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ABSTRACT

This paper reviews the cost of higher education. Section one discusses the costs of higher education in light of the costs of college attendance, foregone income, incidental expenses, educational costs, cost differential, and total costs. The second section discusses who can afford and who is willing to pay the cost of higher education. Emphasis is placed on the issues of college accessibility and college finance, individual values and philosophical positions regarding the individual and higher education, and political activities both in educational institutions and in the government guaranteeing every high school graduate a tuition grant to cover the cost of higher education. This impact is discussed according to the lower, middle, and upper socio-economic group and the National Commission on the Financing of Postsecondary Education data and generalizations. Finally, the social factors that led to the American high school with its universal attendance are discussed in relation to their impact on higher educational attendance. These factors include democracy, industrialism, and professional education. (MJM)

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THE COST OF HIGHER EDUCATION: WHAT IS IT?  
WHO CAN AFFORD IT? AND MORE QUESTIONS.

July 10, 1974

by  
James A. Mustachio

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INTRODUCTION

At this juncture in the history and development of United States Higher Education, we are fully emersed in an era of financial stress. This is the consensus opinion of most authorities in the realm of higher educational finance. In its simplest form, the problem for many institutions of post secondary education is that expenses are greater than income. One easily stated solution to the problem is to increase the income to meet the expenses. But an easy solution is complicated by the concept of resources, the importance of values and the divergence of philosophical stance.

The complications to the solution of the financial problems of higher education have generated a strong amount of attention to questions which must be answered. For example, the Carnegie Commission on Higher Education has recently published Higher Education: Who Pays? Who Benefits? Who Should Pay?. The questions and the recommendations have been coming from many sources. Some further questions must be emphasized: Who can afford to pay? Who is willing to pay? The final question, which represents an unknown quantity in the **problem** and holds the solution, is: Who is going to pay?

The shortage of available resources is one complication blocking the way to increased income necessary to offset the ever

increasing expense side of the higher education balance sheet.

"One cold, hard fact which underlies the study of all economic problems is the reality of scarcity...Such scarcity is caused by existing limits in the quantity of our national resources ...scarcity implies choice, and choices we must make."<sup>1</sup>

We must realistically determine the costs of higher education and wisely choose the means to pay.

THE COST OF HIGHER EDUCATION: WHAT IS IT?Costs of College Attendance

The costs of college attendance are those expenses incurred by students and their families as a result of their seeking formal education beyond the secondary level. These expenses can be considered in two categories--foregone income and incidental expenses.

Foregone Income: This is the income that students give up because they are devoting their time to higher education rather than gainful employment. Howard R. Bowen has stated "A conservative estimate of the annual income they forego in order to attend college is \$5,100 per student."<sup>1</sup> This figure is based on March, 1972, labor statistics. Using Bowen's formula and plugging in January, 1974, statistics from the United States Office of Labor Statistics, the foregone income figure is increased to \$5,585 per student.

Because students are not part of the labor force contributing to the economy and earning a livelihood, someone else must provide for all or part of their living expenses.

"This someone else is really replacing part of what the student might have earned. By working part-time, the student can also replace some of the foregone income himself. Any remaining balance of foregone income is an unrecovered loss which the student bears. Thus, the foregone income consists of three parts: (1) the unrecovered loss; (2) the portion replaced by part-time earnings of the students; and (3) the portion replaced through contributions or loans of others for living expenses."<sup>2</sup>

Incidental Expenses: This second category represents expenses that students bear beyond normal living expenses as a result of their attending college. These expenses include books, equipment, transportation, supplies, membership fees and any special outlays for living expenses. Incidental expenses are estimated roughly at \$500 annually per student.<sup>3</sup>

### Educational Costs

Educational costs are those generally considered as expenses incurred by an institution for running an educational enterprise. These costs can be considered under two broad headings--operating expenses and capital costs. These broad headings are further organized into more specific categories depending on the individual institutional system. However, College Management reports the cost of "Higher Education Index" with these categories of expenditures: Instructional Expenses, Research Expenses, Learning Resources, Operating and Maintenance, Administrative Expenses, Auxillary Services, Student Aid, Public Service Programs, Current Funds, Physical Plant, Current Capital Outlay and All Other Expenditures.<sup>4</sup> The 1973-74 academic year cost \$3,292 for each college student--\$1,719 for each 2-year college student and \$3,960 for each 4-year college student.<sup>5</sup>

