

The literacy-curriculum interface: Literacy demands of the curriculum in post-compulsory schooling

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This project[1] which examined literacy demands across curriculum in the senior years of schooling (Years 11 and 12) was undertaken in response to the brief that the research should:

consider the inclusiveness of the curriculum requirements of the post-compulsory years, and the adequacy of these in the preparation for the workplace, vocational training and tertiary education.

Specific aims of the project identified in the brief were to:

- collect evidence of the literacy practices of students in the post-compulsory years, across the whole cohort
- provide some systematic evidence of the literacy demands across all key learning areas in post-compulsory curriculum
- explore the interfaces between the compulsory and post-compulsory years, between school and first year university, and between post-compulsory education and vocational education and training
- gather evidence of teaching practices which help students to overcome barriers to success related to their levels of literacy achievement
- consider the inclusiveness of the curriculum requirements of the post-compulsory years, in view of the diverse nature of the student cohort
- consider the educational variables relating to literacy within the whole cohort which have a significant impact on success in the post-compulsory years
- make this information available to those with responsibility for curriculum development and implementation in the post-compulsory years of schooling.

For the general purposes of the project, literacy was defined to include reading, writing, listening, speaking, viewing and critical thinking, as defined in the Australian Language and Literacy Policy (1991) and used more recently by Lokan et al. (1995). The definition indicates how literacy and curriculum are interactive and fully interdependent:

the ability to read and use written information and to write appropriately, in a range of contexts; to develop knowledge and understanding; to achieve personal growth; and, to function effectively in our society. Literacy also includes the recognition of numbers and basic mathematical signs and symbols within text plus the integration of

speaking, listening and critical thinking with reading and writing.
(Lokan et al., 1995, p. 32)

This is one of several literacy definitions which point to the dynamic nature of literacy understood to include, among other elements, semiotic, visual, and textual practices. Such definitions indicate the role of cultural knowledge in meaning making, and the cultural and contextual dependency of literacy.

To undertake this project, a multitheoretical and multidisciplinary approach to understandings of literacy was considered to be essential. This approach is elaborated further within the reports and other publications.

In addition, we explored all curriculum areas with subjects taken from three main strands: arts/humanities; maths/science; and technological/vocational education. Data were collected in two states of Australia, Queensland and New South Wales, as these states were identified as having the most different systems of school certification and assessment in the senior years of school.

The project involved three phases. *Phase 1* consisted of comprehensive document analyses of syllabus guidelines and policy documents for subjects in post-compulsory schooling in New South Wales and Queensland, in order to explore the literacy demands of the *official* curriculum. *Phase 2* of the project involved a survey of the reported literacy practices of 1600 Year 10, Year 11 and Year 12 students in the two states. Respondents to the sample were drawn from representative samples of schools across the State, Catholic and Independent school systems. The survey explored reading, writing, listening, speaking and viewing, for in-school and out-of-school leisure, study and work activities with information also collected on various background variables such as language spoken at home.

Phase 3 comprised two parts: data collection, and expert analyses. The major source of data for the study was video recordings of the literacy/learning environment as experienced by a sample of students from four schools, two from Queensland and two from New South Wales, with representation of metropolitan and rural sites. In video recording, the student was not the object of the video but, in effect, was understood as a 'studentcam' for capturing the literacy demands of the *delivered* (as distinct from official) curriculum. Various classroom artefacts related to the students' schooling experiences were also collected.

For the data analyses for *Phase 3*, four-hour segments of video data were compiled for analyses by experts who presented different theoretical and methodological approaches to the data. The results of these analyses are summarised in the report with the original analyses to be published in full in a monograph.

Overall, the findings of our data and analyses include general principles for literacy demands of the post-compulsory curriculum, issues concerning the teaching-learning relationship and specific findings related to assessment issues. Some of these findings include:

The nature of literacy demands varies from subject to subject

- For teachers to understand the literacy demands faced by students, teachers have to first understand the literacy requirements of their subject.
- It is important for teachers to realise that students face shifting literacy demands both within and across subjects. When demands shift within subjects, students benefit from teacher cueing.
- Teachers need to derive better understanding of the literacy demands across subjects and within their own by discussions with other teachers from different discipline areas.
- In order to negotiate the curriculum successfully, students must learn to coordinate multiple literacies simultaneously.
- Extended periods of listening make heavy literacy demands on students.

Student and teacher actions and interactions

- Opportunities to 'do' or 'produce' seem to trigger higher degrees of engagement.
- Explicit modelling and timely and appropriate feedback are essential in maintaining student engagement.
- Students would benefit from classroom time being given to exploring the multiple meanings they may hold about the material being taught.
- Teachers should ensure that students share common meanings of subject-specific terminology. Once known, the use of this terminology in instruction can reduce literacy demands.
- Textbooks often play an ancillary role in classrooms and are not the real focus of the literacy demands of the class. Little attention tends to be given to making explicit or modelling how textbook reading should occur.

