



QUEENSLAND SCHOOL CURRICULUM COUNCIL

Health and Physical Education: Links between Years 1 to 10 and the senior school

Occasional paper prepared for the
Queensland School Curriculum Council

by

Trish Glasby

October 1999

The aim of this paper is to make visible the links that exist between the *Health and Physical Education Years 1 to 10 Syllabus*, the *Senior Health Education Syllabus* and the *Senior Physical Education Syllabus*. It is through understanding the interdependence of these three documents that the task of interpreting the syllabuses and making sense of their differences becomes less daunting.

The paper is written in three sections. Section 1 considers the significant influence of social cognitive theory as a branch of constructivist theory on the development of the syllabuses. This influence is evident within the documents through the information and ideas that are provided to teachers about where they can best direct their teaching activities to promote effective learning. This first section also discusses the impact of sociological theory and its role in encouraging a critical approach to the study of health and physical activity. While Section 2 does not engage in the debate on the differences between an outcomes-based approach and a criteria-based approach to education, it does provide an opportunity to reflect on how each model affects both teaching and learning. The final section looks at more 'nuts and bolts' issues associated with syllabuses. First, it considers how the content within each syllabus is structured and the influence of this structure on the choices teachers have in what they teach. Second, it offers some thoughts on the assessment of student performance.

Section One

Constructivism and learning

A useful starting point to this paper is to recognise that all syllabuses contain within them something about learning, that is, some expectation about how people learn and what they are expected to learn. While there is a range of issues in schools, such as how to develop appropriate behaviour management policy and strategies and how to meet the diverse range of learners' needs that constitute teachers' experiences, it is the ability to ensure effective learning that teachers would recognise as central to their work.

Social cognitive theory as one aspect of constructivism provides a general orienting framework within which to address cognitive, metacognitive and social-emotional aspects of thinking. Constructivist views of learning have become important in helping explain effective learning and its relationship to effective teaching. One essential element in the social cognitive approach to learning is that:

...there is an active involvement of the learner and a shift in focus from what the teacher may do through explicit teaching to influence learning to what the learner does as an active agent in the learning process (McInerney and McInerney 1998, p. 5).

Where is the influence of constructivist views of learning embedded within the syllabuses? What effect does the adoption of this approach have on how to interpret the curriculum and how to engage in planning and teaching? It can be assumed that teachers whose practice is influenced by this learning theory are more student centred than teacher centred in the ways that they construct learning experiences. While the three syllabuses may seem to approach learning and, therefore, teaching differently, they are nonetheless derived from the same theoretical perspective.

The *Health and Physical Education Years 1 to 10 Syllabus* (1999) offers a set of key assumptions about learners and learning that clearly articulate the constructivist view and provide coherent guidelines to the structuring of learning within teaching practice. The adoption of an inquiry-based approach to learning with its four phases

of Understanding, Planning, Acting and Reflecting dominates the structure of the sourcebook modules and reinforces the idea of students making decisions and taking action as a result of their learning.

The *Senior Health Education Syllabus* (1998) is more explicit in its requirement that teachers adopt a constructivist view of learning. The emphasis on students taking active control of their learning is supported by the inclusion within the syllabus of an inquiry approach to learning as the basis of investigating a range of health issues selected for study within the course. The five phases of the inquiry are Selecting an Issue, Defining the Issue, Exploring the Issue, Planning for Maintenance and Change and Reflecting on the Issue. Although the structure of the inquiry model in the *Senior Health Education Syllabus* is slightly different from that of the Years 1 to 10 syllabus, that difference does not mask the real similarities in approach.

Learning within the *Senior Physical Education Syllabus* (1998 p. 2) is dominated by notions of 'self-directed, independent and interdependent' learners. By integrating learning experiences in, about, and through physical activity, learners are expected to personalise their learning experiences in physical activity to evaluate both personal performance and the broader complex social issues surrounding physical activity. Of the three syllabuses, this document is less explicit in foregrounding constructivist views. The concept of personalisation is, however, central to the idea of students actively constructing their own learning.

