



# college access and tax credits

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NATIONAL ASSOCIATION OF STUDENT FINANCIAL AID ADMINISTRATORS

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## foreward

In November 2004, the National Association of Student Financial Aid Administrators (NASFAA) received a grant from the National Educational Loan Network (Nelnet) to study issues involving low- and moderate-income students' access to postsecondary education. The NASFAA/Nelnet College Access Grant funds are being used to develop and disseminate a series of research reports that focus upon critical issues involving access to higher education for under-represented groups and ways these barriers can be overcome. The topics that will be covered in this series have been decided by the NASFAA staff, in consultation with the Association's Research Committee.

This first report under the college access series looks at the links between federal higher education tax credits and college enrollment. The broad-based use of tax credits to help families pay postsecondary expenses came about as a result of the Taxpayer Relief Act of 1997, which instituted the HOPE and Lifetime Learning tax credits. When President Clinton signed the legislation into law, he and many others believed the two tax credits would increase college access and make college more affordable for many Americans. Indeed, the Congressional Budget Office estimated that in their first five years of existence, the HOPE and Lifetime Learning benefits would provide nearly \$40 billion in new funding for college students and their families.

However, since implementation of these tax credits, many education policy analysts have asked a number of questions about them: Do low-income students qualify for tax credits at the same rates as those from middle- and higher-income families? Have tax credits been as effective at influencing college-going rates among groups under-represented in postsecondary education as Federal Pell Grants and other traditional forms of financial aid? Can tax benefits be delivered to students in a timely manner to make them an efficient means of providing financial assistance?

A number of educational researchers and analysts have examined these and other questions about federal education tax credits. This report, written by Michelle Asha Cooper from the University of Maryland, summarizes the research on tax credits and poses some questions for additional research (a short biography of Ms. Cooper is included in this report). Ms. Cooper's extensive review of the research on tax credits reveals that there are indeed large differences in receipt of tax credits between low- and middle-income students, and these differences could have implications for the continuing gaps in college attendance between these income groups now and in the future.

In addition to Michelle Cooper's contributions to this series, NASFAA wishes to acknowledge the support of Nelnet, particularly David Bottegal, Chief Marketing Officer and Executive Director, for their support. Additional reports from this series will be released later this year.

## executive summary

For over a half-century, discussions of educational barriers have figured prominently on the national agenda. In the 1940's, under the leadership of President Harry Truman, the Commission on Higher Education articulated the nation's commitment to "eliminate the barriers of equality of educational opportunity." Nearly two decades later, the Higher Education Act of 1965 (HEA) was enacted. The primary goal of the financial aid programs authorized under the HEA is to ensure that no academically qualified student who desires an education is denied access because of the lack of financial resources.

Although the financial aid programs authorized under the HEA have helped to make college affordable for many low- and moderate-income students, many more of these students continue to encounter financial barriers that have adverse effects on their college enrollment and persistence. In the 1990s, financial barriers to college attainment became an even greater challenge as tuition prices soared, making the cost of attendance prohibitive to many low- and moderate-income students and families. In response to these concerns, President William J. Clinton enacted the Taxpayer Relief Act of 1997. This legislation, which included the HOPE and Lifetime Learning tax credits, marked a new era of federal support for equalizing educational opportunity.

This report outlines the goals and key provisions of the Taxpayer Relief Act of 1997, focusing specifically on the HOPE and Lifetime Learning tax credits. In addition, the report summarizes the existing studies on tax credits and college enrollment, which typically show that the policy's structure prevents it from achieving its intended outcomes—making college accessible and affordable.

The HOPE and Lifetime Learning tax credits were intended to increase college enrollment rates. Although some researchers speculate that it may be too soon to assess the effects of the HOPE and Lifetime Learning tax credits on college enrollment, some still attempt to gauge the policy's effectiveness. These researchers conclude that:

- The HOPE and Lifetime Learning tax credits have not increased college enrollment rates.

There are several structural features of these tax credits that pose barriers to achieving this goal. First, the neediest students are ineligible for the benefits because of their low federal income tax liability. Second, the allowable expenses for the tax credits (tuition and fees) differ from those for traditional student aid programs (tuition, fees, books, supplies, and living expenses), which reduces the amount of funds for which students may qualify. Third, providing financial aid through the tax code delays receipt of benefits, which may adversely affect college enrollment.

- Unlike the traditional student aid programs, the primary beneficiaries of the HOPE and Lifetime Learning tax credits are middle-income students.

These credits encourage middle-income students and adult learners to consider a wider array of college-choice options (i.e., to enroll in four-year colleges rather than two-year schools) and to continue post-baccalaureate studies. But the credits do not appear to have any significant effect on the enrollment decisions of low- and moderate-income students.

The paper concludes with additional comments on the enrollment effects of tax credits and offers suggestions for additional research.

## introduction

Higher education has long been one of the main determinants of social mobility and economic progress in American society. The historical origins of some American colleges and universities, as well as subsequent federal legislation (e.g., Civil Rights Act of 1964, Higher Education Act of 1965), epitomize the nation's commitment to access and equal opportunity. For over a half-century, discussions of educational barriers have figured prominently on the national agenda. In 1947, President Truman charged the Commission on Higher Education to identify the major barriers for college aspirants. The Commission's report solidified the federal government's need to commit additional resources to supporting these students:

"The swift movement of events and the growing complexity of our national life and of world affairs makes it imperative...to eliminate the barriers of equality of educational opportunity; and to expand our colleges and universities to insure that the only factors which would limit enrollment are the ability and interest of the prospective students" (U.S. President's Commission, 1947 quoted in Perna, 1997, p. 1).

