Intel® Teach Essentials Course

International Impact Survey Results Overview 2005-2006

EDC, January 2007

Overview

This report:

- Presents analyses of all impact survey data submitted between November 2005 and December 2006.

- Is based on responses to the 2005 version of the impact survey. Link to Survey

Countries Reporting Data

The following 20 countries submitted data.

Country	N	Country	N
Australia	737	Malaysia	370
Brazil	318	Mexico	972
Chile	511	Pakistan	570
China	4,481	Philippines	391
Colombia	30	Russia	322
Egypt	183	S. Africa	58
India	1,563	S. Korea	992
Italy	139	Thailand	252
Japan	233	Ukraine	206
Jordan	1,454	United States	1,907

Total N=15,689

Regional and Income Breakdowns

Using World Bank indicators, EDC analyzed the data by income level.

LAR

Brazil, Colombia

Chile, Mexico

USA

United States

APAC

Australia, China

India, Japan

Korea, Malaysia

Pakistan

Philippines, Thailand

EMEA

Egypt, Italy

Jordan, Russia

South Africa, Ukraine

High Income - Countries with Gross National Income per capita (GNI) above $10,726.

Medium High Income - Countries with GNI between $10,725 and $3,466.

Medium Low Income – Countries with GNI between $3,465 and $876.

Low Income - Countries with GNI $875 or less.

* Countries were classified by the World Bank in 2006

Highlights

- Globally, the program has strong success rates across four indicators. The Essentials Course is helping teachers use technology with students and for themselves, as well as use project-based approaches to teaching. Link to Finding
- This year's data suggest a new phenomenon: as the Essentials program matures in many countries and as the policy and educational environment in those countries improves, there are now less differences by the level of national economic development in teachers' ability to follow up on the training. Link to Finding

Highlights (continued)

- Implementation of the unit plan designed during the Essentials Course is a key strategy for helping teachers meet the goals of the program. Link to Finding

- The program helps teachers with differing levels of familiarity with project-based approaches experiment with these teaching methods. Link to Finding

Highlights (continued)

- Teachers who understand the relevance of the teaching methods presented in the training are more likely to experiment with new teaching methods. Link to Finding

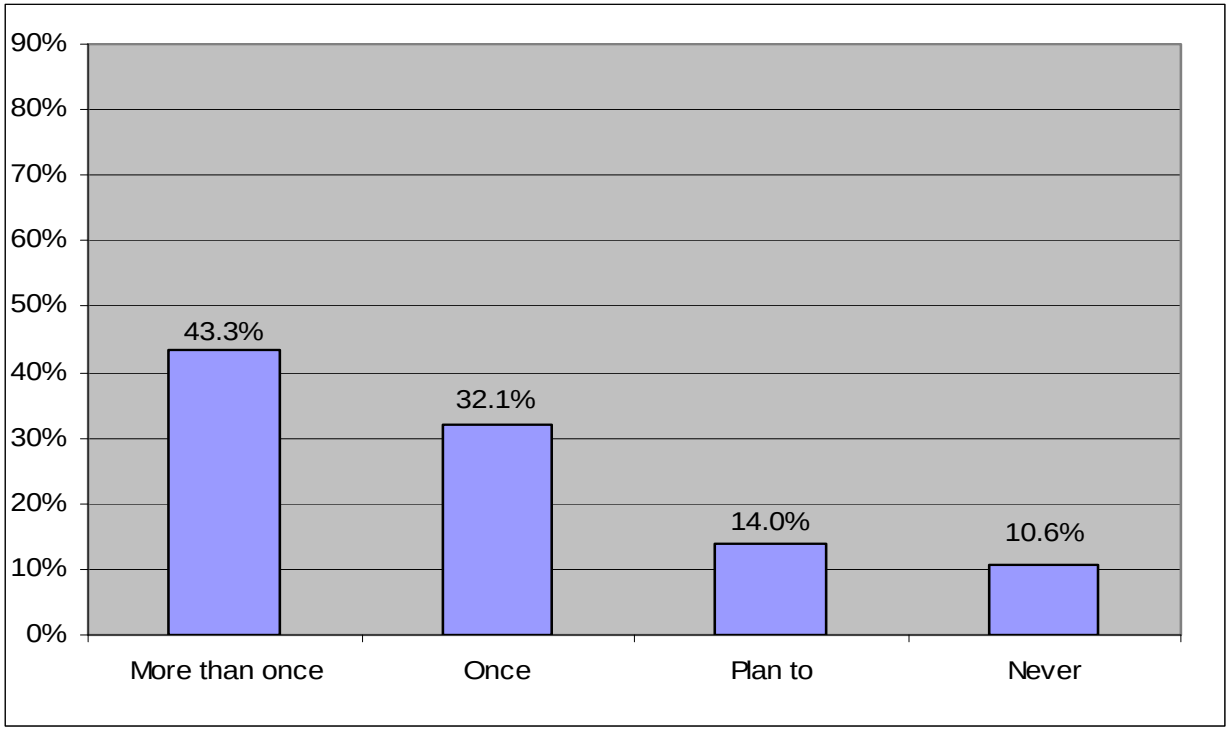
- Easy access to computing resources in classrooms and labs facilitates teachers' ability to use technology with their students. Link to Finding