In conclusion, the key point for the reader is to appreciate that this theoretical approach presents a particular view of what constitutes effective learning. This in turn strongly influences what we collectively think is effective teaching. The challenge, therefore, for each one of us is to learn where we are on this continuum from teacher-centred learning to student-centred learning and whether or not our planning provides opportunities for students to actively engage in their own learning.

Sociological theories and topics

Having looked at how constructivism creates a common approach to learning across the syllabuses, you will see that a second point of similarity between the three documents is the influence of sociological theories and topics on what we expect students to think about and understand.

Willis (1995b in Germov 1998, p. 9) suggests that sociological analysis can be divided into four interrelated parts:

1. Historical (how the past influences the present)
2. *Cultural (how our culture impacts on our lives)*
3. *Structural (how the way the society is organised shaped our lives)*
4. *Critical (how we can improve on what exists).*

Within the syllabuses, an understanding of these four parts suggested by Willis can help students to think about and analyse:

...broad factors that lead to or prevent participation in sport or exercise, the role of the media in sport and physical activity and issues of gender, race and class discrimination (Kirk et al. 1996, p. 144).

They also help students understand:

...that health and illness exist in a social context; that many illnesses are socially produced and are distributed differently within the society on the basis of social class, gender, race and ethnicity; and that what is understood as illness can vary over time and between cultures (Germov 1998, p. 5).

Where does this sociological influence emerge within the three syllabuses? How does it affect what we teach?

The *Senior Physical Education Syllabus* (p. 2) expects that students will understand and critically analyse the 'wider social issues surrounding physical activity in Australia and the world'. To facilitate this learning, the syllabus mandates the content area - Physical Activity in Australian Society. This content area requires the study of three topics:

- body, culture and physical activity;
- lifestyle, leisure, recreation physical activity;
- money, media, power and physical activity.

The content details (p. 17) of each topic make it apparent that the students' ability to bring the historical, cultural, structural and critical 'parts' of a topic to their analysis will encourage the production of the 'intelligent critic' that the Syllabus (p. 1) suggests.

Because of its adoption of a social model of health, the *Senior Health Education Syllabus* is very explicit in locating itself within sociological concepts. The syllabus is underpinned by a Social Justice Framework (p. 34), which emphasises the principles of diversity, equity and supportive environments for understanding how inequities in health status and access to health resources are socially produced. A central focus is the encouragement of social change to promote improved health outcomes for individuals, families, communities and specific populations. The syllabus is framed around the five action areas of the Ottawa Charter for Health Promotion (1986):

- building healthy public policy;
- creating supportive environments;
- strengthening community action;
- developing personal skills;
- reorienting health services.

As students must use this framework when studying the range of health issues that make up the course, they are continually using historical, cultural, structural and critical tools to engage in developing changed health outcomes.

The *Health and Physical Education Years 1 to 10 Syllabus* is equally explicit in its inclusion of sociological ideas and topics within its structure. The syllabus is divided into three distinctly different strands:

- Strand 1 – *Promoting the Health of Individuals and Communities* is constructed around the premise that 'health is maintained and enhanced by both individual action and the combined actions of community members' (p. 8).
- Strand 2 – *Developing Concepts and Skills for Physical Activity* foregrounds 'factors that influence attitudes towards, and participation in, physical activity (p. 8).
- Strand 3 – *Enhancing Personal Development* emphasises the social and cultural contexts within which identity and personal relationships are constructed and how these elements can affect the health of individuals.

Again, students' ability to look at the historical, cultural, structural and critical aspects of the many topics and issues included within these strands encourages their understanding of the nature of social organisation and how people make sense of health and physical activity in their everyday lives.

For those who have little experience in teaching the social sciences, the inclusion of these sociological ideas may offer a significant challenge, particularly in terms of how

these ideas reshape the content of the learning area and how the learning experiences are to be planned. It may be important to think about whether content knowledge needs to be broadened and what the planning might need to include to encourage effective learning of these concepts and ideas.

Section Two

Outcomes or criteria?

