

## **SUMMARY PROJECT REPORT**

### **An exploration of what we know about the formation and impact of perceptions of college prices, student aid, and the affordability of college-going and a prospectus for future research**

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November 2004

This report was prepared for a research project undertaken by The Education Resources Institute (TERI) with support from Lumina Foundation for Education. The purpose of this project was to review available research to assess current knowledge about the role and formation of college financing perceptions (i.e., awareness, understanding, and predictions of college prices, student aid, and the affordability of college going) and develop an agenda of research studies and demonstrations that would, if implemented, improve this understanding and assess the potential impact of student aid program design, operations, and marketing on the college-going rates, patterns, and successes of lower income and minority youth.

The views and opinions expressed in this Project Summary Report are solely those of the authors and not necessarily those of TERI or Lumina Foundation.



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## Preface

November 2004

The objective of this project was to inform higher education policy makers, analysts, and researchers as they explore strategies for improving the impact of student aid programs. Specifically, the project addressed the effect of student aid program design, operations, and marketing on ‘college financing perceptions’ – awareness, understanding, and predictions of college prices, student aid availability, and the affordability of college going – and resulting college enrollment rates, patterns, and successes.

To meet this objective, the project included two basic types of activities.

First, senior researchers conducted reviews of currently available research to identify current knowledge about the impact of program design, operations, and marketing on student aid program effectiveness. As these reviews progressed, it became apparent that very little research addressed this relatively narrow issue. In response, the reviews were refocused on three somewhat broader issues: 1) student and family ‘college financing perceptions’; 2) the impact of student aid programs on these perceptions and 3) the impact of these perceptions on college planning and enrollment rates and patterns. The research reviews also focused on assessing currently available research regarding the impact of student aid program design, operations and marketing on ‘intermediaries’ and ‘partners’ who are important participants in the college planning and college financing processes (e.g., middle and high school counselors, targeted college preparation programs, colleges and universities, and state governments).

Second, the research review authors developed preliminary outlines for potential programs of research and demonstration projects that would, if implemented, improve the level of knowledge about these issues in the future.

This Summary Project Report provides an overview of the results of these two types of project activities. Both the detailed research reviews and preliminary research program plans and this Summary Report should be reviewed by interested readers as they seek to become more informed.

David S. Mundel

**An exploration of what we know about the formation and impact of perceptions  
of college prices, student aid, and the affordability of college-going  
and  
a prospectus for future research**

**Section I -- Summary**

During the last four decades, the goals addressed in student assistance policy debates have remained remarkably constant – increasing equality of educational opportunity for lower income and minority youth and easing the affordability of college-going for all types of students. Paralleling this consistent focus has been an almost equally constant or consistent disappointment with program performance -- college-going rates and patterns of lower income and minority youth have continued to lag behind those of their higher income and majority peers and increasing numbers of families appear to have become concerned about the high and rapidly increasing cost of college-going.

In recent years, higher education policy makers, researchers and analysts have begun to focus on whether parent and youth perceptions of college prices, financial aid, and affordability (in addition to actual price levels and aid patterns) are a source of disappointing policy performance. In early 2004, Lumina Foundation for Education provided a grant to The Education Resources Institute (TERI) to explore what is known, based on currently available research, about the potential role of these ‘college financing perceptions’ and the potential impact of student aid program design, operations, and marketing on these ‘college financing perceptions.’ An additional goal of the Lumina funded project was to develop a prospectus for a future program of research that could provide additional knowledge.

**What is known about ‘college financing perceptions’?** -- Although higher education policy makers, researchers, analysts, and policy makers believe that college financing perceptions probably influence potential college-goers, their parents, and others, there appears to be little, if any, research that assesses this belief. In addition, although it is generally believed that these perceptions can be influenced by changes in student aid program design, operations, and marketing, available research provides little, if any, knowledge or insight about the potential impact of such program changes.

In considering this disappointing state of research-based knowledge about college financing perceptions, it is important to note that this lack of knowledge neither suggests that these perceptions do not matter nor indicates that they cannot be influenced by policy and program changes. Simply stated -- available research provides very little knowledge about whether college financing perceptions matter, how much they matter, and how they can be changed.

**Why isn’t more known about ‘college financing perceptions’?** -- The basic reason for the disappointing state of research-based knowledge about college-financing perceptions is that there has been little research focused on these issues. The project’s focused research reviews of a variety of domains in the extensive higher education research literature identified only a handful

of studies that addressed, at least in part, these perceptual issues. In general, the identified studies addressed these issues minimally and inadequately.

**The contrast between the availability of research-based knowledge about perceptions in higher education and in other youth policy domains is striking.** There is an extensive body of research focused on the role of perceptions in several other youth policy domains – e.g., military recruiting, anti-smoking and anti-drinking campaigns, drug abuse prevention, etc. In general this research indicates that perceptions influence behaviors and that perceptions can be changed through focused policy interventions.

**Future research can improve knowledge about and understanding of ‘college financing perceptions’** -- Although research on perceptions is difficult to conduct, research in other youth policy domains indicates that it can be successful. In attempting to overcome the current disappointing state of research-based knowledge, research funders and researchers should focus their support and efforts on four categories of issues:

- I. Understanding the dimensions and characteristics of college financing perceptions
- II. Understanding how college financing perceptions are formed and change
- III. Understanding the roles that these perceptions play in college planning processes
- IV. Understanding the potential impacts of student aid program and policy changes, including changes in program design, operations, and marketing, on these perceptions and resulting college-going behaviors?

## Section II – Introduction and Background

During the last four decades, following the federal government's decision to focus its higher education policies and budgets on student assistance, the issues confronting the federal student assistance policy debates have remained remarkably constant. Two goals have been the focus of these debates – 1) reducing the inequality of rates and patterns of college enrollment, persistence, and completion that exist between disadvantaged, lower income, and minority youth and their counterparts from middle income, higher income, and majority households and 2) increasing or easing the affordability of college-going for all types of students.

Throughout these years -- beginning with the Higher Education Act of 1965 and continuing with the creation of the Pell Grant Program, the passage of the Middle Income Student Assistance Act, the expansion of federally subsidized student loan programs, and the introduction of expanded higher education tax credits and deductions -- the higher education policy and budget debates have focused on which students should be aided, how much they should receive, and what mechanisms should be used to provide this assistance.

Paralleling this consistent focus of policy attention has been an almost equally consistent disappointment with program performance, given the continuing disparities between the college-going rates and patterns of lower income and higher income youth and minority and majority youth. Although college enrollment rates and patterns of lower income and minority youth have improved, they have continued to remain significantly below and different from those of youth from more advantaged families. In addition, increasing numbers of families have become concerned about the affordability of college-going given high and rapidly increasing college prices.

During these decades of debate and disappointment, policy makers, analysts, researchers, and program operators have become more aware of the complexity of the diverse factors that appear to influence college-going decision processes and result in student enrollment, persistence, and success. Among the generally accepted and increasingly understood to be important determinants of college-going are parental motivation and encouragement; parental financial ability and willingness to pay for college; peer orientation and motivation; school counseling; middle and high school curriculum offerings and choices and academic performance; and college offerings, prices, recruiting and admissions policies. Many observers believe that several of these factors play a major role during middle school and early high school years, well in advance of the final two years of high school when planning for college-going appears to become more formal and explicit.

Many of these factors probably operate through 'perceptions' -- images of reality involving awareness, understanding, and predictions as opposed to concrete data, information, and knowledge -- because of the uncertainties that surround them. These 'perceptual factors' frequently involve views of colleges and college-going that become more concrete, explicit and 'known' in the latter high school years, particularly at the end of the senior year.

These “perceptual factors” have become an increasing focus of attention as policy analysts and researchers, program implementers, and decision makers have attempted to develop strategies for improving the impact of student aid programs. This broadened attention has led to federal and state governments and others to consider, and in some cases implement, changes in student aid programs and increases in marketing aimed at college-going generally and improving student and parental awareness, understanding, and predictions of college finances. These policy review and implementation activities have included the Congressionally-mandated, student aid program simplification project currently being undertaken by the Advisory Committee on Student Financial Aid and the implementation of college marketing campaigns by states, higher education associations, and other not-for-profit organizations and coalitions. In addition, the need for expanding the research and policy processes to include consideration of ‘college financing perceptions’ was outlined in a background paper that led to this research assessment and planning project (see Appendix B).

The purpose of this Lumina Foundation for Education supported ‘research assessment and planning’ project is to inform the higher education community -- including policy makers, policy analysts, researchers, and organizations that support programs, research, and analysis – in its explorations of both the potential role of price, aid, and affordability perceptions (‘college financing perceptions’) and the potential adoption and implementation of policy alternatives aimed at changing these perceptions.

To accomplish this purpose, the project has produced two types of information: first, focused reviews of existing research that assess the current state of research-based knowledge about the impact of student aid program design, operations, and marketing on perceptions that influence program impacts; and second, preliminary plans for a series of research projects that could, if implemented, improve the level of understanding of the potential impact of changes in these program characteristics.

This “Project Summary Report” provides an overview of these research reviews and research program suggestions. Summaries of the research reviews and suggestions for further research plans are included in Appendix A to this report. The full research reviews and research program suggestions are available from TERI and from the individual research review authors.

This project involved a broad collaboration of a variety of researchers and analysts. The project was directed by David Mundel (an independent consultant) and Ann Coles (senior vice president of The Education Resources Institute and director of the Pathways to College Network.) – with assistance and insight from an advisory group – including Lawrence O’Toole (president of TERI), Sandy Baum (Professor of Economics, Skidmore College and consultant to the College Board), David Longanecker (executive director, Western Interstate Commission on Higher Education), and Lois Rice (guest scholar, Economic Studies, Brookings Institution).

The project was conducted under the auspices of The Education Resources Institute (TERI) with support from Lumina Foundation for Education. Neither TERI nor Lumina are responsible for the views and opinions expressed in the summary report or the individual focused research reviews. The project co-directors are solely responsible for the comments and opinions expressed in the summary report and the research review authors are solely responsible for the comments and opinions expressed in the individual focused reviews.