Later, the goal of equal opportunity in college access and attainment became the driving force behind the creation of the federal financial aid programs established under the Higher Education Act of 1965 (HEA). A primary goal of the financial aid programs authorized under the HEA was to ensure that no academically qualified student who desired an education was denied access because of the lack of financial resources. In 1965, when signing the Act, President Johnson stated, "[The Higher Education Act] means that a high school senior anywhere in this great land of ours can apply to any college or any university in any of the 50 states and not be turned away because his family is poor" (Public Paper on the Presidents of the US: Lyndon B. Johnson, 1965, quoted in Wolanin, 2001, p. 4).

In the first reauthorization of the HEA, President Richard Nixon echoed the sentiments of President Johnson and other leaders who shared the nation's commitment to educational equity. He said:

"No qualified student who wants to go to college should be barred by lack of money. That has long been the American goal; and I propose that we achieve it now....Something is basically unequal about opportunity for higher education when a young person whose family earns more than \$15,000 a year is nine times more likely to attend a college than a young person whose family earns less than \$3,000" (Public Paper on the Presidents of the US: Richard Nixon, 1970, quoted in Wolanin, 2001, p. 5).

In the 1990s, the nation faced an even greater challenge to obtaining the goals of equal college access and attainment, as tuition prices soared and the cost of attendance became prohibitive to students and families, particularly those from low- and moderate-income backgrounds. In response to these concerns, President William J. Clinton introduced the HOPE tax credit during a 1996 commencement address at Princeton University. In this address, President Clinton stated that this tax credit was a step toward making the "13th and 14th years of education as universal to all Americans as the first 12 are today" (Greenwood, 1996). A year later, when approving the comprehensive budget plan that included the Taxpayer Relief Act of 1997, President Clinton suggested that the higher education tax credits would "open the doors to college to a new generation—with the largest investment in higher education since the G.I. Bill 50 years ago" (Statement on Signing Balanced Budget Act of 1997 and Taxpayer Relief Act of 1997, quoted in Wolanin, 2001, p. 1). In addition, President Clinton's Secretary of Education Richard Riley stated, "We anticipate an enrollment boost from the national HOPE program" (Riley, 1997). In essence, President Clinton and Secretary Riley suggested that the Taxpayer Relief Act of 1997, particularly the HOPE tax credit, would help increase college enrollment rates and narrow the enrollment gap between poor and wealthy students.

In creating this legislation, President Clinton, like Presidents Johnson and Nixon, sought to equalize educational opportunity. Even though by the 1990s, the enrollment gap between students from low- and high-income families witnessed by Johnson and Nixon had decreased, discrepant patterns in college access and attainment continued to exist between these groups (Advisory Committee on Student Financial Assistance, 2002; Sanderson, Dugoni, Rasiniski and Taylor, 1996). Research continues to show that many students, particularly those from low-income and racial/ethnic minority backgrounds, face numerous challenges and do not have clear paths to college (Kao & Tienda, 1998; Ingels, Burns, Charleston, Chen, and Cataldi, 2005; McDonough, 1997). In fact, over the next decade, projections show that millions of low- and moderate-income students will face obstacles in their efforts to finish high school and continue on to college (Advisory Committee on Student Financial Assistance, 2002).

This report outlines the goals and key provisions of the Taxpayer Relief Act of 1997, focusing specifically on the HOPE and Lifetime Learning tax credits. In addition, the report summarizes the existing studies on tax credits and college enrollment, which typically show that the policy's structure prevents it from achieving its intended outcomes—making college affordable and accessible. Although researchers speculate that it may be too soon to assess the impact of the tax credits on college enrollment, some still attempt to gauge the policy's effectiveness (Bichelmeyer, Lefebvre, Marquis, and Roh, 2003; Dynarski, 2000; Government Accounting Office, 2002; Long, 2003). The paper concludes with comments on the enrollment effects of tax credits and offers suggestions for additional research.

## overview of the taxpayer act of 1997

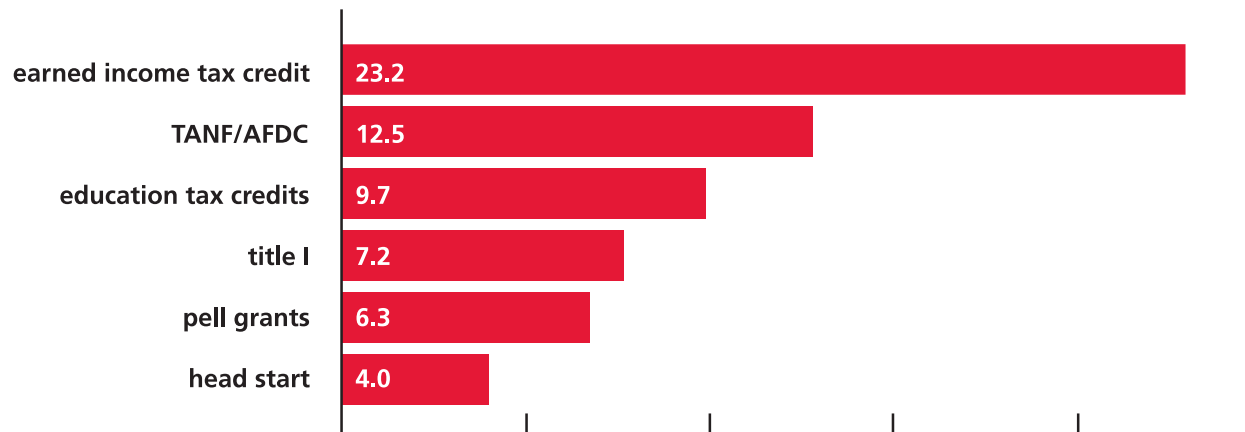
The Taxpayer Relief Act of 1997 substantially expanded tax benefits for postsecondary education. The new provisions include the HOPE and Lifetime Learning tax credits, tax-exempt education savings accounts, and a deduction for interest payments on student loans. Other provisions in the legislation extend the tax exclusion for employer education assistance, eliminate early withdrawal penalties from individual retirement accounts for education-related expenses, and increase the deduction for corporate contributions of computer technology and equipment to elementary and secondary schools.

