Pragmatic Curriculum Development

Stephen Crump

A decade ago Lawton (1979) addressed the issue of the politics of the curriculum in a lecture entitled "The End of the Secret Garden". This phrase was taken from a British Minister for Education, David Eccles, who called (in 1960) for greater government influence over the curriculum which he saw as an important public arena closed to scrutiny and discussion. Certainly the issue of who controls curriculum remains pertinent today with every state in Australia undergoing major reviews of curriculum.

In most cases, as in New South Wales, the conclusion has been to re-assert centralised bureaucratic and party political control over what has come to be perceived by sections of the community as a failed educational system. While acknowledging that greater centralised control might be warranted, one would also wish to protect the achievements gained over the last decade through school-based curriculum development. It is thus time to be pragmatic in the development of what those at the school level understand to be appropriate curricula for secondary schools, in the hope that those at other levels will listen. This article will present the findings of three years of action research on the formation of curricular problems and solutions.

Carpenter High School
Carpenter High, as we shall call it, is a Year 7 to Year 12 comprehensive co-educational state secondary school in the western suburbs of Sydney. Over the last three years the school had enrolments of over twelve hundred students taught by around eighty staff. Teachers at the school were mostly young, with thirty in their first three years of teaching. For the first year of the research I was the head teacher for English. During 1987 and 1988 I was on study leave to enable me to conduct the wide range of research techniques required in an ethnographic, longitudinal cultural case study. One of the central research roles was to participate in a curriculum committee which initiated a wide range of activities including workshops, inservices, surveys and curriculum reviews. The role thus changed over time from a participant observer to a participant as an agent helping the school construct a process of change. This research called heavily on the time and physical resources of the school and I acknowledge the co-operation and support of the Department of Education in N.S.W., the school's principal, staff, students and parents.

Curriculum change occurred at Carpenter for a number of reasons. In the years prior to 1984, as in many other schools around Australia, there was an increase in the number of students who were staying on to Years 11 and 12. These students came into Year 11 with varying needs and interests: some wished to follow the traditional pattern of preparing to matriculate to university; others looked to broaden their knowledge and experience with a sound general program which might increase their prospects of employment either before or after sitting for the Higher School Certificate (H.S.C.); still others needed courses which would lead them into specific careers and prepare them for courses at a College of Technical and Further Education.

It became increasingly obvious to many of the staff that it was difficult to meet these diverse needs by
offering just the one H.S.C. program as determined by the Board of Secondary Education. This led the staff to develop, write and evaluate a wide range of school courses for both the junior and senior school. All school courses were approved and accredited by the N.S.W. Department of Education for inclusion on the School Certificate at the end of Year 10 or on the H.S.C. at the end of Year 12.

The impact of state and national curriculum policy reviews was not a problem at Carpenter until recently. The general direction of earlier policies legitimated the directions developed at Carpenter even before the 1983 publication in N.S.W. of the seminal Swan/McKinnon Future Directions of Secondary Education - A Report. Other publications, including the now largely ignored 1987 Commonwealth Schools Commission In The National Interest report, also provided philosophical support. Financial support came from the national Participation and Equity Program (P.E.P.) which targeted Carpenter for funding - due to its low retention rate for girls - the very year that the school had begun to diversify the curriculum. In the words of the principal, 'I think this (curriculum innovation) would have happened in this school without P.E.P., but P.E.P. was useful... it gave people some money for their courses, it encouraged them to keep going'. From 1988 the N.S.W.'s government's Western Sydney Schools Project 'Staying On' provided further policy and financial assistance which will continue until 1990. This project provides a good example of how a bureaucracy can respond to distinct and discrete needs in the system it controls while allowing key decisions to be made and taken at the school level. Thus, the convergence of school-level initiative and regional/national policy is not being presented as an isolated event. What is striking about the problem-solution analysis at Carpenter is not a sterility generated by parochialism but a fecundity deriving from the school grappling with what are also regional and national issues (Crump 1987, p.159). Yet there is a danger that what has been achieved is not being recognised in the so-called revitalisation of schools in N.S.W. since the election of the conservative Greiner Liberal government.

**Cultural Research**

This study is part of a broad cultural research project being undertaken at the University of Sydney (Walker 1988). The research contains the basic premise that an effective way to study the social practices of cultures in a school is through inquiry into problem-solution programs. The notion is that through defining the problems the cultures encounter, developing hypotheses and attempting solutions, the cultures are researching themselves. A problem-solution analysis describes problems as those perceived by the cultural groups or subcultures. Problems are viewed constructively, not as insurmountable impediments. Solutions are the cultures' practices or strategies developed in response to specific problems. The research analysis probes the various problem-solution programs to detect whether different problems might have compatible solutions and, conversely, whether common problems have common or divergent solutions.

