

## EPISTEMOLOGY AND PHILOSOPHY FOR CHILDREN

*No indictment of existing education is more serious than the charge that it fosters uncritical rather than critical dispositions. It is difficult to see how the addition of anything but epistemology - and even more importantly of philosophy in general - can remedy that deficiency.(1)*

The sentiment expressed here by Professor Matthew Lipman is a profound one. I agree completely that education has, as one of its fundamental tasks, the fostering of critical dispositions. I agree, moreover, that epistemology is basic to an education that takes seriously the enhancement of critical thinking. Philosophy for Children has forcefully delivered the message, to both the educational and the philosophical communities, that philosophy can and should be viewed as a central component of an adequate education. This conference celebrates the completion of Philosophy for Children's first decade, and looks forward to the next. Those of you who have helped to develop and deliver Philosophy for Children's message have earned the appreciation of us all. I am grateful for the opportunity to join you in your tenth anniversary celebration and reflection.

I come to this meeting as an outsider, but not as an enemy or opponent. As a philosopher of education interested in critical thinking, I find myself frequently echoing the message of Philosophy for Children. As a committed advocate of the centrality of epistemology to an adequate education, I regard us as partners in the effort to advocate an education which emphasizes both epistemological sophistication and the development of critical dispositions. And, as a traditional philosopher, whose activities are mainly of the armchair sort, I can only stand by in admiration, even awe, as I watch you charge into the very real world of the classroom and actually put your ideas and ideals into practice.

As befits my traditional philosophical orientation, I intend to focus my remarks on some of the more theoretical dimensions of the Philosophy for Children program. Despite my general fellow feeling for Philosophy for Children, I think that some aspects of its theoretical/philosophical posture can benefit from recasting. In particular, I will argue that Philosophy for Children's treatment of epistemology is, in several ways, defective: its conception of the relationships between epistemology and logic and between logic and indoctrination, and its conception of good reasons, are all in need of attention. First, however, I would like briefly to consider the view of the role of *meaning* in education offered by the Philosophy for Children educational vision.

### *EDUCATION AND THE DISCOVERY OF MEANING*

In the early pages of Philosophy in the Classroom(2), the authors argue that meaning is the *sine qua non* of education:

*...anything that helps us to deliver meaning in life is educational, and the schools are educational only insofar as they do facilitate such discovery.*

*(p. 6)*

*...we could teach children...by helping them find the meanings so lacking in their lives. (p. 7)*

*The relationship between education and meaning should be considered inviolable.*

*Wherever meaning accrues, there is education. (pp.12-13)*

The idea seems to be, as the authors say, that children hunger after meaning in the sense that they seek to "make sense of things for themselves," (p. 13) and that education enables them to do so.

If meaning is a matter of "making sense of things," it is difficult to see why philosophy, or independent thinking, should be thought to be essential for its attainment. For people make sense of things in many different ways. In fact, some people make sense of things, and maintain their understanding, by not thinking. A child who has been indoctrinated into a fundamentalist religious perspective, for example, can routinely make sense of things by attributing events to God's will or God's plan. One needn't think philosophically in order to make sense of things; one needs simply some sort of framework which enables one to interpret experience. So, if enabling students to find meaning is our educational aim, teaching students how to think may well be less educative than indoctrinating them into some meaning-rich framework.

The problem is with the notion of meaning. As it has been used thus far, as an essential condition of education, meaning has nothing much to do with philosophy or with thinking. It has rather to do with the forming and applying of intelligible perspectives, and such perspectives can be, and often are, applied by people who, although not good thinkers, nevertheless "make sense of things for themselves" by interpreting experience in terms of their frameworks or perspectives.

But Philosophy for Children *does* emphasize the development of thinking skills; indeed, it places thinking squarely at the center of the educational agenda. How can thinking and "making sense of things" both occupy educational center stage? By connecting them, of course: "Thinking is the skill *par excellence* that enables us to acquire meanings." (p. 13)

But this connection between thinking and acquiring meanings can be maintained only by equivocating on the notion of meaning. So far, "meaning" has meant "making sense of things," and it is evident that there are many sorts of non-thinking, even anti-thinking, ways of making sense of things - the indoctrinated fundamentalist is only one member of a family of types, all members of which can perfectly well make sense of things without thinking critically or philosophically. In order to establish the desired connection between thinking and meaning, "meaning" must be understood not as "making sense of things" but rather as literal meaning, where literal meaning is determined along lines similar to Donald Davidson's truth conditional account of meaning. According to Davidson, the meaning of a sentence is given by its truth conditions. According to Lipman, et al., a sentence's meaning is given by what can be inferred from it:

*Since to a great extent what a statement means consists in the inferences that can logically be drawn from it, the capacity to draw inferences correctly is of the highest importance in establishing the meaningfulness of those activities that children engage in both in and outside of school. (p. 16)*

This passage illustrates the equivocation I detect. "What a statement means" is a fundamentally different matter from "the meaningfulness of activities." Activities can be meaningful in the latter way - that is, we can "make sense of things" - even when there are no statements around whose meaning we might query, or when we cannot say, and do not care, what meaning relevant statements might have. Distinguish between literal meaning and meaningfulness, or "life meaning." The educational intuition we started with is that education must be meaningful, i.e., must help us make sense of things. That activities have such meaning is independent of the literal meaning of statements. I can know exactly what a statement means, literally, yet have no idea how meaningfully to interpret the activity it describes; I can find something meaningful or make sense of it without knowing which statements literally apply to it, let alone knowing those statements' literal meaning. A statement describing an alien ritual might illustrate the first sort of case; a linguistically indescribable ritual activity one has practiced since childhood might illustrate the second sort of case. The point is that meaningfulness, or "making sense of things," is a different sort of thing than literal meaning. If Lipman, et al., are correct that inference is relevant to the character of literal meaning, it nevertheless remains that that sort of meaning is independent of the meaning required to make sense of things. The meaningfulness of an educational experience is not the same sort of thing as the meaningfulness of a word or sentence. Even if thinking and inferring are relevant to the latter sort of meaning, the case has not been made that they are relevant to the former.

This is not, I don't think, a major difficulty for Philosophy for Children. One can motivate and defend an educational program that emphasizes reasoning and thinking without linking these activities to the ability to "make sense of things." For, not all ways of such sense-making are as respectable as others. We need to distinguish between alternative ways of making sense of things, and to argue that students should be empowered so as to be able to evaluate these alternatives. For this task, thinking and reasoning skills are necessary; this is sufficient to justify an educational program that takes as a basic aim the enhancement of students' thinking and reasoning abilities. Philosophy for Children would be better off if it simply dropped this woolly and confused talk about "meaning", and argued more straightforwardly for the virtue of empowering students competently to direct their lives, and the role of thinking and reasoning in such empowerment.(3)

#### *THE PLACE OF EPISTEMOLOGY IN PHILOSOPHY FOR CHILDREN*

As the opening motto suggests, Philosophy for Children places a great deal of weight on the educational importance of epistemology. This is a tremendous virtue of the program. It is undeniable that epistemology must be central to a program which aims at the enhancement of reasoning, for good reasoning depends on the evaluation and assessment of putative reasons, and epistemology just is the theory of good reasons and evidence. Once we see that epistemology is basic to the assessment of reasons, and that the ability to assess reasons is basic to good thinking and reasoning, we see that

epistemology is basic to a thinking/reasoning educational program. So I applaud Philosophy for Children's commitment to the inclusion of epistemology in the curriculum. The study of epistemology, i.e., of the character of reasons, must be at the heart of an education which strives to foster excellence in reasoning and thinking. For students to reason well, and self-reflexively to understand what they are doing and why it is good, epistemology is fundamental.

But, of course, epistemology is controversial. We don't have a fully settled epistemology; the theory of good reasons is contentious. Philosophy for Children has embraced an epistemology which is, in several ways, problematic. I want to explore three aspects of that epistemology: its treatment of logic, its conception of the relationship between logic and indoctrination, and its treatment of good reasons.