The following focused research reviews were prepared for this project:

**Impact of Student Aid Program Design, Operations, and Marketing on the Formation of Family College-going Plans and Resulting College-Going Behaviors of Potential Students** – Professor Laura W. Perna, Graduate School of Education, University of Maryland

**The Impact of Advice on Price: Evidence from Research** – Professor Patricia M. McDonough, Graduate School of Education and Information Studies, University of California Los Angeles

**Addressing Financial Aid in College Preparation Programs** – Professor William G. Tierney and Kristan Venegas of the Center for Higher Education Policy Analysis at the University of Southern California

**The Impact of Information and Student Aid on Persistence: A Review of Research and Discussion of Experiments** – Professor Edward Patrick St. John, Professor of Educational Leadership and Policy Studies and Director, Indiana Education Policy Center, Indiana University

**Financial Aid and Postsecondary Opportunity for Nontraditional Age, Pre-College Students: The Roles of Information and the Education Delivery Systems** – Professor Edward Patrick St. John, Professor of Educational Leadership and Policy Studies and Director, Indiana Education Policy Center, Indiana University and Tina J. Tuttle

**The Impact of Federal Financial Aid Policies on the Funding, Design, Operation, and Marketing of State and Institutional Financial Aid Policies and Practices: A Review of the Literature** – Dr. David Longanecker and Dr. Cheryl Blanco, Executive Director and Director of Policy Analysis & Research, respectively, at the Western Interstate Commission for Higher Education and Professor Bridget Terry Long of the Harvard Graduate School of Education

**An Exploratory Review of the Literature and Possible Data Sources** – Professor Bridget Terry Long of the Harvard Graduate School of Education

**A Prospectus for an Education Financing Communications Audit** – Virtual Media Resources

### **A cautionary note regarding the disappointing absence of research on these perceptual issues**

Although higher education researchers, analysts, and policy makers believe that perceptions about the price and affordability of college-going and the availability and extent of student aid probably influence potential college-goers and their parents and others – e.g., counselors, college and university administrators, and state higher education policy makers -- there appears to be little, if any, research that addresses this belief. For example, St. John and Tuttle reported that they examined more than 1,000 papers on adult students and found none that addressed the

impact of information on enrollment behavior of nontraditional students. (see St John and Tuttle).

In addition, it is also generally believed that these perceptions can be influenced, at least somewhat, by changes in student aid program design, operations, and marketing. But the focused research reviews make it clear that existing research provides relatively little, if any, knowledge about the potential impact of these program characteristics.

Thus, readers of this summary report and the various focused reviews need to proceed with caution. A search for specific and concrete answers will be unfulfilling. While we know a fair bit about student and family perceptions of price, aid, and affordability (this knowledge is summarized in several of the research reviews), we know little if anything about how these perceptions are formed and how they influence (or don't influence) college-going plans and realities; enrollment rates and patterns; and student persistence and success.

In reviewing the various project reports, readers are cautioned to remember that this lack of knowledge regarding college financing perceptions neither indicates nor suggests that these perceptions do not matter and/or that these perceptions can not be influenced by changes in programs and policies. But, this lack of knowledge does indicate that the higher education research community has not generally addressed these issues.

There are many reasons for the apparent lack of research about price, aid, and affordability perceptions.

First, research in higher education is difficult given complexities of both the college-going decision process and the factors that influence the behaviors resulting from this process. Research on the impact of perceptions is even more difficult given the problems encountered in measuring perceptions as opposed to measuring more concrete variables.

Second, the role of perceptions is probably greater in the earlier stages of the college-going decision process. Thus, research on perceptions probably requires longer term and more expensive longitudinal data bases than are typically supported within higher education. Because of the greater uncertainties regarding the measurement and potential impact of perceptual variables, longitudinal studies involving these variables may also need to involve larger samples of potential college-goers and thus the cost of these projects will be even higher.

Third, many of the researchers involved in research about college-going appear to be less comfortable with perceptual, as opposed to more concrete and readily measurable, variables and concerns. This is particularly true of many of the economists involved in higher education research.

Forth, many of the researchers who focus on price, aid, and affordability perceptions have not raised the issue of whether or not these perceptions matter. There may be several reasons for this omission. Perhaps these researchers have such strong beliefs that perceptions matter that they see little, in any, need to examine whether or not and to what extent perceptions do, in fact, matter. Many of these same researchers have not

addressed the issues involved in the formation of perceptions and how perceptions might be changed through alteration of program design, operations, and marketing.

Another major reason for a lack of research attention to perceptions is an almost universal lack of research support directed toward these issues. Quite simply, there is little evidence that funders of research on higher education have focused their resources and the efforts of the researchers that they support on questions related to price, aid, and affordability perceptions.

It is striking, for example, that no research studies were found that addressed the impact of early intervention on student aid program awareness or college financing perceptions (see Tierney and Venegas); that no research studies were found that assessed the impact of federal student aid program design and operations on state and institutional pricing and aid policies (see Longanecker, Blanco, and Long) and that essentially none of the many studies of high school counseling addressed student and parental perceptions of financial aid and/or college financing perceptual issues (see McDonough).

This lack of research in higher education is striking when compared with the attention paid to these types of issues in other youth policy domains. The literature reviews and research studies noted in Appendix C make it clear that research supporters and performers in other youth policy domains – e.g., military recruiting, cigarette smoking, alcohol consumption, and drug and substance abuse – are paying attention to perceptual issues and strategies for influencing perceptions and that this attention is yielding useful and used insights and knowledge.

### **Section III – An approach to reviewing current research and developing an agenda for future research**

The project utilized a broad ranging and focused research review process because we anticipated finding few research studies addressing the three targeted concerns – 1) the impact of financial aid program design, operations, and marketing; 2) the formation and role of price, aid, and affordability perceptions; and 3) the potential impact of program design, operations, and marketing on these perceptions. This process was broad ranging in that the reviewers were asked to search through a wide variety of sources to identify studies that potentially address the targeted issues. In order to focus the project, once potentially interesting studies were identified, the reviewers carefully assessed whether or not the identified studies addressed the targeted issues. The project was further focused (unlike many, more general research reviews) in that the reviewers directed their attention primarily to those studies that addressed the targeted issue areas.

Clearly, this research review approach has left many interesting and potentially important issues unaddressed, particularly issues that lie outside of the focused issue areas.

A key element of this ‘broad and focused’ process was the selection of senior researchers as reviewers. These researchers already had broad access and familiarity with the research literature. Thus, they were much more likely to be able to scan a wide range of studies from a multiplicity of sources and therefore more likely to find the few studies that might exist. In addition, senior and experienced researchers were also more likely to accurately assess whether an identified study actually addressed the targeted issues and the information or knowledge provided by an appropriately identified study.

Our agreements with and instructions to these reviewers were quite explicit and focused. For example, they included the following:

Each research review will focus on a well-defined issue area or decision domain – e.g., family college-going decision making or state government student aid policy making. Each review will examine what is known about the impact of student aid program design, operations, and marketing (including advertising and other information providing activities) on college-going decisions and behaviors -- particularly the impact of these program parameters on awareness, understanding, and predictions of student aid and college prices and the potential role that these factors play in influencing college-going behaviors.

Specifically, we would like you to prepare a review of the currently available research studies that provide some understanding of the impact of student aid program design, operations, and marketing on (issue domain). This review should include an assessment of available research from a variety of disciplinary domains (including economics, sociology, and psychology).

In preparing this review, we would like you to conduct a comprehensive search of the research literature focused on (issue domain) including published articles, unpublished reports and dissertation abstracts. If possible, this search should focus on research studies that have been conducted since 1985.

We would also like your review to address theoretical and/or conceptual perspectives that may suggest potential relationships and describe studies that may relate to, but not specifically address, the specific focus of this research review.

In addition to carefully selecting the research review authors and focusing their efforts, the project directors and advisory committee members reviewed drafts of the research reviews. In response to these reviews the authors revised and more carefully targeted their reviews. The project directors profusely thank the review authors and the project advisory committee members for their efforts and patience during these intensive review and extensive revision processes.

## Section IV – An overview of what we know

Although the higher education research is extensive and often high in quality, little of this literature addresses the issues targeted by this project. As a result we know very little about the formation of price, aid, and affordability perceptions; the impact of these perceptions on college-going; and the potential impact of changes in student aid program design, operations, and marketing on these perceptions. As noted earlier, this does not mean that these perceptions do not play a role in influencing college-going behaviors. It does mean that we know little about whether or not they play a role and if they do play a role (or roles), we know very little about either the extent or the pattern of this role(s).

This lack of knowledge is outlined in the summaries of the focused research reviews (see Appendix A) and is fully described in the full versions of the reviews (available from the authors and from TERI).

But, we do have some knowledge (albeit, much less than perfect knowledge) about several aspects of these issues. In assessing what we know, it is important to assess both what we know and the level of our confidence regarding this knowledge. To facilitate this assessment, it is useful to think of categories of knowledge, grouped according to our level of confidence in what we ‘know’. The following is the confidence categorization schema that we found useful.

**Level I – ‘High degree of confidence’** -- There are very few aspects of the targeted issues that we understand with a high degree of confidence. In statistical terms, a ‘high degree of confidence’ suggests that there is only a roughly 5-10 % chance that what we think we know is true is actually not true.

**Level II – ‘Fairly high degree of confidence’** -- There are a few additional aspects of the targeted issues about which we have a “fairly high degree of confidence” or about which we are “pretty sure.” In statistical terms, this category includes issues where there is roughly a 15-20% +/- chance that what we think is true is actually not true.

**Level III – ‘Moderate degree of confidence’** -- A third category of knowledge would include those aspects of the targeted issues about which we have a “moderate degree of confidence.” In rough statistical terms, these issues are those in which there is a 30% +/- chance that what we think is true is actually not true.

**Level IV – ‘More likely to be true than not true’** -- A fourth category includes those aspects of the targeted issues about which we think our beliefs are simply more likely to be true than not true. In rough statistical terms, these issues are those in which there is a 40-45% chance that what we think is true is actually not true.

**Level V – ‘Speculative’** -- A fifth category includes aspects of the targeted issues about which we might speculate but about which we have essentially no understanding of the likely accuracy or validity of our speculations.

In reviewing this assessment of the current state of our knowledge, it is important to keep in mind that knowledge or understandings about which we have low levels of confidence may in fact be correct or true and may potentially provide important guidance to efforts aimed at improving program efficacy.

In addition, in attempting to categorize our knowledge using this schema it is important to note that essentially none of the research studies identified and assessed in the various research reviews included these or other indicators of ‘knowledge confidence’. Thus, these assessments of ‘knowledge confidence’ are not those of the researchers whose studies were reviewed. In addition, readers are cautioned to understand that these ‘knowledge confidence’ assessments were not discussed with the authors of the individual research review authors or the members of the project advisory committee. These assessments are solely the views of one of the project directors (Mundel).