Differences within and between programs are also linked to differences in power within and between cultures. Throughout the twentieth century teachers have exercised control of curriculum in their classroom even though this has been as transmitters of centrally-devised syllabi. This provided teachers with the greatest problem solving power in the school community with students and parents relegated a second class problem solving status, their interests squashed through the strategies adopted by teacher groups as well as in relation to the ability of students and parents to exercise enough control to act upon a perceived solution. Yet there are many contexts and problem situations, both within the school and for the school as part of a wider social context, which are shared between teachers, students and parents. When shared problems contain overlapping perspectives, one can argue that there is what Walker (1987b) terms cultural touchstone or intercultural articulation.

The process of school-based curriculum development at Carpenter, as viewed through a cultural analysis, was political as there was a greater sharing of control between teachers of school courses (nominated by the researcher as Initiators) and the students in their school course classes. The findings of the Carpenter study support Walker's contention that it is on this touchstone that the possibility of a coherent curriculum addressing the problems of young people must be based. Knowledge thus becomes one of the main starting points for rational change.

**Validated Knowledge**

Traditional curricula, dominated by Board syllabi, have assigned unequal curricular status to formal and informal knowledge. Formal knowledge has been seen to reside with teachers, mainly through the use of textbooks and through the teachers' 'right' to interpret and apply formal knowledge, especially during assessment of students' learning. Those teachers who maintained this view at Carpenter were nominated 'Traditionalist' by the researcher. Informal knowledge has always been a part of the activity in most classrooms, but it has been employed mainly to support the formal knowledge being presented, not as an alternative or complementary source.

Through accepting a broader curriculum and a more open role for students and parents, the curricular
strategies adopted at Carpenter during the 1980s re-defined what Grace (1978) termed validated knowledge. They also required teachers to surrender part of their institutionalised professional privilege on knowledge. Perhaps 'surrender' is the wrong word. In most instances this act was a conscious process deriving to a large extent from the greater freedom teachers felt when they had greater curricular control. I asked the teacher of the Year 9 Basic Word Processing school course:

Has it made you re-evaluate your own teaching because it's your own course?
Oh yes, I think it's great because it's flexible, you can work at your own pace, you're not restricted by deadlines and those sort of things, even though you have to run the course. I find the flexibility, the way the course is structured, not connected to any other faculty... it allows you to pursue any part of the course at your own pace, or any personal interests that the kids have got with computers.

These perceptions were confirmed by a group of female and male students in this class, interviewed independently but within a week of the relevant interview with the teacher:

Is there anything different about this course, than say courses you have to do?
Male No.3 One of the things... like we're allowed to actually use the computers, and get asked what we want to do. Say in... [traditional subject area], we get told what we have to do.

In this case the teacher abdicated part of the control over the content of the course to the students' personal interests in computing, allowing them to employ their informal as well as formal knowledge in the classroom situation. 'Surrender' is perhaps the wrong word in another sense. Most teachers stated that they derived greater satisfaction from teaching school course classes and I judged that their students openly sensed this. Another teacher, who had been involved with the school course initiative since its inception, commented about the Year 10 Computers In The Business World course:

I'm enjoying teaching far more than I was, which must mean that the kids are enjoying it better. There's no fight on your hands all the time to get kids to work or to participate, to get on with what they're asked to do, it's much easier. So I guess on that measurement, they are responding to the different style. Basically, it's putting it back on them.

There is 'no fight' in this case because the problem-solution programs of the initiator teacher and the students cohere and suggest a cultural convergence (or common ground) where the teacher and students negotiate - what I have referred to as touchstone. Students from the class being discussed in the above quote, also interviewed independently, commented:

Male No.2 If it'll help only one of us he'll help that person. I've been put on a computer on my own at the moment because I want to learn something because I want it. [his emphasis] That's interesting. Would that be likely to happen in other classes?
Female No.1 I don't think other teachers get involved with the students, like they don't ask our opinions... they say 'Do it' and that's it. They don't care what you think about it.
Male No.2 It's a job and they get their pay-packet (...) [Details of teachers' comments]

What is it about these [Board-determined] courses that you don't feel the freedom to ask why the teachers can't [change things]
Female No.4 (Cutting me off) We've asked!... but they just say 'That's irrelevant.' 'Just don't worry about that'... 'Go back to your corner!' [Laughter]
Male No.2 They [Traditionalists] stay on the straight and narrow, they cannot bend...

