"Equal Access" without "Establishing" Religion: The Necessity for Assessing Social Perspective-Taking Skills and Institutional Atmosphere

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We concur with Moshman (1990) that in public high schools there should be unimpeded religious freedom if an empirical assessment shows students have the proficiency to evaluate and freely choose religious systems and practices and to discern attempts by authorities to establish a religion. We differ with Moshman, however, regarding (a) the relative importance of a school's ethical, moral and political climate in influencing the exercise of free religious and political choice; (b) his focus on religious over political freedoms; (c) what kinds of proficiencies need to be assessed; (d) how to assess these proficiencies; (e) his claim that the reasoning ability of high school and college students is similar; and (f) the manner in which decisions permitting religious clubs in high schools should be made. Reasoning proficiency must be assessed in high school, as well as post-high school, populations of students, teachers, and administrators using a social perspective-taking task with establishment of a religion content. A school's institutional atmosphere must be assessed.   © 1990 Academic Press, Inc.

Moshman's (1990) paper, "Equal Access for Religion in Public Schools: An Empirical Approach to a Legal Dilemma," addresses a classic moral dilemma (Kohlberg, 1984) in which three First Amendment principles are pitted against one another: (1) the right to choose and

practice one's own religion, (2) the freedom of speech, press, and assembly, and (3) the prohibition against government establishment of a religion. If religious freedom consists only of the right to practice one's own religion, the question of allowing, or not, religious clubs in high schools would be relatively easy to answer. The establishment prohibition insures the right to freely choose and practice a religion or no religion.

Overview of Concurrences and Differences

Moshman constructs an admirable argument, devoted to establishing a well-reasoned means of promoting the freedom to assemble while respecting religious freedom in public junior and senior high schools, and colleges. We agree that (a) religious freedom in public high schools is invaluable, and must be upheld. We also feel that ensuring this freedom requires empirical assessment. Such an assessment should include a test of the proficiency of students in (b) evaluating and freely choosing religious systems and practices, and in (c) discerning attempts by authorities to establish a religion.

We disagree with Moshman's analysis, however, on several points. Our first point of departure is with his primary focus on freedom to choose and practice religion, in contrast to broader political and religious freedoms. We differ as to (a) the importance, relative to student's reasoning proficiency, of a school's religious and political climate in influencing free religious and political choice. Moshman de-emphasizes the importance of schools' atmosphere too much. Second, we contend that (b) religious and political freedoms must be considered together. Third, we take issue with Moshman on (c) the *kinds* of student reasoning proficiencies that must be assessed, and (d) *how* these abilities are to be assessed. In contrast to Moshman, we recognize (e) major differences in reasoning abilities of high-school and college students. Finally, we disagree (f) as to the manner in which decisions pertaining to religious access should be made.

The Importance of Atmosphere

Moshman believes that as long as high-school students can reason logically, they will make free and informed choices regarding religious beliefs and practices. Ensuring religious freedom thus comes down to ascertaining whether students can reason logically, and prohibiting all religious groups in schools where students cannot do so. Such an approach requires systematic monitoring of students' reasoning proficiency, ignoring the social and institutional context in which high-school students operate. Simply reasoning logically about religion does not guarantee, for example, that one has access to all relevant information about whether the school is attempting to establish religions. It also does not mean that one

is immune from implicit and explicit social pressures from school authorities, fellow students, one's family, and the wider community.

To make clear why assessment of logical reasoning proficiency is in itself insufficient to ensure religious freedom, we set forth the following argument. First, the context in which reasoning takes place determines the way one reasons because reasoning is context-specific (Commons, Armon, Richards, & Schrader, 1989). This means that any instrument used to assess reasoning proficiency must be appropriately context-specific. Moshman's tests are too distant from the actual form and context in which he wants to predict behavior. In the case of high-school students, this context is the atmosphere largely provided by the school itself. Second, the critical type of reasoning involved in detecting religious establishment is a task that we shall call *social perspective-taking*. Moshman's analysis relates solely to logical problems (propositional reasoning), and does not pay heed to social perspective-taking.

EQUAL ACCESS: A QUESTION OF COMMUNICATION

In this paper, First Amendment rights are summarized as Freedom of Communication. The word *communication* is used because its broader meaning historically has included the right to worship, to speak, to assemble, to publish, and to petition the government. Religious freedoms were expanded to communication freedoms because of the recognition that the state could not regulate communication without restricting religious freedom. One not only has the right to practice one's own religion (or none), however, but also the duty to recognize that others have the same right. This duty to recognize others' religious freedom is embodied in the first amendment, prohibiting the establishment of religion by the state. The right to religious freedom, assembly, and free speech helps protect against the establishment of religion by the state.

