

## **Executive Summary**

### **Economic and Financial Education In Hawaii: Assessing the Present, Finding the Future**

Kimberly Burnett and Sumner J. La Croix

August 11, 2003

Economic education in Hawaii's K-12 schools got its formal start in the early 1970s, with the first courses in economics and consumer education being established in high schools. The number of students enrolled in economics courses in public high schools increased dramatically over the next 15 years, with roughly 25 percent of high school seniors in public schools enrolled in an economics course in 1986. Between 1986 and 1999, enrollment rates would almost double, to 47 percent of high school seniors. By 1999, Hawaii public enrollment rates were close to national private-public enrollment rates. This record of success would move into reverse gear in 1999. Between 1998-99 and 2001-02, enrollment rates in economics courses at public high schools tumbled, from 47 to 29 percent. Reasons for the enrollment declines include a drop in the number of public high schools offering economics since 1999; fewer available trained teachers; declining student interest in the elective; as well as scheduling and resource pressures. The enrollment rate in economics courses in Hawaii's private high schools stood at 66 percent of high school seniors in 2002-03, more than double the public school rate.

The declining enrollment rate in public high school economics courses is the central problem with the state of economic literacy in Hawaii. It is critical that major players meet soon—within four to six weeks of this conference's conclusion—to discuss how they will help to reverse this troubling trend. A recommitment by the Hawaii Department of Education, the UHM Department of Economics, UHM College of Education, UHM College of Business, the business community and its representatives, Hawaii's public and private schools, and a reorganization and new role for key players such as the Hawaii Council on Economic Education are the key ingredients in restoring economic education to the extraordinary heights achieved between 1965 and 1999.

The lack of commitment to economic education by the Hawaii State Department of Education is troubling. There is no one with knowledge of the economics subject area at DOE offices; there is no advocate for economic education within the DOE; and there is no commitment to working closely with the UHM Center for Economic Education or the Hawaii Council on Economic Education. Despite this, the enterprise of K-12 education in Hawaii has been extremely successful—at least until 1999. It is time for all major players to re-examine the nature of their commitment to this field—a field listed as one of ten core fields in the federal No Child Left Behind Act. A recommitment to the endeavor of K-12 education from each major player could offer big results, as demonstrated by the extraordinary record of Hawaii high school students on AP economics tests.

# **Economic and Financial Education In Hawaii: Assessing the Present, Finding the Future**

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Paper to be presented at the Economic & Financial Literacy Conference  
“Learning for Life”

Wednesday, August 20, 2003  
8:00 AM – 4:30 PM  
Japanese Cultural Center  
Honolulu, Hawaii

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Economic education was not part of the K-12 curriculum in Hawaii or most other states in 1965.<sup>1</sup> This would change dramatically over the next two decades. Approximately 27 percent of high school seniors in the United States in 1982 and 25 percent in Hawaii in 1986 would graduate with an economics course on their transcript (Table1).<sup>2</sup> Enrollment continued to increase in the United States to 46 percent in 1998 and in Hawaii to 47 percent in 1999 (Figure 1). The positive trend has, however, reversed over the last four years, with enrollment in economics courses in Hawaii falling to 29 percent of high school seniors. Why has the trend reversed? Is it due to “Hawaii’s Lost Decade” of zero income growth? Or is it due to problems with the network of organizations and individuals that offer economic education in Hawaii? The reversal of this progressive trend has prompted us to take stock of the network of people and organizations that are critical to the provision of economic education in Hawaii. We consider (1) why it is important for K-12 students at all grade levels to receive economic and financial education; (2) the state of economic literacy in Hawaii; (3) the network of organizations that provide economic education in Hawaii; (4) the sputtering performance of that network over the last decade; and (5) recommendations for how to improve the performance of the network and to improve the state of economic literacy in Hawaii.

## **I. Why Should K-12 Students Learn Economics?**

Understanding of economic and financial concepts—and an ability to apply them—are no longer reserved for college students. In today’s complex society and economy, all students must learn economics at a relatively young age if they are to achieve their full potential and are to live in a thriving and growing democracy. Why is economics so important? We identify four critical reasons to learn economics and then consider whether students actually learn anything from their economics course and whether the economics courses change their behavior.

### **A. Four Reasons to Learn Economics**

First, *economics provides consumers, workers, and employers with the critical thinking skills* required to analyze how much education to complete; when to search for a new job; whether to vote for a new union contract; whether to rent or buy a home; and whether or not buying additional years of warranty coverage on a new digital camera makes sense. Second, *economics and finance provide borrowers and savers with the skills* necessary to choose intelligently among various credit card offers; to determine how much to borrow when purchasing a home; to decide how much money to save for retirement; and to choose among the wide array of investments available to savers. Third, *economics provides citizens with a framework for analyzing public policy choices at the local, state, and national levels.* A democracy only works well when it has well-

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<sup>1</sup> The emphasis of this paper is on economic education. The authors recognize the subject’s relation to consumer and financial education, and these distinctions will be made wherever necessary.

<sup>2</sup> Hawaii data source: Personal communication with UHM Center for Economic Education Director Gail Tamaribuchi.

educated citizens with the ability to analyze public policy proposals and to determine whether existing public laws and institutions are fulfilling their purpose and operating efficiently. And finally, *economics helps individuals understand the strengths and the weaknesses of the regulated capitalist economy in place in Hawaii and the United States*. Unless individuals have an understanding of how our local, state, and national economies work—and sometimes don't work, they will have a difficult time understanding basic choices between centrally planned economies and decentralized competitive economies.

## **B. Is Economic Education Effective?**

We focus on two aspects of this question. First, we consider whether students' knowledge of economics increases when they take economics courses. Second, we consider whether economic and financial education has short- and long-term effects on decision-making.

**Do students learn anything in their economics courses?** The answer is an emphatic "Yes". Peterson (1992) found that substantial differences exist between students who elected economics courses and those who do not. Motivating students to elect economics classes raises student performance—by an average of more than 10 points on the Test of Economic Literacy (TEL).<sup>3</sup> Soper and Brenneke (1981) found that students enrolled in DEEP (Developmental Economic Education Program) Cooperating School Systems and who had instruction in economics scored substantially higher than students lacking this particular combination on the TEL. Fast et al. (1989) made a convincing empirical argument of consumer education as a direct means of improving consumer and marketplace efficiency. The authors conclude that consumer education is likely to contribute to consumers' decision-making abilities in two ways, by enhancing awareness of the value of information, and by improving the efficiency with which consumers handle information. In sum, our literature review shows the need for additional study of student learning in high school economics.<sup>4</sup>

**Do students change their behavior after taking economics courses?** Boyce and Danes (1998) studied the NEFE's High School Financial Planning Program and found large short-term effects on money management. Nearly half (45 percent) of the teenagers started saving or began saving more, while 38 percent felt more confident about managing their money after the program. The most compelling evidence for behavioral change comes from the Bernheim, Garrett, and Maki (2001) study of the effects of

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<sup>3</sup> The TEL assesses student comprehension of the following content categories: the basic economic problem, economic systems, microeconomics, macroeconomics, the world economy, economic institutions, and economic action and policy.

