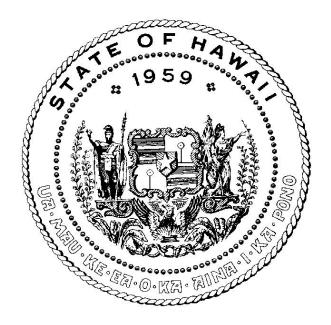
## REPORT TO THE HAWAII STATE LEGISLATURE

# RELATING TO HAWAII COUNCIL ON ECONOMIC EDUCATION (HCEE) ECONOMICS CADRE PROGRAM FOR DECEMBER 2008



Prepared by the

Department of Commerce and Consumer Affairs Business Registration Division State of Hawaii

# **HCEE Economics Cadre Program Report to the Legislature as of December 1, 2008.**

The Economics Cadre is a program designed to empower high school students to make informed economic and financial choices through teacher training. By completion of the program it is expected that all teachers will:

- Understand the basic concepts of economics
- Understand how to teach economics in other subjects
- Serve as a resource to teachers within their school complex

Thirty-eight teachers from across the state applied for the program. Thirty were selected to participate. As of December 1, 2008, twenty-five remain in the program. One teacher was selected as a Fullbright Scholar to travel to India to teach for a year, another was lured to the private sector, and another was given tasks within his school, but outside the classroom. Two teachers dropped out of the program due to personal reasons.

## Outcomes

Teachers have participated in the following Cadre activities as of December 1, 2008:

| 21 Teachers | Completed Core Course 1: <i>Right Start Institute for Teaching Economics</i><br>2-graduate-credit course in economics from Florida Gulf Coast University<br>September 29 - October 2, 2007   Content Hours: 27<br>(6 Cadre teachers expected to complete RSI in March 2009) |
|-------------|---|
| 15 Teachers | <ul> <li>Attended Core Course 2: Interdisciplinary Methods (ITE 404N)</li> <li>3-credit course through UH – teachers develop interdisciplinary economics unit July 7 – 11, 2008   Pedagogy Hours: 20</li> </ul>   |
| 8 Teachers  | Completed <i>Teaching the Ethical Foundations of Economics</i><br>November 10, 2007   Content Hours: 4  |
| 12 Teachers | Completed International Economics Boot Camp<br>March 8, 2008   Content Hours: 8   |
| 13 Teachers | Completed International Economics Summit<br>March 26-27, 2008   Pedagogy Hours: 16  |
| 8 Teachers  | Completed <i>The Environment &amp; The Economy</i><br>2-graduate-credit course in economics from Florida Gulf Coast University<br>October 8 – 11, 2008   Content Hours: 27  |
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26 Teachers Attended at least one networking meeting during the duration of the program.

Cadre teachers have spent **1,419** hours receiving professional development training in economics from Hawai'i Council on Economic Education (HCEE) as part of the Economics Cadre Program.

Thirty teachers received a mini-library of more than 80 economics and financial literacy publications for grades K-12. These lesson plans cover a variety of subjects and are meant for use by the teacher and their colleagues within their school complex. An additional 30 libraries have been distributed to Department of Education Complex Areas and each county's Economic Development Board has received two libraries so that any teacher, regardless of geographic location or participation in the Cadre, has access to grade-appropriate lesson plans in economics and/or personal finance.

HCEE also expects to collect 12-14 Teacher Work Samples (TWS) from Cadre Teachers. A TWS assesses a teacher's effectiveness on student learning. Through the TWS, teachers demonstrate their ability to apply in practice the teaching skills they have developed and demonstrated in their previous teacher education course work. Creating a TWS is a type of "action research", where teachers move through the steps involved in reaching best practices and engage in a process for ongoing professional improvement. (They are assessing the effectiveness of their teaching based on evidence they collect of their students' learning.) This self-renewing process of data-driven decision-making continues throughout their teaching careers.

## **Measures of Effectiveness**

#### Teacher Assessments

It was originally planned to have all teachers pre-and post-tested in economics by December 2007 because it was believed that all Cadre teachers would have completed their Core Course 1 in economics by that time. However, HCEE has decided to post-test the teachers at the end of the Cadre program for the following reasons:

- 1) Six teachers will not be completing Core Course 1 until March 2009.
- 2) The original date of post-testing would only have captured changes in knowledge from Core Course 1. However, Cadre teachers have many opportunities throughout the program to increase their understanding of economics. A change of the post-assessment date would reflect changes in content knowledge as impacted by participation in the entire program, rather than participation in Core Course 1 alone.

Self appraisal data shows that 100% of teachers who participated in The Right Start Institute (RSI) in Economics felt their knowledge and understanding of economics (and their ability to teach it) improved dramatically. Cadre Teachers were asked to rate their ability to answer the questions on various economic topics. The Pre column in the summary table below indicates the average score prior to attending RSI. The Post column indicates the average score after completing RSI.