Moshman emphasizes students' individual abilities to reject undue influence and make free choices. We contend that religious and political freedom cannot exist without freedom of communication: the unfettered access to information and the freedom to pursue one's religious and political inclinations. We also contend that reasoning at the early formal operational stage (Inhelder & Piaget, 1958), one common among high-school students, produces stereotyping, making it the peak period of intolerance.

Moshman's basic argument for allowing religious clubs in high schools is that as long as high-school students can reason logically, they can form reasoned, individual judgments about religious matters. This approach seems too narrow. The central issue here is not only the logical reasoning competencies of the students, as Moshman claims, but also the moral,

ethical, and political atmosphere of the educational institution, a concern Moshman assigns lesser importance.

Equal access cannot be restricted based upon individual or social considerations. If school principals can decide which groups can meet on school property, which rooms different groups should be assigned, when specific groups can meet during the school day, who may address a group, what a group may publish, and so on, they can, in fact, influence the groups themselves and how they are perceived in the school at large.

The Necessity of Including Nonreligious Groups

True equal access (i.e., access without any bias whatsoever) requires nonrestrictive membership in clubs as well as equal access of clubs to facilities. The degree to which such true equal access exists must be empirically assessed. This issue is independent of, but related to, the issue of the extent to which access is *perceived* to be equal. According to Moshman (1990), the 1984 Equal Access Act holds that if a public secondary school allows one noncurricular student group to meet on school premises, the school must provide *all* noncurricular student groups with the same access to school facilities, without regard to the group's religious, political, or philosophical orientation. This legislation recognizes that schools giving access to religious clubs would have to have the same policy with respect to *all possible* student clubs.

Moshman, however, offers only two examples of student groups in his paper: curriculum-related groups and mainstream religious groups. The implication is that only religious groups are currently excluded from high schools, which is far from the truth. Equal access theoretically extends to clubs organized for any purpose—including sororities and fraternities, clubs by and for homosexuals, unwed mothers, satanists, neo-Nazis, Communists, and others. If a high school is to be, and is to be seen as, institutionally neutral, it cannot deny school access to any club whatsoever. Such exclusion would tacitly confer institutional approval upon—or would establish—"acceptable" student organizations.

Problem Solving in a Free-Communication Context

Propositional reasoning, on which Moshman relies as a gauge of students' overall reasoning capability, is insufficient to determine students' proficiency in *social* decision-making. On the basis of students' ability to "distinguish form from content," that is, to determine valid logical arguments from invalid, Moshman argues that religious clubs should be permitted in public high schools. Students understand "neutrality" as well as "validity," he hypothesizes, and would not perceive groups allowed by principals as groups endorsed by principals. He directly equates a logical problem with the social, ethical, and moral problem that would arise if all

types of clubs protected under freedom of communication were allowed in public high schools. Moshman does not explain why he considers propositional reasoning, for which he has tested students, to be a valid gauge of social decision-making, and the evidence indicates that it is not a valid gauge (e.g. Kohlberg, 1984).

A discussion of means to assess social decision-making follows. First is a short discussion of some possible differences between propositional and causal reasoning. We then assert that causal reasoning as well as propositional reasoning underlies social perspective-taking. As Kohlberg (1984) has pointed out, social perspective-taking underlies reasoning about the just. To avoid the establishment of religion, one must reason complexly about the just.

We propose a test of student reasoning proficiencies in the area in question: social decision-making in the domain of governmental religious establishment. It is this area in which high-school students must be able to reason in order to be extended the full right to partake of the freedom of communication. Individuals involved in social conflicts must literally be able to take other individuals' perspectives on the conflict; this is termed social perspective-taking. Individuals must detect how their behavior is caused and what effect it has, not only on themselves but on others. They must be able to anticipate what effects complex social arrangements have on other peoples' behavior as well as on their own. It is these skills, not propositional-reasoning skills, for which students must be tested to determine their proficiency to deal with the conflicts of controversial clubs in high schools.

Tests of social perspective-taking in high-school situations are needed because both the form and domain of reasoning required by a task matter a great deal. First, task difficulty may vary among the different forms of reasoning required by the variety of tasks. For instance, the number of same-stage or lower-stage actions (forms of reasoning) required for the task may vary; most commonly used propositional tasks have fewer required actions than social perspective-taking tasks. Task difficulty may also differ across a domain and stage (Commons et al., 1989) as a task may require the completion of simpler same-stage tasks. Kohlberg (1984) argues that both propositional-reasoning tasks and reasoning about causality are necessary for the corresponding stage of perspective-taking. He also asserts that social perspective-taking provides a basis for moral and ethical reasoning.