<sup>4</sup> Additional research not discussed in the text includes Brasfield et al. (1993), Gleason and Van Scyoc (1995), Lopus (1997), Walstad and Rebek (2001) and (1999), and Walstad (1997). We note that further research may be facilitated by the new tests for economic literacy required by the No Child Left Behind Act.

mandated economic education on personal savings. The authors begin with the hypothesis that financial education increases saving. They study the imposition of economic, consumer, and financial education mandates in 29 states beginning in 1957. Fourteen of these states specifically required personal finance as a mandate, covering such skills as household budgeting and balancing your checkbook. The authors find that students in the typical state that enacted a mandate were no more likely, before the mandate, to have been exposed to financial education than were students in the states that never enacted a mandate. Furthermore, prior to 1957, they identify few differences in savings across states. After adoption of the mandates, the authors find significantly increased exposure to financial education, and an ultimate elevation in savings in those states. Notably, the states that passed these mandates did not show statistically significant differences in income or proportion of high school graduates than the states that did not pass similar legislation. Even more remarkable, it was the low-income families who appear to have made the biggest behavioral changes. Overall, the study suggests that mandates significantly increase exposure to financial education, and ultimately elevate the rates at which individuals save during their adult lives.

### **C. How Much do Hawaii Residents Know About Economics and Finance?**

The Hawaii Council on Economic Education completed a survey with SMS Research in July 2003 to assess the economic and financial literacy of Hawaii's workforce, age 16 and over. Overall, the typical respondent scored 65 percent on the survey, answering 12.96 of 20 questions correctly.<sup>5</sup> Question topics ranged from the effects of rent control to the distribution of gains from international trade to the function of money.

There were a few demographic differences worthy of mention. Individuals identifying with Caucasian or Chinese ethnic backgrounds did quite well, while individuals identifying with Filipino, Hispanic, or native Hawaiian ethnic backgrounds answered fewer questions correctly on average. The younger respondents could not answer as many questions as the older respondents; those who attended high school in Hawaii did not perform as well as those who attended high school elsewhere; and those who took a college economics course did better than those who did not. See the survey's executive summary for further details on questions and results.

Overall, the survey suggests that Hawaii's workforce has a modest understanding of economics and basic finance. While the results don't have the engines leaving the firehouse yet, they do indicate there are significant gaps in knowledge. Emphasis should be placed on providing improved economic and financial education within underserved minority communities and on enhancing both the quality and quantity of economic and financial education in Hawaii's private and public schools.

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<sup>5</sup> On the national on-line test with the same questions, the typical respondent answered 15 of 20 questions correctly. Respondents are heavily weighted towards the unemployed, and are unrepresentative of the overall population. See <http://www.ncee.net/cel/test/>.

## II. Assessing the State of Economic Education in Hawaii

Economic education is a complex enterprise in Hawaii, involving the cooperation, coordination, and competition within a network of individuals and organizations. We stress the “network” aspect of the endeavor because economic education can only be achieved if each of the component parts is functioning well. Moreover, the presence of a “new” or “traditional” player who contributes to this effort may well offer some competition to existing organizations—a good thing, but also surely offers complementary benefits to other organizations, enabling them to be more specialized and to function more efficiently. Some of the important players include:

- Higher Education Institutions and Individuals
  - Hawaii Council on Economic Education
  - Hawaii Center for Economic Education
  - UHM Economics and other private/public economics departments
  - UH System administration
  - UH-Manoa College of Education
- Hawaii Business Community and its Representatives
- Hawaii Labor Unions
- Hawaii Private and Public Schools
  - Teachers, Students, and Parents
  - Principals and administrators
  - Board of Education
- Other Organizations Offering Economic and Financial Education
  - Junior Achievement
  - Alu Like
  - Jump\$tart Coalition for Personal Financial Literacy
  - U.S. Military
  - Internal Revenue Service
  - Credit Unions

Due to space limitations, our analysis focuses primarily on economic and financial education within the private and public K-12 schools. We focus on the curriculum used to teach economics; trends in the numbers of students receiving economic, consumer, and financial education; supply of economics teachers; in-service training of private and public teachers; the priorities placed on economic and financial education by the schools; and the organizations which provide and coordinate in-service training. We conclude with a brief look at organizations and educators outside of K-12 public and private schools who are providing economic and financial education to adults and who are filling gaps in K-12 education.

### A. Curriculum

Students tend to learn economics in four ways: (1) taking a course in which economics is infused into the course’s curriculum; (2) taking an elective course in economics, consumer education, and financial education; (3) taking a required course, that is mandated either by the school, the school district, or the state; and (4) participating in a program outside the classroom which includes economic and financial education.

Elementary school students and many high school students receive most of their exposure to economics via *infusion curriculum*. This methodology infuses economic content into the curriculum of history courses and other social studies courses. In theory, this can be an excellent way to learn economics, as the material is delivered to students in a context where it has practical applications. What are the necessary conditions for infusion to be successful? First, the teacher of the history or social studies course must be well trained in introductory economics and be able to introduce and apply economic concepts to relevant topics in the history and social studies curriculum. Second, the infusion curriculum must be carefully designed to allow time for the introduction and application of relevant economic concepts to these topics and to provide guidance to teachers with respect to its use. Third, there must be careful coordination among curriculum designed for various history and social studies classes to ensure that students become familiar with requisite economic and financial concepts. In practice, infusion curricula often claim more than they can deliver because of the variability in teaching training and their ability to implement it in the classroom; the inadequate treatment of economics in those textbooks used to teach other social science subjects; and time pressure to complete the material stressed in the main course.

Some high school students take an *elective course in economics*. A specialized course has advantages and disadvantages compared to infusion learning. First, it brings all of the core concepts together in a single course. This makes it more likely that the student is exposed to core concepts and receives sufficient practice in their application. Second, an instructor of a specialized course should have more training in the field of economics than an instructor in an infusion course, and this increases the likelihood that the student will receive competent and effective instruction. Third, an elective course might not be selected by a high school student, who would then receive little economics training in high school—in the absence of infusion courses. Fourth, an elective course might not be offered at a particular high school due to unavailability of teachers with sufficient training to teach the course. Finally, an elective course might be squeezed out of the curriculum offering due to pressure to offer other elective courses, such as Hawaiian Studies or music or foreign languages.

In some states, an economics or consumer education course is a requirement for graduation. A *mandated course* has advantages and disadvantages. Most importantly, it ensures that high school students receive exposure to the topic. This is particularly important when the topic is critical for the student's future success—as economics often is—and the student does not fully appreciate this. Such reasoning clearly applies to high school mathematics and science as well as economics. A mandated course runs the risk, however, of enrolling large numbers of students with little interest in the subject. And, given the limited number of hours in the school day, it can displace other elective courses from the curriculum.