Findings: Indicators of Success

EDC combined multiple survey items to develop four indicators of program success, corresponding to Intel's dual objectives of promoting the use of technology by teachers and students, and promoting the use of project-based teaching strategies.

- Implementation of All or Part of the Unit Plan Designed in the Training
- Increased Use of Technology Activities with Students
- Increased Use of Technology for Lesson Planning and Preparation
- Increased Use of Project-based Approaches

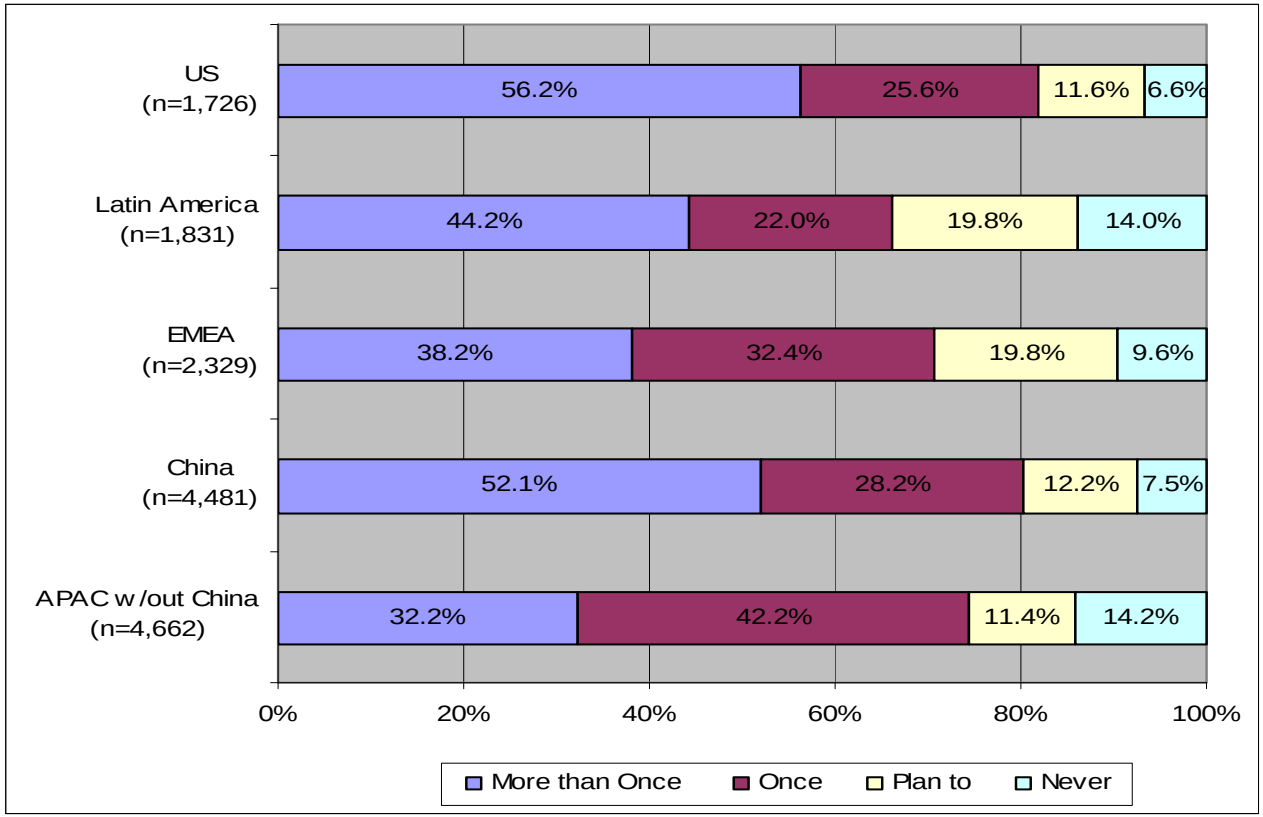
Unit Plan Implementation: World-wide



Roughly 75% of the teachers who responded report having implemented all or part of their unit plan at least once; 43.3% have used their unit plan multiple times.

Link to Highlights

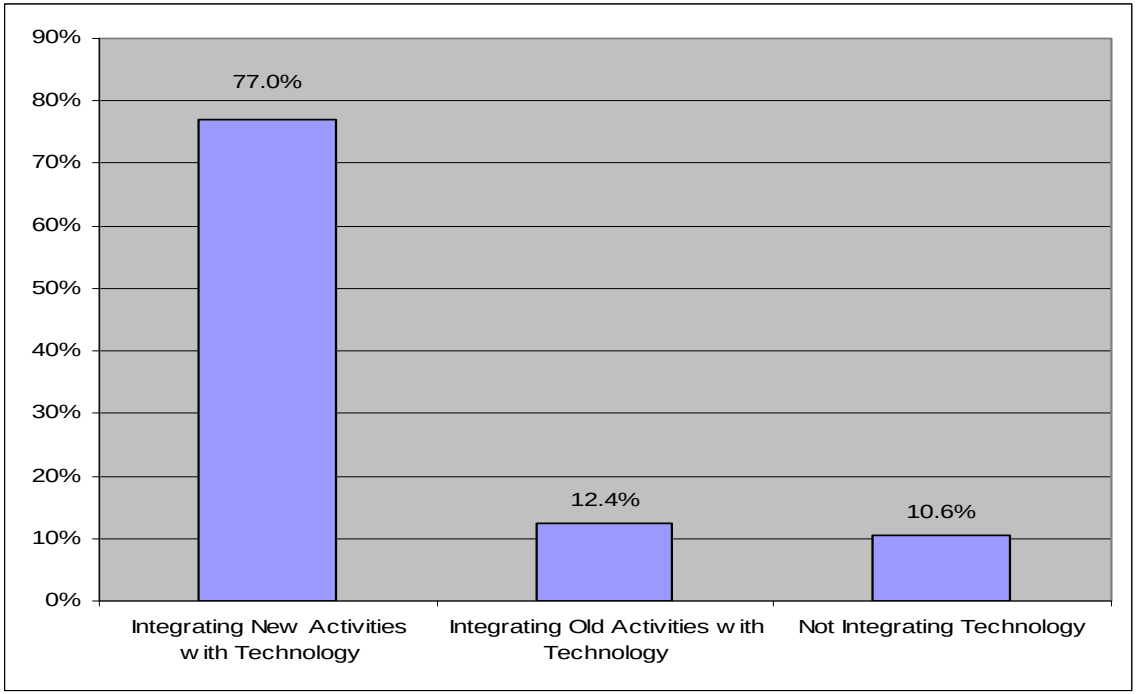
Unit Plan Implementation: Regional



Teachers from United States and China report higher frequency of implementing all or part of their unit plans.

