

TEACHING THINKING SKILLS: MAPPING THE ARGUMENTS FOR CURRICULUM CHOICES

Introduction

In a recent paper Sophie Haroutunian Gordon (1998) drew attention to two issues in education: a current emphasis on teaching people to think and a problem as to what should be done to bring this about. In examining this problem, Dr Bruce Haynes and I are in the process of exploring the concepts of critical thinking, problem solving across the disciplines, philosophy for children and critical thinking within the subject disciplines with a view to mapping the arguments required to justify inclusion in a curriculum designed to teach thinking. Our present plan is to explore the conceptual issues and the contentious issues relative to each of these and then to consider the curriculum arguments.

Ways of Teaching Thinking

The teaching of thinking skills may be included in the curriculum in a variety of ways. They may be taught as skills within their own right under the label of critical thinking. They may be taught as a reflective exercise on how problem-solving occurs across the subject disciplines (the infusion approach). They may be taught within a programme of philosophy for children. Or they may be taught as a particular way of encountering and comprehending the subject disciplines (the framework approach). A short description of each approach and an analysis of related contentious issues is a possible first step to take in mapping the arguments for curriculum choices. This paper presents an example of how this description and analysis might be done, using philosophy for children as the exemplar.

The interest in the paper is to establish how best to examine the possible ways of teaching thinking skills which have been identified. The description and analysis of related contentious issues is the approach adopted in this exemplar, but it may not be the most appropriate approach to use or it may not be an approach which will suit an examination of all the possible ways of teaching thinking skills.

The paper concludes with a preliminary overview of the logic of curriculum decisionmaking.

Philosophy for children: the description

Philosophy for children has been established for many years in the United States through the work of Matthew Lipman. The movement has spread to Britain, to Europe, to Australia and to Singapore. Apart from Lipman's work, the widest network which supports the advancement of philosophy for children is the Sophia foundation, with a secretariat based in Amsterdam and members from a dozen or more European countries. Lipman's work, however, is by far the most established and for this reason his programme will be used for the purpose of establishing a frame of meaning around the term 'philosophy for children'.

There are several features which characterise Lipman's approach. Laurance Splitter (1995) provides a contemporary Australian view of what these features are. According to Splitter, Lipman's programme possesses the following ingredients.

- ***Tools and dispositions characteristic of philosophy***

These include the skill of argumentation; a propensity to question and search for reasons; identifying, applying and modifying the criteria by which we form judgements and make decisions; making distinctions to reveal complexities; identifying relationships such as cause and effect; the exercise of moral imagination (what if ...?)

- ***Concepts***

A focus on concepts of interest to children, such as fair, true, good, friendship, beauty, etc.

- ***Philosophical story telling***

The use of stories which motivate children to wonder and to inquire and focus on events connected to the child's own experience, thus providing them with a sense of control.

- ***Questioning***

Questions become a prompt for reasons, predictions and viewpoints which can be evaluated.

- ***Building a community of inquiry***

A teaching and learning environment based on an awareness of children's perspectives which engages in a search for meaning through dialogue which involves reasoning.

(Splitter, 1995, pp. 15-19)

There are of course many shades of difference in the ways in which Lipman's followers adapt his approach, but for my purpose here it seems to me that Splitter's summary of what was advocated by Lipman (1980) in his original work, *Philosophy in the Classroom* is an acceptable rendition of its many features.

Splitter & Sharp provide a more contemporary description when they state in their book, *Teaching for Better Thinking* (1995).

In its simplest formulation, Philosophy for Children has two basic components:

- an introduction to a broad yet structured range of philosophical concepts and procedures provided by stories that model various aspects of inquiry.
- a methodology based on the community of inquiry which provides an environment in which philosophical dialogue can take place.

(Splitter & Sharp, 1995, p.99)

philosophy for children: the substantive contentious issues

There are several substantive contentious issues which relate either to content taught or to method used in philosophy for children's programmes. In regard to the content taught, the first issue to be discussed is the approach which philosophy for children takes to knowledge of great ideas and knowledge of great thinkers in philosophy. Philosophy for children is concerned with the body of knowledge called philosophy in a particular way. Through the use of stories, philosophy for children seeks to encourage the young into an awareness of, and response to, ideas which have dominated philosophical inquiry from the time of Plato to the present day. The purpose of this enterprise is to initiate children into the traditions of philosophy and to convey to children a sense of the importance of the contribution that they can make to the search for truth which characterises Socratic inquiry. It should be stressed, however, that great thinkers in the history of philosophical ideas are not seen as the primary focus for children's attention by the philosophy for children's movement. Rather, the emphasis is placed upon children discussing philosophical ideas and children being confident about their contribution, as children, to philosophical debate.