## federal income tax credits

The largest provisions of the Taxpayer Relief Act are the HOPE and Lifetime Learning tax credits. These tax incentives were created to help students and families offset their postsecondary educational expenses with tax benefits. In 2002, the General Accounting Office (GAO) reported that 4 out of 10 undergraduates received a tax credit in the 1999-2000 academic year, with the average HOPE and Lifetime Learning tax credits accounting for 20% of the tuition and fees charged to financially dependent students (generally, students between 18 and 24 years old) and 30% of the tuition charged to independent students (GAO, 2002).

Although current data on the number of students who receive the tax credits do not confirm the U.S. Department of Education's earlier predictions of 13.1 million beneficiaries at a cost of \$9.7 billion to the federal government (Long, 2003), the data show that more students receive postsecondary aid from these two tax provisions than through the Federal Pell Grant, which is the largest federal grant program for low-income undergraduate students (Long, 2003). Since instituting the tax credits, the federal investment in providing students assistance through the tax code has risen from \$56 million in 1996 to \$7.6 billion in 2002, with more than 80% of these expenditures comprised of HOPE and Lifetime Learning tax credits (GAO, 2002). In addition, using data from the Current Population Survey (CPS), Long (2003) shows that tax credit expenditures have already exceeded the federal government's contribution to the Pell Grant and several other education-related programs. As Figure 1 illustrates, in 1997, the expenditures for the tax credits were 50% larger than those for the Pell Grant program.

**figure one:**  
federal expenditure programs, 1997 (in billions of dollars)



Source: Figure modified from Long, B. T. (2003). *The impact of federal tax credits for higher education expenses*. Cambridge, MA: National Bureau of Economic Research

The section below outlines the key components of the HOPE and Lifetime Learning credits. Other tax provisions included in the Taxpayer Relief Act of 1997 are summarized in the appendices.

## HOPE tax credit

To be eligible for a HOPE tax credit, students must be enrolled at least half-time in their first two years of college. Eligible students and families can receive a credit of up to \$1,500, which is calculated based on paid tuition costs minus the amount of funds received through financial aid. Receipt of the tax credit is determined by tax filing status. Therefore, students filing as independent as well as families claiming a student as a dependent may be eligible for the tax credit (Internal Revenue Service, 2004; Long, 2003; Wolanin, 2001).

Students or families whose income is too low or too high may be ineligible for any benefits. As Table 1 shows, dependent students in a family of four with an annual income less than \$17,500 are not eligible for any benefit because they have no federal income tax liability, while dependent students whose family income ranges from \$17,500 to \$27,500 may be eligible for some benefits. Similarly, independent students with incomes less than \$6,800 do not qualify for any benefit, while those with income between \$6,800 and \$16,800 may qualify for some benefits. On the other hand, dependent and independent students filing jointly (e.g., married) or single tax returns are phased out of eligibility for full benefits beginning at \$85,000 and \$42,000, respectively.

	dependent students in a family of four*	single independent students*	dependent and independent students filing jointly**	dependent and independent students filing singly**
Income too low for any benefits	Less than \$17,500	Less than \$6,800		
Income too low for full benefits	\$17,500-\$27,500	\$6,800-\$16,800		
Income too high for full benefits			\$85,000-\$105,000	\$42,000-\$52,000
Income too high for any benefits			Above \$105,000	Above \$52,000

\*These data represent 1997 income figures. According to an IRS representative, these income thresholds have changed. Because a tax formula calculates an individual's tax liability on a case-by-case basis, precise figures are not available.

\*\* Data taken from IRS Publication 970 (2004)

Source: Table modified from Conklin, K. D. (1998). *Federal tuition tax credit and state higher education policy*. San Jose, CA: National Center for Public Policy and Higher Education

### HOPE credit

Up to \$1,500 per eligible student

Available only until the first 2 years of postsecondary education are completed

Available ONLY for 2 years per eligible student

Student must be pursuing an undergraduate degree or other recognized educational credential

Student must be enrolled at least half time for at least one academic period during the year

No felony drug conviction on student's record

### lifetime learning credit

Up to \$2,000 per income return, as a family can claim more than one student per return

Available for all years of postsecondary education and for courses to acquire or improve job skills

Available for an unlimited number of years

Student does not need to be pursuing a degree or other recognized educational credential

Available for one or more courses

Felony drug conviction rule does not apply

## Lifetime learning tax credit

To be eligible for a Lifetime Learning credit, students must be enrolled in at least one course. Eligible students and families can receive a credit of up to \$2,000, which is determined based on tuition costs minus the amount of funds received through financial aid. Similar to the HOPE tax credit, receipt of the credit is determined by tax filing status. Therefore, students filing as independent as well as families claiming a student as a dependent may be eligible for the tax credit (Internal Revenue Service, 2004; Long, 2003; Wolanin, 2001).

Like the HOPE credit, students or families whose income is too low or too high may be ineligible for any Lifetime Learning benefits. As Table 2 shows, dependent students in a family of four with an annual income less than \$17,500 are not eligible for any benefit because they have no federal income tax liability, while dependent students whose family income is between \$17,500 and \$24,100 may be eligible for some benefits. Similarly, independent students with incomes less than \$6,800 do not qualify for any benefit, while those whose income ranges between \$6,800 and \$13,450 may qualify for some benefits. The Lifetime Learning tax credit is phased out for upper-income students and families at the same levels as the HOPE credit.

