Evidence of Impact

Annual Impact Results

The Impact of the Intel® Teach Program Essentials Course

Overall, data about the Intel® Teach Essentials Course indicate that teachers have very positive experiences during the training, and they leave the training feeling prepared to apply what they have learned.

Read more about the End of Training Survey results, which reflect teacher perceptions of program quality and their own preparedness.

Evidence also shows that teachers integrate technology as well as new pedagogical strategies in their classrooms as a result of their participation in this program.

Impact Survey Findings

While perceptions of training quality and effectiveness are key data for the continued improvement of program implementation around the world, the data revealed by the global Impact Survey enables Intel to determine how well the Essentials Course is performing in relation to its educational goals.

Designed by EDC/CCT and administered as a follow-up with teachers six months to one year after each training event, the Impact Survey seeks to reveal teachers' reported perceptions regarding opportunities for project-based activities. The Survey also reveals the implementation of new behaviors associated with facilitating student-centered learning as a result of the training.

In analyzing the data collected about the Essentials
Course over the past year, EDC/CCT combined the
responses to several key questions to create four
benchmarks of program success. These benchmarks
relate directly to the two main objectives of the course,

Intel® Teach Program Essentials Course Impact Survey Which Intel Teach training did you complete? ☐ Master Teacher training ☐ Participant Teacher training 2. When did you complete your training? ☐ Jan.-March 2000 ☐ April-June 2000 ☐ July-Sept. 2000 ☐ Oct.-Dec. 2000 ☐ lan-March 2001 ☐ April-June 2001 ☐ July-Sept. 2001 ☐ Oct.-Dec. 2001 ☐ Jan.-March 2002 ☐ April-June 2002 ☐ July-Sept. 2002 ☐ Oct.-Dec. 2002 3. Since completing your intelTeach training, how many times have you used your: Did Not Receive a. Intel Teach manual b. Intel Teach CD-ROM? 4. Since completing your intelltraining, how many times have you visited the Intel® Education Web ☐ More than 10 times ☐ 4-10 times ☐ 1-3 times ☐ Never/Do not know Copyright © 2006, Intel Corporation, All rights reserved. Created and administered by EDC/CCT.

which are to promote the use of technology by teachers and students, and to promote the use of project-based teaching strategies.

Four Benchmarks of Course Impact

Data collected throughout the impact evaluation process reveal that the Essentials Course is succeeding in four key areas:

- Increased use of technology for lesson planning and preparation
- Increased use of technology activities with students
- Implementation of the unit designed in the training
- Increased use of project-based approaches

Global Impact Benchmarks

80% of teachers increase use of technology for lesson planning and preparation.

75% of teachers increase use of technology activities with their students.

75% of teachers use the unit/lesson they developed in training in their schools.

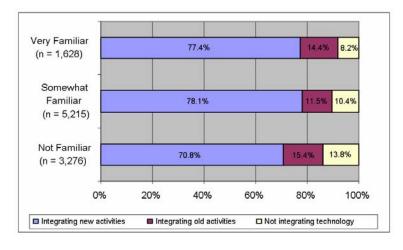
60% of teachers increase use of project-based approaches in their teaching.

Success in the key areas, as indicated by the increases in associated behaviors, is only part of the story. The impact data also uncover interesting relationships among emerging new teaching behaviors and the classrooms and geographical contexts in which they take place.

Teachers Are Using What They Learn

Regardless of the level of access to computers in classrooms or school labs, teachers are using more technology in their classrooms and in their own lesson planning and preparation six months to a year after they participate in the Essentials Course. Not only are teachers increasingly integrating technology, but they are also experimenting with new teaching methods, particularly with project-based learning strategies.

These findings are consistent across all geographical areas in which the course is implemented, but the findings vary by degree depending on a variety of environmental and teacher readiness factors.



Technology familiarity before the training affects the integration of technology activities after the training

The survey data shows a large portion of teachers integrating new technology activities into their teaching. However, some degree of familiarity with the teaching methods appears to facilitate the integration of new technology activities.

Teachers Who Use Unit Plans Are Better Able to Meet Course Goals

Teachers who use their Unit Plans are more likely also to report increased integration of technology and new pedagogical strategies. The finding that the use of the Unit Plan, central to the course design, relates to meeting course goals may seem fairly obvious. However, this finding is actually key to determining that the theoretical foundation of the course is indeed successful. Implementation of the Unit Plan is related to an increased use of technology and teaching strategies learned in the Essentials Course, and the more often teachers implement the plan, the more likely they are to incorporate the changes in teaching practices targeted in the course.

The finding supports the development of the Unit Plan as an organizing feature of the course. The finding also suggests that greater program impact can be achieved when the support and impetus is given to teachers to actually use their plans in the classroom as a way to test the new approaches they have learned before extending them to other lesson plans.

Income Level Is a Key Factor in Course Impact

The income level of the countries where the Essentials Course is implemented relates directly to the impact of the course. Use of income level as reported by the World Bank is a convenient way to categorize countries for a study of course impact. Income level is shown in the data to relate to both pedagogical readiness and technological infrastructure challenges—two variables that have a direct correlation with the emergence and persistence of new teaching behaviors after the training.

As the Intel® Teach Program continues to expand further into emerging nations, broad understanding of differences in the program's impact based on each country's infrastructure is key in setting the expectations of ministries of education and in providing each country with appropriate program components.

Using World Bank indicators, EDC/CCT analyzed the Intel® Teach Essentials Course impact data by country income level and found a correlation between income and course impact

World Bank Income Levels

High: Countries with gross national income (GNI) per capita above \$10,066

Med-High: Countries with GNI between \$10,065 and \$3,256

Med-Low: Countries with GNI between \$3,255 and \$826

Low: Countries with GNI \$825 or less

Instructional Practices and Classroom Use of Technology Survey

Another global survey that explores the impact of the Essentials Course on teachers in the classroom is the 2006 Instructional Practices and Use of Technology Survey. EDC/CCT administered the survey to more than 1,000 teachers, some of whom had participated in the Essentials Course. The survey compares technology integration practices among the teachers and isolates the role that the Essentials Course plays in increasing the use of technology in the classroom.

Essentials Course Participants Use Technology More

The survey's key finding is that Essentials Course participants integrate technology more than nonparticipants. The Essentials Course participants in general (94.4 percent) and Master Teachers in particular (97 percent) use technology more than nonparticipants (86.1 percent). In fact, the participants in general (95.4 percent) and Master Teachers specifically (98.4 percent) use technology with their students more than nonparticipants do (90.7 percent).

In addition, the survey reveals relationships among the following three key factors in technology integration:

- Participating in quality professional development (specifically the Essentials Course)
- Access to technology
- Pedagogical beliefs

Essentials Course participation appeared to produce the most dramatic changes in the behavior of teachers with less access to computers in the classroom and with weaker constructivist pedagogical beliefs.

Further Reading

Light, D., McMillan Culp, K., Menon, R., & Shulman, S. (2006). *Intel® Teach Essentials Course: Impact Survey results for 2005.* New York: EDC/CCT.

Martin, W., & Shulman, S. (2006). *Intel Teach Essentials Course Instructional Practices and Classroom Use of Technology Survey report*. New York: EDC/CCT.