Some high school students—both in Hawaii and on the U.S. mainland—participate in Advanced Placement (AP) economics. These courses allow talented

students to take a college-equivalent course while still in high school and to receive college credit if they pass the advanced placement examination.

## **B. National Student Enrollment**

Enrollment in high school economics courses in public and private high schools increased dramatically between 1982 and 1990, jumping from 28 percent to 47 percent (Table 1). Enrollment continued at these levels during the 1990s, with 46 percent of high school graduates receiving credit for an economics course in 1998.<sup>6</sup> A closer look at the data shows that (1) minority students are more likely to have taken an economics course; (2) students in the South and the West are more likely to have an economics course due to state mandates; and (3) in 1990 private schools trailed public schools in economics enrollment (29 percent v. 49 percent), but by 1998 private school economics enrollments surpassed public school enrollment (50 percent v. 45 percent).<sup>7</sup>

At the national level, there has been a dramatic expansion in AP economics. In 1989, when the first AP economics exams were given, 2,583 students took the microeconomics test and 3,198 students the macroeconomics test. In 2002, the national numbers skyrocketed to 23,108 and 32,184, respectively (Melican and Goodman 2003). A score of 3, 4, or 5 is considered “passing,” and for the macroeconomics exam the number of students passing in 2002 stood at 61.6 percent. The ten-fold increase in enrollment of AP economics students signifies not only an increased interest in economics, but also a rapid growth in the ability of high school students to handle college-level economics.

## **C. Hawaii Student Enrollment**

Economic education in Hawaii’s K-12 schools got its formal start in the early 1970s, with the first courses in economics and consumer education being established in high schools. The number of students enrolled in economics courses in public high schools increased dramatically over the next 15 years, with roughly 25 percent of high school seniors in public schools enrolled in an economics course in 1986. Between 1986 and 1999, enrollment rates would almost double, to 47 percent of high school seniors (Figure 1). The number of high schools offering consumer education or economics also increased over this period, facilitating enrollment increases (Figure 2). By 1999, Hawaii public enrollment rates were close to national private-public enrollment rates and would surely have exceeded them if enrollment data for private high schools had been available. This record of success would move into reverse gear in 1999. Between 1998-99 and 2001-02, enrollment rates for both economics courses and consumer education tumbled, from 47 to 29 percent in economics and from 33 to 18 percent in consumer education. Reasons for the enrollment declines are not fully understood. One possible candidate is

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<sup>6</sup> 1998 is the latest year for which we have national enrollment data.

<sup>7</sup> Grimes (1994) suggests that students in public schools may be learning more economics than students in private schools, even when we adjust for student ability, aptitude, and prior exposure to economic concepts. Thus, public schools appear to be doing a better job in economics instruction than the private schools.

that particular high schools have stopped offering economics due to the retirement of a specialized teacher who has not been replaced. We note that fewer public schools are offering economics courses in 2001-2002 than in 1998-1999 (Figure 2). Other possible candidates include declining student interest in the elective or scheduling pressure stemming from additional course requirements for graduation.

Enrollment data for Hawaii's private high schools are available for just one year, 2002-2003. A phone survey conducted in June 2003 by Kimberly Burnett found that 1,376 students were enrolled in economics courses at private high schools, an enrollment rate of 66 percent for high school seniors. We note that the private enrollment rate (66 percent) for 2002-2003 is more than double the public enrollment rate for 2001-2002 (29 percent). This high overall enrollment rate was achieved despite the absence of economics in some small high schools.

An AP course in economics is currently offered in just one of Hawaii's 34 public high schools (Kalani High School) and in just three of Hawaii's 40 private high schools (Kamehameha Schools, Iolani School, and Hawaii Preparatory Academy).<sup>8</sup> In May 1997, 70 AP macroeconomics exams were given in Hawaii, along with 74 microeconomics exams. In 2002, a total of 300 AP economics exams were given, consisting of 161 macroeconomics exams and 139 microeconomics exams. The 108 percent increase over five years represents a solid achievement for both private and public schools. Hawaii high school seniors are currently more likely to take an AP exam than the average US high school student. Equally impressive, Hawaii students perform better on AP exams than the average US student taking the AP exam. Of the 300 exams taken in 2002, 33 percent of Hawaii students scored a perfect 5 and 71.6 percent passed with a score of 3 or above. Despite the very small number of high schools offering AP economics, Hawaii's performance in this area has been remarkable.

Hawaii economics teachers and students have achieved high levels of national recognition. A notable achievement was the recent success of Iolani School's team in the National Economics Challenge. After winning the Hawaii state competition, the Iolani team won the regional competition, and was one of four teams in the final competition in New York City during May 2003. Economic teachers in Hawaii's public and private schools have won more than their share of prestigious national awards. For example, Richard Rankin, an economics teacher at Iolani School, was the Grand Prize winner in the 2001 Nasdaq National Teaching Awards.

#### **D. Supply of Trained Teachers**

The supply of primary and secondary school teachers who have the ability to teach economics depends on several factors. First, it depends on the number of college

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<sup>8</sup>AP economics was offered annually at Roosevelt High School from 1992-2001. The AP economics teacher at Roosevelt retired in 2001, and the class has not been offered since then. AP economics was also offered at Farrington High School in 1994-95 and at Moanalua High School in 2000-01.

students graduating with an economics majors.<sup>9</sup> Second, it depends on the number of teachers—with and without economics backgrounds—who choose to take in-service teacher training program. Finally, it depends on the salaries paid to entering and veteran teachers and the working conditions faced by these teachers. Let us examine each factor in turn.

The number of economics majors available to become teachers has fluctuated enormously over the last 15 years. Between 1991 and 1995, UHM Economics enrolled between 160 and 185 majors annually (Figure 3). Between 1995 and 2001 the number of majors decreased each year, reaching a low of just 74 in 2001.<sup>10</sup> The trend in economics majors has reversed over the last two years, as UHM Economics expects to enroll 142 majors in Fall 2003 and is targeting 175 majors for Fall 2004 and 200 majors for Fall 2005. Of course, an increase in economics majors does not directly translate into a larger flow of new economics teachers to Hawaii's schools. Low teacher salaries and poor working conditions in some schools push many potential teachers into other occupations. Declining budgets and faculty numbers at the UHM College of Education have prompted the College to focus its resources on teacher training in other areas.<sup>11</sup>

The UHM Center for Economic Education plays the central role in providing in-service training in economics for private and public teachers in the State of Hawaii. The Center is unique in the State in that no other subject area has a center solely dedicated to K-12 education. Basic functions of the center include training K-12 teachers; providing curriculum resources and teaching assistance; mentoring teachers; and developing curriculum for Hawaii's schools. The Center offers credit courses such as Mini-Society, Making a Job, and Integration of Economics into the Social Studies Curriculum. It also sponsors workshops and seminars such as *Harry Potter's Economy & Polity*; *Seas, Trees and Economies*; *Children's Literature and Economics*; *Yen to Trade*; and *Financial Fitness for Life* to provide professional development activities for certified teachers. In partnership with the San Francisco Federal Reserve Bank, the Center has offered

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<sup>9</sup> Three other ways are possible to increase the supply of economics majors choosing to become K-12 economics teachers. (1) A larger percentage of current economics majors at Hawaii's colleges choose to become K-12 teachers; (2) more teachers specializing in other subject areas receive in-service training in economics and pass the TEL; and (3) more teachers with requisite economics credentials migrate to Hawaii from other states.