	<b>dependent students in a family of four*</b>	<b>single independent students*</b>	<b>dependent and independent students filing jointly**</b>	<b>dependent and independent students filing singly**</b>
<b>Income too low for any benefits</b>	<b>Less than \$17,500</b>	<b>Less than \$6,800</b>		
<b>Income too low for full benefits</b>	<b>\$17,500-\$24,100</b>	<b>\$6,800-\$13,450</b>		
<b>Income too high for full benefits</b>			<b>\$85,000-\$105,000</b>	<b>\$42,000-\$52,000</b>
<b>Income too high for any benefits</b>			<b>Above \$105,000</b>	<b>Above \$52,000</b>

\*These data represent 1997 income figures. According to an IRS representative, these income thresholds have changed. Because a tax formula calculates an individual's tax liability on a case-by-case basis, precise figures are not available.

\*\*Data taken from IRS Publication 970 (2004)

Source: Table modified from Conklin, K. D. (1998). *Federal tuition tax credit and state higher education policy*. San Jose, CA: National Center for Public Policy and Higher Education

## differences between the HOPE and lifetime learning credits

There are several differences between the HOPE and Lifetime Learning credits (see Table 3). First, the HOPE credit applies to the first two years of college only, while the Lifetime Learning credit can be used at any point during college matriculation. Second, the amount of the credits differ. HOPE recipients can receive up to \$1,500 per student, while Lifetime Learning tax credits grant up to \$2,000 per federal income tax return, as it allows families to claim more than one student per tax return. Third, HOPE recipients must be in pursuit of an undergraduate degree or some other recognized education credential. However, to be eligible for a Lifetime Learning credit, a student only needs to be enrolled in one or more courses, which do not have to be associated with a degree or certificate program. In addition, students with felony drug convictions are ineligible for the HOPE credit, but are eligible for the Lifetime Learning credit (Internal Revenue Service, 2004; Long, 2003; Wolanin, 2001).

	<b>Traditional Need-Based Federal Aid Programs</b>	<b>HOPE Tax Credits</b>	<b>Lifetime Learning Tax Credits</b>
<b>Target Population</b>	Low- and middle-income students (no income limit for student loans)	Middle-income taxpayers	Middle-income taxpayers
<b>Eligibility</b>	Documented financial need	Tax filers who owe taxes	Tax filers who owe taxes
<b>Timing of Receipt</b>	Current school year	Tax reporting year following payment of tuition	Tax reporting year following payment of tuition
<b>Recognized College Expenses</b>	Tuition and fees, books, living costs	Tuition and fees	Tuition and fees
<b>Amount</b>	Up to the amount of documented financial need	Up to \$1,500 Actual amount a function of family income, tax liability, tuition paid, and grants and scholarships received	Up to \$2,000 Actual amount a function of family income, tax liability, tuition paid, and grants and scholarships received

Source: Table modified from the Washington Higher Education Coordinating Board. (2002). *Washington Promise Scholarship program evaluation*. Olympia, WA: Author.

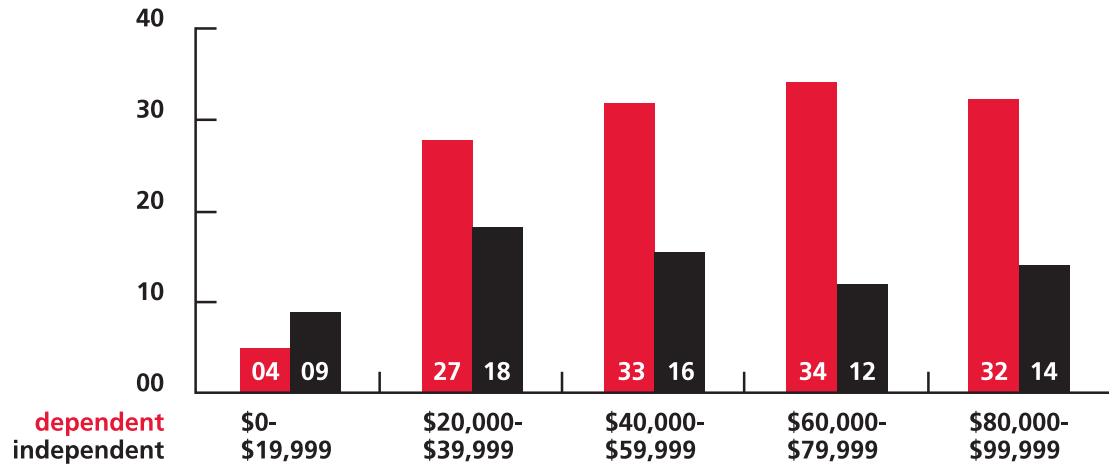
## tax credits and traditional financial aid programs

In the 1960s and 1970s, when Presidents Johnson and Nixon created the federal student aid programs, the principal goal was to ensure that low-income students would not be barred from pursuing postsecondary education because of limited finances. For several decades, the student aid programs remained predominantly focused on providing college access to the neediest students through traditional grant and loan programs. With the passage of the Taxpayer Relief Act of 1997, the federal government devised a new strategy to help students and families cover the costs of postsecondary education. This legislation marked a significant change in the delivery of student aid and in the income levels of aid recipients.