Link to Highlights

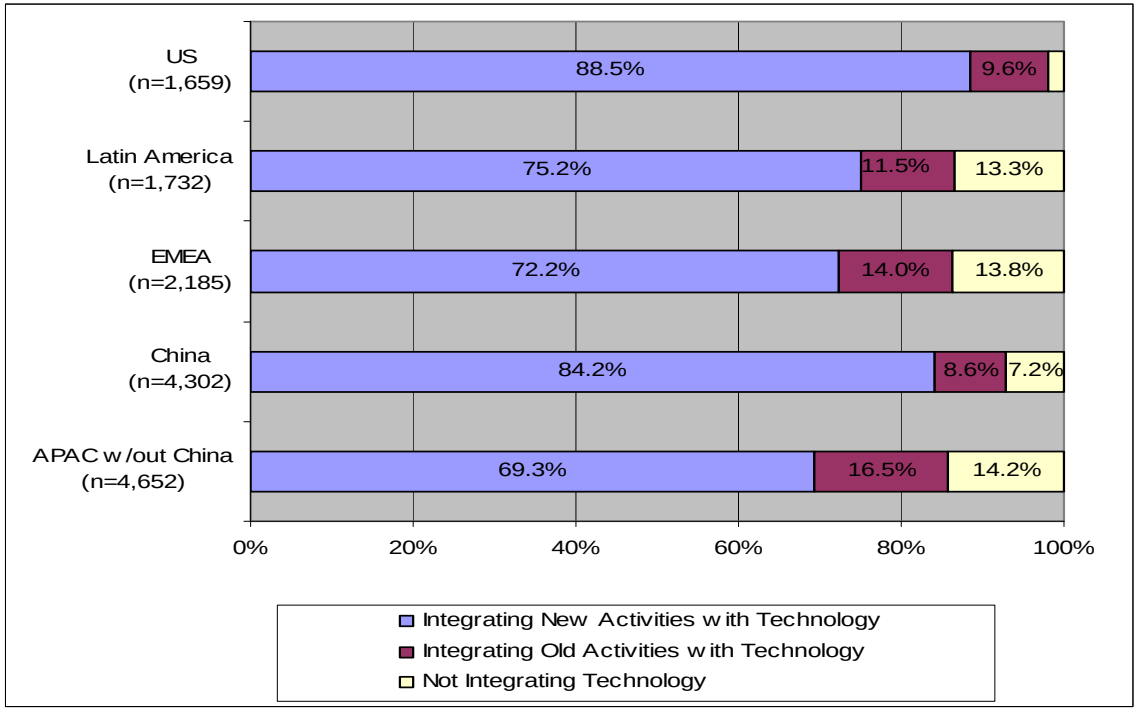
Increased Use of Technology with Students: World-wide



A large majority (77%) of teachers indicate that they are integrating technology in new ways upon completion of the training program.

Link to Highlights

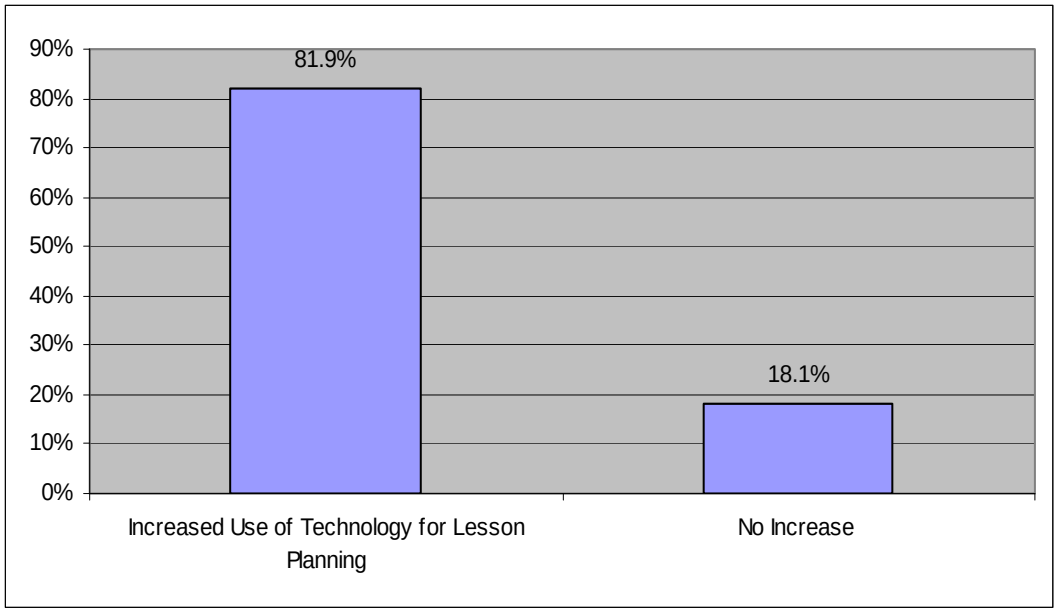
Increased Use of Technology with Students: Regional