This section will not engage in the debate on the nature of outcomes versus the nature of objectives. The discussion may assist the reader, however, to determine whether there are significant differences between the structure and intent of the overall learning outcomes, the key learning area outcomes and the core and discretionary outcomes of the Years 1 to 10 syllabus and the structure and intent of the general and specific objectives of the two Senior syllabuses. It is important to consider the effect of each model on teaching of the learning opportunities that are able to be offered to students and on assessment. One of the key differences is that the *Health and Physical Education Years 1 to 10 Syllabus* is based on an outcomes approach to education and the two Senior syllabuses are derived from a criteria-based approach. What is the significance of this?

The *Health and Physical Education Years 1 to 10 Syllabus* (1999) incorporates three levels of outcomes. The *overall learning outcomes* focus on 'adult life roles' (Willis & Kissane 1997) and highlight the value of lifelong learning. These 'big picture' outcomes are common across all Council curriculum documents and highlight the attributes of lifelong learners (pp. 23). The *key learning area outcomes* as the second level of outcomes highlight the uniqueness of the Health and Physical Education learning area. *Core and discretionary learning outcomes* then provide the specific framework for planning learning experiences and assessment tasks through which students demonstrate *what they know* and *can do* in Health and Physical Education in Years 1 to 10.

The structure of the key learning area outcomes embeds recognisable features of child-development theory. The sequential development of the outcomes represents what teachers would agree is an appropriate expectation of concrete and abstract performance for particular age ranges. Similarly, the exit standards of the Senior syllabuses are based on the notion of a continuum of increasing 'knowledge' and offer a representation of what sixteen and seventeen years-olds are capable of. Teachers' understanding and interpretation of the outcomes and the standards are central to planning, teaching and assessing across the age range.

As mentioned previously, the *Senior Health Education* and the *Senior Physical Education Syllabuses* are constructed around criteria. These 'exit' criteria offer a broad representation of what students should be able to do by the end of their course of study and, as such, provide a useful structure for teachers to differentiate and structure the cognitive complexity of activities. The criteria and their accompanying standards within each Senior syllabus offer a more abstract picture of what and how student performance is to be judged than do the specifically worded outcomes of the Years 1 to 10 syllabus. Nevertheless, the criteria and standards perform exactly the same function as the outcomes in detailing *what students should be able to do* with what they know.

The exit criteria for the *Senior Health Syllabus* are:

- knowledge and understanding;
- application and analysis;

- synthesis and evaluation.

These are somewhat different from the *Senior Physical Education Syllabus* that uses the categories of:

- acquiring;
- applying;
- evaluating.

What should be recognised, however, is that, regardless of the differences in either curriculum model, syllabus structure or language, all three documents have drawn on aspects of Bloom's *Taxonomy of Educational Objectives* (1956) and/or the information processing theory (Gagné 1985) as a 'shorthand' for expressing what is expected of students cognitively.

Whether considering an outcome from the Years 1 to 10 Syllabus or a standards statement from one of the Senior syllabuses, the language used is clearly recognisable as describing the relationship between cognition and learning and has clear implications for assessment. The distinctions that the use of the taxonomy in classifying students encourages are now 'deeply ingrained and institutionalised within the practices of assessment and schooling' (Berlak 1992, p. 17). Consider how judgments are made about student performance that is about how differentiation between performances is constructed. What is the basis for judgments? Regardless of whether an outcome statement from the Years 1 to 10 syllabus is being used or a standards statement from the Senior syllabuses, the same cognitive framework forms the basis of decisions.

Section Three

Content

There is a close relationship between the actual content of the *Health and Physical Education Years 1-10 Syllabus* and the two Senior syllabuses. Let's first look at how the content is structured and second, at what choices teachers have in what they teach.

Within each of the previously mentioned three strands, the *Health and Physical Education Years 1 to 10 Syllabus* is structured around concepts rather than content. Each strand contains a number of central concepts that are then developed sequentially and in increasingly sophisticated ways across the eight levels to produce the learning outcomes for each level. It needs to be recognised, therefore, that each outcome statement encompasses broad concepts. Teachers must be able to 'unpack' each statement to identify what and how the 'interior' of each statement is conceptually contrived. It is only then that multiple opportunities for students to demonstrate each outcome through a range of content topics can be constructed. The syllabus (pp. 23 – 26) has some requirements about the inclusion of core content but offers teachers flexibility in making decisions about when, how much, and what else.