Cost Differential: Efficiency is a watchword in higher education. Therefore, investors in higher education want evidence that their funds are being utilized to the greatest possible return. How to

measure the return on investment or the "outputs" of higher education presents several obvious problems. But units for this purpose have been invented. "Full-Time-Equivalent" is based on the number of credit-hours equaling the standard student load in a given institution. This is a student measuring unit to be coupled with credit-hours, contact-hours or whatever seems productive.

In cost analysis the type and the level of higher educational instruction must also be heavily considered. That is, medical education is several times as expensive for each student as is liberal arts education. And considering the various levels of education--lower division, upper division and graduate school--the expenditure per student varies as much as 1 to 3 to 8.<sup>6</sup>

Higher education has income problems and cost problems. Earl F. Cheit has summarized the cost side of the problem for studied institutions.

"These are: (1) the effects of inflation; (2) rising faculty salaries; (3) rising student aid; (4) campus disturbances, theft and destruction of property; and (5) growth in responsibilities, activities, and aspirations."<sup>7</sup>

#### Total Costs

The total current costs of college attendance are equal to foregone income of students (\$5,585) plus incidental expenses of students (\$500) or \$6,085 times the full-time equivalent college enrollment (7.31 millions).<sup>8</sup> This product is 44.5 billion dollars.

The current total for educational costs is 30.9 billion dollars.<sup>9</sup> The grand total of costs for higher education is 75.4 billion dollars. And students and their families are paying for approximately two-thirds of the total bill including all of the foregone income except the portion replaced by grants, all of the incidental expenses and all of the tuition and fees portion of educational costs.

"The major items of cost are the replacement of earnings and the provision of incidental expenses of students--not the finance of institutions. If there is to be an opening of opportunity through higher education to young people of lower and middle income families, the major task will be to the finance of students, not the finance of institutions."<sup>10</sup>

THE COST OF HIGHER EDUCATION: WHO CAN  
AFFORD IT AND WHO IS WILLING TO PAY?

The total network of American Higher Education poses a restrictive educational opportunity. This is partly a result of the costs associated with college. Not only tuition and fees but also foregone income and other incidental expenses of attending college create for many an irreconcilable financial barrier to higher education. It is well documented that family salary is an indicator of college attendance.

"The participation in post secondary education of individuals 18-24 years of age from families earning less than \$10,000 per year is 17.3 per cent while the corresponding participation rate of families earning more than \$10,000 per year is 38 per cent."<sup>1</sup>

But it would be erroneous to conclude that access to higher education is singularly dominated by the level of family income.

There are several other interrelated factors which account for the current pattern of college attendance, many of which can be placed under the rubric of social factors. "Whether the barriers to college attendance are largely economic or social in nature remains unresolved."<sup>2</sup> And beyond social and economic factors are problems of misconceptions, misunderstandings and misrepresentations. For example, do educators really understand the human quality of ability such that individuals of "collegiate intellectual ability" can be identified and selected for higher

educatuonal experiences? Some years ago, psychologist J. P. Guilford identified 50 ways of being intellegent and theorized as many as 120 distinct human abilities.<sup>3</sup> Misconceptions concerned with who has the ability to benefit from higher education act to restrict access to many individuals.

There is no short statement which adequately encompasses the full pattern of current college attendance. There are as many independent reasons for not attending college as there are people who have decided against a college education. Affordability is certainly a significant factor, but it is not so important that it operates alone. That is, there are other basic factors which must be considered if higher education plans to provide universal educational opportunity.

The current status of higher education is facing financial stress. Increased aspirations, such as universal educational opportunity, will further increase financial stress. Decisions must be made about the additional financial resources necessary for additional development. The Committee on Economic Development has recommended an increased tuition approach.

