Subsidies to education are often justified by arguing that society derives political benefits from education in terms of individuals who perform better as citizens. Since these benefits are external to the student and therefore do not provide him with incentive to invest further in his education, society must devise a means of subsidy that will induce students to continue their education and thereby improve the workings of political democracy. Many argue that an optimal subsidy policy is one which stimulates the student's private economic motive for demanding education. By offering cheap tuition or providing loans at subsidized rates of interest, the consequent cost reductions lead to a greater demand for education. However, such across-the-board cost reductions stimulate investment in education among the more able students and lead to greater investment in training for higher paid occupations, where the private incentives are highest. The logic of majority voting indicates that a more efficient method by which to gain citizenship benefits from education might be through a more egalitarian subsidy policy which would allocate larger subsidies to less able students. Moreover, some selectivity in the areas of study to be supported is desirable, since some courses may be more effective than others in improving citizenship quality. (TT)
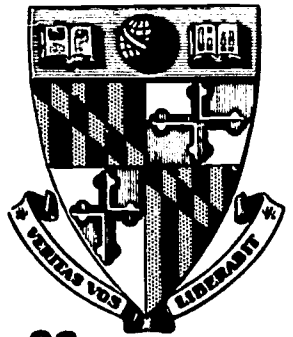
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EDUCATIONAL OPPORTUNITY, DEMOCRATIC THEORY, AND THE ECONOMICS OF EDUCATIONAL SUBSIDY

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Acknowledgments

It is widely recognized that, in a democracy, there are political benefits to society from the extension of secondary and college education to the electorate.[1] These benefits are, to a considerable extent, external to the individual student, since the improvement in the functioning of political democracy brought about by one individual's better performance as a citizen will not--in a society numbering in the millions[2]--suffice to provide a private motive for the individual to pursue his studies. However, this benefit may be important enough to society as a whole for the citizenry to find it worth while to subsidize collectively the student's further education.[3]

Here, then, is a good argument for a state subsidy to education (and one frequently advanced). But while the rationale for a subsidy to education on citizenship quality grounds is clear enough, the form which this subsidy should take is not so obvious.

A number of economists[4] hold that educational subsidy may be allocated with maximum effectiveness by utilizing the private motives for further education. In this view, subsidies might best be used to offer cheap tuition to all students or to provide loans at subsidized rates of interest. These methods afford a broad scope to individual choice. They also give the maximum weight to private benefits in the allocation of educational resources.

The use of subsidy to reduce the cost or price of education will, of course, be expected to increase the demand for education. At the same time, it will influence the types of education pursued and the distribution of education among the population: investment is expanded most here where the private incentives are highest. Thus an across-the-board reduction in the cost of education may be expected to stimulate investment in education most among the more able students[5] and to lead to greater investment in training for the higher-paid occupations.

A general reduction in the cost of education may be an efficient way of promoting a number of economic goals. However, it can be shown that such across-the-board subsidies are not likely to be an optimal method of obtaining the educational benefit, improvement in citizenship quality.[6]

In the first place, some courses of education are more effective than others in improving citizenship quality.[7] Hence, in subsidizing education in order to promote better citizenship, it might be desirable to be selective in the areas of study that are to be supported by the subsidy, even if this puts a constraint on the student's freedom of choice. For example, the government might make a stiff undergraduate social science requirement a condition of aid to colleges or individual students.

In the second place, a blanket reduction in the cost of college education will be an inefficient way of improving citizenship quality, since the distribution of a given educational expenditure among the population on political grounds is likely to be quite different from the distribution which would result from private choice. This conclusion follows from the logic of majority voting, and, more generally, from an analysis of the workings of political democracy. This divergence between the political goal and the goal of private choice can be clarified by an examination of the optimal distribution of education for citizenship quality implied by the more popular models of political democracy.

In a very simple model of democracy, political decisions are reached by a majority vote of the citizenry, and each citizen has equal political influence.[8] In this model the ideal or maximum goal for citizenship quality is a "correct" majority on each political issue. But people vote on the basis of self- or group interest, as well as on the basis of their political knowledge. This suggests, first, that the more modest goal of decisions dominated by informed or politically educated voters may have to be

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substituted for that of "correct" results. Moreover, the algebra of majority

voting suggest that interest group voting will introduce further complica-

tions. With interest group voting, a split majority of informed voters

would permit a know-nothing minority swing vote to determine the outcome.

With a different split a politically educated minority might decide the

issue. Alignments change from issue to issue, so that it might be necessary

to educate many more than a majority of voters in order to obtain trained-

voter-dominated results in a reasonable proportion of issues.