<sup>10</sup> The number of faculty in UHM Economics declined precipitously in the 1980s and 1990s, falling from 21-23 full-time equivalent (FTE) faculty in the early 1980s to just 12 FTE faculty in 1998. This severely restricted the Department's capabilities to offer classes and to serve majors. It also restricted the ability of the remaining overburdened faculty to provide service to the Council and the Center.

<sup>11</sup> Supply-demand mismatches at schools in Hawaii can also be a problem. The small number of teachers who majored in economics is sometimes assigned to other classes, such as history, geography, and Hawaiian studies. Gail Tamaribuchi, Director of the Center for Economic Education, relates that since 1986, only nine of 499 graduates of the UHM College of Education social studies program chose economics as their major, and of those nine, two are not teaching economics because their schools needed them elsewhere.

seminars and workshops for elementary and secondary teachers. These include *Money Connection*; *Money and Banking*, and *The Federal Reserve System*.

The Center has been supported by a large number of private and public entities. The UHM College of Education has provided release time for center faculty since its founding; the UHM College of Social Sciences has provided space in Saunders Hall since the mid-1970s; UHM Economics has provided faculty service to develop curriculum and to undertake administrative roles since the Center's inception; UHM College of Business Administration provided financial support for the Council's executive director during 2000-02; the University of Hawaii President's Office provided support for a secretary/administrative assistant in the late 1980s and early 1990s; the State of Hawaii Department of Education (DOE) provided release time for a resource teacher during 1992-94; and numerous Hawaii businesses, individuals, and foundations have provided financial and in-kind support to economic education since the early 1950s.

Between 1988 and 1991, the Center served between 350 and 425 teachers annually.<sup>12</sup> The addition of a second staff member in 1992—a resource teacher loaned to the Center by the Hawaii DOE—facilitated a massive expansion in the number of teachers served, from 457 in 1991 to 810 in 1992 to 1,147 in 1993 and to 1012 in 1994. Since 1994 the number of teachers served by the Center has plummeted, falling below 200 in 2000 and 2001.<sup>13</sup> The decline can be explained by three factors. First, the Hawaii DOE was unable to continue its support of the resource teacher after 1994. Second, the Director of the Center received less release time from the UHM College of Education to engage in Center activities. Finally, the Center received declining financial support from the Hawaii Council on Economic Education (Figure 5). Funding levels achieved in FY1996 would not be reached again until FY2002.

Besides resource problems, the Center is faced with logistic challenges in training more teachers. Center Director Gail Tamaribuchi is concerned that the new year-round school calendar will impact teacher ability to participate in professional development courses which focus on upgrading subject matter knowledge and developing and acquiring new teaching and instructional methods. Teachers have cited the increases in UHM tuition rates over the last decade as a significant barrier to participation in professional development courses.<sup>14</sup>

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<sup>12</sup> For a teacher to be classified as “served by the Center” list, they must either have participated in a seminar or workshop offered by the Center or have received one-on-one training from Center Director Gail Tamaribuchi.

<sup>13</sup> Center Director Gail Tamaribuchi was on sabbatical during the Spring 2001 semester. The absence of an economic educator at the Center during this period reduced the number of teachers served in 2001.

<sup>14</sup> It is possible that teacher demand for in-service courses may increase in the next few years, as teachers work to improve their current knowledge of subject areas to meet the requirements of the federal No Child Left Behind (NCLB) legislation.

### **E. DOE Content Standards for Economic Education**

According to the Office of Accountability and School Instructional Support, a branch of the Hawaii DOE, area content standards are developed to “represent the essence of each discipline and must be presented in ways that will enable all youngsters to learn them thoroughly and successfully.”<sup>15</sup> Hawaii’s content standards include a terse list of five sweeping topics:

1. Limited choice and resources;
2. Role and function of markets;
3. Economic interdependence;
4. Role of government;
5. Economic analysis.

These ill-defined standards stand in sharp contrast to those developed by the National Council on Economic Education, entitled “Voluntary National Content Standards in Economics.”<sup>16</sup> Each of their 20 content standards, developed by a panel of economists and economic educators, includes a rationale for its inclusion, benchmarks indicating attainment levels for students in grades 4, 8, and 12, and samples of what students can do to enhance or demonstrate their understanding of economics. By contrast, Hawaii’s striped down, vague standards provide little guidance for teachers and little information for citizens interested in the scope of economics taught in Hawaii’s public schools.

### **F. Hawaii Council on Economic Education**

The Hawaii Council on Economic Education (HCEE or the Council) has played a unique role in facilitating the expansion and success of economic education in Hawaii. Established in 1965, the Council promotes and improves the teaching of economic concepts in Hawaii's public and private schools and aims to increase the economic and financial literacy of Hawaii's students and residents. A statewide partnership of business, labor and education, the Council is an independent, nonpartisan, nonprofit, 501(c)3 educational organization. It provides resources, guidance, and oversight for the UHM Center for Economic Education. The HCEE organizational set-up is flexible, as it allows for other centers in Hawaii to be established as demand warrants.<sup>17</sup>

The Council sponsors two student-based activities to promote K-12 economics education. On April 8, 2003, the Council held the third annual State Competition of the

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<sup>15</sup> Social Studies Content Standards, Department of Education State of Hawaii, August 1999.

<sup>16</sup> The NCEE developed the standards in partnership with the National Association of Economic Educators and the Foundation for Teaching Economics.

<sup>17</sup> A second center for economics education was established at the University of Hawaii at Hilo in 1987 and was closed in 1991.

NCEE/Goldman Sachs Foundation “Economics Challenge” at the University of Hawaii. The Economics Challenge is a student competition designed to increase their understanding of and interest in economics and finance. Three Hawaii high schools, sponsoring thirteen teams, competed. The Council also joined Market City, Ltd. and First Hawaiian Bank in sponsoring the Spring 2003 Hawaii Stock Market Simulation (SMS) game. The game is designed to teach students essentials of the stock market.