Commons and Richards (1984) formalize this argument as follows. Stage of performance is the hierarchical complexity of a task that is successfully performed. For a task to be hierarchically more complex than tasks from another set of tasks, the more hierarchically complex task requires actions that *are defined* in terms of lower stage actions and

organize the less complex actions in a *nonarbitrary* fashion. Similarly, the lower-complexity actions are also defined in terms of even lower-complexity actions. The number of times that a less complex action must be applied to an even less complex task in order to define the hierarchical sequence gives the ordinal stage number of the task. Thus, researchers should consider logical, causal, and moral reasoning tasks of the same stage of hierarchical complexity as having different degrees of difficulty. Commons and Grotzer (1990) show that logical and causal reasoning are embedded within and required by a social perspective-taking task, which is, in turn, embedded within and required by a moral reasoning task.

Second, the logical propositional reasoning tasks (Moshman, 1990) are not sufficient to assess students' facility in thinking about the establishment of religion because they do not assess reasoning in the most related domains. Students are generally faced with actions in complex social situations, not with abstract arguments and justifications. But the domain of causation and its derivative social perspective-taking relate more directly to detecting the establishment of religion than does the propositional logic domain. This would not be much of a problem except that propositional reasoning and causal reasoning fall into quite different domains. Domain describes the context and content of the tasks, including the actions and objects, and relations among them.

Despite their apparent mathematical similarity, implication relates to language and arguments, whereas cause relates to real-world events. Logical reasoning predicts what is true from arguments. Statements are treated as propositions and do not necessarily represent real-world events. Propositional reasoning has binary arithmetic as a kernel. A statement is either true, or false, and not both. Moral logic has three values and hence is more complex. A statement may reflect *permission,* as well as *obligation,* and *prohibition.* Causal reasoning predicts outcome events as opposed to what propositions may be derived. Cause has to precede the effect; the cause cannot act at a distance from the effect.

Propositional reasoning tasks overestimate students' proficiencies in thinking about the establishment of religion for another reason: the propositional tasks do not have the right content. Formal-operational problems requiring a working knowledge of an unfamiliar domain, such as the establishment of religion, are more difficult than others (Lam & Sonnert, 1988) because they require a working knowledge of the specific relations of the domain.

Student Detection of Establishment of Religion

Students have little experience in detecting the establishment of religion. Such establishment might appear as subtle leaning towards one or

more religions or the rejection of some very unpopular ones. Testing for proficiency should take place in the domain of interest for two reasons. First, we guess that the closer to the actual problem the prospective task is, the more it will predict actual behavior. People find little transfer from one domain to another (e.g. Bart, Frey, & Baxter, 1979; Kuhn, 1974). Second, the task of detecting institutional bias is more complicated (but not hierarchically so) than social perspective-taking between two people.

Our vignettes and the questions that follow them are counter-examples to Moshman's argument that adequacy in dealing with possible establishment of religion is shown by early formal reasoning as measured by propositional reasoning. The tasks show that perspective-taking skills are necessary to detect whether establishment of religion is taking place. The tasks also show that such a detection relies on more than logical propositional reasoning. As shown in Table 1, the metasystematic Stage 5b (Richards & Commons, 1984) required for detecting establishment of religion in this task is two stages beyond formal operations. The tasks also show that "openness" is not readily attainable in public high schools, given the *in loco parentis* requirement reflected in their present structure. The hierarchical complexity of reasoning required of everyone becomes clear in our discussion of the perspective-taking stages and of what, at each stage, can actually be done about the issue of clubs in public schools.

The perspective-taking tasks shown in the Appendix, especially question #3, require metasystematic Stage 5b social perspective-taking skills, skills that secondary school students and staff do not necessarily possess. The task requires metasystematic reasoning because the solution requires individuals involved in a social conflict to be able to take other individuals' perspectives on the conflict. Administrators and students *have* been shown to reason adequately about propositions at the formal operational stage, but the question of religious clubs presents a more complex problem. As the above problem shows, reasoning about establishment of religion is more than a propositional-reasoning problem. It is a real-life social conflict demanding perspective-taking skills not tapped by pencil-and-paper logic problems. The question, then, is whether high-school students and administrators possess perspective-taking skills at a level sophisticated enough to work through the problems of controversial student clubs. We propose that the stage theory of social perspective-taking is more viable than the stage theory of propositional reasoning in addressing the religious club issue. The stage at which students solve social perspective-taking tasks in the actual domain of interest—the establishment of religion domain—is the best indirect gauge of their proficiency to deal with the likely complications of real religious clubs in their own schools.

