There is a move away from examinations towards continuous assessment methods by means of projects and portfolios of work. However less than one third of our schools have any sort of library (South Africa. Department of Education, 1997) and only a tiny minority have librarians, even on a part-time basis. So information literacy education has to take place in contexts different from those described in much of the international literature. My study set out to explore these contexts within one circuit of schools and to investigate how the increase in project work might provide an opening for information skills teaching. Examination of the literature shows that, at least in theory, both the so-called project method and information literacy education share a learner-centred constructivist philosophy of learning. Project work provides a meaningful context for the development of information skills.
The study reported on in this paper builds on an earlier ethnographic field study of project work within one primary school in Cape Town - a school I named Galant Primary School (Hart, 1999).

Ethnographic field study of Grade Seven projects within Galant Primary

The original purpose of the earlier study within Galant Primary had been to take an in-depth look at Grade Seven project work with a view to suggesting ways of enhancing it for information literacy education. In the first few days within the school I was confronted with puzzling gaps and contradictions. Teachers were telling me that they were "doing a project"; and they were in early interviews using the jargon of the new curriculum. But what I was observing everyday in class seemed little different from the teacher-centred "chalk & talk" prevalent in most South African schools in the past (Kallaway, 1990). The focus of the study shifted to look more closely at teaching and learning styles. It eventually concluded that the projects I had observed were projects "in name only". It suggested that the teachers' deeply-held beliefs acted as filters for new ideas and methods. It was not that the teachers were misleading me - indeed they sincerely believed that they were progressive teachers ahead of educational change. The research in teachers' beliefs threw light on the contradictions. For example, to explain similarly puzzling gaps between teachers' versions of what was happening in class and his own, Barnes (1992) suggests that many teachers can only "frame" what happens in their classes in one way. The fact that they saw only one set of possibilities for teaching explains why the teachers in my study constantly referred to outside conditions - lack of resources, lack of parents' support, community poverty - as explanations for their classroom behaviours. The implication here is that if teachers' fundamental conception of teaching is "giving" information and of learning is "finding the right answer" then a few afternoon workshops will not help them make the fundamental shifts in thinking required for effective information literacy education.

Study of Grade Seven project work in the other primary schools of the circuit

The follow-up study, the main focus of this paper, widened the lens to examine project work within the other primary schools of the circuit. It involved two sets of interviews. Sixteen principals were interviewed, using a structured questionnaire, with a view to building a picture of what Moore (1998) calls in her New Zealand study the "information climate" within the schools. Then I conducted in-depth interviews with 26 Grade Seven teachers in all but two of the schools using a semi-structured questionnaire. The chief subject of the teachers' interviews was their management of projects.

Until 1995, the schools fell under three racially-divided education departments - three are historically white ex-Cape Education Department schools (ex-CED), 13 are historically coloured ex-House of Representatives schools (ex-HOR) schools and one is an historically African ex-Department of Education and Training (ex-DET) school. Since only one ex-DET primary school was included in the study (the only other one in the circuit is a semi-private church school and so was not included) my analysis grouped the ex-HOR and ex-DET schools as "black". Both sectors were disadvantaged in apartheid South Africa though the DET schools were always at the bottom of the pile.

Information climates of the schools: principals' interviews
My preliminary questionnaire for the principals built a picture of information resources in use both inside and outside the school. It also included questions about school policy on project work and information skills teaching.

The implementation of national teacher/pupil ratios to redress past discriminatory policies has led to a turbulent period especially in the ex-HOR schools. Class size varied from 30 to 58 with three of the teachers in the ex-HOR schools struggling with a class of over 50 learners. Schools that serve middle class communities have been able to turn to school fees to cushion the effects of the national norms. Thus all three of the historically white schools had teacher librarians - paid for out of so-called "governing body" funds. None of the black schools had even half-day teacher-librarians, though many of the ex-HOR schools had had teacher-librarians from the mid-1980s until about 1994. With the disappearance of their librarians, the position of school libraries in the ex-HOR schools has deteriorated. Only three principals claimed to have a library; while eight reported that their libraries were no more than bookstores - with an average stock of 1.5 book per pupil. Only one had acquired new books in the past year. This contrasts with the historically white schools - all of which had bought new books that year - using governing body funds. These three libraries had an average of 11 books per learner. The one ex-DET (historically African) school in the study had no library at all - having no spare room and no library books.