The Council’s success depends upon adequate funding and in-kind support from its constituent groups; effective leadership from its Executive Director; and active involvement by its Executive Council. We consider these in turn.

First, the HCEE received substantial funding from individual supporters and Hawaii businesses in the 1980s. Individual and corporate contributions amounted to \$55,000 in 1986.<sup>18</sup> Support from individuals and businesses fell dramatically in the 1990s, averaging only \$10,433 annually between 1995 and 2002 (Figure 5). While aggregate HCEE funding climbed sharply in 2002 due to strong support from local and national foundations, the decline in business and individual contributions is significant as it represents a decline in community commitment to the HCEE. During the late 1980s, the UH President’s Office provided support for the HCEE’s secretary. This support ended in the early 1990s.

Second, the HCEE’s second executive director, Professor Stephen L. Jackstadt, served for 11 years, from 1975 to 1985. Over the next 18 years, the HCEE would see a parade of executive directors, most of whom would serve only 1-2 years. Continuity in leadership may well be overrated, but excessive turnover is problematic in Hawaii, where many non-profit organizations have a long-serving executive director who is trusted by constituent groups and who has built a network of contacts for the organization.

Third, the HCEE Executive Council consists of prominent educators, government officials, labor union executives, and businesspeople. Its traditional roles have to muster support for the enterprise of economic education in the various communities represented; to provide guidance concerning selection of activities for the Center for Economic Education; and to provide oversight over the Center’s activities. Executive Council meetings have—at least in recent years—often been more focused on providing oversight rather than providing policy advice for the Center for Economic Education. The last year has, however, seen a more intensive involvement by the Executive Council in policy matters.

### **G. Complementary Organizations Providing Education**

The Center remains the only organization in the state providing training in economic education to teachers. Besides integrating economics into K-12 curriculum, there are a number of other methods being tried and tested around the country and around our islands. For example, there is a strong effort among banks to advance economic

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<sup>18</sup> Personal communication from Professor James Mak, HCEE Executive Director in 1986.

understanding and personal financial skills among youth. In their 2003 Survey of Bank-Sponsored Financial Literacy Programs, the Consumer Banking Association found that 77 percent of banks indicated that they offer financial literacy programs for K-12 students, and in such cases 57 percent of banks indicated that they partnered with organizations like the Jump\$tart Coalition in such activities. In addition, 70 percent of banks noted that they support youth financial education through the national “Adopt-a-School” program, and 83 percent engage in programs where employees tutor students.<sup>19</sup>

Organizations providing financial and economic education in Hawaii include credit unions, the Internal Revenue Service, Alu Like, labor unions, and the U.S. military. The efforts are largely complementary, yet the groups rarely meet to compare experiences.

### **III. Finding the Future: A Few Thoughts**

#### **A. Economics as Part of Content Standards**

The number of states with economics as part of their education content standards has increased in recent years. Table 3 summarizes the current state of content standards in economic education around the country. In 2002, 48 states included economics in their standards, although only 35 had implemented these standards in any meaningful way (NCEE Survey April 2003). Only 17 states required that economics be offered in high school. As for personal finance education, only four states, Idaho, Illinois, Kentucky, and New York, currently require students a course that covers personal finance before receiving a high school diploma.

Hawaii requires content standards in economics to be implemented, but does not require a course in economics to be offered at any grade level nor require student enrollment in such courses. The state has a list of five content standards for economics (see section II.E), which appears to be dormant. It is unclear whether the standards have been functionally integrated into the secondary school curriculum or whether any mechanism has been designed to test for understanding of these concepts. Regardless, the current standards are so vague as to be virtually useless. A first step would be to evaluate the NCEE’s content standards and to modify them to fit local conditions.

Revision of the content standards is even more important given the current tendency to use content standards as a means to determine curriculum content. The State of Hawaii does not provide a guide or framework that all social studies courses need to

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<sup>19</sup> A group of businesses, financial institutions, state officials, and real estate agents established a coalition with the goal of creating 40,000 new homeowners in the state. Led by the Bank of Hawaii, the coalition raised \$180,000 for the development of the Hawaii Homeownership Center. The Center is intended to serve as a resource for first-time homebuyers and provide a full spectrum of educational resources on the home-buying process. The Center will also conduct an 8-hour homeownership seminar for potential homebuyers, provide one-on-one counseling and referrals to professional services, and link participants to affordable loan products (CBA 2003).

meet. This is a problem in implementing a cohesive economics or financial literacy program in school across the state.

### **B. Should Economics be a Required Course in High School?**

Hawaii does not have particularly stringent guidelines governing its economics curriculum. Table 2 highlights the curriculum in some of the more rigorous states, such as Georgia and Tennessee.<sup>20</sup>

Should Hawaii upgrade its curriculum requirements? One option for Hawaii is to pass legislation requiring that public and private high school students received credit for a one-semester course in economics to graduate. In support of the mandate, recent research has shown significant improvements in savings and wealth following the imposition of a mandate. (See previous discussion in Section I and Bernheim et al. 2001) In Hawaii, this effect could be quite important, as the savings increases are most pronounced in low-income families, a group which suffered through Hawaii's lost decade. School principals may, however, argue that they are besieged by mandated subject areas and that another mandate would be difficult to fulfill given the constraints on total student hours per week in the classroom.

A less intrusive step would be for the Board of Education to commit to offering economics in each of Hawaii's high schools. The number of public high schools offering economics has fallen in recent years, and most students would find it burdensome to take an elective at another high school. Committing to offer at least one economics course commits a high school to hiring a teacher with economics credentials, and this would ensure that the program could be expanded as student demand warrants. Moreover, the highly successful AP economics program is now offered in only one high school, rather than the two-three high schools that offered it during the 1990s. Clearly, a gradual expansion of the very successful AP program to three-four more large high schools over the next few years would seem desirable and appropriate.

### **C. No Child Left Behind**

The *No Child Left Behind (NCLB) Act* of 2001 is a sweeping federal effort to structure and to support elementary and secondary education throughout the United States. The new law requires "highly qualified" public school teachers to be instructing the core academic subjects (English, reading or language arts, mathematics, science, foreign languages, civics and government, *economics*, arts, history and geography) by the end of the 2005-2006 school year. The Federal government's definition of "highly qualified" includes full certification, passing the state's licensing exam, a license to teach, and a demonstrated competence in their academic subject (NCLB Act P.L 107-110).

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<sup>20</sup> At the other end of the spectrum, Iowa is a state apparently not at all concerned about economic education standards. Interestingly, the education program requirements in the Iowa Code require Social Studies to be taught in grades 1-12, and further identify economics as one of the disciplines within "social studies."

Another provision of the Act requires states to establish academic achievement goals by setting academic standards in core subjects and measuring progress using tests aligned to state standards.