### *A. Epistemology and Logic*

Philosophy for Children treats logic in a non-substantive, non-epistemic way. According to the program, logical criteria like consistency and coherence are not substantive criteria which may properly be utilized to direct belief. They are rather to be seen as *procedural*:

*...coherence, consistency, and comprehensiveness are... standards for effective communication and criteria for effective inquiry. They are appropriate to the way a person should think, not to what he should think. Therefore, they are procedural considerations, not substantive ones. (p. 86, emphasis in original)*

*...logical criteria...are like parliamentary rules of discussion that are agreed to in carrying on a debate. ...even a classroom discussion cannot proceed unless there are some implicit or explicit agreements as to ground rules such as "no irrelevant talk will be permitted," "no filibustering," "no use of force," and the like. Similarly, logic sets ground rules for rational dialogue. (p. 87)*

This view of logic as procedural robs logic of its epistemic force. Why do we want students to reason logically? We want them to do so because we think that logical reasoning is better than illogical reasoning; that a belief which is logically supportable is better - is more *worthy of belief* - than a belief which does not admit of logical support. Contrary to the first passage cited above, logical criteria *are* relevant to *what* a person should think. If, for example, a student believes that p, and if she is contemplating believing that not-p, the criterion of consistency suggests that she should not believe that not-p unless she is willing to give up the belief that p. In this case, which is entirely typical, logical criteria *do* tell students what to believe. The procedural/substantive distinction Lipman, et al., invoke here is untenable. Logical criteria are substantive as well as procedural. I should not believe that Reagan is a young president because that belief is inconsistent with my well-justified belief that he is old, and with evidence of various sorts which justifies my belief that he is not young but old. Thus, the criterion of consistency does tell me what to believe: believe that Reagan is an old president; do not believe that he is a young one.

It should not be surprising that logical criteria are substantive, and play a fundamental normative role in directing belief. If they didn't, they would be epistemically irrelevant. We would not be able to say to someone that she shouldn't

believe that p because p is incompatible with a body of evidence, or with other well-founded beliefs. But we do say such things, and we want to - especially in the classroom. We want students to see that inconsistent beliefs cannot all be justifiably held; that a good reason for rejecting a belief is that it is inconsistent with other, better grounded, beliefs and/or evidence. Logic thus has enormous epistemological moment. If it didn't, then Philosophy for Children, conceived as a program which seeks to improve students' reasoning abilities, would be absurd. Why would we value good thinking and reasoning, if we thought that such reasoning ought not to have an impact on what students believe? The answer is obvious: we want students to reason well because good reasoning - defined at least in part by logical criteria - is better than not-so-good reasoning, and beliefs which are supported by good reasons are more justified, more epistemically worthy, than beliefs which are not. To regard logic as strictly procedural is to rob logic of its normative and epistemic force. Once so robbed, advocates of Philosophy for Children would be hard pressed to say why their focus on the enhancement of reasoning abilities is a valuable educational endeavor.

Logic, I am claiming, has epistemic force. That is precisely why students should understand and strive to believe in conformity with logical criteria. To say that a candidate belief is consistent(4) with other beliefs which are well-founded, or with a body of evidence which is well-founded, is to say something relevant to our assessment of that candidate belief. It is to say that that belief is, insofar as it enjoys that relationship of consistency with well-founded beliefs and evidence, to some degree *justified*. To say that a belief is justified is just to say that there are good reasons for believing it. So, a program which strives to enhance reasoning abilities aims as well at the fostering of justified rather than unjustified belief. Justification turns, in part, on logical criteria; that is why logic is relevant to the enhancement of reasoning skills. Because logic does have substantive, justificatory, epistemic force, it is a mistake to regard logical criteria as merely procedural, or as "parliamentary rules of discussion." To see this, we need only envision other, non-logical, rules of discussion. Suppose everyone here accepted the rule, "it is permissible to beg the question and to affirm the consequent." Would we then say that beliefs we arrived at by utilizing that rule would be justified? Obviously not. This is because logical criteria are *not* just "rules of discussion." They are rules of *good*, epistemically respectable, discussion. To say this is to say, once again, that logical criteria are substantive, and have epistemic force. That is why we want students to understand them, and to reason in accordance with them. To regard logical criteria as procedural is to miss their central contribution to the evaluation of reasons, and to forget that *what* we should or should not believe is a function of our evaluation of the reasons which can be brought to bear for and against candidate beliefs. Logic is substantive; it *does*, and *should*, contribute to the determination of belief.