This approach to the content is heavily criticised by the school of thought represented by Anthony O'Hear. While O'Hear agrees that philosophy has a value for those who are interested in its questions, and that there are fundamental questions that have been asked many times before, he queries how far learners can go in reasoning without knowledge. Philosophy, he claims, once an obvious point has been made, becomes too difficult without knowledge of philosophy. To pursue fundamental questions requires entering the tradition of people who have pursued them to a high level, not engaging in simple, childish philosophising. Such claims as these are made on the grounds that the questions of philosophy are hard questions, which have been made harder by those who have pursued them in the past. Moreover, in philosophy for children, there is the hidden curriculum of children developing self-esteem by assuming an attitude of scepticism. Fostering continual questions and doubt by the, as yet, not educated, brings a danger of imparting values which make children unreceptive to their own ignorance (O'Hear, 1997).

A second substantive contentious issue which is evident in relation to content is the issue of children's rights. Supporters of the movement are sufficiently child centred in their thinking to argue that learning philosophy is not just interesting to children, which might be called the psychological argument, and not just of benefit to children in terms of their self esteem, which might be called the normative argument. The strongest argument, which might be called the philosophical argument, is that children are stakeholders in the acquisition of worthwhile knowledge, and that that worthwhile knowledge includes philosophy. Children, therefore, have a right to learn philosophy and that includes contributing to it by expressing their own ideas.

Splitter and Sharp make this claim quite unambiguously.

In our view children have a right to do philosophy, and to contribute, in their own way, to the ideas and traditions which have come from several thousand years of reflective inquiry. Not only is philosophy interesting to children, but children have an interest in philosophy, in much the same way as a distant relative might have an interest (stake) in a property - whether she shows it or not. Children inherit this interest as part of their intellectual heritage.

(Splitter & Sharp, 1995, p.115)

At odds with this claim is the stance taken by Roger Scruton, who implies that philosophy is properly dealt with at the level of postgraduate research.

Philosophical questions are ultimate: hence they lie at the limits of the human understanding. It is difficult to know whether we have truly grasped them. In order to grasp them, therefore, we study the works of the great thinkers who have wrestled with them, and whose superior intellect, even when cluttered by outmoded beliefs and discredited conceptions, guides us more truly to the heart of the subject than we should ever be guided by our own capacities.

(Scruton, 1994, pp. 13-14).

A third substantive contentious issue concerning content is the relationship of philosophy to other subjects. Splitter and Sharp refer to philosophy as "a generic or 'enabling' discipline" which "facilitates the transfer of skills, dispositions, concepts and procedures in the context of the thinking and learning that goes on in regular school subjects and disciplines" (1995, p.109). They suggest that in philosophy there is a cluster of concepts such as number, cause, fairness, beauty, personal identity, freedom and so-on which are "part of the foundation of all the disciplines because they operate at the most general levels of human experience" (1995, p.112). They represent philosophy as the base of the curriculum and its procedures and content as offering a transfer or bridge from one context to another (1995, p. 111). Presented diagrammatically, their view is as follows:

| | | | | |
|-------------------------|-----------------------|-----------------------------------|-----------------------------------|-------------------------------|
| Language and Literature | The Arts and Religion | Mathematics, Science & Technology | Humanities, Society & Environment | Health and Physical Education |
| Reading | Writing | Questioning | Speaking | Listening |

Reading and inquiry Concept Formation Meaning-making

Logic Ethics Epistemology Aesthetics Metaphysics

PHILOSOPHY

(Splitter & Sharp, 1995, p. 117)

Opposing this type of claim, O'Hear has argued that it has the potential danger that philosophy will take over the whole curriculum. The curriculum, that is, becomes "philosophised" before the young are ready for it. O'Hear also argues that standards of epistemic reasonableness are acquired in the course of learning. He suggests that philosophy for children is, in fact, impossible since the child cannot start with doubt, questions, requests for explanations and reasons before the child knows what he or she is doubting. To sustain his case O'Hear draws on Wittgenstein's connection between teaching, learning and doubting in "On Certainty", 310 to 317. The line of argument used by Wittgenstein appears in the following three excerpts from "On certainty".