The situation with regard to computer and audiovisual facilities was equally barren. Only the three historically white schools had computers for teachers and pupils -with two of these having access to the Internet.

Cape Town is a large metropolis, a national and provincial capital. The schools lie no more that ten kilometres from the centre of Cape Town with its wide range of libraries and museums - including the Western Cape Education Department's teachers' library, Edulis, which sends block loans of books out to schools for projects. All the schools are close to public libraries. However, the principals seemed surprisingly unaware of the existence of these kinds of facilities. Only six had heard of Edulis, for example.

The preamble to the Information Skills learning programme in our interim curriculum points out that "information resources can be found among the people and in the environment of any community" (WCED, 1995:2). The Basic Information Science programme of our neighbour Namibia contends that information literacy can be developed in disadvantaged schools through the use of community resources such as local leaders and clinics (Marais, 1996: 56). Eisenberg, a leading information literacy specialist in the USA, agrees that information literacy education does not require well-endowed environments. In response to my question to the Big6 Listserv in 1997, he replied that the Big Six model was "applicable in any situation and actually, in underresourced situations students still need to solve information problems. [Students] still have a need to define the problem, decide on the best information source - textbook, notes, other people - use the information..."(Eisenberg, 1997). Surely, however, if this approach is to succeed, schools do need to build information literacy education consciously into their programmes. There certainly seemed very little awareness among the principals in my study of information skills or even of the new supposedly compulsory subject Information Skills.

Overall then, the finding of the principals' survey is that, in terms of information provision and recognition of teachers' and learners' information needs, the climate within the schools was not favourable for information skills teaching.
However, despite the obvious shortages of resources, all reported that their school regularly undertook project work from Grade Four upwards. The bleak picture I gained from the principals certainly piqued my interest as to how the teachers were coping and as to what kind of projects they were doing.

**Grade Seven project work & information skills: analysis of teachers' interviews**

I interviewed 26 teachers - more than 50% of the Grade Seven teachers of the circuit. All 26 had training college primary school teaching qualifications - with eight holding university degrees as well. Eighteen had more than five years' experience and eighteen had spent all their working lives at their present school. Half of the teachers claimed to have received no training in project work. Twelve teachers had no computer experience while another seven had used a word-processor only. Only one teacher had Internet experience. Only three had heard of the concept of information skills.

The teachers' interviews, including a mix of closed and open questions, had five foci:

- the teachers' experience and training,
- their views on project work in general
- details of the most recent project they had undertaken using the criteria evolved by Tann (1988) in her survey of project work in UK schools
- use of learning and information resources in their teaching in general
- an open-ended information problem - following the example of an Australian study (Todd, Lamb & McNicholas, 1993). The aim was to assess their awareness of the information search as a cognitive process involving phases, as depicted in various information models (Kuhlthau, 1993).

The interviews had two strategies to uncover any gaps between teachers' "official" views and their deeply-held frameworks - of the kind I had found in the field study at Galant Primary. The first was both to ask for general views about project work and to zoom in for specific details of the most recent project they had undertaken that year. The second was to use a mix of closed and open-ended questions. I hoped that the qualitative data might provide a window on the teachers' fundamental beliefs about learning and information.

**Use of resources**

The teachers' use of resources in their everyday teaching was very limited. The most frequently mentioned items were books borrowed from friends and their own books. Fifteen claimed to use their local public library at least "every few weeks" but 20 teachers in the township schools felt they could not send their classes to the local library out of fear that they might get caught up in territorial gang warfare. The teachers at the only schools with a functioning library used it every week - relying on it more than any other resource. Nine teachers claimed to make weekly use of teachers' resource collections held within the schools. The WCED's Edulis seemed hardly to be used at all. Most said that it was "too far".