TABLE 1
STAGES OF SOCIAL PERSPECTIVE TAKING AND HIGH SCHOOL PRINCIPALS' REASONING

Preoperational 2b (1/2): Differentiate between their own physical and psychological actions. Another's subjective state is thought to be inferable by simple physical observation.

Primary 3a (2): Second-person perspective begins. See that own behavior leads to personal outcomes, or that other's behavior leads to other's outcomes. Individuals assume that other people see the world the same way as they do. Principal #2 makes "helpfulness to principal," a preferred outcome, the criterion for assigning rooms.

Concrete 3b (2/3): Perceives relationship between self and other by seeing causes for own action and how own actions affect other's behavior. Principal #3 use of "helpfulness to other students" shows a perception that one's own behavior may be the cause of another's behavior—a connection between the actions of self and the actions of others.

Abstract 4a (3): Asserts a third-person or neutral other by generalizing cause-and-effect chains of two individuals' behavior. When a neutral observer cannot determine which side in a social conflict is correct, the outcome preferred by the largest number of persons is adopted as the most neutral. That modal outcome is determined by finding the largest sum and is the only relevant algebraic assessment allowed at this stage. Principals #1 and #7 use "size" and "popularity" because they feel each side has an equally legitimate claim and, therefore, the outcome that is desired by the largest number of individuals is the most fair.

Formal 4b (3/4): Isolates specific causal relations in complex sets of interactions in a linear fashion. Detects the actual causal chain of command in the hierarchy as well. See text for principals' reasoning.

Systematic 5a (4): See behavioral framework of other as integrated system of traits, beliefs, experiences; coordinates linear causality with hierarchical social organization; places different perspectives in hierarchy of preference. See text for principals' reasoning.

Metasystematic 5b (5): Compares, contrasts, transforms, and synthesizes individuals' perspectives and understands that everyone's behavior shapes their own perspective and vice-versa. Treating systems of vertical and horizontal causal relations as the objects, allows systems to be compared and contrasted in terms of their properties. The focus is on the similarities and differences in each system's form, as well as constituent causal relations and persons within them. For instance, individuals may reflect on the logic exhibited in conflicting interpretations of a social incident. They are reflecting on the systemic organization of conflicting perspectives. Whereas at systematic Stage 5a, a perspective has a single unifying structure, at metasystematic Stage 5b the structure of the different perspective systems are compared and described. Principal #6 uses chance after taking the viewpoint of each student in each club. Chance recognizes the validity of the perspective of the least preferred person.

Paradigmatic 6a (6): Recognizes that independently constructed perspectives are either incomplete or inconsistent, and understands the necessity of co-construction of new perspectives through dialogue and collaboration.

Note. General stage model numbers are first; Kohlberg's and Selman's numbers are in parentheses.

Stage Theory of Social Perspective-Taking

The stage theory of social perspective-taking posits that each of us utilizes frameworks through which we perceive the world. These frameworks integrate different relationships and heavily influence an individual's ideological positions and social decision-making. For example, social scientists assume a framework that posits continuity of action across situations when they propose that measured test results of reasoning predict real-life reasoning. A perspective can clearly encompass some events in the world and, at the same time, miss major points. Thus, the perspective may be consistent with events in the world and relations among the events, but incomplete. As individuals' perspectives advance in stage, the perspectives become less egocentric. And in situations involving conflicting viewpoints, in which individuals need to understand both the perspectives of other people and the frameworks that shape those people's perspectives, this understanding becomes increasingly easy.

In most high schools, however, the stage of the moral and ethical atmosphere seems to be limited to formal operations (Powers, Higgins, & Kohlberg, 1989). Conventional moral and ethical activities are asserted in an authoritarian way, regardless of whether the authoritarianism is explicitly recognized by students, teachers, or administrators. Social perspective-taking proficiency of most high-school administrators may also reach an upper limit at the systematic Stage 5a. Although individuals performing at this stage can describe other people's points of view, they do not necessarily sympathize with perspectives different from the ones they hold personally (Rodriguez, 1989; Rodriguez & Commons, 1989).

Primary, concrete, abstract, and metasystematic operations. These operations are defined and illustrated in Table 1 by analyses of principals' solutions to the religious club room-choice problem in the Appendix. The stage numbers are from the General Stage Model (Commons & Richards, 1984) and the numbers in parentheses are from Kohlberg (1990) and Selman (1980).