310. A pupil and a teacher. The pupil will not let anything be explained to him, for he continually interrupts with doubts, for instance as to the existence of things, the meaning of words, etc. The teacher says "Stop interrupting me and do as I tell you. So far your doubts don't make sense at all".

311. Or imagine that the boy questioned the truth of history (and everything that connects up with it) - and even whether the earth had existed at all a hundred years before.

314. Imagine that the schoolboy really did ask "and is there a table there even when I turn around, and even when *no one is there to see it?*" Is the teacher to reassure him - and say "of course there is!"?

Perhaps the teacher will get a bit impatient, but think that the boy will grow out of asking such questions.

315. That is to say, the teacher will feel that this is not really a legitimate question at all.

And it would be just the same if the pupil cast doubt on the uniformity of nature, that is to say on the justification of inductive arguments. The teacher would feel that this was only holding them up, that this way the pupil would only get stuck and make no progress. And he would be right. It would be as if someone were looking for some object in a room; he opens a drawer and doesn't see it there; then he closes it again, waits, and opens it once more to see if perhaps it isn't there now, and keeps on like that. He has not learned to look for things. And in the same way this pupil has not learned how to ask questions. He has not learned *the game that we are trying to teach him*.

In terms of the method favoured in philosophy for children programmes there are also one or two substantive contentious issues. The first to be discussed relates to the notion of experience. Oakeshott (1933, p. 9) drew a distinction between the sense of 'experience' which implies 'experiencing' and the sense of experience which implies 'what is experienced' which may be a useful distinction to consider here, as both senses of 'experience' appear to be of concern in the method used in philosophy for children. Oakeshott went on to say that experiencing and what is experienced must be considered to be completely interdependent, so that a view of experience can be developed from either.

In terms of *experiencing*, the teacher in philosophy for children is charged with the task of educating children to "experience the connections that constitute meaning" (Splitter & Sharp, 1995, p. 73) to allow children to "move beyond the deceptive security of their own experiences" (p. 79) and to allow children to "find ways to harmonise their own experiences and perspectives with those of others (p. 79) The way in which this is to be done is by transforming the classroom, through dialogue, into a community of inquiry.

Dialogue is

that form of conversation which characterises and represents the thinking of the inquiring community . . . Dialogue represents the thinking of the community: it shows the community 'thinking out loud'.

(Splitter & Sharp, 1995, p. 34)

The community of inquiry which develops is

driven by the need to transform that which is intriguing, problematic, confused, ambiguous, or fragmentary into some kind of unifying whole which is satisfying to those involved, and which culminates, albeit tentatively, in judgement.

(Splitter & Sharp, 1995, p. 18)

The notion of experience invoked (in the sense of 'experiencing') is drawn from Dewey and the pragmatist tradition. From Dewey, in particular comes the emphasis upon thinking as a reconstruction of experience in which the search for meaning will help to solve problems and assist in improving experience. From Dewey, also, comes the emphasis upon the communal and the notion of inquiry and problem-solving which stress process rather than content.

In terms of *what is experienced*, it is "through our grasp of concepts that we are able to connect upon to think about and hence to give sense to, what is presented to us" (Splitter & Sharp, 1995, p. 11). Concepts are "classifiers or collators of our thoughts and experiences" (p. 11). Dialogue in the community of inquiry becomes an "interplay" between the "concrete/experiential and the abstract/conceptual" (p. 83).

This interplay, when supported by the procedure of giving reasons, is an essential part of any inquiry which seeks to construct, modify and apply concepts, rules and principles; hence of any inquiry which can lay claim to improving the quality of thinking. Merely building upon personal anecdotes and experiential reports is not enough for cognitive improvement. On the other hand, in the absence of familiar concrete experiences, our general concepts and principles would remain forms without substance: empty structures or pigeon-holes waiting to be filled.

(Splitter & Sharp, 1995, p. 83)

The notion of experience here (in the sense of 'what is experienced') is drawn from a Kantian perspective (p.86, note 44). The view of concepts as organising principles, which are part of experience is drawn from Kant's account of the limits of knowledge in his *Critique of Pure Reason*. Also from Kant comes the idea of the interaction between the particular instance and the general notion ("experiences without concepts are blind but concepts without experiences are empty"). Just as we need the concepts, in order to give the experiences content, so we also need the experiences in order to give the concepts points of application (Hamlyn, 1972, p.251).