### **-- Important Components of Our Current Knowledge --**

#### **Category I -- Aspects that we understand with a ‘high degree of confidence’**

1. Based on a long series of increasingly rigorous econometric studies, we know that college finances (prices, aid, family resources, etc.) influence enrollment, persistence, and college choice decisions, particularly among youth from lower income families. (See IV-1, below, regarding our limited understanding of the role of perceptions of college finances.)
2. Based on an extensive array of studies of other marketplaces or contexts within which young people make decisions, we know that perceptions and awareness of prices and other factors influence youth decision making and that these perceptions can be influenced by marketing activities. (See V-1, below, regarding our limited understanding of the potential for changing perceptions of college finances.)
3. Consistent and intensive college counseling that includes information, motivation, and encouragement during middle and high school years can influence college-going behaviors but this type of counseling is generally not available, particularly in schools enrolling significant numbers of lower income and minority students. (See V-4, below, regarding our limited knowledge about whether or not effective counseling includes attention to college finances and whether or not effective counseling that does include attention to college finances has an impact on perceptions of college finances.)
4. Research has consistently shown that parents and parent behaviors are a major and significant factor influencing youth college-going decisions and behaviors. But research provides little insight regarding the aspects of parental behaviors that are most influential and if and how these behaviors are influenced by parental college finance perceptions (See V-2, below.)

## **Category II -- Aspects that we understand with a ‘fairly high degree of confidence’**

1. Current research allows us to be fairly confident that the college finance perceptions of many potential college-goers and their parents (particularly during their middle school and early high school years) are quite uncertain and somewhat biased in a pessimistic direction. These uncertain and biased perceptions seem more prevalent among lower income students and parents and students and parents without family college-going experience.
2. Current research allows us to be fairly confident that potential college-goers and their parents desire to have more information about college-finances during middle school and early high school years. But, we can only speculate about why they desire more information (e.g., do they understand that their current beliefs are biased or uncertain [see II-2, above] or do they want more information because this seems to be the ‘appropriate’ response to survey questions); the kind of information that they would or might find useful; and the potential impact of this information on college planning and college going.
3. Based on a small number of relatively careful studies of aid guarantees included in easy-to-understand and well ‘marketed’ student aid programs (such as the now discontinued aid to dependents of Social Security beneficiaries and a few state student aid programs that provide aid guarantees) we can be fairly confident that programs with these characteristics will have somewhat higher impacts on college-going decisions than traditional, more complex, less transparent, and poorly marketed student aid practices. It is not clear that these higher impacts are due to larger aid awards, the effect of guarantees and marketing on finance perceptions, or a combination of these two factors. (The issues related to the role of guarantees are addressed extensively in St John, *The Impact of Information and Student Aid on Persistence: A Review of Research and Discussion of Experiments.*)

## **Category III -- Aspects that we understand with a ‘moderate degree of confidence’**

1. Lower income parents, particularly minority parents and parents without personal college experiences, face greater personal and institutional barriers to obtaining college finance information and probably require more ‘contextual’ knowledge to make this information useful and understandable.
2. Based on studies of state merit-based and need-based student aid programs, it appears that increases in need-based awards and eligibility for merit-based awards increase high school graduation rates. It is likely that this indicates that early awareness of awards and award eligibility (an important aspect of college-financing perceptions) influences preparation for college-going. (The studies addressing this issue are reviewed in St John, “*The Impact of Information and Student Aid on Persistence: A Review of Research and Discussion of Experiments*”.)

#### **Category IV -- Aspects that we understand with a ‘modest degree of confidence’**

1. Although our general understanding of the role of college finance perceptions (i.e., perceptions of prices, aid, and affordability) in influencing college-going decisions is speculative, we can be modestly confident that perceptions matter. This modest confidence is based on a small number of relatively careful studies of financial guarantees included in easy-to-understand and well ‘marketed’ aid programs (such as the now discontinued aid to dependents of Social Security beneficiaries and a few state aid programs that provide aid guarantees) that indicate that these programs have had a higher impact on college-going decisions than traditional, more opaque and poorly marketed aid practices.

#### **Category V -- Aspects about which our understanding is ‘speculative’**

1. Although we can be modestly confident that finance perceptions matter, we can only speculate about the extent to which they influence behaviors that influence college-going – including parental involvement and influence, parent and child college planning, attention to college preparations, high school completion, and college enrollment and choice.
2. Because of the limited insights provided by current research, we can generally only speculate about the nature of parent and youth college finance perceptions (i.e., perceptions of price, aid, and affordability), the importance of various characteristics of these perceptions, or how these perceptions are formed and changed over time.
3. Current research only allows us to be speculative about the efficacy (in terms of changing perceptions and the impact of changes in perceptions on college-going behaviors) of college affordability and financial aid marketing programs.
4. Current research provides essentially no information regarding whether or not college counseling in middle and high schools includes attention to college finances and whether such attention, if included, influences student and parental college-going planning and decisions.
5. Current research provides essentially no information regarding the extent to which targeted college preparation or intervention programs include activities designed to influence college finance perceptions, whether these programs influence perceptions, and whether potential changes in perceptions resulting from these programs influence college-going behaviors.
6. Current research provides essentially no information regarding the impact of federal student aid programs on the financial perceptions and predictions of state governments and public and private colleges and universities. Current research provides essentially no understanding of the impact of these perceptions (including perceptions of the complexity

and unpredictability of federal student assistance) on state government and institutional financial planning, student aid policy-making, and aid program practices.

7. Current research only supports speculative assessments regarding which student aid program design and operational characteristics and components, if any, are responsible for the uncertain and biased perceptions of potential aid recipients.
8. Current research only supports speculative assessments regarding the impact of student aid program design and operations on college-going behaviors.

## **Section V – An overview of potential directions for future research**

Given our limited knowledge about college financing perceptions and the potentially important role that these perceptions may play in both influencing college-going behaviors, there is a significant need for additional research. In addition, increased understanding of the formation and role of finance perceptions may guide and focus needed efforts aimed at improving the efficacy of student aid policies and practices. The need for additional research is stressed in each of the project's focused research reviews (see Appendix A.) In addition, each of these reviews includes a series of recommendations for further research.

This section of the "Summary Project Report" provides an overview of potential directions for future research directed toward four categories of understandings or issues.

### **I. Understanding the dimensions and characteristics of college financing perceptions**

What are the college financing perceptions of potential college students, parents, counselors and others (including college and university administrators and state government policy makers) regarding college prices, student aid, and the affordability of college-going?

### **II. How are these college financing perceptions formed and how do they change over time?**

### **III. Do these perceptions matter?**

What is the extent of their impact? How does this impact change over the time during the complex college planning, deciding, and attending process?

### **IV. What are the potential impacts of student aid program and policy changes, including changes in program design, operations, and marketing, on college financing perceptions and college-going behaviors?**

## **Category I Research – understanding the dimensions and characteristics of college financing perceptions**

There is a need for research that helps to better understand the college financing perceptions of potential college students, their parents, and middle and high school counselors (including those counselors involved in supplementary college preparation and motivation programs). Our current lack of deep understanding of these perceptions limits our ability to both assess the impact of perceptions and evaluate the potential impact of perception-changing policy alternatives.

Research in this category should be focused on types of students who are the primary targets of equality of educational opportunity policies -- lower income and minority youth, particularly those youth whose parents have not attended college.

To date, most of the available research focused on this issue has involved either survey or focus group activities. Given our lack of basic understanding of these perceptions, continuing use of these techniques will probably not be productive. Alternatively, the use of deep interview techniques that can explore how the targeted audiences actually think about college finances will probably be more productive. Once basic understandings are developed and articulated, broader survey or focus group projects may be productive.

## **Category II Research – understanding the formation of college financing perceptions**

It is important to understand the sources and content of the various messages that potentially influence the formation of the college financing perceptions of participants in the college planning process – including potential college students, parents, counselors and others. One component of research aimed at providing this understanding should be a review of existing longitudinal studies to assess the correlations between various sources of and approaches used to obtain college finance information and the resulting character and accuracy of college finance predictions and perceptions. This research could also involve new surveys of participants to identify the sources and content of various messages that they receive and explore the correlations between these sources and messages and the participants' college financing perceptions.

In addition, it would be useful to conduct a media audit that assesses the content of various college finance messages flowing through different media channels to different audiences. A prospectus for such an audit was prepared for this project by Virtual Media Resources, Inc., a media research company that has conducted audits of youth exposure to alcohol advertising and other media issues. (This prospectus is available on request from TERI.)

Another approach to understanding the formation of college financing perceptions would be to carefully evaluate current marketing and public information campaigns aimed at potential students and their parents. Given the variety of campaigns currently underway, it should be relatively easy to assess the message content, exposure, and the resulting changes in perceptions and attitudes. This research could involve surveys, focus groups, and experiments in which targeted audiences are exposed to particular messages and their response is carefully assessed. This research needs to be explicitly targeted toward developing a cumulative, research-based understanding of college financing perception formation, rather than simply creating 'facts' that provide support for continued funding for these marketing and other campaigns.

A fourth approach to understanding the formation of college financing perceptions would be to carefully assess the college financial advising components of school counseling and early intervention and college preparation programs. This research should include assessments of the nature and sources of the perceptions of the counselors involved in these activities, the content of these program components, and the impact of this content on student and parental college finance perceptions. This third approach should include assessments of the potential utility of data from two national evaluations supported by the U.S. Department of Education -

- the Upward Bound evaluation being conducted by Mathematica Policy Research, Inc. and GEAR UP evaluation being conducted by Westat.

Another potentially promising approach toward better understanding the formation of college financing perceptions would be to conduct studies (probably involving interviews or surveys) of perceptions in states that are introducing new marketing campaigns and/or pricing and student aid policies. Research on these ‘natural experiments’ (including introductions of marketing campaigns and aid guarantee programs) should, like the more general research on marketing campaigns described above, be directed toward developing a cumulative, research-based understanding of college financing perceptions and their impact on college-going. It is important that research funders stimulate studies that develop both baseline data (for a period preceding the implementation of a new policy) and data that track observations after the policy is implemented. In order to ‘get ahead’ of policy changes, funders must both actively monitor state policy-making processes and be willing to invest in research that focuses on time periods that precede policy changes. This requires that research funders accept the possibility that some of their research investments will be less valuable because they will have been made in settings where anticipated policy changes do not occur.

Research on the formation of college finance perceptions should also be directed toward how students and parents (particularly lower income, minority, and first generation potential students and their parents) receive and process information from non-traditional sources (community organizations, churches, and peers.) We know that peer effects are important in many youth marketplaces and contexts and we need to understand how these effects influence the information provided to students and parents and the formation of their college financing perceptions.