Formal operations. Stage 4b (Selman's Stage 3/4) reasoning individuals, like Principal #4, disassociate themselves personally from deciding a social conflict. The individual may attempt to treat the problem in a horizontal manner, referring the matter over to an authority other than the self to make the decision. Principal #4 invokes a logical method, "holding an election" so that the students vote on what they want. In that horizontal manner, such individuals detect sequential cause: student behavior influenced, and was influenced, by the behavior of others; the principal's behavior influenced, and was influenced, by the behavior of others. In a vertical manner, individuals also detected hierarchical organization: prin-

$S_1 \longrightarrow B_1 \ldots \ldots O_1$ Events:

Person$_1$ | Person$_1$ ↑ Person$_1$ S = Situation

            B = Behavior

$S_2 \longrightarrow B_2 \ldots \ldots O_2$ O = Outcome

Person$_2$ | Person$_2$ ↑ Person$_2$ Subscripts:

Person$_1$ 1 = First (and vertically superior) position

           2 = Second (and middle superior) position

Person$_2$ $S_3 \longrightarrow B_3 \ldots \ldots O_3$ 3 = Third (and least superior) position

Person$_3$ | Person$_3$ ↑ Person$_3$
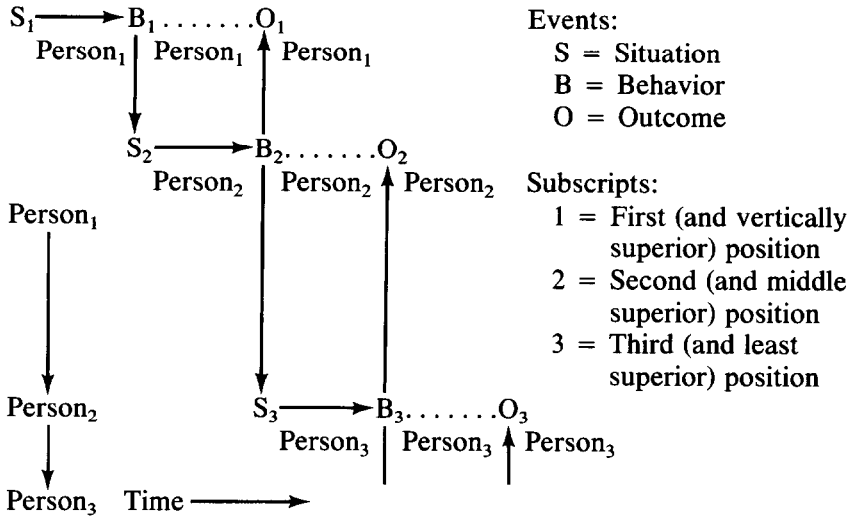
Person$_3$ Time $\longrightarrow$

DIAGRAM. Stage 5a (Selman's 4) Systematic Operations.

cipals stood at a different step in the hierarchy from the students. They do not integrate that information, however.

At formal operational perspective-taking Stage 4b, individuals engage in finding *causal* links between events as shown in the Diagram. Each horizontal sequence in the Diagram represents a causal chain, and a situation causes a behavior which leads indirectly to an outcome. The vertical lines represent the links between different persons' causal sequences. The cause for each behavior (B) in a causal sequence is the situation (S, on the same line) produced by another's behavior (B, on the line above) antecedent in the chain. The situation is the behavior occurring in its context.

Formal operational perspective-taking requires one to detect the cause of each action among a group of events.[1] Possible causal events are isolated and linked to the outcome to which the individual's attention is directed. Individuals see that person$_2$ responds ($B_{person2}$) to the situation (S_2) produced by behavior of person$_1$ (B_1). Person$_3$ in turn responds ($B_{person3}$) to the situation (S_3) produced by behavior of person$_2$, etc. Formal Stage 4b perspective expands on abstract Stage 4a reasoning, in which individuals are limited to formulating abstract others. These ab-

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[1] A second form requires the detection of balance of perceived value of outcomes (somewhat analogous to the balance beam problem of Inhelder & Piaget, 1958). Perceived value may be determined by a number of factors including the probability of an outcome and the value ascribed to it.

stract others may be pejorative stereotypes clubs might exploit. At Stage 4a, as shown in Table 1, individuals see many seemingly causal interpersonal relations, but can detect only those which are actually causal at Stage 4b. The linearity of thought of Stage 4b is consistent with *asserting* at Stage 4a or *methodically considering* at Stage 4b only one variable, which connects cause to effect, at a time. At Stage 4b, a second causal sequence is detected. The hierarchical nature of organizations is known: cause and effect can flow downward in an organization. Thus, in the diagram, causality moves down, as well as across. Individuals know these two variables exist but operate with only one at a time.

Formal operations is the modal stage of the adult population and the stage at which informed decision-making seems to begin. About ⅓ of the adult population reasons at moral Stage 3/4, which corresponds to formal operational Stage 4b (Kohlberg, 1984, 1990).