### *B. Logic and Indoctrination*

The motivation for regarding logic as procedural stems from the desire to avoid indoctrination. For, if logic is substantive, then it appears that, in encouraging students to reason logically, we are encouraging them to believe some propositions and to disbelieve others, to accept some values and reject others. That is, if we are teaching students a substantive logic, then it appears that we are indoctrinating them. So, to avoid the charge of indoctrination, we must regard logical criteria as procedural rather than substantive. (pp. 86-87)

I have been arguing, however, that logic *is*, contrary to Lipman, et al., substantive. Does it follow from my view that Philosophy for Children indoctrinates, or that it ought to indoctrinate? Fortunately, these conclusions do not follow. The authors are utilizing an inadequate conception of indoctrination; it is that inadequate conception which leads them, in their desire to avoid indoctrination, to regard logic as procedural.

Lipman, et al., conceive indoctrination to be simply the fostering of beliefs or values. If I get students to believe that p, e.g., that the sun is 93,000,000 miles from the earth on average, or that blacks are inferior to whites, or that logical inconsistency is to be avoided, then on this conception of indoctrination, I am indoctrinating them. Such a stark view of indoctrination is untenable. We want students to reason well. Because logic is substantive, in wanting them to reason well, we want them to believe some propositions and refrain from believing others. Reasoning well is not separate from believing. But in saying that we want students to believe that the sun is 93,000,000 miles from the earth on average, and to believe that logical consistency is preferable to logical inconsistency as a guide to the formulation of beliefs, and to refrain from believing that blacks are inferior, we are not saying that students should be indoctrinated into these beliefs/values. We do want students to believe certain propositions, and to disbelieve others. But we don't want them to believe/disbelieve these things on the basis of indoctrination. Everything turns on how the beliefs are held.

Elsewhere (5) I argue that indoctrination is best thought of in terms of what might be called *styles of belief*. By this, I have in mind various ways in which beliefs might be held. The indoctrinated person has a *non-evidential* style of belief. Her beliefs are not open to critical evaluation; she holds her beliefs in such a way that they are protected from negative evidence. A person who has an *evidential* style of belief, by contrast, believes in such a way that her beliefs are open to critical examination. An evidential style of belief encourages reflection, critical scrutiny, and the adoption of beliefs which are epistemically worthy of belief. A non-indoctrinating education should aim at cultivating in students an evidential style of belief. This involves both the development of students' reasoning abilities, and the fostering of dispositions and habits of mind consonant with that style of belief.

Whatever style of belief one's educational efforts strive to foster, the inculcation of some beliefs is unavoidable. One wants students to believe that  $2 + 2 = 4$ , not 5; that the sun is 93,000,000 miles from earth on average, not 50,000,000 or 50; that Shakespeare wrote Hamlet, not Mailer. In the case of very young children, there are a plethora of beliefs we seek to impart: that Mommy and Daddy will protect them; that their bedrooms are safe; that they shouldn't eat too much candy; etc. When we inculcate beliefs such as these, are we indoctrinating?

On my view, the answer to that question depends on the style of belief we are cultivating/striving to cultivate. We cannot teach very young children that they should believe only those propositions which are justified by good reasons, for they first must learn what a reason is, and how to tell good reasons from bad ones. We have no choice but to inculcate beliefs such as these *sans* justification, for until students hold these beliefs, the notion of justification is not available to them. We have no choice, then, but to inculcate beliefs. Such inculcation is indoctrinative, however, only if it tends to produce a non-evidential style of belief. Belief inculcation is not indoctrinative, on the other hand, if it helps to cultivate an evidential style of belief (or at least doesn't foster a non-evidential style).

If this is a plausible account of indoctrination, then only some types of belief inculcation are rightly regarded as indoctrination. Beliefs such as "the Pope is infallible" or "the Bible is the divine word of God" would, when inculcated, be indoctrinative, for a person who believes them will not challenge, seek evidence relevant to, or critically evaluate the case to be made for or against matters on which the Pope or the Bible have opined. That is to say, beliefs such as these encourage a non-evidential style of belief. So do beliefs such as, "I'm too stupid to figure this out for myself, so I'll just accept what my parent (church, gang, society, etc.) tells me to believe." Non-evidential styles of belief can be fostered by the fostering of poor self-images as well as by the inculcation of certain sorts of beliefs.