U.S. Senator Daniel K. Akaka, D-HI, introduced legislation as a subpart of the NCLB Act to improve the economic education of students around the nation with his *Excellence in Economic Education Act*. The Act's purpose is to increase students' economic knowledge, strengthen teachers' ability to teach economics, encourage research to increase economic understanding and instruction, help states incorporate economics into school curricula, and promote public and private partnerships to support economic education.<sup>21</sup>

The Act involves serious implications for economic education throughout the United States, including some unique concerns for Hawaii. States will need to develop evaluation standards to assess the subject-matter competency of current teachers. There are two critical questions for DOE policymakers to address concerning how the NCLB will affect economic education in Hawaii.

**(1) Will Hawaii have enough qualified teachers in economics to meet the NCLB's requirement that subject area teachers be qualified?** The NCLB leaves each state to define a "qualified" teacher. Early indications are that if teacher meets the requirements of the Hawaii Teachers Standards Board, they will be considered "qualified." For the secondary teacher, that means passing the PRAXIS social studies test and for the elementary teacher passing the elementary PRAXIS test. The elementary PRAXIS test has a few social studies questions, but none are identified with the field of economics. Thus, the K-6 teacher need not have any economics background, yet will be required to teach the economics content standards in their social studies classes. We conclude that the current qualification standards are relatively weak and that more discussion among all parties is needed if elementary and secondary teachers in Hawaii are indeed to have the requisite skills needed to teach economics.

**(2) Will Hawaii's students be prepared to take standardized examinations on economic concepts that the Act will set into motion?** The first-ever National Assessment of Economic Progress (NAEP) sponsored by the National Center for Education Statistics is scheduled to be given in 2006 to students in the twelfth grade. The assessment framework, specifications, and background variables are currently being developed.<sup>22</sup>

Because the NCLB Act is calling for the establishment of academic standards in core subjects such as economics, and requiring assessment tests aligned to state standards, the obvious place to start would be with Hawaii's content standards. The

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<sup>21</sup> The *Excellence in Education Act* was co-sponsored by Senators Thad Cochran (R-MS), Patty Murray (D-WA), Dan Inouye (D-HI), and Bob Kerrey (D-NE).

<sup>22</sup> See <http://nces.ed.gov/nationsreportcard/>.

current standards cannot be used as a basis for assessing student understanding or knowledge; or as a basis for curriculum design. A reassessment and upgrade of Hawaii's measly standards are necessary first steps before any discussion of their implementation or assessment of student learning after their implementation.

#### **D. Hawaii Council on Economic Education/Center on Economic Education**

The Hawaii Council on Economic Education and the Center for Economic Education are the key conductors of the complex cast of players that support economic education in our state. The training, mentoring, and teacher development provided by the Center are unmatched in any other academic field or by any other UHM entity. The Council's support of the Center's activities is crucial for its continued success. As both groups approach their 40<sup>th</sup> anniversary, it is necessary to reexamine each organization's future roles, functions, and programs for economic education in Hawaii. To begin, we provide a short list of recommendations.

##### **1. The Council**

***Adopt a more coordinating role.*** The last decade has witnessed a surge in the number and range of groups engaged in financial and economic education. While the Council's main focus should continue to be on supporting, overseeing, and guiding the Center for Economic Education, it also needs to devote some resources to the role of stimulating interaction among the various groups and acting as a clearinghouse for information on their activities. There surely exists ample room for partnerships, cooperatives, and other important cooperative teacher and student outreach activities. A pre-requisite for such cooperation is that organizations and individuals working in the field become aware of each other's presence and activities.

***Revival of membership.*** In the 1970s and 1980s, "memberships" in the Council generated an attachment by businesses and individuals to Council and Center activities. During the early 1990s, the Council eliminated membership, as it concluded that it spent too much administrative time communicating with members. With the elimination of "excessive" administration costs also came the elimination of "excessive" volunteerism, donations, and awareness. A reexamination of Center membership is warranted.

***Reexamine funding and role of Executive Director.*** The Council needs to re-examine the role of the Executive Council and the Executive Director. Taking stock of the factors behind the high turnover in executive directors since 1987 and the changing roles of Executive Council members is vital if the Council is to function effectively in the future.

##### **2. The Center**

***Staffing.*** One half-time faculty is insufficient to staff the Center. Though she does seem to work miracles, Center Director Gail Tamaribuchi cannot serve as a resource person for all of Hawaii's public and private schools. We recommend that the DOE, the UHM

College of Education, and the Council meet soon to determine how Center staffing can be increased.

***Shorter, more intensive modules.*** One major concern in reaching more teachers is the year-round calendar adopted by many schools around the Islands. The longer, more continuous school year requires adaptation of teacher workshops and 500-level courses to fit into the new calendar. Shorter, more concentrated classes might help accommodate this issue.

***Offering partial tuition subsidies to teachers.*** Another concern of the Center is the rising tuition charged by the University of Hawaii to attend professional development classes. The Council should consider awarding full or partial scholarships to teachers attending its in-service courses.

***Updated library collection.*** While boasting the state's largest library on economic and financial education, many materials held by the Center are somewhat dated and in need of inventory and renewal. Today's technological advancements and computer savvy teachers and students require more accessible, convenient means of obtaining and processing curriculum materials. These include materials available on-line as well as a library of instructional DVDs.

#### **IV. Conclusion**

Clearly, the declining enrollment rate in public high school economics courses is the central problem with the state of economic literacy in Hawaii. It is critical that major players meet soon—within four to six weeks of this conference's conclusion to discuss how they will help to reverse this troubling trend. A recommitment by the Hawaii Department of Education, the UHM Department of Economics, UHM College of Education, UHM College of Business, the business community and its representatives, Hawaii's public and private schools, and a reorganization and new role for key players such as the Hawaii Council on Economic Education are the key ingredients in restoring economic education to the extraordinary heights achieved between 1965 and 1999.

The lack of commitment to economic education by the Hawaii State Department of Education is striking. There is no one with knowledge of the field at DOE offices; there is no advocate for economic education within the DOE; and there is no commitment to working closely with the UHM Center for Economic Education. Despite this, the enterprise of K-12 education in Hawaii has been wildly successful—at least until 1999. It is time for the DOE and the BOE to re-examine the nature of their commitment to this field—a field listed as one of ten core fields in the NCLB Act. A small commitment could offer big results, as demonstrated by the record of Hawaii high school students on AP economics tests.