We grant that some students are prepared to detect whether religion has been established at school, if so directed. Many will take the outcome, the establishment of religion, and link it causally to the actions of the school. Moshman seems to assume that high-school students can detect the tendency of a school to establish a religion without being directed to do so. Let us examine this assumption. Arlin (1975) has shown that finding a problem, such as the establishment of religion, without being trained to do so, would require postformal reasoning. Students trained to look for establishment could find it using formal operational reasoning. It is unlikely that schools would offer courses in such perception.

Systematic (postformal) operations. Principal #5, in using club seniority as the deciding factor, employs systematic Stage 5a (Selman's, 1980, Stage 4) skills. Such principals attempt to be unbiased by removing themselves and other actors from the decision process. The Stage 5a decision-making is disposed to turn over the matter to a power other than the actors involved; Principal #5 turns the matter over to the society, so to speak, deciding the matter on basis of precedent that preserves the social order. In this case, the principle is "first come, first served."

The systematic Stage 5a perspective-taking coordinates the two parts of the Diagram, the consequence of the individual's vertical hierarchical command or power structure as well as the horizontal sequential connection of individuals' actions. The isolated understanding of cause and effect and of hierarchy obtained at Stage 4b are united by "multiplying" the causal vectors, as shown in the Diagram. Events and persons are thereby coordinated into a social system, with each person holding a place in a chain of social interactions. The system so generated encompasses a hierarchical organization of social roles, rules, and events as well as a network of causal interactions whereby one person's behavior affects another's in a methodologically established chain.

There are two key changes in the view of causation. First, outcomes are seen as resulting from a network of causal interaction rather than from simple causal chains (Koplowitz, 1984). What individuals reflect upon is the fact that any action or event is part of a system of actions and events. One's present behavior is interpreted in light of precipitating events in the social system.

Second, as position in the hierarchy changes, different rules of cause and effect govern behavior. Individuals and their acts are considered with respect to their place in the hierarchy (Kohlberg, 1984; Selman, 1980) and whether they preserve the system. As a byproduct, individuals compete within the system for power. The system and the individual are then put into conflict. Decisions are biased, however, because the hierarchical position of the actor influences the value given the perspective of actions and outcome. Only metasystematic Stage 5b operations produce a social perspective that overcomes hierarchy to produce the unbiased principal's behavior as shown in Table 1.

Differences between High Schools and Colleges

Atmosphere. Powers et al. (1989) show that freedom of speech and assembly in a school environment support learning and inquiry. It appears highly unlikely, however, that most high schools would be willing to adopt a policy of genuine neutrality toward student clubs, given the present stage of moral and ethical atmosphere of institutions, and the present stage of social perspective-taking of decision-makers. Only principals reasoning at the postformal metasystematic Stage 5b, which is at least one stage higher than what is commonly found in high-school decision-makers, resolve the room-pick issue in truly unbiased fashion (see Principal #6 in the Appendix and in Table 1, and also see Sonnert & Commons, 1989, as to whether metasystematic reasoning is really sufficient). If one can deduce the stage of reasoning of administrators from the stage of atmosphere of the institutions to which they contribute, most high school administrators' reasoning about these issues falls somewhere between formal operational Stage 4b and systematic operational Stage 5a (Powers et al., 1989). School decision-makers would almost certainly label controversial student clubs as "more acceptable," "less acceptable," and "unacceptable" and treat them accordingly.

College and university decision-makers, on the other hand, typically perform at a slightly higher social perspective-taking stage than high-school administrators (Meaney, Commons, & Weaver, 1989) because they are required to deal with greater diversity. Moshman's conclusion that "public secondary schools should generally permit equal access for

religious students for the same reason that the Supreme Court has ruled public colleges and universities must do so'' seriously underestimates the difference between the institutional atmosphere and contexts of high schools and higher education establishments.

Students. Although there is overlap in the distribution of intellectual proficiencies among high-school and college students, the two groups are distinctly different. The lack of students' reasoning at Kohlberg's (1984) postconventional stages (Stage 5b) indicates that conformity does not peak at age 13 and then decrease to adult levels, as Moshman claims. The reason Moshman finds no difference between stages of reasoning of adults and adolescents is that the studies he has examined have not included higher stage problems.

Postformal measures of adult stages, such as Kohlberg and Loevinger's Stage 4 (systematic, 5a) and Stage 5 (metasystematic, 5b), are needed to evaluate the adequacy of high-school student reasoning. They show a difference between the mean stages of adolescent and adult stage performance (Armon, 1984; Colby & Kohlberg, 1987). Kuhn and her associates (Kuhn & Ho, 1977; Kuhn, Ho, & Adams, 1979) and Armon (1984) found significant development of formal operations in students during college.