What about the inculcation of logical principles and criteria? We do want to inculcate logical beliefs - e.g., that certain argument forms are valid, others invalid; that an argument which begs the question fails to justify a conclusion; etc. - and also beliefs about such principles and criteria, e.g., that beliefs held in conformity with logical principles and criteria enjoy a justificatory status not enjoyed by beliefs which do not so conform. In inculcating beliefs such as these, are we indoctrinating? It is certainly not necessary that we indoctrinate when we inculcate logical beliefs, or epistemological beliefs, about logic. For we can inculcate these beliefs while fostering an evidential style of belief, which enables and encourages students to think, consider, and evaluate candidate beliefs. By fostering an evidential style of belief, we encourage students to consider the cases which can be made for and against the very beliefs we have inculcated. We say to the student, in effect: "We think that these beliefs are important for you to hold, and as you are not yet in the position to evaluate them, we have tried to get you to believe them *sans* justification. But we also think it very important that you become able to evaluate beliefs, and decide for yourself which beliefs are worthy of acceptance; and our educational efforts are aimed at so enabling you. When so enabled, you will be able to decide for yourself whether the logical and epistemological beliefs we have inculcated are worthy of your continued acceptance."

Once it is seen that the inculcation of logical beliefs is compatible with the fostering of an evidential style of belief, it becomes clear that the inculcation of such beliefs need not be indoctrinating. The case for the non-indoctrinative character of such inculcation is even stronger once we realize that the beliefs in question are necessary for the development of an evidential style of belief, because that style of belief requires that believers have an understanding of the epistemology of reasons and the ability to evaluate beliefs and reasons for and against them, and the inculcated beliefs in question help provide that understanding and ability. In this way, the charge of indoctrination is overcome. We need not indoctrinate when we get students to believe that which is necessary for the proper evaluation of belief, and when we encourage an evidential style of belief which can be utilized with respect to any belief, including those we have inculcated. In teaching substantive beliefs in the service of the development of an evidential style of belief, we are not indoctrinating. So we needn't shy away from inculcating substantive logical beliefs.

Philosophy for Children rightly emphasizes that students should think for themselves. They will be able to do so - or at least to do so well - only if we substantively guide them. We do think that some beliefs are worthy of acceptance, and others not; we are not necessarily indoctrinating when we get students to believe as we think they should. Everything depends on the style of belief our efforts promote. We don't want students simply to think for themselves. We want them to think *well* for



themselves. And that requires teaching them something substantive about the character of good thinking. In so teaching, we teach substance, not merely procedure. But we don't indoctrinate, if our teaching serves the ultimate end of fostering an evidential style of belief - a style which can be brought to bear on the very substantive beliefs we have taught. The non-indoctrinative character of Philosophy for Children is, thus, not dependent on the avoidance of substance or the retreat to procedure.(6)

### C. Good Reasons

Philosophy for Children's conception of good reasons is also in need of repair. First, let me briefly note a minor difficulty. On the Lipman, et al., view, logic is inclusive of good reasons - that is, the goodness of reasons is a logical matter. (pp. 131; 138-146) This is at best misleading, for it confuses logic and epistemology. It is epistemology which determines the goodness of reasons; logic is a particular source to which the epistemologist turns, but it is not the only one. Consider, for example, the following argument: the person who looks like Matt Lipman tonight is really someone else in a Lipman costume, because tonight is Halloween night. Is tonight's being Halloween a good reason for thinking that someone is in a Lipman costume? Logic won't help us here. Of course, the conclusion does not deductively follow from the reason, but we shouldn't say that, therefore, the reason is not a good one. If we say this, we rule out good inductive arguments, whose conclusions do not deductively follow from their premises but which are, nevertheless, strongly supported by their premises.(7) The goodness of reasons, in short, is not solely a matter of logic. This is a minor, perhaps terminological point, but for a program which places great weight on logic and epistemology, getting their relationship right seems a worthy endeavor.

A more serious difficulty for Philosophy for Children's conception of good reasons is this: it makes judgments about the goodness of reasons rely on an intuitive sense of "good reason," which intuition is not itself subject to reasonable scrutiny:

*...the good reasons approach...emphasizes seeking reasons in reference to a given situation and assessing reasons given. Since reasons that can be brought to light in a given inquiry will largely depend on its context, what will make for a reasonable search and a good reason are also context-bound. As a consequence, the good reasons approach basically relies on an intuitive sense of what can count as a good reason. (p. 139, emphasis in original)*

*An inquiry is objective if it meets with the approval of the relevant community of inquirers, but not if it violates their sense of what counts as reasonable. (p. 141)*