"Under the CED proposal, tuition at public institutions would increase to 50 per cent of the cost of instruction; grants for low and middle income students would be increased but federal, state and local institutional support would decline."<sup>4</sup>

Other credible sources are recommending increased state and federal governmental support with stable or decreased tuitions.

Within the federal support model there are several major alternatives: "1. Categorical Aid...2. Aid to Students...3. Grants to Institutions...4. Tax Relief...and Revenue Sharing"<sup>5</sup> And most recently the Commission on Financing Postsecondary Education has examined 50 alternative financing plans and reported its analysis of 8 of the alternatives in some detail. This commission approach was to provide an analytical framework on which the federal and state governments could make informed decisions.<sup>6</sup>

Within this barrage of alternatives, how will decisions for financing be made? The literature suggests that who pays for higher education should be based on who benefits. The obvious problem is to figure out how to identify and measure the benefits of higher education. Many would reduce the benefits of higher education to strict dollars and cents returns. Further, they would indicate that the individual, not society (as if the individual can be separated from his collective society), reaps the monetary benefits resultant from higher education. Is this the mentality which prompted Congressman O'Hara to point out that the budget cutters "know the price of everything and the value of nothing"?

The Issues of College Accessibility and College Finance: These issues are very much related and interdependent. The future of both are deeply rooted in the values that individuals, families, social groups and the general population hold in regard to higher education. The future of both will be shared by the majority

or prevailing philosophy regarding the purpose of higher education, and that in the final analysis, the futures of both will be decided thru extensive political activity.

Values: Whether or not an individual decides on a college education is dependent on more than the question of affordability. The values that one holds are usually deeply rooted in family and social background, and these values may act to retard or to insure college attendance regardless of socio-economic status. The individual may hold in esteem high investment returns and decide on college attendance only if it promises such rewards. Another individual may base his college attendance decision on religious, moral or social values. If higher education is looking toward greater support and attendance, it must open up, reach out into the community and get in touch with the values that people hold regarding higher education.

Philosophy: For the Calvinists that settled New England, the purpose of education was to provide a means of personal salvation and to perpetuate an enlightened clergy and governmental administration. For the Virginia land barons, higher education was utilized to maintain an educated upper class. While further south in Florida, for example, the Catholic influence on education maintained that the Church should act as an intermediary between the individual and his salvation. Now, there are many different philosophical positions regarding the individual and higher education. Is the individual personally responsible for his own education and the whole array of benefits that it provides?

Or is society an intermediary between the individual and his personal responsibilities? There is no absolute right or wrong answer, but the prevailing philosophy will shape the future of educational accessibility and finance.

Political Activity: "There is a myth in America that education and politics exist separately from each other."<sup>8</sup> But in the final analysis the decisions regarding higher educational finance and accessibility will be made thru political activities both in educational institutions and in the governmental legislatures. Some schoolmen have deluded themselves and/or the general public into believing that education is above the mundane toil of grass-roots politics. But it would be more beneficial to the general public and to schoolmen alike if educators would join their forces with the existing political power structures at all levels in an allied effort to fully develop the vast supply of human resources within the United States.

IF THE FEDERAL GOVERNMENT GUARANTEES EVERY HIGH SCHOOL GRADUATE A TUITION GRANT TO COVER THE COST OF HIGHER EDUCATION, WHAT IMPACT WOULD THIS HAVE ON COLLEGE ATTENDANCE?

The impact of governmental tuition grants given to students would vary for different socio-economic groups and would vary for different reasons.

Lower Socio-Economic Group

The greatest impact of guaranteed tuition grants on the proportion of college attendance would occur in the lower socio-economic group. These are the families whose incomes are most directly related to daily survival, and it is to these families that foregone income has the greatest meaning. Because of immediate basic needs, these families may decide against even a free college attendance due to the income power that must be sacrificed now for a promise of salary increases later. Rising tuitions coupled with student aid thru loans would prove too strong a barrier for these students. Giving up foregone income now and placing the future in hock is too much to reconcile for the lower income family. Alleviating part of the costs of college attendance for these families thru guaranteed grants would provide for many the means to an otherwise inaccessible higher education.