Thus both pragmatist and Kantian beliefs inform the philosophy for children programme's account of the notion of experience. Just how compatible these two different epistemological traditions will prove to be in terms of providing a base for the method of dialogue and the community of inquiry is an issue that suggests the need for further debate.

A second substantive contentious issue which arises in considering the method used in philosophy for children is the issue of egalitarianism. Egalitarianism is related particularly to the nature of dialogue. Dialogue is a particular kind of conversation in the classroom community of inquiry because it displays an egalitarian structure (Splitter & Sharp, 1995,

p. 35). This egalitarian structure means that all members of the community are held to be of equal worth when contributing to the dialogue.

By what they say, participants show that they value themselves and one another equally for the purposes of the dialogue, irrespective of where they stand in relation to a particular viewpoint.

(Splitter & Sharp, 1995, p. 35)

The notion of equality which is involved is the one which draws on the idea of sameness. All members of the community are equal, i.e. the same, in the sense that all members of the community have some involvement in contributing to the dialogue, although not necessarily in the same way. All members have the same opportunity and the same status as contributors within the community.

No one person is regarded as having a more powerful or significant role in the process of inquiry than any other.

(Splitter & Sharp, 1995, p. 36)

The concept of equality-as-sameness is thus linked to three other principles: fairness, reciprocity and respect for persons. (Splitter & Sharp, 1995, p. 36). The idea of sameness is that personal characteristics such as gender, ethnicity, age, status, socio-economic background, personal relationship to the speaker, which might serve as differentiating features, should not be permitted to influence the dialogue. There must be no "unwarranted discrimination" (Splitter & Sharp, 1995, pp. 35-36).

The connection between dialogue and respect for persons appears to draw on the Kantian view that respect is owed to each individual conceived of as a rational moral being. Because every individual is equally a rational moral being, respect is owed equally to all (p.36 note 12).

However, as Bernard Williams has pointed out, this Kantian view makes the characteristic of being a rational, moral being independent of empirical aspects of the individual. Williams compares it to the Christian notion that all people are owed respect equally because all are

equally children of God. But in the absence of empirical considerations, Williams argues, the claim becomes an empty one. In Williams' words

It seems empty to say that all men are equal as moral agents, when the question, for instance, of men's responsibility for their actions is one to which empirical considerations are clearly relevant, and one which moreover receives answers in terms of different degrees of responsibility and different

degrees of rational control over action. To hold a man responsible for his actions is presumably the central case of treating him as a moral agent, and if men are not treated as equally responsible, there is not much left to their equality as moral agents.

(Williams, 1962, quoted in Bedau [Ed.] 1971, pp. 122-123)

Splitter and Sharp themselves acknowledge that equality in respect of persons is difficult to establish.

We are aware that the concept of equality is itself problematic, and that the idea that people are, or should be, or even can be, equal in some sense is contentious, particularly in the public and political areas.

(Splitter & Sharp, p. 36)

The logic of curriculum decision making

To justify the teaching of thinking skills, in any form, it must first be established that thinking skills are a curriculum good, that they are more valued than other competing curriculum goods that could be included and that they can be taught. Having established all these matters, we may conclude that thinking skills should be taught. We may then use this conclusion to justify any activity which teaches thinking skills to children. However, it is then further required that any proposed method of teaching thinking skills should be better than any other ways of achieving this curriculum good.

This process of curriculum decision making can be rendered as follows:

X is a curriculum good,

X is better than other curriculum goods,

X can be taught,

therefore,

X should be taught.

However,

X can be taught as A or B or C or D.

We have already identified four ways of teaching thinking skills, viz. philosophy for children, critical thinking, infusion and framework. Given the conclusion that thinking skills should be taught, to judge which of these alternatives is best requires a prior decision. For the judgement may be made either in terms of the best way of teaching thinking skills or the best way of educating children which includes teaching thinking skills.

Whatever terms are used in making the judgement, some factors are relevant to consider in the matter of teaching thinking skills. While all four ways teach thinking skills they also do other things, require different resources and have different outcomes.

Critical thinking seems the nearest to teaching thinking skills *per se* but with a set of desired attitudes as part of the outcome. It requires resources in the form of teacher competence, teaching materials and additional allocated timetable time.

Philosophy for children teaches thinking skills in philosophy and has a different set of desired attitudes. It requires resources in the form of teacher competence in philosophy, teaching materials and a timetable slot which would displace other teaching.