### **Category III Research – exploring the impact of college financing perceptions**

Although the High School and Beyond (HSB) longitudinal study of the graduating class of 1982 is over 20 years old, it is one of the few longitudinal studies that contains information about both college finance perceptions and enrollments. Thus, one potentially interesting avenue of research on the impact of perceptions would be to analyze the HSB data set. (This data set is described more fully in the research review prepared by Bridget Terry Long, “An Exploratory Review of the Literature and Possible Data Sources”.)

The potential utility of other data sets should also be explored. Other existing data sets (e.g., NELS 88) and data from the ongoing study of the GEAR UP program include information on financing perceptions. State level data bases may also contain data on college finance perceptions, planning, and enrollment decisions. The potential analysis of these data sets should be examined as part of an effort aimed at improving understanding of the potential impacts of college financing perceptions.

In addition to analyzing existing data sets, attention should be directed toward encouraging current and future data gathering efforts to include college finance perceptions information. If successful, this encouragement would produce an expanding group of data sources that

could be used to improve our understanding of the impact of college financing perceptions. As we have seen during the last three decades of econometric research of demand for college, the existence of relatively easy to obtain and use data sets both encourages and facilitates research that can result in important understandings.

Another potentially promising focus for research the impact of college financing perceptions would be to study the perceptions and enrollment behaviors of military personnel who have guarantees of substantial aid awards and have been the target of significant marketing campaigns (see St. John and Tuttle, *Financial Aid and Postsecondary Opportunity for Nontraditional Age, Pre-College Students: The Roles of Information and the Education Delivery Systems.*)

Experiments with changes in student aid program design (e.g., making aid guaranteed and easy to understand) and program marketing (including advertising and improved communication with potential students, parents, counselors, and others) would contribute to improved understanding of the impact of college finance perceptions. These experiments would also contribute to improved understanding of perception formation, as outlined in the discussion of Category II research issues, above. Because the cost of experiments is likely to be high, they should only be undertaken after less expensive and less time consuming Category I and II research and Category III data analyses have identified potentially promising hypotheses and interventions for experimentation. Because they are likely to be less costly to implement, experiments with marketing and communications activities may be more feasible and appropriate for earlier implementation.

Category III research should also be directed toward a major set of issues that have been essentially unaddressed by research -- the impact of student aid program design, operations, and marketing on institutional and state government pricing and aid policies. This research could involve both careful assessments of natural experiments involving changes in federal policy -- e.g., how have institutional and state pricing and aid policies been impacted by changes in federal aid awards -- and case studies of institutional and state government higher education policy processes. In both cases, one could explore how institutional and state policy makers perceive and understand changes in federal policy and how, if at all, their policies and practices change in response to these changes. It is important that such research efforts address whether institutional and state policy makers are aware of and have accurate perceptions of what is occurring at the federal level and how this awareness and these perceptions are influenced, if at all, by federal and other communication activities and program operations.

A potentially useful strategy for improving knowledge about state and institutional behaviors would be to create a higher education research organization modeled after the Center for the Study of Health System Change funded by the Robert Wood Johnson Foundation (see <http://www.hschange.org/>). This Center has conducted a wide variety of high quality research studies aimed at providing insights that contribute to better health policy. These studies are often based on the information gathered by the Center regarding market and policy trends in a set of metropolitan and state health care marketplaces.

**Category IV Research -- exploring the impact of student aid program and policy changes -- including changes in program design, operations, and marketing -- on college-going behaviors**

This category of issues is perhaps the least informed by currently available research. Although researchers and analysts repeatedly and vociferously describe the complexity, incoherence, and opacity of current pricing policies and student aid programs and practices, there is essentially no research on these issues. For example, there is no research that indicates that students and parents in states with simpler pricing and aid policies have more accurate perceptions of prices and aid. In addition, there is no research that indicates which components of the current aid system are the most confusing to potential applicants and are therefore potentially the most likely to deter program participation and limit program impact.

Research on this category of issues should include careful assessments of existing aid ‘guarantees.’ These assessments should include detailed descriptions of existing programs that include guarantee components; assessments of the impact of these components on price, aid, and affordability predictions and perceptions; and explorations of the impact of these components on college-going decisions.

Research on this category of issues should also explore the design and operations of current aid programs that do not involve guarantees. What components of these programs contribute most to incorrect and biased perceptions and high transaction (or participation) ‘costs’ for targeted potential students? What components of these programs most inhibit predictability and understanding and therefore contribute to higher uncertainty and discomfort among potential students and their parents? What aspects of these programs inhibit communicability and sharing of information among potential students and the parents of potential students?

In addition, research on this category of issues should explore whether potentially useful insights and understandings can be learned from program design and simplification efforts in other domains.

## **Section VI – Concluding thoughts**

- It seems obvious that perceptions of college prices, student aid, and the affordability of college play a role in influencing the college planning and college-going process.
- It seems almost equally obvious that the design, operations, and marketing of college pricing and student aid policies and practices play a role in the formation of these perceptions.
- It is obvious that our research-based understanding of these issues is disappointing.
- The participants in this project – including the project directors, the project advisory committee members, and the authors of the focused research reviews – hope that we have contributed directly to improving our future understanding of these issues.

## Appendix A

### Summaries of Focused Research Reviews

#### Brief overviews of the seven focused research reviews:

**Impact of Student Aid Program Design, Operations, and Marketing on the Formation of Family College-going Plans and Resulting College-Going Behaviors of Potential Students** – This research review addresses currently available research studies that provide some understanding of the impact of student aid program design, operations, and marketing on both the formation of family (including both parental and children’s) college-going aspirations, expectations, and plans and the resulting college-going behaviors of potential students. This review includes an assessment of available research from a variety of disciplinary domains (including economics, sociology, and psychology) and focus on lower income and minority families, particularly families in which parents have not attended college. The ‘family college planning’ review was prepared by Professor Laura W. Perna, Graduate School of Education, University of Maryland.

**The Impact of Advice on Price: Evidence from Research** – This review addresses currently available research studies that provide some understanding of the impact of student aid program design, operations, and marketing on the role and impact of school counselors in the formation of students’ (and their families’) college-going aspirations and plans and the resulting student college-going behaviors. This review focuses on, but is not limited to, the role and impact of counselors who serve high school and middle school students from lower income and minority families, particularly families in which parents have not attended college. The ‘middle and high school counseling’ review was prepared by Professor Patricia M. McDonough, Graduate School of Education and Information Studies, University of California Los Angeles.

**Addressing Financial Aid in College Preparation Programs** – This review addresses currently available research studies that provide some understanding of the impact of student aid program design, operations, and marketing on the efficacy of early intervention programs aimed in increasing college-going among lower income and minority, middle and high school youth, particularly youth whose parents have not attended college. The ‘early intervention’ review was prepared by Professor William G. Tierney and Kristan Venegas of the Center for Higher Education Policy Analysis at the University of Southern California.

**The Impact of Information and Student Aid on Persistence: A Review of Research and Discussion of Experiments** – This review focuses on the potential impact of awareness, understanding, and predictions of student aid and college prices on patterns of students’ persistence, continuation, and success, once they have enrolled in college. This review was prepared by Professor Edward Patrick St. John, Professor of Educational Leadership and Policy Studies and Director, Indiana Education Policy Center, Indiana University.

**Financial Aid and Postsecondary Opportunity for Nontraditional Age, Pre-College Students: The Roles of Information and the Education Delivery Systems** – This review focuses on a particular ‘non standard’ pathway toward college in which students leave high school (either after graduating or without graduating), enter the civilian or military labor force, and then (after a few years in the labor force) enroll in postsecondary education. This review addresses what, if any, understanding can be provided by currently available research regarding the potential impact of awareness, understanding, and predictions of student aid and college prices on the decisions of students following this ‘non standard’ pathway to college. This review was prepared by Professor Edward Patrick St. John, Professor of Educational Leadership and Policy Studies and Director, Indiana Education Policy Center, Indiana University and Tina J. Tuttle.

**The Impact of Federal Financial Aid Policies on the Funding, Design, Operation, and Marketing of State and Institutional Financial Aid Policies and Practices: A Review of the Literature** – This review addresses currently available research studies that provide some understanding of the impact of student aid program design, operations, and marketing on state government and institutional (i.e., college and university) policies and practices. The review focuses on state and institutional financial aid program and pricing policies, with particular attention to understanding the ways in which federal financial aid policies have influenced the design, operations, and marketing of state and institutional financial aid policies and state and institutional pricing decisions and the ways in which state and institutional policy makers have taken into account and been influenced by federal policies when establishing and implementing state and institutional policy. This review was prepared by Dr. David Longanecker and Dr. Cheryl Blanco, (Executive Director and Director of Policy Analysis & Research, respectively, at the Western Interstate Commission for Higher Education) and Professor Bridget Terry Long of the Harvard Graduate School of Education.

**An Exploratory Review of the Literature and Possible Data Sources** – This review addresses whether currently available data sets can potentially be used to address the roles of price and financial aid awareness, understanding, and predictions that are the focus of this project. Historically, most econometric studies of higher education demand and choice have examined the role or impact of the price of college-going (including the impact of list prices or tuition levels and student aid reductions in list prices). However, the potential role of price perceptions (including student and family awareness, understanding, and predictions of list prices and student aid) has been largely ignored. This purpose of this review was to assess whether some of the existing data sets that have been used in previous studies contain data elements that would, if addressed within future analyses, provide insights regarding the unexplored role of price perceptions. If these data elements are present, the cost of improving our understanding of the role of price perceptions in determining college-going aspirations, expectations, plans, and behaviors will be significantly lower than if new data collection efforts are required. This review was prepared by Professor Bridget Terry Long of the Harvard Graduate School of Education.

# **IMPACT OF STUDENT AID PROGRAM DESIGN, OPERATIONS, AND MARKETING ON THE FORMATION OF FAMILY COLLEGE-GOING PLANS AND RESULTING COLLEGE-GOING BEHAVIORS OF POTENTIAL STUDENTS**

Laura Perna

## **Summary**

This paper reviews and synthesizes research from a variety of disciplinary perspectives to describe what is known about two questions that relate to college-going behaviors:

- To what extent have families, especially families of lower income and minority students, been affected by their awareness, understanding, and predictions of college prices and student aid program resources? and
- To what extent have families' awareness, understanding, and predictions of college prices and student aid programs been influenced by student aid program design, operations, and marketing activities?

## **Formation of Students' College-Going Aspirations, Expectations, and Plans**

Parents play a central role in the development of students' aspirations, expectations, and plans for college. Although most parents provide encouragement for their children's postsecondary aspirations and planning, low-income parents and parents with no college experience often do not have the knowledge, information, and other resources that are necessary to adequately guide their children through the search and choice phases of the college enrollment process.