Middle Socio-Economic Group

Within the middle income group, guaranteed tuition grants would produce an increase in college attendance but probably not as great as the proportionate increase among lower income families. Many students from the middle income group are already attending college. Foregone income has less impact on the family with moderate financial security. The concept of future rewards resultant from a higher education has a more practical meaning for these families. The investment returns on a free education are greater than the returns on an expensive education, and this extra incentive will increase the college bound from the middle class.

It is interesting to note that increasing tuitions without concomitant increases in student aid would have a negative attendance effect on middle income families. Some current proposals for financing higher education would increase tuitions and increase aid only to lower income students.

"But under this plan...enrollments of students from income groups above \$15,000 will decline... High income people are price sensitive...and the price will go up without a significant increase in student aid available to them."

Upper Socio-Economic Group

These families are beyond the middle class economically and by my definition are financially independent. These families are neither price sensitive or concerned by foregone income. Their college attendance decisions are not based on cost; therefore, guaranteed tuition grants will have little or no effect

on the proportion of students attending college from the upper class.

#### N.C.F.P.E. Data

The National Commission on the Financing of Postsecondary Education has reported data on the analysis of eight alternative financing plans. None of the plans provide guaranteed average tuition grants to every high school graduate; but two of the alternatives, Plan C and Plan F, provide similarity such that reasonable comparisons and projections can be made regarding a universal tuition aid model.

Plan C: This plan proposes substantial increases in student aid thru increases in Basic Educational Opportunity Grants from 50 per cent of cost to 75 per cent. But eligibility for grants would still be based on family income, concentrating aid to the lower socio-economic group and denying it to the middle socio-economic group.

As expected, the Commission's computer analysis for this plan projected an enrollment increase for students from families with a below \$10,000 yearly income of 270,000 or 8 per cent in 1980.<sup>2</sup> But for students from cost sensitive families (income of \$15,000 annually) enrollment will decline 15,000 by 1980.<sup>3</sup>

Plan F: This plan proposes increases in institutional aid, such that the first two years of public higher education would be free. It decreases over-all student aid but increases it to students attending private institutions covering the full cost

of the first two years' tuition and fees. This plan provides free education for the first two years, but it decreases student aid generally and especially to the students from lower income groups.

Projected enrollments for lower income families for 1980 show a decline of 112,632 students but an increase of 31,848 students from families with an income of more than \$15,000 annually.<sup>4</sup> Increased aid to students of middle income families will increase their rate of college attendance but not as proportionately as increased aid to students of lower income families.

N.C.F.P.E. Generalizations:

"1. At any level of financing, targeted student assistance plans (such as grants to needy students) are more effective for improving student access than general student assistance (such as tuition reduction).

2. Increases in the effective price (tuition minus student aid) of postsecondary education (the price the student must pay) result in decreases in enrollment; conversely, decreases in the effective price result in increases in enrollment."<sup>5</sup>

The combined proposals of Plan C and Plan F would provide increased student aid to both lower and middle socio-economic groups, approximating guaranteed tuition aid irregardless of financial status. The combined effects on projected enrollments would be increased for both lower and middle income groups. But individual values and differences should not be ignored within socio-economic groups. Other factors and objectives should be considered besides projected enrollments when devising actual plans for student and institutional aid.

AT THE SECONDARY SCHOOL LEVEL OUR SOCIETY HAS ACHIEVED  
A DEGREE OF ATTENDANCE THAT APPROXIMATES "UNIVERSAL  
EDUCATION". ARE WE LIKELY TO ACHIEVE A SIMILAR DEGREE  
OF ATTENDANCE IN COLLEGE IF WE WERE TO ADOPT THE  
PRINCIPLE OF "FREE PUBLIC HIGHER EDUCATION"?