There are several differences between the traditional student aid programs and the tax credits (see Table 4). The first and most critical is that the tax credits are not based on students' or their families' financial need (Dynarski, 2000; Long, 2003; Wolanin, 2001). Traditional student aid programs use a need-analysis formula that considers family income, assets, and other factors to determine eligibility. According to Dynarski (2000), the federal need-analysis formula assists about 90% of the dependent students whose family income is less than \$40,000 to enroll in college.

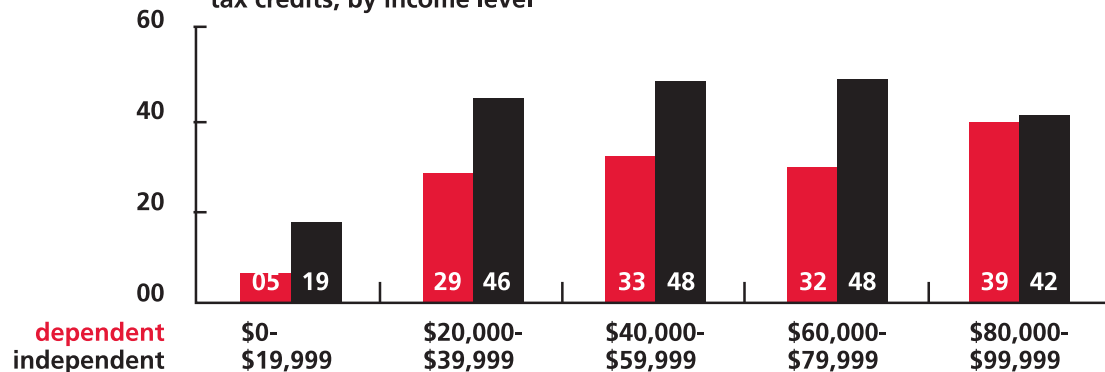
A GAO (2002) report on student aid and tax benefits shows that very low percentages of low-income students receive HOPE or Lifetime Learning credits. In fact, the new aid programs are aimed primarily at middle-income students and families. As Figure 2 shows, students whose annual family income is between \$20,000 to \$79,999 are the primary beneficiaries of the HOPE tax credit. Likewise, independent students in the same income range represent the primary recipients of the Lifetime Learning tax credit (see Figure 3). Although both the HOPE and Lifetime Learning credits include income caps to prevent upper-income students from qualifying for the benefits, Dynarski (2000) reports that the income cutoffs are set so high that less than 10% of tax filing households exceed them.

**figure two:**  
percentage of all undergraduate students who received HOPE tax credit



Source: Figure modified from GAO (2002). *Student aid and tax credits: Better research and guidance will facilitate comparison of effectiveness and student use.* Washington, DC: Author.

**figure three:**  
percentage of all undergraduate students who received lifetime learning tax credits, by income level



Source: Figure modified from GAO (2002). *Student aid and tax credits: Better research and guidance will facilitate comparison of effectiveness and student use.* Washington, DC: Author.

An additional difference between traditional student aid and tax credits is the exclusion of certain educational expenses and the deduction of need-based aid from qualifying expenses. In other words, for those students whose tax liability may marginally qualify them for a credit, their allowable education expenses (tuition and fees only) are reduced by any need-based aid received. As a result, many of these students do not receive any credits. This feature of the legislation also has a negative effect on low-income students (Dynarski, 2000; Hoblitzell & Smith, 2001; Long, 2003; Wolanin, 2001).

Third, the HOPE and Lifetime Learning credits alter the delivery of student aid benefits (Long, 2003; Washington Higher Education Coordinating Board, 2002; Wolanin, 2001). Typically, student aid is received through the postsecondary institution and credited to a student's bill. As a result, the aid has a direct, positive effect on college enrollment. However, because tax credits cannot be received until after tuition is paid and federal tax returns are filed, there may be a delay of tuition payment and receipt of credit of up to 15 months (Long, 2003). Hence, these tax benefits may not be useful to students whose enrollment is dependent upon available funds to pay college costs. Long (2003) suggests that this disconnect between the receipt of aid and college enrollment for those who qualify "increases the likelihood that the tax credits will not be used for postsecondary expenses" (p. 2).

Fourth, a student's or family's tax credit is based on their tax liability. Therefore, a student from a family with little or no tax liability is ineligible for a tax credit (Dynarski, 2000; GAO, 2002; Long, 2003; Wolanin, 2001). As a result, students with the greatest financial need generally do not qualify for these benefits.

## enrollment effects of tax credits

Although several studies describe the impact of financial aid policies on college enrollment (Kane, 1994; Heller, 1994, 1997; McPherson & Schapiro, 1989; Paulsen & St. John, 2002; St. John, 1991), fewer studies have analyzed the effects of tax credits on college attendance (Bichelmeyer et al., 2003; Dynarski, 2000; Long, 2003). The available data suggests that the HOPE and Lifetime Learning tax credits have not increased college enrollment; rather, these tax benefits have encouraged middle-income students and adult learners to consider a wider range of college-choice options and to continue post-baccalaureate studies. The following section summarizes the existing research in greater detail.

Because low-income students encounter the greatest barriers to college access, they were typically the target recipients of federal financial aid prior to the implementation of HOPE and Lifetime Learning tax credits. Studies reveal that college costs and financial aid influence college enrollment, especially among low-income and minority students (Kane, 1994; Heller, 1994, 1997; McPherson & Schapiro, 1989; Paulsen & St. John, 2002; St. John, 1991). In an update to Leslie and Brinkman's review of college student demand studies, Heller (1997) reports that research consistently shows that the enrollment of lower-income students is more sensitive to increases in college costs than the enrollment of higher-income students. Heller (1997) comments:

"Although the effects differ across studies, [the researchers] find that poorer students are more sensitive to increases in net cost, whether those increases take the effect of tuition increases or financial aid decreases....Tuition increases that are not offset by concomitant increases in financial aid appear to have the effect of reducing access to higher education for our country's poorest students" (p. 642).