The content of the *Senior Physical Education Syllabus* is structured around two dimensions. The first dimension includes four categories of physical activities:

- direct interceptive activities;
- indirect interceptive activities;
- performance activities;
- aesthetic activities.

The second dimension consists of three content areas:

- Content area A – Learning physical skills;
- Content area B – Biological bases of training and exercise;
- Content area C – Physical activity in Australian society.

The syllabus is explicit in its requirement that 'schools must choose four physical activities from at least three of the categories of physical activities' (p. 12) and that the 'nine content foci (that constitute the three content areas) must be covered' (p. 14). Teachers planning their course, therefore, can choose the physical activities they wish to cover and the time and emphasis given to each of the nine content foci within each physical activity chosen.

The *Senior Health Education Syllabus* structures its content quite differently to the previous two documents. In this syllabus, teachers can select for inclusion within the course any health issue that they consider relevant, providing it matches the intent of each of the four semester units:

- Semester 1 – Personal Health;
- Semester 2 – Peer and Family Health;
- Semester 3 – Community and Environmental Health;
- Semester 4 – Health of Specific Populations.

Regardless of the issues selected, however, each issue must be developed through a process of inquiry (p. 31) which requires students to:

- select and define the health issue;
- explore the issue through the application of the five action areas of the Ottawa Charter;

- plan for socially just ways of maintaining or changing health outcomes;
- reflect on the impact of their exploration of the issues on the actions they take, their beliefs, values and attitudes.

This structure offers teachers real flexibility with regard to their choice of content but significantly limits how they will plan their learning experiences.

What does this tell us about the three syllabuses? First, each syllabus has a set of rules that guide how decisions are made about what will be taught. Second, by recognising that school subjects reflect the values and attitudes of the time, the syllabuses demonstrate what knowledge is currently valued. Finally, although there are syllabus rules, there is flexibility for teachers to make decisions about content that suits the context of their school and the needs of their students.

Assessment

If it is accepted that making judgments about student performance on the basis of cognitive processes is a naturalised self-evident part of teaching, what are the three syllabuses conveying about assessment? Broadfoot (1996, p. 8) argues:

Whoever has the power to determine the criteria against which assessments are made has the power to influence the priorities pursued by teachers and pupils through the land.

The Board of Senior Secondary School Studies has institutionalised Bloom's taxonomy through the exit criteria that are central to all Senior syllabuses. Within the *Senior Health Education and Senior Physical Education Syllabuses*, therefore, what is considered as significant within teaching and learning for Years 11 and 12 is directed by the cognitive criteria. The Board exerts considerable effort to ensure that teachers' understandings of the exit criteria and standards are comparable. Secondary teachers are familiar with the Board's district and state panel structure and their role in verifying teachers' judgments about the quality of work programs and the quality of students' performance. Over time, these structures have been central to the development of teachers' understandings of the exit criteria and standards. These understandings are built upon the availability of examples of assessment tasks and student work and on multiple opportunities for teachers to discuss and interpret what the words of the syllabus mean. What if these same opportunities to develop understanding of the Years 1 to 10 syllabus and the 'implied' criteria are not available?

The following tables offer a limited description of some of the Level 6 outcomes from the Years 1 to 10 syllabus compared with the exit criteria and standards for Senior Health Education (Table 1) and Senior Physical Education (Table 2). What similarities and differences can be identified between the sets of statements in each table? What meanings can be derived from the reading of one as compared to the other?

Level 6 –Promoting the Health of Individuals and Communities	<i>Health Education Senior Syllabus</i>
6.1 Students <i>investigate</i> the social, cultural and environmental factors associated with a health concern of young adults in order to <i>propose strategies</i> that promote the health of themselves and others.	Students demonstrate <i>understandings</i> of significant aspects of health issues. Through <i>investigation and analysis</i> of health issues, they provide <i>competent explanation</i> of simple relationships within the issue. They draw <i>conclusions</i> and provide basic <i>justification</i> for the conclusions drawn.