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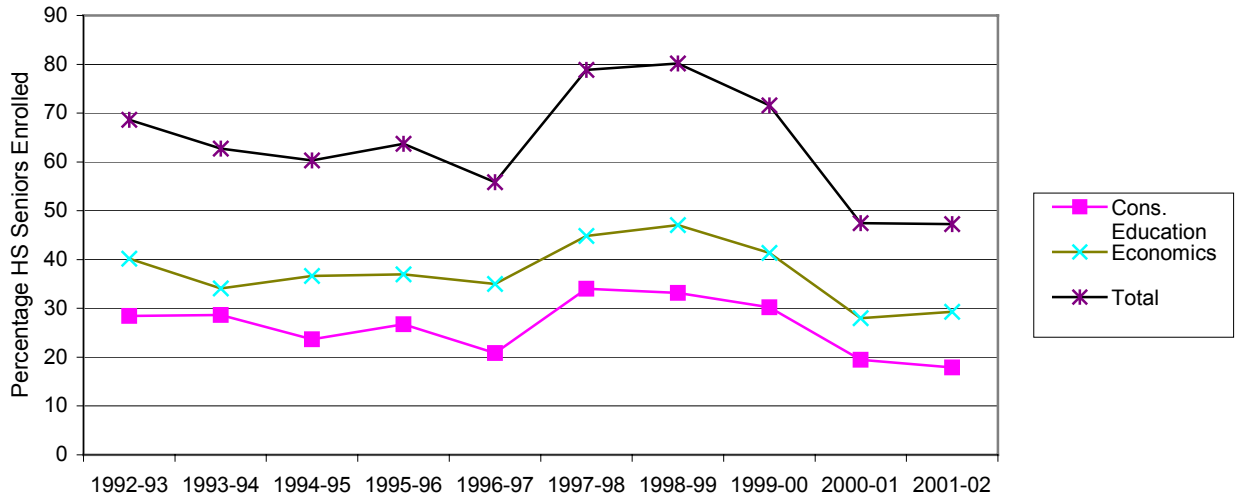
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**Figure 1: Percentage of High School Seniors Enrolled in Economics and Consumer Education Courses**

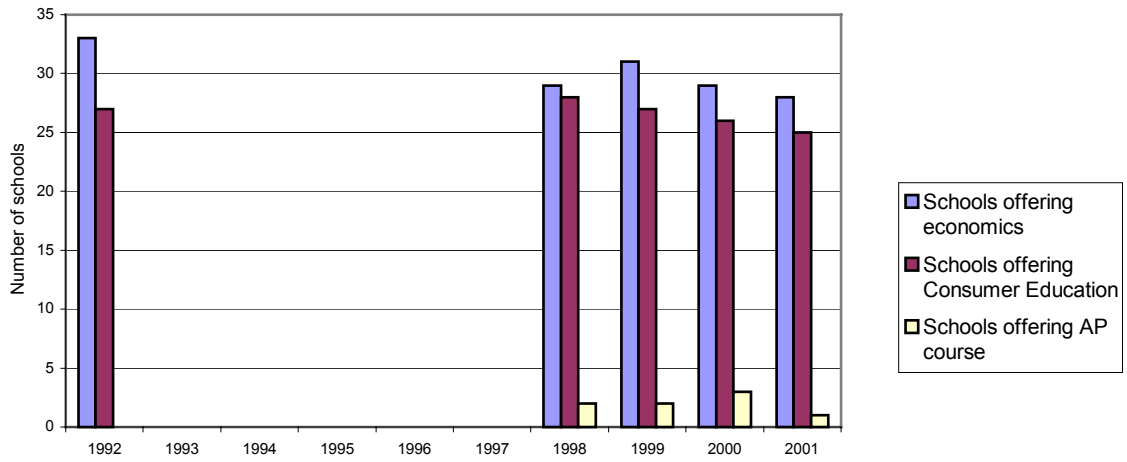


Source: Department of Education, State of Hawaii.

Year	1982				1990				1994				1998			
<i>Definition</i>																
Economics	27.37				47.36				43.79				45.78			
<i>Community</i>					<i>Big city</i>	<i>Fringe</i>	<i>Med.</i>	<i>Small</i>	<i>Big city</i>	<i>Fringe</i>	<i>Med.</i>	<i>Small</i>	<i>Urban</i>	<i>Sub</i>	<i>Rural</i>	
	--	--	--	--	62.54	44.06	39.53	46.65	44.57	49.07	46.18	39.39	54.29	38.50	46.23	
<i>Region</i>	<i>NE</i>	<i>South</i>	<i>MW</i>	<i>West</i>	<i>NE</i>	<i>South</i>	<i>MW</i>	<i>West</i>	<i>NE</i>	<i>South</i>	<i>MW</i>	<i>West</i>	<i>NE</i>	<i>South</i>	<i>MW</i>	<i>West</i>
	18.40	31.48	33.09	22.10	29.01	63.67	36.12	54.94	33.92	48.58	30.44	63.18	45.92	55.33	28.69	51.19
<i>School</i>	<i>Public</i>		<i>NP</i>		<i>Public</i>	<i>NP</i>			<i>Public</i>	<i>NP</i>			<i>Public</i>		<i>NP</i>	
	27.76	24.14			49.18	29.27			44.25	38.50			45.37	50.05		

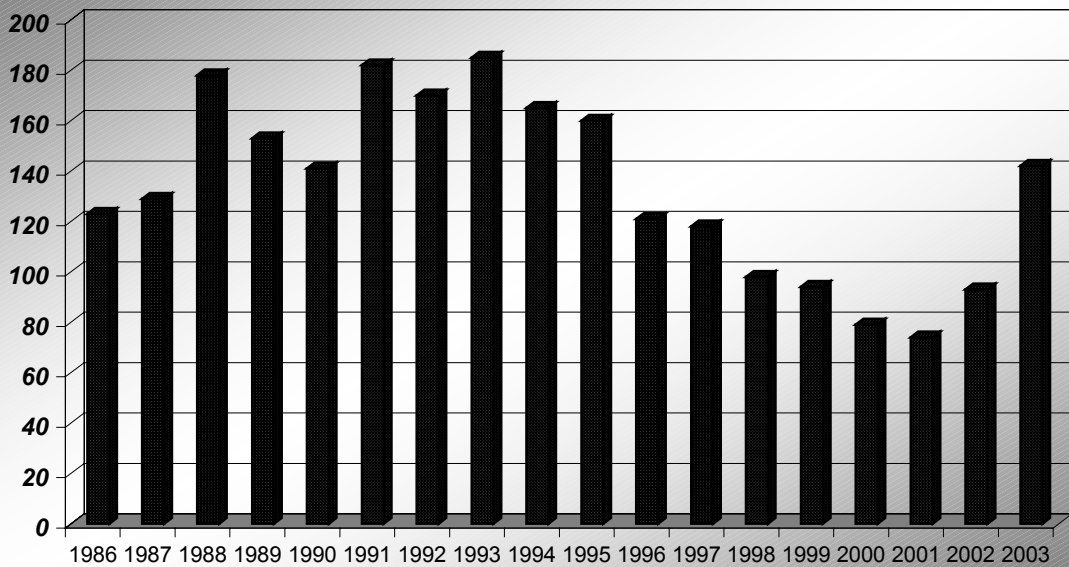
Source: National Center for Education Statistics, *1998 High School Transcript Study*, Tables 50, 54, 55, and 56.