Economic, social, and psychological barriers limit the involvement of low-income and minority parents. Low-income, African American, and Hispanic students and parents are less likely than other students and parents to gain access to the resources that promote college enrollment through social networks. Structural barriers, including the focus of schools on bureaucratic processes and the limited duration of interactions with teachers and counselors, restrict the extent to which information may be acquired from school personnel.

## **Level of Awareness, Understanding, and Predictions of College Prices and Financial Aid**

Many students and parents, even those who expect college attendance, are uninformed, or poorly informed, about college prices and student financial aid. Simply having information about college prices and financial aid does not ensure the accuracy of the knowledge among students or parents; students and parents tend to overestimate college prices. Levels of awareness and understanding of college prices and financial aid are particularly low among Latino and Black students and parents, although more research has focused on probing the understandings of Latinos. The relationship between parental education and income and student awareness and understanding of college prices and financial aid has not been consistently established. Parents with direct experience with higher education, either via their own or another child's educational

attainment, have greater, and more accurate, knowledge than other parents of college prices and student financial aid.

### **“Effects” of Awareness, Understanding, and Predictions of College Costs and Financial Aid on College Plans and Enrollment**

Inadequate awareness and understanding of college prices and financial aid may be one source of the gap between the higher educational expectations that students declare in high school and their lower rates of actual postsecondary education. Researchers speculate about, and students perceive, that such a relationship exists. A variety of college-related outcomes are lower for students who have less knowledge and information about college prices and financial aid than for other students. Nonetheless, while students’ and parents’ awareness and understanding of college prices and financial aid are positively related to such outcomes as college expectations, application, enrollment, choice, and financing strategies, the direction of causality is ambiguous. In other words, research does not reveal the extent to which knowledge and information are a cause or consequence of college-related outcomes.

### **Effects of Student Aid Program Design, Operations, and Marketing Activities on Awareness, Understanding, and Predictions of College Prices and Financial Aid**

Little is known about the ways in which student aid design, operations, and marketing influence students’ and parents’ awareness, understanding, and predictions of college prices and financial aid. Attention to the design of student aid programs focuses on the complexity of the eligibility and application processes for federal financial aid with little focus on the ways in which elementary and secondary schools as well as colleges and universities “market” financial aid to students.

Research on the timing of awareness and understanding of college prices and financial aid suggests that either student aid program design and operations typically do not target students or parents early in the educational pipeline or that early marketing efforts have minimal impact. Most students and their parents acquire knowledge and information about college prices and financial aid only during the final years of high school, likely after having made decisions (particularly with regard to academic preparation) that influence their ability to attend college.

Many entities are, or should be, involved in the marketing of student aid programs, as suggested by the variety of sources from which parents and students obtain information about college costs, financial aid, and other college requirements. Language barriers restrict the sources of information that are available to parents with limited English proficiency, causing at least some parents to rely on their children for college-related information. Compared to White students and parents, African American, Hispanic, and low-income students and parents appear to be more dependent on school personnel for information about college. But, the schools that these students typically attend are generally not equipped to provide support for college-admissions related activities. Little is known about the contribution of such sources as the media, friends, and social networks to students’ and parents’ awareness, understanding, and predictions of college prices and financial aid.

## **Directions for Future Research**

Although prior research consistently shows that students and their parents are poorly informed about college prices and financial aid until, at best, the latter years of high school, the implications of poor awareness and understanding for college enrollment are not well understood. This review suggests at least four areas where additional research is necessary.

First, additional research is required to understand the ways in which awareness, understanding, and predictions of college prices and financial aid influence the formation of college aspirations, plans, and enrollment. Although research suggests that college enrollment rates are higher when students and their parents have accurate knowledge and information about college prices and financial aid, findings from this research are limited because the direction of causality between awareness and understanding of college prices and financial aid and such outcomes as college enrollment has not been established.

Second, research should explore the openness of students and parents to information about college prices and financial aid. This review suggests that more needs to be known about the receptivity of different groups of both students and parents to information about college prices and financial aid, as well as the most effective ways of communicating this information to different groups.

Third, research is required to understand the ways in which student aid program design, operations, and marketing influence students' and parents' awareness, understanding, and predictors of college prices and student aid. Research has generally not examined specific features of student aid design, operations, and marketing but has focused on describing the sources that students and parents use to acquire information about college prices and financial aid and the ways in which sources of information vary across groups.

Finally, more research is needed to understand the ways in which elementary and secondary schools, as well as higher education institutions, can ensure that students and parents are knowledgeable about college prices, financial aid, and other college-related requirements and processes. The involvement of low-income, African American, and Hispanic parents in college-planning activities is often limited by economic, social, and psychological barriers, but schools and other community institutions are not adequately compensating for these lower resources.

# THE IMPACT OF ADVICE ON PRICE: EVIDENCE FROM RESEARCH

Patricia McDonough

## Summary

Nearly three quarters of adults believe that a four-year college education is not affordable for most Americans, yet at the same time almost sixty percent of those same adults believe that, regardless of costs, education is so indispensable that they will do whatever it takes to ensure their child's college attendance. In spite of the extensive financial aid system and low prices in the public sector, poor students and students of color still experience major barriers to college access and policy concerns for inequity continue. An assumed and potential source of college affordability information is high school counselors, but what do high school counselors know about college preparation, admissions, and student financial aid? How, if at all, does counselors' student aid knowledge affect students' postsecondary education aspirations, plans, and preparation for and eventual enrollment in college? What impact do counselors have on students' and parents' college-going aspirations, plans and knowledge? Can we reasonably assess counselors' knowledge and impact on the knowledge that students and parents possess?

After an extensive review of nearly twenty years of research literature, the best answers to these questions are: We have evidence on the college advising role of high school counselors in some schools, we have limited evidence of counselors' impact on students' (and parents') college dreams, plans and behaviors, and we have little to no empirical evidence of counselors' awareness of and familiarity with student aid.

We have evidence on the college advising role of middle school and high school counselors in some schools that suggests that counselors can have both positive and negative impacts on students' aspirations, plans, and enrollments as well as on their financial aid knowledge. Meeting frequently with counselors increases students' chances of enrolling in a four-year college, and if students, parents, and counselors work together and communicate clearly students' chances of enrolling in college significantly increase. Moreover, lack of college counseling related to academic preparation explains a large and statistically significant part of the effect of socioeconomic status on the college enrollment of low-income students.

Where they are available, counselors are seen by students and parents as primary and reliable sources of information, especially for aspirations and plans in the middle school years, and for providing information about college costs and financial aid in the junior and senior years. Good counseling results in statistically proven differences in students feeling that they have enough information. Students have more accurate information about college entrance requirements and costs when they consult with available and trained counselors.

What we know little about from research is the extent to which counselors are actually aware of and knowledgeable about college costs and student aid. This gap in our knowledge about counselors is because of an almost complete lack of empirical data from large, nationally

representative databases and a small number of non-representative studies, and a small number of good, but limited sample qualitative studies. Students and their families lack awareness and understanding of the affordability of college (knowledge of costs and available aid) and this lack of awareness and understanding limits many students of color and low-socioeconomic status (SES) students' preparation for college---aspirations are not formed or are abandoned when college seems out of reach. The existing research on "advice on price" suggests that timely, informed, and reliable advisement about college costs and financial aid can make a difference in college-going.

Consistent, frequent interactions (at least once a month) in groups and one-on-one was the kind of systematic counseling that proved to be effective for students and their families, with more frequent interactions with students being more effective. Communication among students, parents, and school personnel predicted increased enrollment in college.

Based on existing research, the average school counselor is relatively unavailable for any college task, and mostly uninformed about costs and financial aid. Moreover, the least available and least college-informed counselors are in schools that serve large numbers of underrepresented minority and low-SES students and their families.

Counselors, high school counseling, and college-related counseling are not the foci of adequate, nationally representative data collection. The few studies that have examined financially-oriented counseling are quite limited and the existing research base suggests that few students of color and low-SES students appear to be getting college affordability, or any, counseling. A few studies suggest that the complexity and obtuse, ever-changing nature of the student aid system limits counselor action and effectiveness for this role.

## **ADDRESSING FINANCIAL AID IN COLLEGE PREPARATION PROGRAMS**

William G. Tierney & Kristan Venegas

### **Summary**

This paper considers research pertaining to financial aid in college preparation programs. The paper begins by defining college preparation programs and how financial aid has been utilized in these programs. The authors point out that information pertaining to financial aid in college preparation programs has been rarely employed and rarely researched. Using the little research that does exist on college preparation programs and financial aid, the authors then suggest a research agenda that might be undertaken to determine the utility of having a financial aid component in college preparation programs. By considering the current research on college preparation programs, the authors conclude with the following question: *If research on college preparation and financial aid were to be conducted what might it look like?*

# THE IMPACT OF INFORMATION AND STUDENT AID ON PERSISTENCE: A REVIEW OF RESEARCH AND DISCUSSION OF EXPERIMENTS

Edward St. John

## Summary

Experiments with providing information on student aid programs should be informed by research on the impact of student aid, including research on persistence. Persistence research has examined the impact of aid, but not the role of information. This paper examines research related to the role of information in promoting persistence. No prior studies have examined the direct effects of information and encouragement on persistence. However, research on student aid, including research of the effects of prices and subsidies on persistence, can inform the design of experiments with early (pre-college) information. Research related to three approaches to providing was considered.

*Type 1—Encouragement:* Providing information on different types of student aid programs to encourage applications, without any specific information about the amounts of grant and loan aid students might expect to receive, or the costs. Since there is reason for concern about the amount of need-based aid available in many states, there are reasons to question whether information on student aid would actually promote persistence for low-income students. It is important to provide information about amounts of aid students can expect to receive even if appears limited. While research on encouragement has been limited, there is reason to question the value of encouraging students to apply for aid without providing information on the amounts of aid students can expect to receive.

*Type 2—Information on Aid Awards:* Providing students information about the amounts of government grants and loans they could expect to receive, at a given level of college costs. Information on the amounts of aid students are likely to receive could improve financial planning for enrollment and, as a consequence, modestly improve persistence.

*Type 3—Guarantees of Grant Awards:* Providing low-income students in middle schools and/or high schools with specific monetary commitments, probably as guarantees to meet tuition costs. Research on Indiana's Twenty-first Century Scholars Program indicates that aid guarantees can improve enrollment and persistence by low-income students.

Based on this review, it appears that a great deal could be learned from experiments with information on aid awards, coupled with guarantees of varied amounts of grant aid. While little is known about the role of early information in college persistence, it makes sense to consider experiments with information that include information on aid amounts. Experiments that vary the amounts of aid students are "guaranteed" would extend understanding of the role of information, guarantees, and aid amounts.