Significant numbers of teachers across all regions are integrating new technology activities with their students.

Link to Highlights

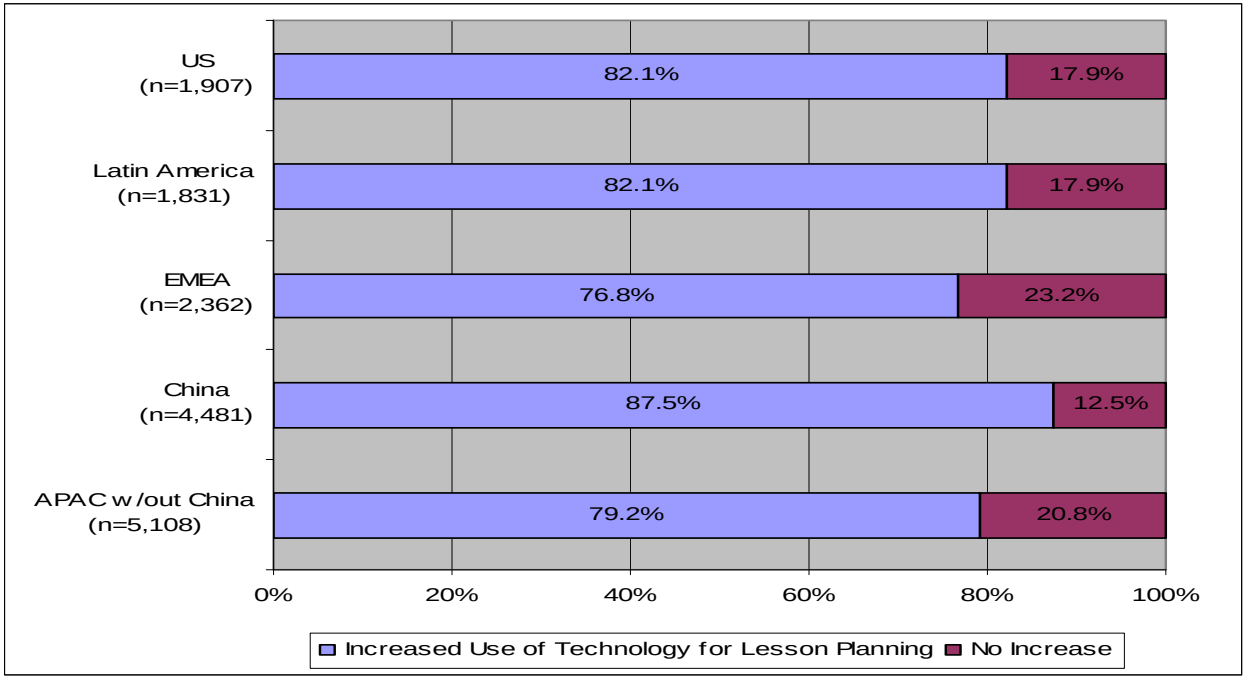
Increased Use of Technology for Planning and Preparation: World-Wide



The data suggests that the Essentials Course is successful at helping teachers increase their usage of technology for planning and preparation.