**Figure 2: Economics in Hawaii's Public High Schools**



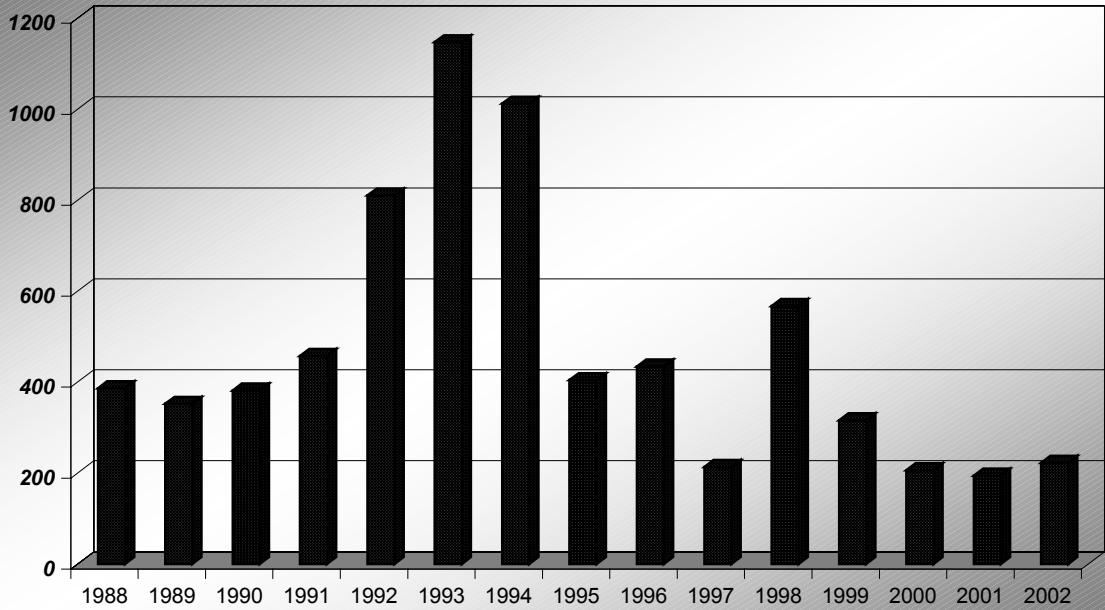
Source: Department of Education, State of Hawaii

**Figure 3. UHM Economics Majors**



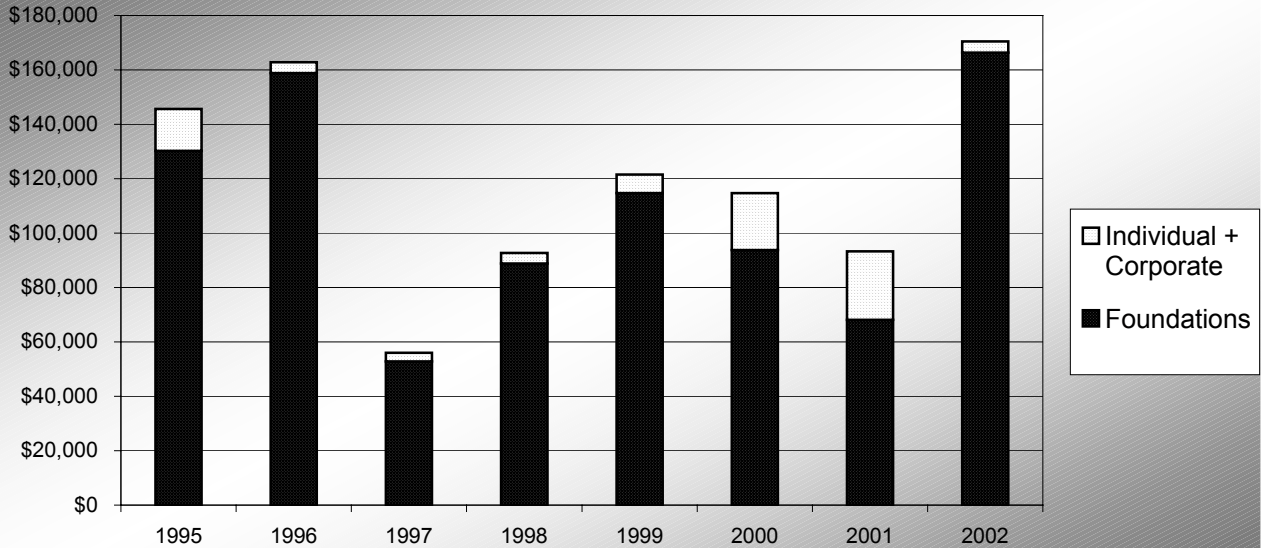
Source: UHM Department of Economics

**Figure 4: Teachers Served by UHM Center for Economic Education**



Source : UHM Center for Economic Education

**Figure 5: HCEE Funding**



Source : Hawaii Council on Economic Education

**Table 2. Status of Economic Education in Selected States.**

State	Type of standards, guidelines or proficiencies & grade levels	Standards required to be implemented	Course(s) required to be offered & grade level(s)	Course(s) in which enrollment is required & grade level(s)	Student Testing Required
Alabama	Content standards, K-12	Yes	1 semester economics required for HS graduation	1 semester economics required for HS graduation	Yes
Georgia	Standards/objectives, K-12	Yes	Economics/ Business/ Free Enterprise	Economics/ Business/ Free Enterprise	Yes
<b>Hawaii</b>	<b>Content standards, K-12</b>	<b>Yes</b>	<b>None</b>	<b>None</b>	<b>No</b>
Iowa	None	N/A	N/A	N/A	N/A
Kentucky	Academic expectations/ core content, K-12	Yes	Course name varies by department	Course name varies by department	Yes
Tennessee	Standards, K-12	Yes	Economics (HS)	Economics (HS)	Yes
National Totals	---	<b>18 No</b>	<b>17 require course</b>	<b>14 require enrollment</b>	<b>24 No</b>

Source: Adapted from NCEE Survey of the States, April 2003. Includes District of Columbia, 51 total.

**Table 3. Update on Economics Standards and Their Impact.**

Topics	1998 Survey Findings	2000 Survey Findings	2002 Survey Findings
<b>Standards</b>	38 states include economics in their standards	48 states plus DC	48 states plus DC
<b>Standards required to be implemented</b>	28 states with standards require implementation of economic standards	36 states	34 states
<b>Course(s) required to be offered</b>	16 states require economics course to be offered	16 states	17 states
<b>Course(s) with required enrollment</b>	13 states require students to take economics course	13 states	14 states
<b>Student testing required</b>	25 states require testing of economics	22 states require economics testing ; 9 more states planning tests within 4 years	27 states require testing of economics, with 4 more states developing tests as of 12/31/02

Source: National Council on Economic Education, Survey of the States, April 2003.