The National Commission on the Financing of Postsecondary Education has analysed a proposed higher educational financing plan, designated Plan F, which lends itself to this question. The proposed plan specifies that tuition at all public colleges should be eliminated for the first two years and also calls for a student aid plan to eliminate lower division tuition at private institutions. This plan approximates "free public higher education". The computer analysed data for Plan F produced the following enrollment projections for 1980. Enrollments will decrease for public two-year colleges by 44,470 students, for the lower divisions of public four-year colleges by 93,185 and for all postsecondary levels by 71,817.<sup>1</sup> According to this study, "free public higher education", as per free public elementary and secondary education, will have a negative effect on universal higher educational attendance--at least to the year 1980.

Another source, the Carnegie Commission on Higher Education, has addressed the future of higher educational enrollments. One Carnegie report favors universal access for those who wish entrance to and who can benefit from higher education.

But regarding universal attendance, the Commission takes a different stance.

"We do not believe that each young person should of necessity attend college...it cannot be shown that all young persons will benefit sufficiently from attendance to justify their time and expense involved...We therefor oppose universal attendance as a goal of American higher education and believe that noncollegiate alternatives should be made more available and more attractive to young people."

Universal attendance in the elementary and secondary public schools is legally mandated. Higher education will never consider this approach to universal attendance, nor should it. But we have achieved universal attendance at the secondary public school level for other reasons beyond free access and legal mandate. There were several social forces which effected the evolution of public secondary education from the early Latin grammar school to the present American high school with its near universal attendance. And I am convinced, contrary to some current evidence, that we will achieve near universal higher education attendance and "free public higher education", at least for the first two years, both as a result of prevalent social factors.

The social factors which led to the American high school with its universal attendance are similar to current social factors which will lead to universal higher educational attendance. The forces are similar but further in development and broader in scope.

1. Democracy: After 1800 the new government philosophy expressed a belief in the political, social and economical rights of the common man. In 1874 the Kalamazoo case provided taxation for all to finance public education. The common man paying taxes to support public education wanted to realize the benefits of education for his children.

The forces of democracy are still prevalent and growing, reaching out to all groups of citizens. And as governments expand their support of public higher education thru tax dollars, the tax payers will seek an expanded relationship with higher education.

2. Industrialism: The Industrial Revolution created the need for new and educated skills. It forced many out of work who needed new job skills

Our technological revolution is changing job needs even at a greater rate. The need for educated skills and re-educated skills is current and growing. Jobs of the near future do not exist today. The need for expanded higher education to meet these needs is obvious.

3. Professional Education: John Dewey and the progressive educational movement and later the development of the comprehensive high school accepted the educational challenge of the times.

Today the community college has developed in response to the current educational and social challenges.

This is an abbreviated comparison of the social factors effecting and leading to universal education. Some other factors share commonality with the secondary and higher educational movements, and others are unique to one movement or the other.

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CONCLUDING STATEMENT

Our country, as sophisticated as it is, is constantly facing several severe and confounding problems. One such problem facing the United States is the financial stress affecting the development and operation of higher education. Another problem facing the United States is the well publicized energy crises. The importance of oil as a natural resource has led to the slogan that "America Runs on Oil", but oil is not our greatest natural resource. Humanity and human "mind-power" are our greatest natural resources and we are constantly, efficiently and joyfully replenishing the supply. The problem facing the "mind-power" crises relates to the development of human resources thru education.

We must solve this energy crises and we must alleviate the financial stress constricting the full operation of higher education. It is clearly the task of higher education to build educational plans that develop human resources to the brink and will in the long run perpetuate an unlimited supply of refined human energy. Who should pay for full throttle higher education is a philosophical question; who is going to pay is a political one. That someone must pay is a value judgement.

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FOOTNOTESINTRODUCTION

<sup>1</sup>Walter G. Hack and Francis O. Woodeard, Economic Dimentions of Public School Finance: Concepts and Cases (New York: McGraw-Hill Book Company, 1971), p.5.

THE COST OF HIGHER EDUCATION: WHAT IS IT?

<sup>1</sup>Howard R. Bowen and Paul Servelle, Who Benefits From Higher Education--And Who Should Pay? (Washington, D. C.: The American Association for Higher Education, 1972), p. 29.