Link to Highlights

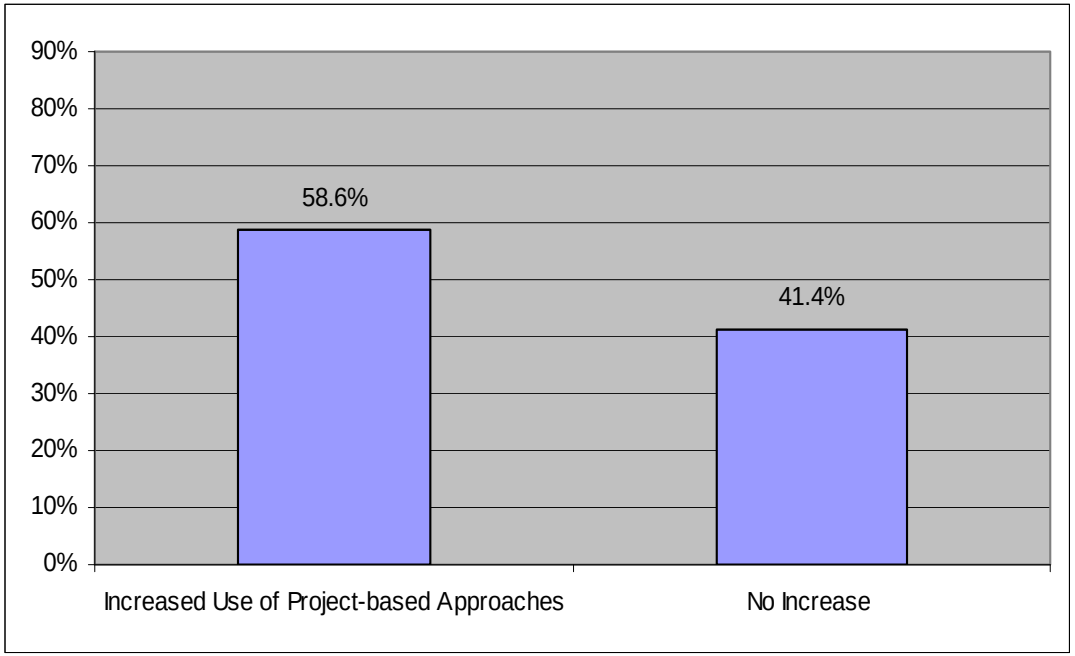
Increased Use of Technology for Planning and Preparation: Regional



Teachers in all regions are increasing use of technology to support their own professional practice.

Link to Highlights

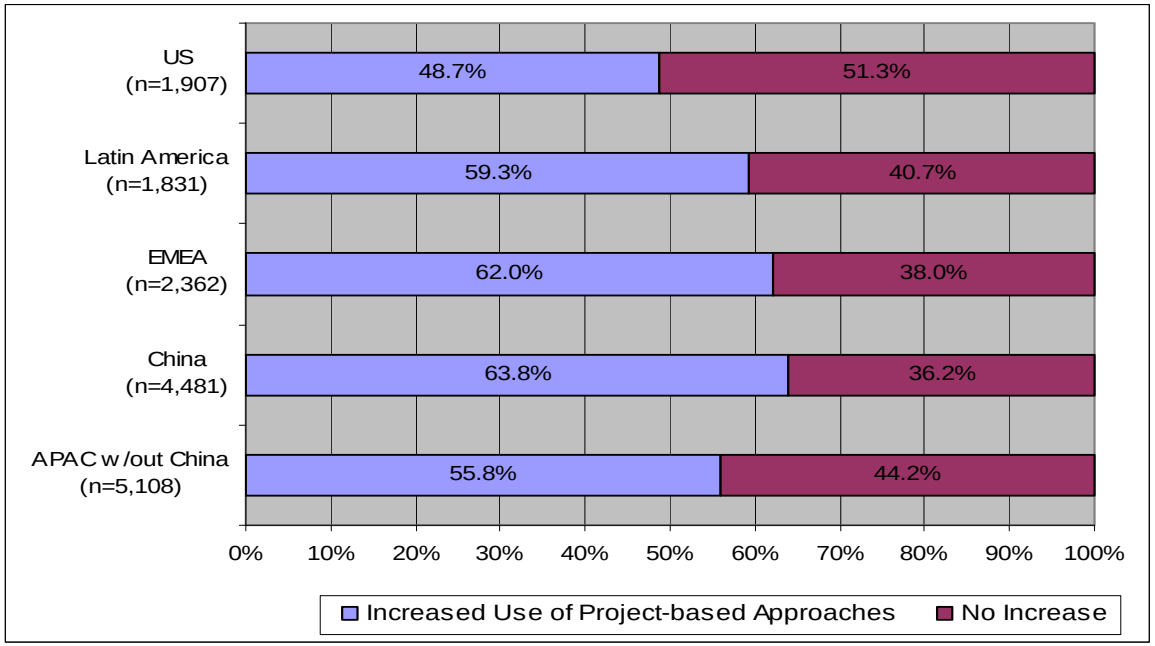
Increased Use of Project-based Approaches: World-wide