*<The search for reasons>...presupposes that the inquirers share an intuitive sense of what is to count as reasonable. While it would be a mistake to formulate this too precisely, it should not be pictured as some mysterious inner feeling, but simply as a rough sense of what is reasonable and what is not. (p. 142)*

If what counts as a good reason rests ultimately on intuition, then it is difficult to see why Lipman, et al., regard epistemology as central to their program. Epistemology is the study of the evidential or probative force of reasons. If the probative force of putative reasons rest on intuitions concerning that force, then



epistemology is impossible - for how powerful a reason is determined not by the relationship between the putative reason and the claim for which it is a reason, but rather on an intuition regarding the powerfulness of putative reasons. On this view of good reasons, epistemology is irrelevant to the evaluation of reasons and arguments. I take this result to be a *reduction* of the view that the strength of putative reasons depends upon intuitions regarding good reasons.

We can see the problem from a different angle. It is a well established empirical fact that many people accept the pattern of reasoning known as the "gambler's fallacy." Such people accept, for example, that the fact that the roulette wheel has come up red several times in a row is a good reason for thinking that, on the next spin, it will come up black; that the fact that a tossed coin has landed on heads several times in a row is a good reason for thinking that, on the next toss, it will come up tails; and that the fact that the Knicks have been terrible for the last few years is a good reason for thinking that they will do well this year. People who accept this form of reasoning believe that reasoning which is in accordance with the gambler's fallacy is reasonable; that is, their intuitions regarding good reasons include the intuition that the gambler's fallacy is a form of good reasoning.

But this intuition is mistaken. Reasoning which conforms to the gambler's fallacy is *not* good reasoning; it fails to recognize the statistical independence of causally unconnected events. Here is a case, then, in which people's intuition about what counts as a good reason are simply mistaken and must be corrected. What *seems* like a good reason is in fact *not* a good reason. Intuitions concerning reasonableness can be corrected; they can be strong, but nevertheless, wrong.

What this shows, I think, is that epistemology is more basic than, and can correct, intuitions regarding reasonableness. Such intuitions can themselves legitimately be challenged, and reasons sought for/against them. The good reasons dimension of the Philosophy for Children program should not, then, rest its analysis of good reasons upon intuitions, not even upon the shared intuitions of a community of inquiry. For, as we have seen, such intuitions can be mistaken. In any case, for there to be a place for epistemology in the program, it must be held that the determination of the goodness of reasons does not rest upon intuition, but rather that intuitions concerning reasonableness can themselves be subjected to critical scrutiny, and reasons demanded for their acceptance.

One can see the difficulty I have been belaboring by considering Philosophy for Children's appeal to *standards* for the evaluation of reasons. Lipman, et al., offer a set of standards for evaluating reasons (namely factuality, relevance, support, familiarity, and finality). (pp. 143-144) The general idea is that reasons which fail to meet these standards are less good than reasons which do. But why should we believe this? Suppose my intuition is that factuality is not a legitimate standard of evaluation. (Perhaps I am an idealist.) Shall we then say that factuality is not a reasonable standard of reason evaluation? Apparently we should say this, at least for the community of inquiry to which I belong. But this sort of cheap relativism should be no part of a program which takes epistemology seriously.(8) We should say, rather, that standards of reason evaluation are themselves justified by the epistemology of which they are a part.(9) For standards of reasonableness to play a role in the determination of the goodness of reasons, intuition can play no ultimate role in the determination of such standards.

## CONCLUSION

I want, in conclusion, to restate what I said at the outset: Philosophy for Children is a very important, excellent educational program. Its Deweyan focus on bringing learning to children and starting with students' interests is a refreshing change from almost every other contemporary curricular approach. It brings philosophy to children and helps them to explore it and to do it well - a terrific thing to do, at least for those of us who recognize the greatness and fundamentality of philosophy. It enhances children's thinking, reasoning, and reading skills. Indeed, Philosophy for Children has a double virtue; it is a successful critical thinking program insofar as it fosters the abilities and dispositions constitutive of the critical thinker; but it is more than that insofar as its philosophical emphasis teaches philosophical content and also encourages the development of imagination by encouraging speculation concerning counterfactual states of affairs. (p. 26) It successfully bridges the theory/practice gap so basic to educational endeavors, and it does well to point out the intimate relationship between thought and feeling (e.g., p. 162) and the relevance of the program to science education. (p. 109) In all these ways, and no doubt in many others as well, Philosophy for Children is a wonderful thing. But it would be even more wonderful if its epistemological house were in order. My criticisms and suggestions are intended to help Philosophy for Children achieve that "even more wonderful" status.