**FINANCIAL AID AND POSTSECONDARY OPPORTUNITY FOR  
NONTRADITIONAL AGE, PRE-COLLEGE STUDENTS:  
THE ROLES OF INFORMATION AND THE EDUCATION DELIVERY SYSTEMS**

Edward P. St. John & Tina Tuttle

**Summary**

This paper addresses three questions related to the role of information in promoting college access for nontraditional age adults.

Who are the potential nontraditional age students? The percentage of the adult population enrolling in college has changed very little over the last three decades. The advent of the Pell grant program; the growth, decline, and restructuring of proprietary schools; the decline in the purchasing power of Pell grants after 1980; the reform of welfare systems; and the rise and fall of workforce programs have had little influence on the enrollment rates for adults. The problem often overlooked in college access for adults is that most adults who lack prior college are underprepared educationally. There are many low-income adults who have not completed high school. Most college programs market to the relatively small population of college-prepared adults.

How well prepared is the education delivery system to serve the nontraditional adult population? The postsecondary education system has adapted to provide evening programs for adult students who are college prepared. There are also many executive programs that provide graduate education options. However, most of the universities that invested in electronic systems to provide distance education have not seen financial returns on their investments (Bok, 2003). The access challenge for many of the underserved adult population—those who missed entry into the college pipeline the first time through—is the requirement of some type of adult basic education before college enrollment. Targeting the learning needs of the large population of adults who are underserved has never been a priority of higher education in the U.S. ABE systems have been linked to welfare—through a range of adult programs often related to welfare reform—but they, too, have not substantially improved the percentage of adults who enroll in higher education.

Another part of the problem relates to the market models used in adult basic education and in higher education. ABE programs generally have low or no tuition and student financial aid is not available for them. Aid is available for postsecondary programs, but preparation is required. Many of the proprietary programs that were marketed to adult students were closed because of bad practices, high default rates, and so forth. Yet, the successes and failures of the proprietary sector were seldom studied. Researchers simply did not publish market research on this sector.

What role might financial aid information play in promoting postsecondary opportunities for adults? A great deal could be learned about marketing to adults through a series of well-designed experiments. If the history of proprietary schools teaches us little else it would be that advertising student financial aid for education is of interest to adults. Further, researchers who study

encouragement for traditional age students find that parents are frequent users of the information (Hossler & Schmit, 1995). However, given the barriers to access for adult students, it makes sense to combine information experiments for adult students with the provision of educational services for them—combining educational experiments with information experiments.

Two areas of experimentation merit special attention. First, experiments that target information for veterans are particularly appealing at the current time. Former servicemen have educational benefits, and the return of new veterans creates a window of opportunity. Second, recent analyses of NELS indicate there should be substantial numbers of college-qualified students who were from low- and lower-middle-income families and did not enroll initially. More colleges should consider ways of linking creative pricing strategies to enable those potential students to enroll in evening and other nontraditional programs.

# **THE IMPACT OF FEDERAL FINANCIAL AID POLICIES ON THE FUNDING, DESIGN, OPERATION, AND MARKETING OF STATE AND INSTITUTIONAL FINANCIAL AID POLICIES AND PRACTICES: A REVIEW OF THE LITERATURE**

David A. Longanecker, Cheryl D. Blanco, & Bridget Terry Long

## **Summary**

The vast majority of college students today rely upon financial aid to help them pay for college expenses. Prospective students must navigate through a complicated mix of federal, state, and institutional programs offering grants and loans under varying conditions and with different income, cost, and merit requirements. While this may be the reality facing students, research on higher education often ignores the complexity of the financial aid environment and treats each level of policies separately. In this way, scholars often ignore possible interactions between the financial aid policies of the federal government and those of states and colleges.

However, the degree to which federal aid policies influence the design, operation, and marketing of state and institutional programs could have important implications for the efficacy of financial aid. Moreover, whether federal policies work in conjunction with state and institutional policies or to opposing ends has a direct impact on the sum total of financial aid received by students. In summary, the influence of federal programs, the largest provider of direct student aid, on states and colleges could be important in determining the conditions under which aid is provided in the United States.

This report provides a comprehensive review of the higher education literature since 1985 to address the following question: To what extent have states and institutions considered and been impacted by federal policies when funding, designing, operationalizing, and marketing their financial aid policies and practices? Moreover, how has the design, operation, and marketing of the federal programs themselves impacted states and colleges? To address these questions, the review will identify ways in which the literature explores how state and institutional policymakers have taken into account and are influenced by federal programs when setting policy. Due to the nature of the available research, the report focuses on the actions of states and colleges rather than the decision-making process itself and often relies on statistical analyses of state and institutional tuition and financial aid data.

Federal financial aid policies might affect states and colleges in several ways. First, state governments and postsecondary institutions might choose to coordinate their own programs with those of the federal government. By working together, these groups might be able to maximize the goal of increasing college access. In contrast, states and colleges may choose to take advantage of federal money, and there has been much discussion about whether federal aid programs are used as substitutes for other potential sources of financial aid. In this report, we document and discuss examples of each type of behavior. On the other hand, states and colleges may not react to federal aid programs due to the fact that student aid works thru an intermediary (e.g. the student and their family) rather than directly with the state or institution.

# **THE ROLE OF PERCEPTIONS AND INFORMATION IN COLLEGE ACCESS: AN EXPLORATORY REVIEW OF THE LITERATURE AND POSSIBLE DATA SOURCES**

Bridget Terry Long

## **Summary**

Recent surveys suggest that most high school students hope to attend college. However, while many appear to be aware that a postsecondary degree affords a variety of benefits, they seem to know far less about how much college costs or how to deal with this expense. This paper assesses what is known about the role of college price perceptions on college access and choice. Additionally, I investigate the impact of awareness about financial aid. The goal is to present conclusions from the research literature while also assessing whether the existing data sets contain elements that could be used in future analyses to provide insights regarding the role of price perceptions, financial aid awareness, and college information.

Theoretically, college enrollment should be related to costs, and although most models assume perfect information among actors, this is unlikely to reflect reality. The amount and accuracy of information about tuition could affect behavior. Research points to the potentially important role of information in the success or failure of a financial aid program. Although basic economic theory predicts that financial aid would encourage enrollment by reducing price, many researchers have failed to document large responses to the introduction of financial aid programs. If eligible individuals do not know about the aid or are unable to navigate the application process for securing the support, it will not help them. Recently, as many as 19,000 who had qualified for a Cal Grant, a need-based aid program in California, failed to even apply due to a lack of information about the policy (Sturrock, 2002).

My review of the literature suggests that students and families know little about college costs and financial aid. Several studies have found a significant lack of information among prospective college students regarding tuition levels and financial aid programs. Those who give an estimate of costs often overestimate the true level, and individuals appear to have a lot of incorrect information about financial aid. For instance, when asked to estimate the average yearly tuition that in-state undergraduates were charged at public four-year colleges in 1998-99, students and their parents guessed approximately twice the actual amount (Horn, Chen, and Chapman, 2003). The misperception for public two-year colleges was even larger – students guessed a price that was over three times the actual mean tuition charge. Additionally, many studies find that there are differences by background in the information individuals have.

The review of the literature also suggests that very little work has been done to link perceptions to college access and choice. Few studies use controlled analysis techniques and most suffer from a number of methodological problems. Moreover, researchers have been unable to establish whether information about postsecondary education has a causal effect on college decisions. Appendix A includes an annotated bibliography of the articles reviewed for this report.

While the question of how college perceptions affect attendance remains, there are a couple of data sources that might contribute to future analyses. Unfortunately, each has its own drawbacks. The HSB survey includes a great deal of information on students' perspectives of college prices and whether individuals plan to use a particular financial aid program. However, these data represent the high school class of 1982 and are therefore over two decades old. More recently, the 1999 NHES provides information on awareness about college price and aid. However, the data are not longitudinal and lack a great deal of facts about educational decisions. Unfortunately, the NELS88 and 2002 ELS do not include information about college price perceptions or affordability. They do, however, have data on college expectations. Finally, the National GEAR UP Survey, if it can be obtained, provides information on the relationship between college expectations and perceptions of price and affordability for students and parents.

Many studies are based on smaller samples collected by individual researchers, and the collection of targeted data on college perceptions may hold promise for future analyses. For example, Avery and Kane (2004) surveyed high school students in the Boston area for their analysis, and many states have commissioned data for reports. Other research organizations have used the services of polling or marketing firms.

Clearly, additional research is needed on this topic. Determining the role of price perceptions has many implications for policy. If information is important in college access, policymakers should consider programs or initiatives that would increase the level of awareness. Knowing the exact nature of students' and families' understanding of college prices would help authorities to tailor efforts in the best way possible. However, to be most effective, one must also consider whether student and parents would take advantage of a proposed information programs. Therefore, it would be useful to know how students and families currently get their information about colleges and if outside bodies could tap into those outlets. In terms of financial aid, if the complexity of programs and application procedures is a real deterrent, policymakers could have a significant impact by simplifying these factors. Additionally, as government aid has shifted towards more of a loan orientation, careful consideration should be given as to how to inform students and families about this form of aid. Students and families may find it more complicated due to the additional factors that must be considered such as the nature of repayment obligations.

## **Appendix B**

### **‘Expanding the Student Aid Policy Debate’**

#### **Can the Impact of Student Aid Programs be Increased by Changing Program Design, Operations and Marketing?**

David S. Mundel

Prepared in May 2003 for the Brookings Institution  
Dialogues on Financing Students in Higher Education – In Pursuit of Equity  
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#### **Introduction and Background –**

During the last 35 years, the issues confronting the federal student assistance policy debates have remained remarkably constant. In the late 1960’s during the final months of the Johnson administration, a major report (the “Rivlin Report”) outlining the role of expanding student aid to achieve equality of postsecondary educational opportunity was issued by then Department of Education and Welfare. Several other similarly oriented reports soon followed, including reports by the Carnegie Commission (chaired by Clark Kerr) and reports and legislative proposals put forth by the Nixon Administration and House and Senate congressional committees. The major Congressional action that defined the debate followed quickly in 1972 with the passage of the Basic Educational Opportunity Grant program that later became the Pell Grant program. Several other policy reports recommending expansion of equality of opportunity-oriented, federal student aid programs were also issued during the early 1970’s – e.g., the 1972 report of the College Scholarship Service Committee on Student Economics and the 1973 report of the Committee for Economic Development.