Studies have also found differences in price-responsiveness by race/ethnicity (Heller, 1994; Kane, 1994; St. John & Noell, 1989). St. John and Noell (1989) determine that Black students are the most responsive to financial aid offers, followed by Latinos and Whites. Kane (1994) also finds that African American students, who are more likely to also be of lower-income status, have heightened sensitivity to increases in tuition and/or decreases in financial aid, which often reduces their chances of college entry.

Because of the relationship between college enrollment and financial aid, some scholars have speculated that tax credits may also have a positive effect on college enrollment (Cronin, 1997; Long, 2003). However, others contend that the data showing the relationship between college enrollment and students' price responsiveness is inapplicable to tax credits, as most low-income students are not eligible for the credit (Dynarski, 2000; Hoblitzell & Smith, 2001; Wolanin, 2001).

Cronin (1997) believed that the HOPE tax credit and tuition tax deduction would lead to an increase in student enrollment, a hypothesis based on economic literature on the price elasticity of college attendance. By imputing data from the 1992-93 National Postsecondary Student Aid Study (NPSAS) to the U.S. Treasury's Individual Tax Model, she predicted that by 2002 the enrollment response of the tax credit would be between 150,000 and 1.4 million additional students, with the likely response closer to the lower estimate. These data were not disaggregated by credit eligibility; therefore, these projections may have included students whose income level disqualified them for receipt of a credit (i.e., students from the lowest- and highest-income levels). Also, as Long (2003) notes, Cronin's estimates are based on an earlier version of the tax credit proposal which included tax deduction of up to \$10,000 for older students, instead of the Lifetime Learning credit that was eventually passed.

Long (2003) also created a prediction model to determine the expected effects of tax credits on college enrollment. Based on her cost estimates from college-demand studies and 1997 college enrollment rates, Long speculates that an additional 101,244 traditional-age students (ages 18-24) and 9,397 non-traditional students (ages 25-34) would enroll as a result of the tax credits. In her analysis, she noted, similar to other researchers (Dynarski, 2000; Hoblitzell & Smith, 2001; Wolanin, 2001) that not all of these students would be eligible for the tax credit, as low-income students generally are ineligible for these benefits. Based on 1997 tax returns, Long estimated that nearly two-thirds of the students would be eligible for the credit, which would reduce the estimated enrollment effect to approximately 74,000 new students between the ages of 18 and 34.

Next, to evaluate the effect of HOPE and Lifetime Learning credits on college enrollment, Long (2003) uses data from the CPS and logistic regression models to investigate whether there is a difference in enrollment rates before and after the tax credits. Because enrollment patterns differ by background characteristics, such as race, gender, and age, these demographic variables are controlled in the analysis. In addition, to account for differences in levels of wealth, economic conditions, and educational preferences across the nation, Long incorporates state-level information about annual unemployment rates, per capita income, and the percentage of the population with a four-year degree to the model. States with large financial aid programs are excluded from the analysis, including Florida, Georgia, and New Mexico. In order to determine the enrollment effect, Long compares how attendance decisions of those eligible for the credits changed after the policy was created. Individuals not eligible for the tax credit (students and families with the lowest- and highest-income levels) comprised the control group. Her analysis reveals that individuals eligible for the tax credit are more likely to attend college, relative to the control group. However, there is no differential increase in college enrollment among eligible students after the introduction of the tax credits.

In a related study using data from the 1999 National Household Survey, Bichelmeyer, Lefebvre, Marquis, and Roh (2003) find little evidence to support the claim that the Lifetime Learning tax credits increase college access among adult students. In an analytic sample of 6,697 adult learners, they find that of those individuals using the credit, 64% have undergraduate degrees, 32% have graduate degrees, and 5% have a high school diploma or less. In essence, their study finds that Lifetime Learning credits encourage adult learners to engage in post-baccalaureate studies.

Several researchers speculate that because the tax credits may reduce the cost gap between colleges, the credit may entice students to choose higher-priced institutions (Dynarski 2000; Long, 2003). Recognizing that the HOPE and Lifetime Learning credits, similar to Georgia's merit aid scholarship program, are aimed at the same student demographic (i.e., middle-income students), Dynarski (2000) estimates the impact of the HOPE tax credit on college enrollment through a comparative analysis of Georgia's merit-based scholarships' effects on college enrollment in that state. She notes, however, that key differences between the federal and state programs limit the precision of the findings. Nevertheless, Dynarski (2000) finds that the Georgia merit aid scholarship awards shifted student enrollment from public two-year colleges into public four-year institutions. Therefore, she predicts similar effects on college enrollment for the federal government's HOPE and Lifetime Learning credits.

Long (2003) also confirms the positive effect of the federal tax credits on college choice. She finds that eligible students, primarily those between the ages of 20 and 24, are more likely to enroll in a four-year college after the enactment of the tax legislation. The tax credits increase the likelihood of enrolling in a four-year versus a two-year college by 17% to 20%. However, full- or part-time enrollment patterns did not change significantly after the change in the tax policy. Although Long's analysis of enrollment effects of the tax credits offers insight into the relationship between college enrollment and tax credits, her study does not consider how enrollment effects from tax credits differ by race/ethnicity, gender, age, or other background characteristics. However, descriptive data from Bichelmeyer and colleagues (2003) show that among adult recipients of Lifetime Learning credits, over 90% have at least a bachelor's degree, 56% are women, and 44% are between the ages of 16 and 29.