Over half (58.6%) of the teachers indicate increasing their use of project-based approaches to teaching.

Link to Highlights

Increased Use of Project-based Approaches: Regional



- Across all regions, except US, over half of the respondent teachers have increased their use of project-based approaches.
- China displayed the greatest percentage of teachers who increased their use of project-based pedagogy (63.8%) closely followed by EMEA region teachers (62.0%).

Link to Highlights

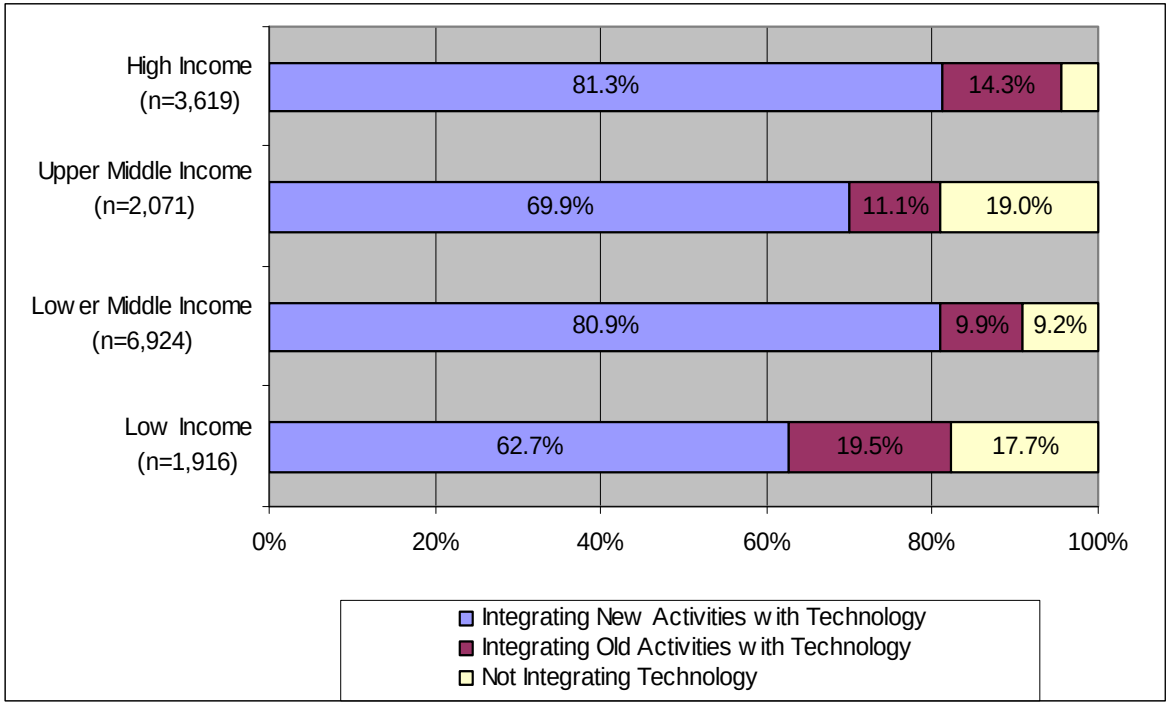
Findings: Indicators of Success by Income Level