Throughout these 35 years, concern has consistently been focused on reducing the inequality of rates and patterns of college going (i.e., ‘access and choice’), persistence, and completion that exist between disadvantaged, lower income, and minority youth and their counterparts from middle income, higher income, and majority households. This policy debate has focused on changing behaviors (i.e., changing college-going rates and patterns) and changing affordability (i.e., easing student and family access to funds needed to finance college-going). In addition to focusing on student assistance instruments, the low proportions of college-qualified and college-oriented youth from lower income and minority families has stimulated attention on the potential role of early motivation, enrichment, and information programs.

Paralleling this consistent policy focus has been an almost equally constant disappointment with the continuing disparities between the college-going rates and patterns of lower income and higher income youth. Although the college enrollment rates and patterns of lower income youth have improved, they have continued to remain significantly below and different from the rates and patterns of youth from more advantaged families.

In addition to focusing on equality of opportunity, the student aid debate has also directed attention toward the financial problems facing middle income students and families. Because the list price of college-going has grown more rapidly than family incomes during most of the past 3 ½ decades, programs and budgets have been directed toward easing middle income affordability and reducing the unmet measured financial need of these students and their families.

While the goals and objectives addressed in the policy debate have remained essentially constant, the debate has increasingly focused on budget tradeoff issues, in part as a result of the passage of the Budget and Impoundment Control Act in 1975 and the increasingly important role of the budget process within both the Executive and Legislative branches. The student assistance budget debates have addressed tradeoffs among different types of student aid programs (e.g., grants, loans, and tax deductions and credits); tradeoffs between student aid programs and motivation, enrichment, and information programs; and tradeoffs among types of students to be supported (e.g., lower income vs. middle income, dependent vs. independent, and part-time vs. full-time students).

During these same 35 years, policy makers, analysts, and implementers have become increasingly aware of the complexity of student and family college-going decision processes. It is now widely understood that a diverse range of factors determine college enrollment, persistence, and success. Among the important determinants of college-going are parental motivation and encouragement; parental financial ability and willingness to pay for college; peer orientation and motivation; middle school and high school curriculum choices, performance, and counseling; and college offerings, proximity, prices and recruiting and selection practices. Many of these factors appear to play a major role during middle school and early high school years, not solely during the later years of high school when college planning is more explicit. In addition, it is also clear that many of these decision-relevant factors are ‘stacked against’ the college enrollment, persistence, and success of lower income and minority youth, particularly youth from families with no history of college-going.

### **The current state of the federal higher education policy debate – business as usual**

A quick review of the recent higher education literature suggests that the past is prologue. Most of the reports and analyses released during the last few years continue to emphasize the importance of equality of opportunity concerns and recommend expanded budgets for student aid and early intervention programs oriented toward these concerns. Most of these reports question the increasing allocations of support and attention toward other concerns and many question the weak targeting of current policies.

Two types of program instruments continue to receive most of the budget and policy attention at the federal level. A majority of the budget and attention is allocated to student and family assistance programs – including grants, loans, tax deductions and tax credits. Much smaller levels of funding (X % of the federal budget) and attention are devoted to middle and high school motivation, enrichment, and information programs – including the Trio Programs (e.g., Upward Bound and Talent Search and the Gear-Up program).

At the same time, disappointment with the performance of current programs continues to be widespread. All of the components of equality of higher education opportunity remain unachieved and potentially threatened and affordability problems and ‘unmet need’ continue to exist and are anticipated to grow. In addition, there is little reported evidence that the current policy instruments are making any noticeable or significant difference.

The upcoming reauthorization of the Higher Education Act (scheduled for 200x) appears unlikely to provoke significant departures from a business-as-usual approach – reauthorize the current programs with little change and hope for expanded funding in the future (see, Wolanin et al, 2003).

### **There is a need to move beyond business-as-usual in the federal higher education student assistance policy process**

The continuing levels and patterns of inequality of opportunity in the higher education marketplace and the continuing disappointment with the impact of student assistance and other programs on these results suggest that the policy process need to be expanded and refocused. The process needs to be expanded to include examining and potentially changing the program configurations and operations with a focus on which program characteristics (including operations and marketing) can impact college-going, persistence, and completion behaviors. These changes are needed not because budgets and funding levels no longer matter, but rather because other factors may also have significant impact of program efficacy.

### **Lessons from outside the higher education sector can be useful in improving the impact of policies on changing patterns of college-going (i.e., changing behavior)**

One potentially productive approach to improving program efficacy is to explore what analysts in other sectors have learned about influencing consumer behavior. Although higher education is seemingly unique and far different from other sectors, analysts in other sectors have devoted substantial attention and resources to understanding how to influence the behavior and how to design products and services that can be successful in the marketplace. For example, it is clear from the recruiting successes of the military services following the move to an all volunteer army that high quality, focused, research-based marketing campaigns can change youth behaviors.

The following are four potentially helpful insights derived from both experiences outside the higher education arena and a review of the some of the literature on demand stimulating product and service strategies (including product design, service design and implementation, and product and service marketing and advertising).

1. **A variety of product and service characteristics and qualities matter to potential consumers.** The basic issue is which characteristics and qualities enable a product or service to fulfill customer wants and needs and thus which characteristics and qualities will lead toward better marketplace performance. In general, different combinations of characteristics and qualities are important to different customers and the importance of these characteristics and qualities varies over time.

To be successful, enterprises (like Dell Computer Corporation) are constantly exploring customer preferences and attitudes and adjusting product and service offerings to respond to the factors that are important to customers. The success of Dell and other companies clearly shows that immediately measurable product characteristics (e.g., price) are not the only characteristics that are important. Dell's strategy of improving the product purchasing process (through more helpful and informative on-line and telephone-based sales assistance) suggests the importance of factors well beyond the price and quality of the product, itself.

The importance of product and service characteristics suggests several issues that need to be addressed in the student aid program domain. For example, it will probably be important to know which product and service components in various student aid programs appeal to which students and families at what times in the college planning process and which components are not appealing and likely to limit program attractiveness and efficacy. Similarly, it will be useful to know which components, if any, appeal to high school counselors and others who advise students and families early in the college planning process because more appealing products and services will be more likely to be 'sold' by these potentially important intermediaries.

Basically, the importance of multiple product and service characteristics suggests that the potential efficacy of student assistance programs may not be solely dependent on the effect of these programs on the net college prices facing students once they enroll in college. It is possible (and perhaps, quite likely) that the impact of these programs on early college planning is only partially related to their eventual impact on net college prices.

Implementing a 'customer-oriented' approach to program design based on continuous assessment of program performance against potentially changing customer preferences suggests the need for ongoing research and a potential need to adjust offerings over time. Setting many program design characteristics 'in stone' within the relative infrequent legislative authorization process may be counterproductive.

2. **Price matters.** In almost every marketplace or sector, the price of product and service offerings matters for many potential customers and price matters more for some customers than others. As with other product and service characteristics, price is often a complex characteristic. Price reductions, rather than price levels, may be more important to some customers. Similarly, price stability and predictability may be more important than price levels to many groups of customers.

Within the student aid policy analysis community, there is widespread agreement that the price of college-going is a major barrier to or determinant of enrollment among lower income youth. What is not well understood is how much price matters to different groups of students and parents, which dimensions of price matter more to which groups of students and parents, and which dimensions of price matter at different times in the college planning or decision-making process.

Without detailed and ongoing assessments of the role of prices and various pricing characteristics in determining college-going decisions, it is doubtful that the efficacy of student aid programs (which are primarily designed to lower effective prices) can be substantially improved.

- 3. Customer behaviors are influenced by their awareness and understanding of product and service characteristics and prices and their ability to predict or anticipate these characteristics and prices.** In most marketplaces, successful enterprises realize that their potential customers' perceptions (formed by awareness, understanding, and predictions) matter a great deal, often more than reality. In addition, successful enterprises realize that perceptions are often more difficult to change than reality and as a result, enterprises allocate substantial effort, attention and budgets to influencing perceptions. In many marketplaces, customer perceptions are formed (at least in part) by beliefs, cultures, media, and word-of-mouth, peer communications that are often beyond the control of an enterprise or its collaborators or competitors and these externally formed perceptions are often competitive to the perceptions that enterprises are seeking to create. Again, the higher education marketplace appears to be no different.

Successful enterprises realize that customer awareness is a crucial ingredient in success. If customers are unaware of a product or service and its price, characteristics, and availability, they are unlikely to purchase it. Enterprises also realize that awareness is particularly important if a long decision process is involved in purchasing a product or service. Long term and seemingly repetitive awareness-oriented marketing and advertising campaigns may be the effective, but sometimes all-too-obvious, results of this realization.

Similarly, enterprises realize that understandability is often a key determinant of customer behavior. Complex products and services (those with many characteristics and complex pricing schedules) are difficult to sell to other than well-informed, experienced, repeat customers because these products and services are difficult to understand and a lack of understanding or confusion generally deters purchasing decisions. Sellers can often help to overcome complexity-related barriers to purchasing decisions by simplifying a product and its prices to increase understandability. In addition, assisting customers achieve better understanding and thus comfort can occur within the purchase planning or purchasing process, themselves. Again, Dell provides a useful model demonstrating the role of increasing customer understanding (and as a result, customer comfort and purchases) through both its on-line and phone based purchasing processes.

A lack of customer understanding may be an important source of the limited efficacy of the current student assistance programs. The constantly evolving, arcane and complex world of student aid programs (including eligibility regulations and expected family contribution formulae) does not appear to have been designed with customer understandability as a goal.

Perhaps, refocusing student aid program design and operations toward behavior-changing increases in customer understanding and away from the current understandability-reducing concentration on complex, horizontal and vertical equity oriented, fund allocation rules would be an effective change?

In other sectors, enterprises realize that unpredictable products and services – e.g., those with characteristics, performance, and prices that can not be forecast and are thus uncertain – also face problems in the marketplace. These problems are especially important if customers have choices and if customers are uncomfortable or discouraged by uncertainty. There is extensive literature regarding the negative impact of uncertainty on customer comfort and

resulting purchasing decisions. Successful enterprises use a variety of strategies (including product designs, performance guarantees, free trials, and advertising) to diminish these unpredictability-related barriers to success.

Predictability is not (and has never been) a hallmark of student assistance programs and policies. Although the basic programs have been operating for many years, there is little evidence that potential college students, their parents, or their middle and high school teachers and counselors can predict either the continued existence of these programs or the amount of support that students and families can anticipate receiving. If prices and net prices matter, it seems obvious that predicted or anticipated prices and net prices probably matter. The potential implications of the unpredictability of student aid awards are all too apparent.