Twenty-three teachers said that they never used the National Film Library and all 26 never used the public library film/video collections. It was difficult to get
clear answers as to why - they just did not seem to see a need for audiovisual resources. Also the teachers working in township schools agreed that equipment was in constant danger of being stolen.

Teachers and project work

All 26 teachers said they felt positive about project work, listing various benefits and skills demanded. They all showed a theoretical understanding of project work, all agreeing that it means a move away from didactic teacher-centred methods. Most equated it with group work.

Despite the unanimously positive views given in the formal questions, scattered throughout the more open-ended responses were many doubts over the feasibility of project work in their circumstances. Here they were usually not referring to the provision of resources; indeed there was consensus that shortages of resources need not prevent project work. They were rather referring to the abilities of their pupils. Like the teachers at Galant Primary, many doubted whether "our kids" could cope with the learner-centred approaches recommended in the new curriculum. The most frequent complaint was that their pupils were unable to work on their own and that the teachers ended up having to "do everything".

On being asked to specify the learning outcomes of their most recent project, very few of the teachers in my study mentioned the kinds of skills or benefits they had listed in the more general theoretical questions. Here most talked of what they had wanted the children to learn. Similarly when asked what phases the project had gone through, all the teachers interpreted this in terms of topics and sub topics - thus in terms of content rather than phases of the information search process. Teachers seemed pre-occupied with marks but hardly any kept records of work done in the course of the project. Almost all assessment depended on the final product. They spent on average about 36% of their class time on projects yet allocated only 20% of their term marks to them. On the whole, the projects were extremely teacher-centred. For example, there seemed to be no awareness of the importance of having learners come up with their own problem or question to investigate - found to be crucial to effective project work (McGregor, 1994). The topics were on the whole very much of the "go and find out about" variety rather than problem based and very few of the projects can be described as interdisciplinary. Typical titles were: "gypsies and Eskimos", "animals", "leaves", "Sharpeville".

The most successful projects were the practical ones. One class researched the cooking of various countries in recipe books brought in by the teacher and produced dishes. Another made a newspaper, using the local free community paper as a model. One teacher had his class go out at regular intervals to measure the shadow of a stick and so make a sundial. All these have potential for information literacy education and none of them requires expensive resources.

The more focused discussion of their most recent projects confirmed the patterns of resource use described in the previous section. Teachers' own books and textbooks were the most common resources - followed by friends' books. The school library was mentioned by all four of those working within the historically white schools. Teachers were also asked what their class had had access to in the course of the project. The most common replies were the teachers' own books and worksheets. Textbooks came next and then newspapers.

My time at Galant Primary had alerted me to the danger of what Beswick in 1984 called the "tyranny" of worksheets. Of course worksheets in themselves are
not bad news for information literacy. They can serve to scaffold learning. But the ones I had seen at Galant consisted of passages copied from textbooks with key words omitted. The most frequent task was to hunt out the missing words. Teachers at Galant told me that the use of worksheets enabled them to bypass their pupils' reading problems. And indeed I found virtual unanimity amongst the 23 teachers in the other township schools that reading problems were hindering their project work. It is tempting to speculate that the reason why none of the teachers at the historically white schools reported low levels of reading might be that their learners had had access to libraries from Grade One.

The discussion of resource use has thus to consider some fundamental pedagogical issues. One of the claimed benefits of the project method is that it provides the opportunity for the application of reading and writing skills - and of course of information skills. Project work is often described as being about process rather than product. Yet the teachers in my study saw the lack of reading skills as an obstacle to project work rather than project work as a means to improve their reading. The limited range of resources used suggests that the teachers did not see project work as an opportunity for children to learn how to find, analyse and synthesise information. Only 10 spent time before or during the project teaching some of the skills needed. As mentioned above, the most frequent complaint among the teachers was that their pupils were unable to work on their own. I had found at Galant Primary the same kind of assumption that children just pick up such skills.