<sup>2</sup>Howard R. Bowen, "Tuitions and Student Loans in the Finance of Higher Education," in The Economics in Financing of Higher Education in the United States, The Joint Economic Committee, Congress of the United States, Wright Patman, Chairman (Washington, D. C.: United States Government Printing Office, 1969), p. 620.

<sup>3</sup>Bowen and Servelle, op. cit., p. 31.

<sup>4</sup>Kenneth H. Dukiet, "The Cost of Higher Education 1973-74," College Management, IX (January, 1974), pp. 8-18 & 47.

<sup>5</sup>Ibid., p. 47.

<sup>6</sup>M. M. Chambers, Financing Higher Education (New York: The Center for Applied Research in Education, Inc., 1963), p. 87.

<sup>7</sup>Earl F. Cheit, The New Depression in Higher Education (New York: McGraw-Hill Book Company, 1971), p. 103.

<sup>8</sup>Avance Grant, United States Office of Education, National Center for Educational Statistics, (telephone interview), Washington, D. C., February, 1974.

<sup>9</sup>Dukiet, op. cit., p. 8.

<sup>10</sup>Bowen, op. cit., 1969, p. 621.

THE COST OF HIGHER EDUCATION: WHO CAN AFFORD IT AND WHO IS WILLING TO PAY?

<sup>1</sup>Jack Magarrell, "Commission on Financing Post-High-School Education Offers Tool to Systematize Government Support," Chronicle of Higher Education, VIII (January, 1974), p. 4.

<sup>2</sup>W. Lee Hansen and David R. Witmer, "Economic Benefits of Universal Higher Education," in Universal Higher Education, ed. by Logan Wilson (Washington, D. C.: American Council on Education, 1972), p. 21.

<sup>3</sup>C. Gilbert Wrenn, Counselor in a Changing World (Washington, D. C.: The American Personnel and Guidance Association, 1962), p. 54.

<sup>4</sup>Jane S. Shaw, "National Policy and the Great Tuition Debate-- Does This Man Have the Solution? Maybe," College and University Business, LVI (January, 1974), p. 27.

<sup>5</sup>Ronald A. Wolk, Alternative Methods of Federal Funding for Higher Education (Berkeley, Cal.: The Carnegie Commission on the Future of Higher Education, 1968), p. 9.

<sup>6</sup>Magarrell, op. cit., p. 1.

<sup>7</sup>James T. O'Hara, "A View of the Community College from Capitol Hill," Community and Junior College Journal, XLIV (February, 1974), p. 53.

<sup>8</sup>Frank W. Lutz, "The Politics of Education," in Politics and Education (Washington, D. C.: American Association School Administrators, 1972), p. 5.

IF THE FEDERAL GOVERNMENT GUARANTEES EVERY HIGH SCHOOL GRADUATE A TUITION GRANT TO COVER THE COST OF HIGHER EDUCATION, WHAT IMPACT WOULD THIS HAVE ON COLLEGE ATTENDANCE?

<sup>1</sup>Shaw, op. cit., p. 29.

<sup>2</sup>The National Commission on the Financing of Postsecondary Education, Donald E. Leonard, Chairman, Financing Postsecondary Education in the United States (Washington, D. C.: United States Government Printing Office, 1973), p. 278.

<sup>3</sup>Ibid., p. 266.

<sup>4</sup>Ibid., p. 266.

<sup>5</sup>Ibid., pp. 310-11.

AT THE SECONDARY SCHOOL LEVEL OUR SOCIETY HAS ACHIEVED A DEGREE OF ATTENDANCE THAT APPROXIMATES "UNIVERSAL EDUCATION". ARE WE LIKELY TO ACHIEVE A SIMILAR DEGREE OF ATTENDANCE IN COLLEGE IF WE WERE TO ADOPT THE PRINCIPLE OF "FREE PUBLIC HIGHER EDUCATION"?

<sup>1</sup>Ibid., p. 266.

<sup>2</sup>The Carnegie Commission on Higher Education, op. cit., March, 1970, p. 11.

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