4. **Marketing is usually a constant focus, not merely an afterthought or an add-on, in successful product and service strategies.** In complex competitive marketplaces, where customers' perceptions about complex products and services are formed over a long time period and influenced by an array of factors and sources, successful enterprises constantly engage in marketing and advertising to create an aware and informed customer base. Within these marketplaces, marketing, advertising, and communications are seen as complements to product and service designs, operations, and pricing decisions.

Within the context of federal higher education student assistance programs, marketing is often seen as an anathema or at the least, a mistaken use of scarce programmatic resources.

A forthcoming report prepared for the Pathways to College Network and the College Board by CommunicationWorks, LLC shows the impact of ignoring or not concentrating on marketing activities. The report suggests that although there are some potentially effective marketing efforts underway in several states, "by and large, however, most of the campaigns and programs throughout the country designed to help under-served students attend and complete college are not designed as social marketing campaigns." Based on an analysis of these existing programs, the report concludes that "most of these initiatives (do) not have a clearly defined long term strategy" and "only a third provided early college awareness aimed at middle school or lower." The messages included in most of the campaigns were judged to be "generally trite, uninspiring, and too varied to create ... desired action" among targeted college-going decision makers.

### **Assessing the efficacy of federal student assistance in the context of these lessons**

A basic goal of federal student aid has been and continues to be increasing equality of opportunity (i.e., college-going, persistence, and completion) among lower income youth by reducing the 'effective' or 'net' price of college.

There is a long history of research showing that lower income youth enroll in college less frequently than higher income youth and that when they do enroll, lower income youth enroll in lower price colleges. Several studies also show that lower income youth and their parents are more concerned about paying for college than higher income youth and parents. Similarly, there is a long history of statistical analyses suggesting that the college enrollment and choice decisions among lower income youth are more sensitive to college prices than are the decisions of higher income youth (e.g., Kohn, Manski, and Mundel; Manski and Wise; Kane; and Long).

As many (including the author of this paper) have frequently and vehemently argued, this suggests that well-targeted student aid programs should be effective instruments.

But, in the last few years, it has become increasingly apparent that the actual prices that student aid programs are intended to reduce are far below the prices anticipated by many potential college students and their parents. For example:

Wolanin (2003) reports that while the maximum Pell Grant award only covers 34 percent of the actual average price of attending four-year public colleges (pg. 33), potential students and their families believe that tuitions at these colleges are more than 200 percent higher than they actually are (pg. 113).

An American Council on Education sponsored survey conducted in 2000 found that parents of 12 to 17 year olds estimated that the tuition levels of two-year community colleges were, on average, almost \$5000 per year, almost three times as high as the actual tuitions for this type of college (Taking Stock...., Ikenberry and Hartle).

In a report issued in Spring of 2003, the Stanford University Bridge Project reported that “less than half the 9<sup>th</sup> and 11<sup>th</sup> grade students surveyed estimated the cost of college tuitions within two times the actual cost for each type of institution” (pg. 35). In addition, the project found that “while students overestimated tuition at all types of institutions; they tended to have greater overestimations of tuition at less-selective institutions, including community colleges” (pg 36).

Even more disturbing, is the pattern of price perceptions or beliefs among different types of families. In a 1998 survey of parents of middle school students conducted for the U.S. Department of Education by the Gallup Organization, lower income parents reported substantially higher price perceptions than higher income parents. (see table, below).

Family income level	Average estimated price (tuition & fees) at a two-year public college
< \$20,000	\$8400
\$20,000 to <\$35,000	\$8196
\$35,000 to <\$50,000	\$5669
\$50,000 to <\$75,000	\$6077
\$75,000 to <\$100,000	\$6576
\$100,000 or more	\$5746

Unpublished findings of 1998 Gallup Organization survey conducted for U. S. Department of Education (data supplied to author by USDOE staff)

There are several potential sources for these high perceived or estimated tuition price levels.

The publicity and marketing efforts devoted to publicizing low tuition levels pale in comparison to the media coverage of high and increasing price levels at higher price schools. In addition, the advertising campaigns devoted to various tax advantaged, college saving and prepayment plans may increase the price perceptions of both their customers and others. This unintended side effect may occur because the widespread campaigns focus on the high cost of college-going and the requirement for extensive parental savings in order for college to be a possibility.

Even low price colleges appear reluctant to advertise their low price levels. Perhaps, they fear withdrawal of state government support if legislators or constituents knew how inexpensive these colleges actually are. Alternatively, they may fear that potential students will mistake their low prices for low quality. In fact, many of these schools advertise the availability of student aid rather than low prices, potentially suggesting that assistance is needed because of the level of their unstated prices.

Even the federal government seems reluctant to improve awareness and understanding of the existence of low price college opportunities. Surprisingly, there is no mention of the price of any college opportunities in the “The Student Guide”, the 34 page document (published by the U.S. Department of Education) that accompanies both the on-line and hard copy versions of the application for the federal student aid programs.

In the absence of competing and concrete messages about the availability of low prices and the multiple messages about the high and increasing price of college, it is not surprising that potential students and their parents think colleges are very expensive. It is also not surprising that lower income potential students and their parents have even higher price perceptions because what they hear and see confirms their view that college-going is out-of-reach for them. Students and parents with more college-going experience and more peers with college-going plans and experiences are more likely to understand that the high and increasing price of Harvard is not indicative of the general price of college-going.

Not only are perceived tuition levels or prices excessively high, but it appears that many potential students and their families have little, if any, information about the level of student aid that might reduce the prices they will face. On the whole, federal student aid programs are not easy to understand, are not forward-funded entitlement programs that provide predictable benefits, and are not well or extensively marketed.

For the most part, students receive information about their eligibility for and the amount of federal student aid that they will receive only after they apply for and are accepted by colleges toward the end of the senior year of high school.

Although the available materials describing the federal student assistance programs are extensive, they are confusing, difficult to understand, and uninformative (particularly for youth and parents with no college-going experience.) For example, the “Free Application for Federal Student Aid” is a 101 question form. The copy of the 34 page guide to federal student aid programs that the author received in May 2003 includes the following,

disturbingly vague, answer to the question of ‘how much money can a student get from the Pell Grant Program for the 2003-2004 academic year’.

“Pell Grants for the 2003-2004 award year will depend on program funding. The maximum Pell Grant for the 2002-2003 award year was \$4,000. How much you get will depend not only on your EFC but also on your cost of attendance, whether you’re a full-time or part-time student, and whether you attend school for a full academic year or less.”

Not surprisingly, it is probably difficult for parents and students to predict how much student aid they might receive. Disturbingly, the aid programs that are more targeted toward more- price-responsive, lower income students remain virtually unpredictable, while tax savings programs that benefit middle and upper income students are essentially predictable, ‘entitlement’ programs.

A 2002 survey of parents of 18 to 24 year-olds and 18 to 24 year old, young adults (conducted for The Sallie Mae Fund by Harris Interactive) found that:

- “Nearly half of all parents wished they had more information about how to pay for college.”
- “Those who need financial aid information the most, understand it the least – 60% of parents with incomes under \$50,000 report that they need more information about how to pay for college compared to only 37% of parents with incomes of \$75,000 or more.”
- “Lowest income and Hispanic-American families get financial aid information later than upper income and other families.”
- “Lower income and minority parents are least likely to be able to identify common sources of financial aid.”

The complexity of student aid programs and their application processes; the unpredictability of program eligibility and aid amounts until late in a student’s senior year of high school (if then); and the general lack of accessible and concrete information about student aid programs are likely to leave parents and students highly uncertain about whether or not aid can help pay for college.

**In combination, excessively high tuition perceptions/estimates and limited understanding of and high uncertainty about eligibility for and potential levels of financial aid almost certainly limit the behavioral impact of federal student assistance programs.**

**The effects of these limitations are probably more significant for the principal groups targeted by equality of opportunity oriented student assistance programs – lower income youth and their families.**

## **Preliminary conclusions and suggested first steps --**

Basically, this analysis suggests that ‘business as usual’ may not be good business. Increasing attention to program design, operations, and marketing issues may provide opportunities for improving the impact of federal student assistance programs. The current focus within the policy debate -- which programs and which students get what amounts of budgetary support – may be important but may not, by itself, lead to significant increases in program efficacy.

The analysis also suggests that the attention to design, operations, and marketing needs to be oriented toward understanding what program characteristics (including price reducing aid parameters and application and communication processes) are important to which types of youth and families and how program designs and operations can be restructured to increase customer awareness, understanding, and predictability in order to change college-going behaviors.

The following are some potential first steps toward moving forward:

- **Improving understanding the roles and sources of perceptions and expectations**

There is a need for research on the role of perceptions and expectations in the college planning process. The importance of different perceptions for different target populations and for different stages of the college-planning process needs to be better understood if policy redesign is to be effective. The sources of the messages, experiences, and attitudes that create these current perceptions and expectations and the potential efficacy of alternative messages needs to be better understood if effective marketing strategies are to be designed and implemented.

This research and analysis needs to be ongoing. Increasing the customer and behavioral impact focus of these programs can not be a one shot initiative. Potential customers and potential ‘collaborating’ intermediaries (such as middle and high school counselors and teacher) change and the importance of various determinants of their behavior also change.

- **Improved understanding of state government and private student aid initiatives**

There are many state and private initiatives aimed at changing the delivery and marketing of student assistance programs. Whether or not these initiatives can provide insights and understandings that can improve federal program effectiveness is unclear, but unless resources are devoted to assessing and evaluating these programs it is clear that no insights and understandings can be derived.

- **Exploring strategies for improving awareness, understanding, and predictability of student assistance programs**

The likely importance of improved program awareness, understanding and predictability suggests that alternative approaches to achieving these outcomes need to be explored immediately.

Awareness and understanding increasing marketing efforts should be designed and implemented as carefully assessed, experiments. The impact of current programmatic efforts aimed at improving awareness and understanding need to be carefully evaluated. Similarly, the potential impact of program design simplifications on both understandability and distributional outcomes needs to be understood.

Alternative strategies for increasing predictability need to be explored. Predictability may not need to include commitments of support to each specific individual; it may be achievable with formal commitments to simplified eligibility criteria and formulaic award structures. It may also be achievable with a division of the grant program into two elements; a basic, fully predictable element and a supplementary, less predictable element. 'Early commitment' of awards reduce budgetary flexibility and increase the ability of institutions, states, and other financial supporters to respond with either substitutive or complementary policies, but the incentive effects on lower income youth, their parents, and middle and high school teachers and counselors may be worth this sacrifice.

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## **Appendix C**

### **Some Representative Research Studies and Research Reviews Performed in Other Youth Policy Domains**

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