Infusion teaches thinking skills as part of other subjects with attitudes that may be part of the attitudes fostered by study of those subjects. Teacher competence and teaching materials may be similar to that required by critical thinking and specified time is required to teach the infusion material.

The framework approach encourages a different attitude on the part of teachers towards their teaching and evaluation of other subjects but does not presuppose a specific time allocation for teaching thinking skills. It requires teacher competence in teaching and evaluating thinking skills within a subject, not necessarily the competence required in critical thinking.

After laying out the variables to be considered in judging which alternative is best, more detailed consideration of the variables may look something like the following.

The quality of thinking skills learned in each way of teaching may be compared. Perhaps it could be judged that the breadth and depth of thinking skills learned in philosophy for children is better than that in critical thinking, as the children are able to associate the skills with particular philosophical conclusions they are able to reach. Perhaps the quality of skills learned by the infusion way is better than that in the framework because specified attention is paid to teaching these skills through dedicated lessons using particular materials. It may even be possible to rank order the quality of thinking skills taught by each way.

In addition to these considerations, which have been cast here as rankings, it is also pertinent to determine whether the outcomes achieved by students from each of these ways of teaching thinking skills are equivalent in terms of being useful in other situations. While it

may be that technical mastery of thinking skills is achieved better by critical thinking than by other ways, it may be that students are able to make more effective use of those skills if they are learned in other contexts.

Likewise it may be possible to identify the different attitudes desired by each way of teaching thinking skills and to rank order the sets of attitudes in terms of desirability. Perhaps philosophy for children opens up types of questions which are in addition to the critical attitudes sought by critical thinking. It may be that neither infusion nor framework seek these critical attitudes but are more limited to technical skills of argument located in subject areas. The attitudes they seek to teach may be those more related to the subjects taught.

Ranking the level of resources required in terms of teacher competence may be relatively easy. The framework way of teaching thinking skills requires teachers to make more explicit and extend skills they already have and assume their students will acquire by studying a subject. Both the infusion and critical thinking ways require teachers to learn specific thinking skills and methods of teaching those skills. Philosophy for children requires teachers to have some understanding of philosophy as well as specific thinking skills.

No specific learning materials are required for the framework but considerable assistance is needed to enable teachers to conduct the required evaluations. The other ways of teaching thinking skills require specific learning materials and varying levels of evaluation assistance.

Dedicated timetable allocation is required for philosophy for children and critical thinking. Such an allocation has the advantage that the activity is more likely to be carried out by teachers in the classroom. It has the disadvantage that it means that something else must be displaced, thus raising the issue of whether it is better than other curriculum goods in a direct manner. The infusion way reduces this issue by inserting the teaching of thinking skills into allocated timetable space and only displaces some content from that timetabled subject. The framework minimises this issue by seeking to change the way teachers see what they and the children do rather than dedicate significant amounts of time to specific thinking skills activities.

All of these considerations relate to a judgement about the best way of teaching thinking skills. There is still more to be considered in judging which is the best way of educating students which includes teaching thinking skills. This is so because the best way of teaching thinking skills may not meet our moral standards or may include some additional features which should lead us to judge that another way was better. None of the identified four ways of teaching thinking skills obviously contravenes the common moral standards applied to schooling. However, each of the identified ways contains additional features which are relevant in a judgement as to the best way of educating children.

Both infusion and framework minimise the consideration of additional features by operating within the established curriculum judgements contained in the timetabled subjects in schools. Critical thinking operates outside these subjects and thus requires consideration of the value of the material to be excluded as a result of its inclusion. Philosophy for children not only requires that kind of consideration but also a judgement about the merit of children studying philosophy of the kind presented in that way of teaching thinking skills.

conclusion

This paper has considered an exemplar, philosophy for children, as a way of teaching thinking skills. It has explored a way of discussing the exemplar, with a view to the possibility of applying the same approach to discussing three other ways of teaching thinking skills: critical thinking, problem solving across the disciplines (the infusion approach) and critical thinking within the subject disciplines (the framework approach). The analysis has revealed several substantive contentious issues which may help to shed light on the issues to be considered in establishing the logic of curriculum decision making. What remains to be seen is whether these connections are informative in relation to mapping the arguments for curriculum choices. What also remains to be seen is whether a similar approach can be used in considering the three other ways of teaching thinking skills which are to be explored.

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