Nonintervention as Administrative Policy

Assume many high-school students will perform at the formal stage on a social perspective-taking task such as the one presented here. Given both the likely authoritarianism of a high-school administration over religious clubs and the students' own underdeveloped cognitive proficiency, it is clear what sort of situation would transpire if religious clubs were instituted under existing policies. Students would be unable to detect a principal's bias if this bias existed. Such bias might result in a very real threat of government establishment of religion. To guard against this possibility, as the Congress has suggested, religious clubs should only exist in an atmosphere of complete free speech, press, and assembly. Such an atmosphere can be guaranteed only through a policy of strict nonintervention by principals, administrative officials, teachers, and other school representatives.

Students should be able to invite outside community members of any persuasion to speak and counsel them. Thus, people with possibly higher stages of reasoning and wisdom would be able to partake in and critique the process.

Schools would no longer have the same degree of *in loco-parentis* if they could not regulate speech and assembly. With respect to club orga-

nization, meetings, and activities, school staff would deal only with considerations of time and place. Otherwise, school staff would be forbidden from involvement with the clubs in any capacity whatsoever. Random processes for room assignment would be used. Processes of club governance would then fall to the community under the same laws that govern any citizen. The school boards and government would be likewise constrained. Early attempts at having such clubs would need to be monitored regularly as to their success. Violations of nonestablishment would be brought to the lowest level of authority possible, just as is the case with other forms of discrimination. Processes for appeals would need to be established. If free communication did not exist or if access to all types of noncurricular groups were *not* allowed in high schools, religious clubs should not exist. Having after-school clubs would more clearly demarcate a separation between school and religion.

CONCLUSION

Moshman does not recognize the full scope and complexity of the religious club issue. His approach to cognitive development minimizes the differences between the reasoning proficiencies of adolescents and adults (or, to use his categories, between junior high, high-school, and college students). He also underestimates the importance of the institution's moral and ethical atmosphere (Higgins, Powers, & Kohlberg, 1984), in effect equating high-school atmosphere with that of colleges and universities. Finally, Moshman argues that abstract or formal propositional reasoning suffices for detecting institutional bias toward religious clubs. Propositional reasoning has never been shown to underlie causal reasoning. Propositional reasoning is about the logical validity of arguments. Causal reasoning is about the empirical validity of causal models. The problem which students face, that of detecting religious establishment, is not one of logical argument but of a possible reality that needs to be detected. In contradistinction, we present an argument here that causal reasoning is embedded in social perspective-taking. Social perspective-taking of a sufficiently advanced stage is necessary to detect whether religious establishment has taken place. The stage theory of social perspective-taking is sensitive to the aspects that Moshman's propositional approach is not, providing a better model for assessing the responses of secondary school students and administrators to religious/political-club dilemmas. If enough students perform at both the abstract and formal operational stages on a relevant social perspective-taking task, having religious clubs in an atmosphere with free speech, press, and assembly seems reasonable.

APPENDIX

A. Consider the following scenario:

Counter-Earth is a planet similar to earth but is hidden on the other side of the sun. Several years ago, a School Board there decided that student clubs could meet inside school buildings during school hours. The principal at each of the seven schools gives the new Satanic Club an ugly, gross room for its meetings. The Satanic Club at each school complains, saying "The Christian Club is getting special treatment. The Christian Club meets in a nice room with a rug and air conditioning. The neo-Nazi Club has a good room, too." The neo-Nazi Club is the oldest, biggest, and most popular club at school. The principal at each school agrees that "The school cannot favor one club over any other club." The next day, each principal says "The three clubs will pick their rooms again." The rooms are all the same size, but some are nicer than others. The seven principals each make a different rule on how the clubs will pick their rooms.

1. Principal 1 at Gerald Carter High School says that "the club that is most popular with the students gets first pick. The club that is the least popular gets last pick." The neo-Nazi Club is the most popular. The neo-Nazi Club picks the room that the Christian Club used to meet in.

2. Principal 2 at Danforth Bush High School says that "the club that helps the principal most gets first pick. The club that is the least helpful gets last pick." The neo-Nazi Club helps the principal the most because neo-Nazi Club members guard the halls and bathrooms during lunch. The neo-Nazi Club picks the room that the Christian Club used to meet in.

3. Principal 3 at George Quayle High School says that "the club that helps other students most gets first pick. The club that is the least helpful gets last pick." The neo-Nazi Club helps other students most because neo-Nazi Club members beat up students who break into other students' lockers. The neo-Nazi Club picks the room that the Christian Club used to meet in.