1 = no perceived understanding

5 = complete perceived understanding (teach without notes)

| TOPICS   | Pre  | Post | %<br>Change |
|--|------|------|-------------|
| The Economic Way of Thinking                     | 2.63 | 4.15 | +57.79      |
| Scarcity, Trade Offs, and Opportunity Costs      | 2.74 | 4.00 | +45.98      |
| Demand, Supply and The Market                    | 2.33 | 4.37 | +87.55      |
| The Role and Importance of the Public Sector     | 2.75 | 4.05 | +47.27      |
| National Economic Goals                          | 2.04 | 3.37 | +65.19      |
| Measuring Economic Activity                      | 1.74 | 3.66 | +110.34     |
| Inflation and Unemployment                       | 2.30 | 3.90 | +69.57      |
| Aggregate Demand and Supply-Fiscal Policy        | 2.21 | 3.00 | +35.75      |
| Money and Banking System                         | 2.02 | 3.97 | +96.53      |
| Market structures, Output Levels, and Efficiency | 2.10 | 3.70 | +76.19      |
| International Trade                              | 1.98 | 4.37 | +120.70     |

Twenty-five teachers have been pre-tested using the Test for Economic Literacy (T.E.L.), a nationally-normed, standardized test developed by the National Council on Economic Education. This tool tests understanding of fundamental economic concepts, microeconomics, macroeconomics, and international economics. These pre-test results will serve as a baseline for the program participants.

| PRE-TEST<br>(BASELINE) | Fundamental<br>Economic<br>Concepts | Micro-<br>economic<br>Concepts | Macro-<br>economic<br>Concepts | International<br>Economic<br>Concepts | All<br>Questions |
|------------------------|-------------------------------------|--------------------------------|--------------------------------|---------------------------------------|------------------|
| % of test on topic     | 35%                                 | 25%                            | 25%                            | 15%                                   | 100%             |
| Pre-Test Mean          | 82.6%                               | 79.6%                          | 80.0%                          | 68.0%                                 | 79.0%            |

While HCEE decided to postpone comprehensive post-testing of teachers until Spring 2009, a sample of teachers (fourteen total) were selected to take the T.E.L. for a second time as a midpoint evaluation to test actual progress against expectations.

| MID-POINT                              | Fundamental<br>Economic<br>Concepts | Micro-<br>economic<br>Concepts | Macro-<br>economic<br>Concepts | International<br>Economic<br>Concepts | All<br>Questions |
|--|-------------------------------------|--------------------------------|--------------------------------|---------------------------------------|------------------|
| % of test on topic                     | 35%                                 | 25%                            | 25%                            | 15%                                   | 100%             |
| Pre-Test Mean<br>(14 teachers)         | 83.2%                               | 80.7%                          | 82.2%                          | 64.3%                                 | 79.5%            |
| Midpoint-Test<br>Mean<br>(14 Teachers) | 86.7%                               | 82.9%                          | 76.4%                          | 81.0%                                 | 82.3%            |
| Avg. Percentage<br>Point Change        | 3.5                                 | 2.2                            | -5.8                           | 16.7                                  | 2.9              |
| Avg. Percent<br>Change                 | 5.8%                                | 3.7%                           | -6.0%                          | 34.8%                                 | 4.1%             |

It is expected that 25 teachers will demonstrate increased understanding of basic economic concepts by Spring 2009.

#### Student Assessments

HCEE set a goal of up to 1,200 students demonstrating increased understanding of economics or personal finance concepts by Spring 2009.

The following table shows the <u>expected</u> student testing as reported "achievable" by participating teachers in September 2008.

| Fall 2008 –   | 780 students |
|---------------|--------------|
| Spring 2009 – | 410 students |
| Fall 2009 –   | 310 students |

As of December 1, 2008, eight teachers have submitted assessment results for a total of 334 students. The remaining results for Fall 2008 testing are due January 31, 2009.

| Teacher | #<br>Students | Pre-test<br>Avg Score | Post-test<br>Avg Score | % Point<br>Change | Concepts taught                         |
|---------|---------------|-----------------------|------------------------|-------------------|---|
| А       | 60            | 25.80%                | 64.87%                 | +39.07            | Investing & Financial Concepts          |
| В       | 16            | 49.38%                | 78.38%                 | +29.00            | Basic economics concepts                |
| С       | 23            | 36.80%                | 72.22%                 | +35.42            | Basic Economics concepts                |
| E       | 31            | 40.26%                | 86.90%                 | +46.65            | International Economics Concepts        |
| F       | 27            | 22.59%                | 82.96%                 | +60.37            | Basic Economics concepts/Current events |
| G       | 29            | 28.03%                | 78.69%                 | +50.66            | Basic Economics Concepts                |
| Н       | 19            | 44.53%                | 68.42%                 | +23.89            | Basic Economics Concepts                |
| Ι       | 127           | 25.67%                | 74.17%                 | +48.50            | Basic Economics Concepts                |

# Expenditures

| Item                         | Budgeted  | Total Expended * | DCCA Funds Expended * |
|------------------------------|-----------|------------------|-----------------------|
| Advisory Board               | 18,250    | 17,867           | 3,500                 |
| Right Start Institute        | 38,950    | 37,872           | 6,500                 |
| Pedagogy Course              | 24,550    | 21,884           | 12,900                |
| Workshops                    | 43,505    | 56,474           | 31,400                |
| Mini-Grants                  | 43,000    | 11,500           | 11,500                |
| Networking                   | 41,450    | 17,305           | 1,500                 |
| E-Mentorship                 | 14,000    | 12,899           | 0                     |
| Program Design & Maintenance | 64,350    | 55,689           | 37,530                |
| Teacher Recruitment          | 11,945    | 13,786           | 5,750                 |
| Total                        | \$300,000 | \$245,276        | \$110,580             |

\* as of December 1, 2008