Conclusions

There hasn't been the space here to analyse systematically the data gathered or to trace the complex connections among them. The chief finding is that the projects on the whole did not teach information skills. My analysis suggests that most of the teachers had what Paulo Freire calls the "banking" conception of teaching, in which the teacher is the banker or controller of knowledge - a model perhaps incompatible with the philosophy of the project method. The significance for information literacy education is that information is thus something rather than a constructive process. Teachers blame external factors for the ineffectiveness of their projects with many claiming that projects are "a good thing" - but not with their pupils. However, if the gap between the kind of learning in everyday class work and that in project work is too great, children will tend to dismiss project work as not "real" learning. Overall, the style of the projects might lend support to international evidence that teachers often pay lip-service to the child-centred philosophy of projects while in reality employing them as convenient classroom management (Kerry & Eggleston, 1994: 188). Indeed, those in the historically black schools all agreed that group project work was a way of keeping their large classes busy.

Implications & recommendations

The significance of the study is its finding that projects will not teach information literacy any more than any other pedagogical choice. Information literacy is intertwined with teachers' beliefs about learning.

Teacher education

My findings have received support from recent studies within 300 South African schools that show teachers are struggling to implement our new curriculum (Taylor & Vinjevold, 1999). According to the research in teachers' beliefs and scripts, such failures are caused by unrealistic expectations on the part of
researchers and developers (Barnes, 1992: 12). Teachers cannot simply be expected to implement new ideas since they interpret these ideas only in terms of their existing, often inappropriate, beliefs or frames. This means that changing teachers' practices depends on changing their frames, or, at least, expanding their repertoire of frames.

If teachers are to build the capacity to develop information literacy in their classrooms, they will need on-going support as they introduce new methods and reflect on them. It is difficult to see how the existing three departmental information skills advisors, each of whom has hundreds of schools under his or her wing, can possibly manage this kind of training. Collaborative projects are urgently needed. Good support materials need to be developed. Information literacy outcomes need to be spelled out in the new outcomes-based textbooks across the curriculum.

Access to information and learning resources

Given the current economic climate and the lack of basic facilities such as classrooms and electricity, the provision of school libraries is not likely to be a priority for our government. There is a national policy framework for school library standards in the pipeline (South Africa. Department of Education, 1998) and a four-year implementation plan is being circulated for comment at the moment. However the document merely describes various models of resource provision - including classroom collections, shared teachers' resource centres and so-called "one school -one library". It will be up to each school to decide for itself which model is appropriate. Given the findings of my study, it is hard to see teachers and principals understanding the urgency of the need to provide for information literacy education. Far more positive government intervention is needed if the gaps between information rich and information poor are to be narrowed.

The fact that the schools in my study are small and are geographically close to one another might suggest shared or clustered facilities. This would have to be accompanied by the kind of teacher education I described above. The mere provision of resources will not automatically change teaching and learning styles. My study of Cape Town children's public libraries in 1999 indicates that we cannot assume that they can play a stronger role. Their educational role has not been clarified; they fall under different governance structures; they are understaffed; teachers seem to have no idea of their role (Hart, 1999).

A possible solution to the shortage of resources might be information technology; perhaps the Internet might serve to "leapfrog" disadvantage. However schools would need generous provision and support. I have witnessed the futility in giving a school one computer with access to the Internet - with no further backup. And again, even a well-equipped computer room does not guarantee information literacy education.

If we are to develop information literacy education in our schools, we need pilot projects in clusters of schools. Roleplayers from various sectors will need to collaborate to design effective interventions - which might provide small groups of teachers with support as they experiment with new methods. Of course, we also have to speak with a far louder voice about the urgent need for learning resources - and for school libraries.

References


- Western Cape Education Department. 1995. Interim policy documents for the junior and senior primary school phases. Cape Town: Western Cape Education Department.
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