4. Principal 4 at Walter Kennedy High School says that "the club that wins an election by getting the most votes, gets first pick. The club that loses an election by getting the fewest votes gets last pick." The neo-Nazi Club get the most students to vote for it. The neo-Nazi Club picks the room that the Christian Club used to meet in.

5. Principal 5 at Ronald Nixon High School says that "the club that is the oldest gets first pick. The club that is the newest gets last pick." The neo-Nazi Club is the oldest club. The neo-Nazi Club picks the room that the Christian Club used to meet in.

6. Principal 6 at Richard Reagan High School says that "the club that picks the lowest number gets first pick. The club that picks the highest number gets last pick." The neo-Nazi club picks "#1" from the hat. The neo-Nazi Club picks the room that the Christian Club used to meet in.

7. Principal 7 at Jimmy Ford High School says that "the club that is the biggest gets first pick. The club that is the smallest gets last pick." The neo-Nazi Club is the biggest. The neo-Nazi Club picks the room that the Christian Club used to meet in.

B. Answer *all* the questions as *fully* as possible.

1. Rank the principals' views as to how much they actually show favor toward a club.
   Give a rank of 1 for a principal's view that actually shows the most favoritism toward a club.
   Give a rank of 7 for a principal's view that actually shows no favoritism toward any club.

a. Principal 1 at Gerald Carter High   _____
   School

APPENDIX—*Continued*

   b. Principal 2 at Danforth Bush High   _____
       School

   c. Principal 3 at George Quayle High   _____
       School

   d. Principal 4 at Walter Kennedy High   _____
       School

   e. Principal 5 at Ronald Nixon High   _____
       School

   f. Principal 6 at Richard Reagan High   _____
       School

   g. Principal 7 at Jimmy Ford High   _____
       School

   Explain your answers.

2. Which views match those of each principal? (The order of the principals' views should be randomized when given to subjects.)

Stage Principals Views	Which principal shows those views?
5a. I choose the rule that goes along with established rules. Principals should act like court judges. Court judges uphold good common rules and customs. I choose the common "first come, first served rule." Everyone knows it is fair.	_____
5b. I look at the situation from each club member's point of view. I than ask, "What rule can be made that favors no student over any other student or their group over any other group?" I choose the rule that all students would know favors no club.	_____
4b. I use a rule that leaves the decision to the students instead of to me. Majority rule is the best way to solve this problem. That way I will not favor any one club.	_____
4a. I use a rule that anyone would use. Each club has its own reasons for getting the best room. Because their reasons are equal to one another, the only way to choose is to give the best room to the biggest and most popular club.	_____
3b. I use a rule that will get the students to respect my authority. If I use something that the students like as a reason for choosing a club, then they will listen to me more.	_____
3a. I use a rule that helps me. Some club has to get first pick. It might as well	_____

APPENDIX—Continued

be the club that helps the principal the
most. That way the principal can help
all the clubs more.

3. Circle the number that you think answers the question best. The lower the number
you circle, the more you think the two principals are different. The higher the
number you circle, the more you think the two principals are similar.

Question: *How similar* are the principals in the way they view the problem of the
student clubs?

		Completely different					Completely similar
a.	Principal 1 and Principal 2	0	1	2	3	4	5
b.	Principal 1 and Principal 3	0	1	2	3	4	5
c.	Principal 1 and Principal 4	0	1	2	3	4	5
d.	Principal 1 and Principal 5	0	1	2	3	4	5
e.	Principal 1 and Principal 6	0	1	2	3	4	5
f.	Principal 1 and Principal 7	0	1	2	3	4	5
g.	Principal 2 and Principal 3	0	1	2	3	4	5
h.	Principal 2 and Principal 4	0	1	2	3	4	5
i.	Principal 2 and Principal 5	0	1	2	3	4	5
j.	Principal 2 and Principal 6	0	1	2	3	4	5
k.	Principal 2 and Principal 7	0	1	2	3	4	5
l.	Principal 3 and Principal 4	0	1	2	3	4	5
m.	Principal 3 and Principal 5	0	1	2	3	4	5
n.	Principal 3 and Principal 6	0	1	2	3	4	5
o.	Principal 3 and Principal 7	0	1	2	3	4	5
p.	Principal 4 and Principal 5	0	1	2	3	4	5
q.	Principal 4 and Principal 6	0	1	2	3	4	5
r.	Principal 4 and Principal 7	0	1	2	3	4	5
s.	Principal 5 and Principal 6	0	1	2	3	4	5
t.	Principal 5 and Principal 7	0	1	2	3	4	5

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