Further comparisons were made by students to non-school course classes and Traditionalist teachers in relation to the employment of student knowledge, especially the comparison between textbook teaching and more practical, related learning. These comparisons indicate the students' perception of the need for a link between theory, formalised knowledge, and practice. For example, the Year 9 Drama students commented:

Female No.4 I reckon we learn more because we have to do things heaps, like we have to get out there and do it - it's like a prac. in science, you learn a lot more than when you just write it down.
So it's [Drama] very practical... because you experience it you learn it?
Various: Yeah.
You mentioned Science labs. What about other subjects? Are there any other subjects you learn the same way?
Female No.2 [No! indicated by gestures] Textbooks! It's all textbooks. And when I see a textbook it automatically turns me off!
Female No.3 You go into... [subject area] or something and they just shove a textbook in front of you and you've got to write it out 'til you're finished.
Students in the Year 9 Extensions in Maths class also made this connection, identifying not only a lack of credibility in textbook learning but also distinctions within mathematics between approaches to the same content matter. They remarked:

**Female No.1** It's a lot of pure Maths [in the Board-determined class], but this [school course] is applied Maths - you can use it for everything else.

**Male No.2** In normal Maths they just sit you down, our teacher does anyway, gives you a textbook and says, y'know, do [exercise] 10.7, or something.

**Female No.2** We used a 300 page [writing] book [last year] but only 45 [pages] this year and we've learnt just as much: we've formed our own company, done a survey on computers... we've done a real lot.

Knowledge was also validated for school course students in settings outside the school. All the students from the Year 9 Writing for Children classes went to a local primary school to read and perform the stories the students had written, an experience their teachers nominated as crucial to their attitude to the school-based course. I asked the interview groups:

You've told me it was good because you had contact with the kids. What else was good about it?

**Female No.2** They enjoyed it.

**Female No.4** We learnt from it.

**Male No.1** [For example] What sort of things they like.

**Female No.4** Yeah, what they understood and what they read. We learnt what we had been writing about, not just writing down the words - we learnt what they were actually about. [my emphasis]

**Does that happen much in other subjects?**

Various: *Na.*

These comments indicate epistemic issues which the school-based courses raised in students' minds, issues which stimulated student concerns over the extent to which they were allowed to participate in decision-making about the content of the curriculum, and approach to pedagogy, in other classes. However, it was not only views of valid knowledge which had begun to change.

Changing Relations in the Classroom

The broadening of acceptable knowledge brought into the curricular practices at Carpenter extended in a number of ways into formal knowledge, into teacher/student relations, into assessment of student achievement and into the practices employed in Board-determined courses. First, in many school course classes the content of formal knowledge was expanded as demonstrated by these comments from some of the students in the Year 9 Extensions in Maths school course:

**Female No.2** Besides, you find out about the people you study [in the school-based course]. Like [in contrast] we do Pythagoras' theorem [in her Board-determined Maths class] and just dribble on about the theorem, and you don't actually know who the person was, or what else he did.

**Female No.1** And also, Mr. T. [the school-based course teacher] shows us what to do but we can sort of argue with him if you think something's wrong.

**Male No.2** Normal Maths, if you reckon it's wrong you get sent out! This one, you reckon it's wrong, you get to explain it. [my emphasis]

**Male No.3** You get group work and get to discuss the thing.

Second, as these students also explain, the mutual recognition of rights and interests reduced the gap between teachers and students, a gap reduced by diffusing the issue of control, power and status in the classroom. Sharing control over teaching strategies and lesson content thus created a new set of personal relations in school courses:

**Female No.3** Also, he communicates what he wants to communicate. Other teachers, they just teach us. It's more like a friend teaching you than a teacher/student kind of thing: 'You do this', 'You do that'...