Table 1 – Health Education 'standards'

Level 6 – Developing Concepts and Skills for Physical Activity	Physical Education Senior Syllabus
6.1 Students <i>evaluate</i> their own and others' performances in order to <i>plan</i> and <i>implement</i> ways of <i>improving performance</i> in games, sports or other physical activities.	Students perform a range of physical responses accurately. They <i>identify</i> major requirements of the tasks and use some information to demonstrate logical <i>reasoning and application</i> . They implement physical responses involving <i>reflection and decision making</i> in familiar environments.

Table 2 – Physical Education 'standards'

Consider the *similarities* between the Years 1 to 10 syllabus and the Senior syllabuses in terms of assessing student performance on the basis of demonstration of the cognitive processes. The following questions may be a useful focus when reading the text. What is the influence of prior experience in interpreting these 'standards'? Are the cognitive processes on which the 'standards' been developed recognisable? Can sense of both sets of 'standards' be made? Can the 'standards' be applied to students' performances?

For many primary teachers, opportunities for sharing work and discussions about the expectations of the Years 1 to 10 syllabus may not be available, but this should not limit teachers' confidence in 'making sense' of the outcome statements. Judgments about the quality of student performance on the basis of cognitive performance are as 'naturalised' within primary practice as they are within secondary practice. Two *differences* worth noting exist between the Years 1 to 10 syllabus and the senior syllabuses. First, within the Years 1 to 10 syllabus, cognitive expectations of student performance are embedded within the conceptual framework of **each** outcome statement as opposed to use within the Senior syllabuses of an overarching standard statement that is applied to all performance. Second, unlike the senior syllabuses, the Years 1 to 10 syllabus does not require teachers to differentiate between performances on key cognitive processes. Students will either demonstrate or not demonstrate the cognitive expectations of each outcome statement.

In conclusion, regardless of which syllabus is being implemented, acknowledgment of the significance of the cognitive processes in constructing what students are expected to do with what they know is essential in prioritising how teachers will plan, teach and assess. While there are several differences between the Years 1 to 10 Health and Physical Education syllabus and the Senior Syllabuses, recognition of the underlying similarities may help teachers to think about how this period of unprecedented curriculum change will impact on their everyday work.

References:

Berlak, H. 1992, 'The Need for a New Science of Assessment' in H. Berlak et al. (eds), *Towards a New Science of Educational Testing and Assessment*, State University of New York Press, Albany.

Bloom, B. 1956, *The Taxonomy of Educational Objectives: The Classification of Educational Goals*, David McKay Company, New York.

Board of Senior Secondary School Studies 1998, *Senior Syllabus in Health Education*, Brisbane.

Board of Senior Secondary School Studies 1998, *Senior Syllabus in Physical Education*, Brisbane.

Broadfoot, P. 1996, *Education, Assessment and Society: A Sociological Analysis*, Open University Press, Buckingham.

Gagné, R.M. 1985, *The Conditions of Learning* (4th edn), Holt, Rinehard and Winston, New York.

Germov, J. *Second Opinion: An Introduction to Health Sociology*, Oxford University Press, Oxford.

Kirk, D., Nauright, J., Hanrahan, S., Macdonald, D. & Jobling, I. 1996, *The Sociocultural Foundations of Human Movement*, Macmillan Education Australia Pty Ltd, South Melbourne.

McInerney, D.M. & McInerney, V. 1998, *Educational Psychology: Constructing Learning*, Prentice Hall, Sydney.

Queensland School Curriculum Council 1999, *Health and Physical Education Years 1 to 10 Syllabus*, Education Queensland, Brisbane.

Willis, S. & Kissane, E. 1997, *Achieving outcome-based education*, Australian Curriculum Studies Association, Perth.

World Health Organisation 1996, *Ottawa Charter for Health Promotion*, Ottawa.