Bichelmeyer and colleagues also show vast differences in usage patterns of Lifetime Learning tax credits between African American and White adults. White adults represent 78% of the Lifetime Learning credit beneficiaries, while African Americans represent 22%. Similarly, using CPS data to evaluate the effects of Georgia's merit-based scholarship on college attendance rates within the state, Dynarski (2000) finds that the enrollment rate of African American students is not affected by Georgia merit grants, while White students have experienced a 12-percentage point increase in their enrollment rates relative to White students in neighboring states. Dynarski suggests that the differences in enrollment are due to Georgia's merit-based scholarships' income and academic requirements. Thus, Georgia's merit grant has widened the racial gap in the state's college attendance rates. Considering Dynarski's presumed relationship between Georgia's merit-based scholarship and the federal education tax credits, racial disparities among HOPE and Lifetime Learning credit users may also prevail. However, research has not tested this hypothesis.

Researchers report that high-ability students from low-income families are less likely than high-ability students from upper-income families to enroll in postsecondary education (Advisory Committee on Student Financial Assistance, 2002; Wolanin, 2001). Federal education tax credits may make this already wide gap in college access even wider. As Wolanin (2001) states "the nation is clearly not maximizing the use of its human resources if everyone does not have the same opportunity to enjoy the benefits of higher education based on their ability" (p. 5).

## summary

In summary, the HOPE and Lifetime Learning tax credits do not appear to have fully realized President Clinton's goal of increasing college enrollment rates. In fact, many scholars contend that the design of these tax provisions pose barriers to achieving this goal. First, the neediest students are ineligible for the benefits because of their low federal income tax liability (Dynarski, 2000; GAO, 2002; Hoblitzell & Smith, 2001; Long, 2003; Wolanin, 2001). Even low-income students with some tax liability may have had reduced subsidies because of their likely receipt of other financial aid. Second, the allowable expenses for the tax credits (tuition and fees) differ from those for traditional student aid programs (tuition, fees, books, supplies, and living expenses), which reduces the amount of funds for which students may qualify (Long, 2003; Washington Higher Education Coordinating Board, 2002; Wolanin, 2001).

Third, providing financial aid through the tax code delays receipt of benefits, which may adversely affect college enrollment (Hoblitzell & Smith, 2001; Long, 2003; Wolanin, 2001). The tax credits are not delivered directly to the student through the school. Instead, the subsidies arrive several months after college-related expenses have already been paid. As a result, researchers contend that the credits provide little financial incentive to students with demonstrated financial need (Dynarski, 2000; Hoblitzell & Smith, 2001; Long, 2003; Wolanin, 2001).

Unlike the traditional student aid programs, research confirms that the primary beneficiaries of the tax benefits are students from middle-income families (Dynarski, 2000; GAO, 2002; Long, 2003). Existing research also shows that the HOPE and Lifetime Learning credits encourage middle-income students and adult learners to consider a wider array of college-choice options; that is, the beneficiaries are able to choose to enroll in four-year colleges rather than two-year schools and to continue post-baccalaureate studies (Bichelmeyer et al., 2003; Long, 2003).

## implications and future research

The stated purpose of the HOPE and Lifetime Learning tax credits is consistent with the goals of the longstanding student aid programs—to make college affordable and accessible for students and families. However, traditional student aid programs focus primarily on need-based aid for low-income students, while the tax provisions provide financial incentives to students from middle-income backgrounds. Because of these differences, those students who most lack the ability to pay for college and have the greatest financial need are the least likely to receive “relief” under the Taxpayer Relief Act of 1997.

Even though researchers have begun to explore the enrollment effects of the tax credits (Bichelmeyer et al., 2003; Dynarski, 2000; Long, 2003), it may be too soon to yield conclusive data. Nevertheless, the results of existing studies show that these tax provisions have no notable impact on college access, but some effect on college choice (Bichelmeyer et al., 2003; Long, 2003). Researchers (Dynarski, 2000; GAO, 2002; Long, 2003; Wolanin, 2001) speculate that this unintended consequence may be caused by the policy’s design (i.e., restrictions on eligibility, allowable expenses). Further analysis is needed to determine the veracity of these claims. In addition, researchers need to consider whether other aspects related to the design and implementation of the tax credits have an indirect effect on enrollment, including the application process, public awareness, and tuition increases. For example, researchers should investigate the following questions:

- Are all potentially eligible students aware of the tax credits?
- Are students confused by the tax regulations or forms needed to claim the credits?
- Have the tax credits resulted in tuition increases?

Several researchers and policymakers have critiqued the policy’s lack of attentiveness to these issues (Boherer & Guitierrez, 2000; Hauptman & Rice, 1997; Hoblitzell & Smith, 2001; Hebel, 1999, 2000). At first glance, each of these concerns may appear to be tangential to enrollment effects; however, because existing research shows a disconnect between the policy’s aim and outcomes, such areas warrant further consideration.