The researcher observed that the benefits of this closer student-teacher relationship also occurred in the Drama school course. As expressed by this group of students:

**Female No.2** You don't really get on with teachers in any other subject. [students only take one school course per year] He [the school-based course teacher] talks to you like an individual because he knows your personality - he knows you. [her emphasis]

**Other teachers, they**...

**Male No.1** ... they teach the whole class!

Many members of every school course student group interviewed made a similar comment. Part of the reason for these improved relationships might be attributed to school courses being smaller than other classes, but in many cases they were not, and in the above Drama example the class was in fact larger than many Board-determined classes.
Third, one of the significant features flowing out of this shift in teacher/student relations was a shift in discipline issues, and indiscipline had dominated a lot of school time at Carpenter. Initiators, almost unanimously, determined upon a set of less authoritarian strategies for handling misbehaviour in their school course classes. The conversation below follows a discussion of an incident the researcher had witnessed where the Drama teacher had dealt with a situation where the students became quite unruly:

**Female No.5** When he was giving us the lecture he said 'Oh, I've been happy all day 'til I came into this class and got really angry and upset'. And we thought 'Oh' ... ['Oh's from the rest of the group].

**Would you buy that from another teacher?**

All: *Na.* [Laughter]

**So what's the difference?**

Various: He's like a friend.

**Female No.4** I think we can communicate that much better with him. I think if all teachers were like that I think the whole school system would be completely different. [my emphasis]

Various: Yeah/reckon.

**Female No.4 (Continuing)** I mean, the - [subject area] teachers give you a referral [note detailing alleged indiscipline] and send you out and you just think 'Oh, I hate him!'. It's not going to work [to improve student behaviour].

**Female No.3** But Mr. M. [school-based course teacher], he makes us understand what we were doing wrong.

Admittedly, the Drama teacher's control methods were quite old-fashioned [copy notes, give 'lecture'], but in many Board-determined classes the more sophisticated and contemporary methods developed through the referral system were often abused and more oppressive, even though their aim was to enhance students' rights. Likewise, the students' perception of the consequences of establishing a better relationship with their teachers if they were more 'like a friend' was not necessarily a new insight.

What is significant is that they represent the quality of the solutions being arrived at by students and teachers: the shift in formal roles from teacher to friend is further evidence of convergence, of cultural touchstone, derived from changes in the programing and categorisation of individuals through changing the political balance in the control of knowledge, and therefore in the political relations within the classroom and - potentially - within the school as a whole.

For example, curricular changes brought changes to student welfare and discipline policy at Carpenter. The school operated this policy on a set of principles aimed at reducing the tension between students and teachers and structured around depersonalising a conflict when it arose. This involved a fairly complex system of paperwork, with a written referral to senior executive for serious behaviour problems. This referral nearly always ended up in the deputy principal's files and could influence a number of things for the student including the school's reference. Yet in many Board-determined classes referrals were widely, frequently and indiscriminately used as a weapon instead of educative classroom management practices. The effect was to drive a wedge between these students and their teachers. The consequence, in these classes, was to perpetuate Woods' (1979) 'divided school'. The following student comment demonstrates this process:

**Female No.1** A lot of teachers give out referrals and think 'The kid deserves this'. A lot of teachers hand out punishment and don't realise that it really effects kids. I got a referral not long ago for something I didn't do and, oh, that really effected me badly - for two reasons: firstly, I knew I didn't do it and secondly, I had never had one before. I was in tears all the time ... crying and crying.

The researcher judged that despite this atmosphere of fear and antagonism, despite the presence of conflict and opposition, many students were still reaching out to establish better personal relations in these Traditionalist classes. Yet many teachers were afraid to respond:

**Female No.4** If we don't like something [in the school-based course class] we say 'Hey sir...', and he listens to us. Whereas when I asked one [Traditionalist] teacher ... I said 'Hey, you don't like me do you sir?', and he said 'I'm not paid to like you' ... and I felt really low then, really bad.

The primacy for students of better personal contact with their teachers - both Initiator and Traditionalist - can be summarised by this comment, made by a Year 9 Design And Graphics school course student in response to a question about what students would like to change around the school:

**Male No.2** Well, you could change attitudes, change teachers' attitudes. It doesn't matter where you work in, it's the teachers that make it. You can work in a hovel, but as long as the teachers are alright it doesn't matter.

It would appear that the achievement of the school course classes was that the physical environment and
quantity of material resources were not necessary conditions for effective learning. The important quality in these courses was the constructive use of the richest resource in the classroom - students' knowledge, ability, interest and critical analysis - to solve the acknowledged problems of curricular relevance, motivation, assessment, and of classroom management and control. This is pragmatism at its best.