Impact of assessment on literacy demands

- The assessment system plays a large part in driving the curriculum and literacy expectations.
- There is often a difference between student understanding of what they are required to know and do and teacher or institutional expectations. Teachers need to make explicit for students their assessment expectations.
- The language of the subject in the classroom and the language of the subject in assessment are not always matched.

More specifically, our findings note the need to consider issues relating to 'curriculum literacies' whereby the multimodality and complexity of the literacy demands for students as they undertake each subject and as they move from subject to subject must be explored.

IMPLICATIONS FOR THE NATIONAL PLAN

The National Plan (DEETYA, 1998) emphasises the importance of participation in education and its relationship to literacy development. The National Plan also states that 'if children have not met appropriate literacy and numeracy standards by the end of primary school, they are unlikely to make up the gap through the rest of their

schooling'. A major finding of our study was that despite the high and multiple literacy demands of post-compulsory schooling, which we defined as 'curriculum literacies', we found little evidence of systematic instruction and scaffolding of these literacies in Years 11 and 12. In general, where such supportive instruction did occur, it was seen in subjects other than English.

Therefore, while we do not necessarily endorse that all appropriate literacy and numeracy standards can be attained by the end of primary school, and would in fact agree that many of the curriculum-specific literacy and numeracy demands of secondary studies cannot be contextualised by students until they are studying in those areas, we do believe that further attention needs to be paid to developing learning in curriculum literacies in the middle years of schooling, lower secondary schooling (up to and including Year 10) and in senior secondary schooling.

PROFESSIONAL DEVELOPMENT PRIORITIES

In the report we make a number of recommendations for professional development, the most significant of which are repeated here.

As a first priority, we recommend that funding be provided for professional development of teachers across systems and across all subject specialisations to increase (i) their understandings of the literacy demands of syllabus documents, and (ii) their understandings of curriculum literacies in their areas of specialisation.

We recommend the following types of professional development as preferred activities for optimising teacher engagement with considerations of syllabus documents and curriculum literacies:

- professional development at the school or school network level to ensure that teachers are able to be involved in the identification of their own areas of needs and that the impact of the professional development on the quality of teacher-student interactions is maximised
- use of collaborative models such as between universities and schools, syllabus developers and systems authorities and schools, or school networks, again to maximise the linkages between research, policy and practice and the impact of professional development on teacher-student interactions, and in order to be responsive to local needs
- professional development in understanding the literacy demands of syllabus documents and subject areas that involves teachers from across subject specialisations, not just from within subject areas
- professional development to support teacher understandings of syllabus expectations for documents that have been developed by state authorities for implementation in all school sectors.

In addition, we recommend that professional development be undertaken with syllabus and curriculum developers so that they can structure curriculum documents to focus on active student engagement in tasks rather than transmission of knowledge and also ensure that documents include reference to and strategies for relating out-of-school experiences and in school practices.

KEY RESEARCH PRIORITIES

In the report we make a number of recommendations regarding future research directions, the most significant of which are reproduced here. We recommend that:

- a sustained program of research be undertaken for in-depth analysis of the subject specificity of curriculum literacies
- further research funding in the areas of literacy should be directed to multitheoretical research in curriculum literacies
- a replication of this research study should be conducted into the literacy demands of the curriculum in middle years of schooling (Years 5 to 7) and in Years 8 to 10
- future research funding should be allocated for research that replicates the present study and the projects identified as needed but with a numeracy focus.

CONCLUSION

We consider that this study has addressed a significant area of literacy and identified that previous considerations of curriculum literacy and literacy across the curriculum have been too simplistic to assist learning. Through this research we have been able to identify that there are multiple literacy demands on students in their senior schooling, demands which interact in very complex ways. This study has only been able to go part of the way in elaborating the precise nature of these demands and this must now be undertaken in future work.

We also consider that through the conduct of this study we have demonstrated the value of a multitheoretical and multi-disciplinary approach, not just to this body of data based on authentic classroom practice, but to all research. In education today, we have many theories on which we can draw. We believe this study has shown that it is important to see these theories not as competing but as able to provide a synergy of interpretations and frameworks that enrich educational research. Hence we strongly encourage the use of similar approaches in future educational research into literacy.

REFERENCES

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ENDNOTE

1. Cumming, J.J., Wyatt-Smith, C.M., Ryan, J. & Doig, S.M. (1998). *The literacy-curriculum interface: The literacy demands of the curriculum in post-compulsory schooling*. Canberra: DEETYA.
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