Harvey Siegel

## Notes

1. Matthew Lipman, "Constructing a Curriculum to Improve Thinking and Understanding," Part Two, CT News, Volume 5, Number 4, March-April 1987, pp. 2, 9. Citation from p. 9.
2. Matthew Lipman, Ann Margaret Sharp, and Frederick S. Oscanyan, Philosophy in the Classroom, Second Edition. Philadelphia: Temple University Press, 1980. Parenthetical page references in the text are to this book unless otherwise noted.
3. This is (roughly) the line I take in Educating Reason: Rationality, Critical Thinking, and Education. London: Routledge & Kegan Paul, 1988 (in press).
4. Lipman, et al. also uses "consistency" to mean "consistent usage of a term," i.e., as the opposite of equivocation.(p. 117) This usage differs from the usage of "consistency" the authors utilize in their discussion of logical criteria, i.e., the logical consistency of sentences. The logical consistency of sentences is obviously distinct from the consistent usage of a term. According to the latter sense of "consistency", the authors' use of "consistency" is inconsistent.
5. Educating Reason, op. cit., Chapter 5.
6. Terrell Ward Bynum echoes the Lipman et al. position when he writes that "Philosophy for Children...is actually the *opposite* of indoctrination, since one of its chief goals is to help children to think for themselves...." (Bynum,

"What is Philosophy for Children?--An Introduction," *Metaphilosophy*, Vol. 7, No. 1, January 1976, pp. 1-6. Citation is from p. 2, emphasis in original.) This reflects an indefensible conception of this "chief goal" of Philosophy of Children, for the goal must be thought of as helping students not simply to think for themselves, but to think *well* for themselves (as Lipman et al. recognize, e.g., p. 15). If we helped students to think *badly* for themselves, by getting them to reject authority but by failing to provide guidance with respect to the evaluation of reasons for belief, we would surely not have accomplished our goal of helping them to think for themselves. Bynum's remark also reflects an indefensible conception of indoctrination, according to which indoctrination occurs when we get students to adopt particular beliefs, i.e., when we teach substance rather than procedure. As argued above, this substance/procedure distinction does not work, since in the case of logic teaching procedure (e.g., how to draw an inference) is at the same time teaching substance (e.g., that this inference may not be drawn). In any case, the mark of indoctrination is not the inculcation of substance, but the fostering of a non-evidential style of belief. Teaching substance is non-indoctrinative when it fosters an evidential style of belief (or at least does not foster a non-evidential style).

7. Here I must protest Lipman et al.'s fostering of the myth that "*Inductive inferences* typically proceed from specifics to generalities...." (p. 39, emphasis in original) Inductive inferences can proceed from specifics to specifics (e.g., "each of these philosophers has a big nose, so the next philosopher we examine will likely have one"), from generalities to specifics (e.g., "most philosophers have big noses, so the next philosopher we examine is likely to have one"), and from generalities to generalities as well. What makes an inference inductive is its *ampliative* character, i.e., the fact that its conclusion goes beyond the instances examined in the premises. Specifics/generalities have nothing to do with it.
8. See my Relativism Refuted: A Critique of Contemporary Epistemological Relativism, Dordrecht, D. Reidel (Synthese Library, Volume 189), 1987.
9. The justification of basic epistemological theses concerning justification and rationality is a fundamental philosophical problem. See Educating Reason (op. cit.), Postscript for further discussion. 10. Before leaving the topic of epistemology, I should register a question concerning Lipman et al.'s treatment of belief. It is, as they might put it, inconsistent: treating belief sometimes traditionally (e.g., p. 73), and other times pragmatically (e.g., p. 97-98). What conception of belief do the authors want to work with? I strongly urge embracing a traditional conception of belief, and a rejection of a pragmatic conception. Choosing otherwise will result (though I cannot argue the point here) in difficulty reconciling a pragmatic account of belief with the program's emphasis on reasons, which rely on a traditional, non-pragmatic conception of truth for their proper explication.