Pragmatism
A problem-solving approach to curriculum development involves the school analysing its situation, clarifying its aims, values, views of knowledge and learning, and attempting to relate the problems of teachers to those of others. The pay-off is that the school is more likely than not to become a more democratic and just place. However, this approach does not entail the opportunism popularly ascribed to pragmatism but aims to generate viable practical principles linked to action through practice. It can, therefore, be identified as principled pragmatism. There is perhaps no better person to judge this by than Carpenter's principal, who indicates in the following remarks the learning he experienced in working through the above process:

When you say I must have some sort of philosophy - I can tell you now I have - but whether I had a very strong philosophy in relation to that [curriculum] the moment I arrived, I doubt that I did. In fact, that came out of having to be principal - having to address the problem, 'What would I do?': So that forced me back to curriculum. I got involved in the senior curriculum, and as you know I've been trying to push that back further and if I was here longer I'd push it back to Year 7. [The principal retired towards the end of 1988]. My philosophy has developed out of the situation, it's grown, and I hadn't really thought it out very much as a younger teacher. [my emphasis]

That's probably the best way?
But it's a bit slow if you get what I mean... whereas you are going up through a system where the school is forcing a lot of people to think about these things. No school forced me in my experience to think about these things - never. [his emphasis] I think something is happening in this school in that sense. The very fact that people are talking about these things ... what you're doing has helped me ... it's very, very helpful to the school and the teachers ... it has to be - you're forcing them into consideration of principle.

Part of the pragmatist hypothesis is that it is in everyone's interest for the growth of knowledge to continue and be widely distributed. People need the opportunity to express their interests, or at least their perception of what their interests are and how they might realise them. The conditions to allow this to occur include individual freedom of expression and critical exchange of views and, more importantly, the confidence to express those views without the threat of undermining existing interests. This confidence has been clearly demonstrated in many of the student and teacher comments quoted earlier as well as in the expanded role students were allowed for one of the things closest to their short and long-term interests - assessment. An example of how Initiators more adequately considered the role of assessment can be found in comments made by the teacher of the second Writing For Children class:

As far as assessment's concerned, I think I've paid a lot more attention to effort rather than product, 'cause it is different. It has been very hard for them to actually accomplish some of the things we've tried to do, and so I think we've tended to reward effort as much as actual technique and style ... and I think kids have responded to that, the fact that we have appreciated the effort that has gone into the stories, or whatever. They've felt happier that we're not only looking at the quality of their work but also the participation, and the ideas, and the discussions - we've taken that into account in the marking. Participation in group work, drama, etc, has been a big part of it ... we haven't only looked at the writing.

In the Computers in the Business World course the reforms to assessment came into conflict with faculty and earlier school policies:

I wanted a criterion-based system, where they were able to do it, therefore they were all equal - some could do it in five seconds, some could do it in 30 seconds, but they could all do it, these particular skills. We do hand out a skills summary, with an 'average', 'above average' type [label] related to different skills - which is additional to their school report (...) [Details]. That was interesting too. People [in the early stages of the development of the course] insisted that kids be ranked from 1 to 20, and that's what I objected to, that I couldn't rank them, I didn't want to rank them 1 to 20. I wanted to rank them on particular skills - they could do these skills, maybe they couldn't do these skills, and whether some other kid in the class could do it as well was irrelevant to how they could do it.

Nearly all school courses allowed for quite major
student input into their assessment, many including peer assessment. The Extensions in Maths class spent fifty per cent of its period time for a number of weeks researching, in the library, famous mathematicians or famous mathematical problems. These were presented to the class and each member contributed to the mark for each presentation. This mark became a major part of the end-of-term assessment. Most students reacted well to this, as indicated in the following interview exchange:

I also found out that with these talks you’re going to mark each other. Can you tell me more about that?

Female No.1 Yeah. He asks us [to mark on] ‘Did they have enough information?’, things like that. ‘Did you understand what they were talking about?’, the time ...

Female No.2 [An example] ... it’s for our assessment and things. Everyone in our class likes each other, we all work together and try to help each other [would be fair to each other in marking].

Do you contribute to any of the marks in normal Maths classes, or English, or?

Various: Na.

Male No.2 All we do... we just get up there, we try our [individual] best, and the teacher marks it.

Female No.2 All we do in [Board-determined subject area] is study hard enough to pass, then we do the exam, hand it in. If we fail, we fail ... if we pass, we pass. We’ve got nothing to say about it.