However, the educated-noneducated dichotomy itself is artificial. Is

it worth more to the democracy to have intelligent votes cast by a minority

than to have semi-intelligent votes cast by a majority? On the face of it,

one would expect the latter alternative to be more productive (although it

is not clear that better decisions will be reached with imperfect knowledge

than with no knowledge). Moreover, on some issues decisions are more

difficult than on others, so that a man may be educated well enough to vote

correctly on one issue but not on another. This is further complicated by

the interrelationship between issues on which votes are cast: for example,

make the assumptions that the War on Poverty is good and that the war in

Vietnam is bad. If the further assumption is made that the war in Vietnam

has prevented the W.O.P. from being carried out, an intelligent decision

on the W.O.P. has in fact been negated by uninformed views on Vietnam and

on the relationship between Vietnam and the W.O.P.

Thus even a simple majoritarian model of democracy quickly leads to

difficult or even insoluble problems in the allocation of funds for

education. However, if one does accept the majoritarian model, several

points of importance to educational policy can be deduced. First, there is

no reasons whatsoever here for creating "millionaires" of political knowledge,

since the marginal social product of the additional knowledge of the

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millionaire is negligible. But there may be equally little reason, in a majority system, for attempting to raise the least able (say, the lowest 5 to 15 per cent of the population) to a higher level of political awareness. The degree to which the least able may be safely neglected in the voting process will depend, of course, upon the extent to which they constitute a separate interest group with intense preferences on a number of issues. If the least able tend to be found in a particular occupational, racial, or religious group, or in one small area of the country, then it might become of great importance to educate them to play an informed role in collective decision-making.

An additional deduction follows if, as one would suspect, careful calculation leads to the conclusion that a fairly knowledgeable majority will tend to have a better batting average of correct decisions than will a fully informed minority. Then, on the basis of these political consider-ations, it would probably pay society to invest much more in the training of the below-average student (though not the least able) than to invest in the above-average student, since the latter group will require less training to reach the requisite level of information, interest, and skill. This third deduction directly challenges the conventional wisdom of the academy. It also flies in the face of private economic considerations, inasmuch as empirical data show that there is a tendency for the private financial rate of return from education to be higher for the above-average student, and for such students to have more invested in their college education.[10]

If this majoritarian model is combined with what we know about the private demand for education, some further inferences about the proper distribution of subsidies for political purposes become possible. If education for improvement in citizenship quality has a positive association

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with education as such, then the more able students and most middle- and upper-class youths of lesser ability (i.e., those whose private demand for education is greatest) will be obtaining more politically relevant education than others in the absence of subsidy. Hence the distribution of educational subsidy that society would be required to make on grounds of citizenship quality would be even more heavily weighted in favor of less able students and lower-class youths (i.e., not only would greater expenditures have to be made on the less able youth to bring him up to an acceptable level, but a higher proportion of this expenditure would have to come from a public subsidy for this purpose). Thus the greatest citizenship quality payoff may well come from subsidies for the further education of those whom the private return would not itself be great enough to induce to go to college. (Citizenship quality education for this group might better be carried on at the secondary or junior college level than within a four-year program.)

However, a simple majoritarian model, the empirical political scientist will tell us, is naive. To paraphrase _Animal Farm_, we are all equal, but some are more equal than others. Within a small group it is clear that leaders of opinion dominate their fellows.[11] In the larger society it is equally clear that the owners of the mass media and other members of the business, political, and military elites have more power than the average citizen.[12] Unfortunately, empirical political scientists are sharply divided on the question of just how much power is wielded by the members of each of these several elites.[13] Moreover, to use this knowledge of the power distribution for subsidy decisions at the high school or college level, a forecast of the future adult roles of students is required. (Citizenship quality has, of course, a much more immediate application

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to adult education: an obvious case can be made for improving the
citizenship quality of newpaper publishers and union shop stewards.)

However, the introduction of political influence and political
inequality into the majoritarian model does modify in several interesting
ways the conclusions it suggests. First, a rationalization of the creation
of millionaires of political knowledge at public expense is provided if
there is in fact reason to believe that there will be sufficient inter-
action between the millionaire and his fellows to justify his educational
subsidy. (One must remember that unless he is a professional journalist,
politician, or the like, the political expert does not have the financial
incentive to use his knowledge to help his fellows that, for example, a
brain surgeon has--his income does not depend upon its use.)

Second, since middle- and upper-class youths in the United States are
more likely to possess political power during their lives than lower-class
youths, an argument can be made for raising them to a higher level of
citizenship quality. There is some weakening here, then, of the case for
favoring the lower classes developed in the majoritarian model. The
importance of this for policy is, obviously, dependent upon the value
that the policy-maker puts on avoiding educational policies which would
bring about greater political inequality. Once this egalitarian aim is
introduced, the possibility of contradictions between the political goals
of efficiency and of equality must be admitted. Concern over equality
might then discourage the policy-maker from assisting the political
education of the more powerful members of society (the middle and upper
classes) on the grounds that such education woudl further increase their
influence.[14]

In conclusion, this consideration of one of the public or social
goals of education, the improvement of citizenship quality, suggests that

the correction of imperfections in the free market by provision of attractive student loan packages, free or cheap tuition, or other across-the-board subsidies is not an efficient approach. Rather, a study of the argument suggests that some selectivity in the areas of study to be supported is desirable. Moreover, this analysis argues that a much more egalitarian subsidy policy than is indicated by the free market allocation should be advocated. In fact, as we have seen, there may be grounds here for going beyond the principle of equal subsidies for all and actually allocating larger educational subsidies to less able students.