## about the author

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## appendix a:

Tax Provisions	Tax Benefit	Definition of qualified higher education expenses	Who is eligible?	Tax benefit is phased out for filers with modified adjusted gross incomes between
<b>HOPE Credit</b>	<p>Maximum credit: \$1,500 per student. Credit rate is 100 percent on the first \$1,000 of qualified higher education expenses, 50 percent on the next \$1,000.</p> <p>Nonrefundable: If filer has no tax liability due to offsetting deductions, exemptions, or other tax credits, filer cannot receive credit.</p>	Tuition and fees at institutions eligible to participate in Title IV programs. Filers must reduce qualified expenses by the amount of tax-free educational assistance received.	Tax filer on behalf of self, spouse, or dependent who is working towards a degree or certificate at least half time in the first 2 years of postsecondary enrollment.	<p>Single filer: \$42,000-\$52,000</p> <p>Joint return: \$85,000-\$105,000</p>
<b>Lifetime Learning Credit</b>	<p>Maximum credit: \$2,000 per tax filer (20 percent of qualified higher education expense up to \$10,000).</p> <p>Nonrefundable: If filer has no tax liability due to offsetting deductions, exemptions or other tax credits, filer cannot receive credit</p>	Tuition and fees at institutions eligible to participate in Title IV programs. Filers must reduce qualified expenses by the amount of tax-free educational assistance received.	Tax filer on behalf of self, spouse, or dependent who is enrolled in undergraduate or graduate courses, or any course that aids in learning new or improving existing job skills, for as many years as the student is enrolled.	<p>Single filer: \$42,000-\$52,000</p> <p>Joint return: \$85,000-\$105,000</p>
<b>Student Loan Interest Deduction</b>	<p>Maximum deduction: \$2,500</p> <p>Interest paid on eligible education loans is deductible.</p>	Eligible loans are those used to pay for tuition, fees, room and board, and related expenses minus any scholarships or grants received.	Tax filer, even those who do not itemize, may deduct interest paid.	<p>Single filer: \$50,000-\$65,000</p> <p>Joint return: \$100,000-\$130,000</p>
<b>Exclusion for US Series EE or I Savings Bonds</b>	Interest income from bonds purchased after December 31, 1989, may be excluded from income subject to taxation if bond proceeds are used to pay qualifying higher education expenses.	Tuition and fees at institutions eligible to participate in Title IV programs. These must be reduced by tax-free educational assistance, tax-free withdrawals from a Coverdell ESA, and expenses used in figuring HOPE and Lifetime Learning credits.	<p>Similar to Lifetime Learning credit.</p> <p>The bond owner must be at least 24 years old before the bond's issue date.</p>	<p>For tax-free withdrawals,</p> <p>Single filer: \$74,850</p> <p>Joint filer: \$119,750</p>

## selected characteristics of tax provisions in the taxpayer relief act of 1997

Tax Provisions	Tax Benefit	Definition of qualified higher education expenses	Who is eligible?	Tax benefit is phased out for filers with modified adjusted gross incomes between
<b>Prepaid Tuition Plans (Also called qualified tuition plans or section 529 plans)</b>	Earnings withdrawn from prepaid plans when used to pay for qualified higher education expenses are free from federal income taxation after Dec. 31, 2001 for state-sponsored programs and after Dec. 31, 2003 for programs of private institutions.	In general, tuition and required fees. Room and board if enrolled half-time or more. Specifics can vary by plan. For example, beneficiary may be limited to attending state public colleges or any college in a specific state.	Specifics depend on particular plan. Normally a plan is open for contributions only on behalf of young children and accounts must be closed within some number of years after the beneficiary reaches college age.	Not applicable.
<b>Coverdell Education Savings Accounts</b>	Account earnings and distributions for qualified higher education expenses are tax-free. Annual contribution limit is \$2,000 per year per student through age 17 (unless special needs beneficiary).	Tuition, fees, books, supplies, and equipment required for attendance. Room and board if enrolled half-time or more.	Distributions from Coverdell Education Savings Account can be used for students enrolled on full-time, half time, or less than half-time basis.	For contributions, Single filer: \$110,000 Joint filer: \$220,000
<b>Tax Deduction for Tuition and Fees</b>	Maximum deduction: \$4,000 per return for filers with a maximum adjusted gross income not exceeding \$65,000 (single filers) or \$130,000 (joint filers).  Maximum deduction: \$2,000 per return for filers with maximum adjusted gross income between \$65,000 to \$80,000 (single filers) or \$130,000 to \$160,000 (joint filers).	Tuition and fees at institutions eligible to participate in Title IV programs.	Same as Lifetime Learning credit. For 2002-05, taxpayers will have the option of using either the HOPE tax credit or the tuition deduction.	Single filer: \$80,000 Joint return: \$160,000
<b>Early Distributions from IRAs</b>	Distributions from IRA's can be made without having to pay the 10% additional tax if used for qualifying educational expenses.	Expenses are tuition, fees, books, supplies, and equipment required for enrollment or attendance at an eligible educational institution. They also include expenses for special needs services incurred by or for special needs students in connection with their enrollment or attendance.	Distributions from IRA's can be made before reaching age 59?, without paying the 10% additional tax, if for the year of the distribution, you pay qualified education for yourself, your spouse, your children, step-children, or grandchildren.	Not applicable.

## appendix a (continued)

Tax Provisions	Tax Benefit	Definition of qualified higher education expenses	Who is eligible?	Tax benefit is phased out for filers with modified adjusted gross incomes between
<b>Employer-Provided Educational Assistance</b>	Maximum deduction: \$5,250 per year.	Tax-free educational assistance benefits include payments for tuition, fees and similar expenses, books, supplies, and equipment.	To qualify, the plan must be written and must meet certain requirements.	Not applicable.
<b>Business Deduction for Work-Related Education</b>	Deductions will be the amount by which your qualifying job and qualifying work-related education expenses plus other job and certain miscellaneous expenses if greater than 2% of your adjusted gross income. If you drive your car to and from school, the amount you can deduct is 37¢ per mile		If you are an employee and able to itemize your deductions, you may be able to claim a deduction.	If your adjusted gross income is more than \$142,700 (\$71,350 if you are married filing separately), your itemized deductions may be limited.

Notes: Additional data taken from IRS Publication 970 (2004)

Source: Table modified from GAO (2002). *Student aid and tax credits: Better research and guidance will facilitate comparison of effectiveness and student use.* Washington, DC: Author.



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