The contrast made by these students between ‘we all work together (on problem-solving)’ in school-based courses and ‘I (individually) only study hard enough to pass’ in Board-Determined classes is a damning indictment of the way schools traditionally approach education. This contrast also illustrates the ease with which able students can penetrate the facade of traditional assessment as a just and objective practice. In Drama, those students interviewed enthusiastically informed the researcher about their school course assessment procedures:

Female No.4 What he does, like for our Half-Yearly [report], he had fifty percent for each person - and then he had everyone's name on a piece of paper. He handed them around and we gave them a mark out of ten, which made up the other fifty percent.

Everyone took it seriously?

Female No.4 [Spoken with pride] Yeah.

Everyone took it seriously, and we assessed it how it should be, and we assessed fifty percent of our Half-Yearly [grade].

Does that happen in other subjects?

Various: Na.

Teachers were also were carefully considering the implications of greater curricular freedom. What is encouraging for future curriculum development at Carpenter is that the problem-solving approach to the questions of validated knowledge, questions about the nature of classroom relationships and management, and about student negotiation of formal assessment, is beginning to have an impact on teaching in Board-determined courses. First, many Initiators such as this teacher are transferring features of their school-based courses into their ‘normal’ classes:

With the juniors, with Geography and Commerce, teaching the computers has changed the way I teach them - more along the lines of more group work I suppose ... group work [where] There’s a problem, go over there, you three go over there and work on it and come back with an answer. So the approach all the time now, even with [Board-determined] Geography and Commerce, is to get them to break stuff down into individual solvable problems rather than present them with the approach where you say ‘OK, well we’re going to do Law’. [Instead] I [now] try to explain it, step it out, say ‘Here’s what we’re going to do, here’s the individual steps’ … something I never used to do - I just went ahead and hoped that they got it.

Second, these teachers are also making an impact on their own staffrooms, expanding the strategies that they have developed in their own school-based classes to apply to all classes within their faculty. In 1987 at least three faculties considered the introduction of mixed-ability groupings into their Board-determined classes, with the English faculty developing this strategy with the whole of Year 8 in 1988, as well as with Year 9 in 1989. These holistic developments have been spurred on in every case by teachers who have directly experienced mixed-ability teaching through school course classes (Crump 1988) though much of the push for mixed-ability teaching was, as Ball (1981) demonstrated, a function of its greater effectiveness for classroom control. It would be ironic if the introduction of mixed-ability was, therefore, to provide tighter social control rather than furthering challenges to the Traditionalists’ educational practices and values.

Reflections

The repertoire of problem-solution programs depicted in the brief examples of this article depict positive organisational learning and the educative development of school cultures. However, much of what I have pointed to is already well understood by
effective classroom teachers. It is also the direction being adopted in a number of centrally-devised Board-determined syllabi in N.S.W., for example, the Junior English, Science, Maths and Industrial Arts syllabi. What is significant about the the processes of curricular formation and change at Carpenter is that they are working because teachers, increasingly in league with their students and with parents, make the key decisions through researching and analysing the school's own problem situation.

Many students and teachers at Carpenter now think epistemically, and link epistemic points to pedagogy and the development of more equal relationships through negotiation in the development of school-based curricula. The respect Initiators hold for the opinions of their students, and the Initiators' willingness to learn about and negotiate over the effect of their responsibilities and objectives on students' needs, interests and perceptions, also marks the development of a coherent curriculum - one in which teacher and student are both more active in determining the course of learning. The point to be stressed is that teachers are not simply encouraging critical thinking over existing professionally-defined knowledge but that they are also opening up the curriculum to student sources of knowledge and the wider perspectives of the students' cultures.

During the research one easily sensed the joy of learning the students experienced in school-based courses at Carpenter, experienced through taking part in the process of learning and through being accorded the rights and responsibilities traditionally belonging to adults in this situation. It is important that future curriculum development acknowledge the worth of this process. Yet changes to the nature of the Higher School Certificate in N.S.W. during 1988/89 suggest a shift back to a school preoccupied once again with a narrow range of skills and a limited Board-determined validation of knowledge. These issues converge on the question of control of the curriculum and equity. The problem-solution analysis presented in this article provides a potent tool for schools to confront these issues because it allows schools to contribute to the description of their own problem situation, as against being told exclusively what it is by some outside agency.

The key relationship is the curriculum-pedagogy nexus, the relations between curriculum and pedagogy playing a crucial role in determining the experiences of schooling for the various cultures of the school and, as such, exerting a large influence on how school might affect outcomes for individuals and groups. I have not argued that the findings of the Carpenter study can be applied to other schools. However, I would argue that what one school has learnt from the experience of educational change is transferrable to other schools through shared educational policy and through the process of pragmatic curriculum development.

References


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