The extent to which governments and other subsidizers of education will permit these considerations to influence their educational policies will, of course, depend upon the importance they attach to better collective decision-making relative to other educational goals and upon the role they assign to education in improving the operation of political democracy.

Footnotes

[1] See the empirical work of Angus Campbell and others, _The Voter Decides_ (Evanston, Ill., 1954); V. O. Key, _Public Opinion and American Democracy_ (New York, 1963); and Edgar Litt, "Civic Education, Community Norms, and Political Indoctrimation," _The Political Imagination_, ed. Edgar Litt (Glenview, Ill., 1966). For a useful analysis and summary of several of these studies, see Burton A. Weisbrod, _External Benefits of Public Education_ (Princeton University Research Report Series 105, Industrial Relations Section; Princeton, N.J., 1964), pp. 95-99.

[2] See Mancur Olson, Jr., _The Logic of Collective Action_ (Cambridge, Mass., 1965), for a useful discussion of the relationship between the size of the group and the nature of externalities.

[3] For example, the political benefits of a student's college education may be worth $5,000 to society, but the student's share in this sum may be so small that his stake in the outcome is approximately zero. Hence the $5,000 benefit is external to the student.

[4] See Milton Friedman, "The Role of Government in Education," _Capitalism and Freedom_, ed. Milton Friedman (Chicago, Ill., 1962); Andre Daniere, _Higher Education in the American Economy_ (New York, 1964); and William Vickrey, "A Proposal for Student Loans," in _The Economics of Higher Education_, ed. Selma Mushkin (Washington, D.C., 1961), for representative presentations of this view. However, each of these writers does complement his advocacy of a free market solution with suggestions for correcting various imperfections in a free market allocation of educational resources.

[5] See Shane Hunt, "Income Determinants of College Graduates and the Return to Educational Investment" (unpublished Ph.D. dissertation, Yale University, 1963), for evidence that the rate of return to quality education is higher for the more able student. Dael Wofle and Joseph Smith, "The Occupational Value of Education for Superior High School Graduates," _Journal of Higher Education_ (April, 1956), pp. 201-2, 232, present data that suggest that the rate of return on college tends to be greater for the more able student. See Alan L. Sorkin, "Some Factors Associated with Tuition in Public and Private Colleges and Universities" (Brookings Institution, 1968) (mimeographed), for evidence that the able student tends to attend better-quality colleges. See Robert J. Havighurst, _American Higher Education in the 1960's_ (Columbus, O., 1960), pp. 28-46, for evidence that the able are more likely to attend college.

[6] One might also object that subsidies for improvements in citizenship quality might be better spent outside the sphere of formal education altogether--for example, by helping the mass media or, perhaps, poor people's organizations, to function more effectively. However, as long as subsidies to education are, in fact, justified in part by the political benefits of education, it is appropriate to consider the optimal distribution of subsidy within the education sector that is implied on political grounds.

[7]See Edgar Litt, op. cit., pp. 487-94, for an empirical analysis of the influence of more specialized courses of study on civic attitudes.

[8]Cf. the majority voting analysis in James M. Buchanan and Gordon Tullock, The Calculus of Consent (Ann Arbor, Mich., 1962), and in Anthony Downs, An Economic Theory of Democracy (New York, 1957). An important variant of the majority voting model is, of course, representative democracy (cf. the discussion of representative democracy in Buchana and Tullock and in Downs). The representative form may require a lower level of education on the part of the voter than does direct democracy. However, the questions raised here on the optimum distribution of education among the voters apply both to the direct and the representative forms.

[9]Intensity of preference will be more important in representative than in direct democracy, if the latter is interpreted to rule out vote trading or logrolling on issues. See Buchanan and Tullock and Downs for the important role that can be played by the "passionate minority" in determining a single issue.

[10]See note 5 above.

[11]See, for example, the evidence presented in Elihu Katz and Paul Lazarsfeld, Personal Influence (Glencoe, Ill., 1955).

[12]See Key, op. cit., on the role of business elites in the mass media and on the influence of the mass media on the political system. For a particularly strong statement of the national elite theory, see C. Wright Mills, The Power Elite (New York, 1956). For a summary of a number of studies of local "power elites," see Nelson W. Polsby, Community Power and Political Theory (New Haven, Conn., 1963).

[13]See Polsby, op. cit.

[14]In principle, educational subsidies could also be used actively to promote political equality by giving the less powerful groups greater educational opportunities.