The 2005-2006 impact survey data suggest that there is no strong connection between income level and program success. Previous data have suggested that teachers from high income countries were more likely to integrate new technology activities. However, high percentages of teachers at different income levels are increasingly able to integrate ICT.

Perhaps as the Essentials program matures in many countries and policy and educational environments improve, past challenges, like lower levels of familiarity with project-based teaching and less ICT access, are being reduced.

Link to Highlights

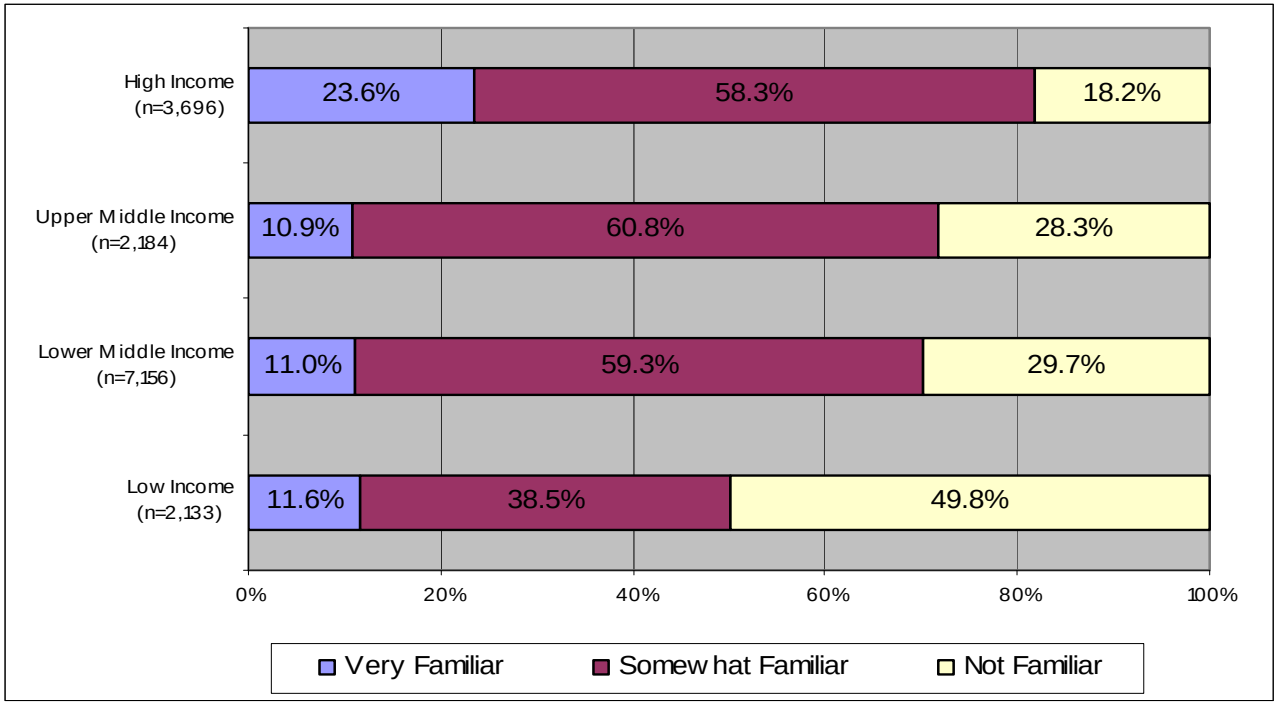
Findings: Income Level by Integration of Technology Activities



Teachers in lower middle income countries are as likely as teachers in high income countries to integrate new technology activities with students.

Link to Highlights

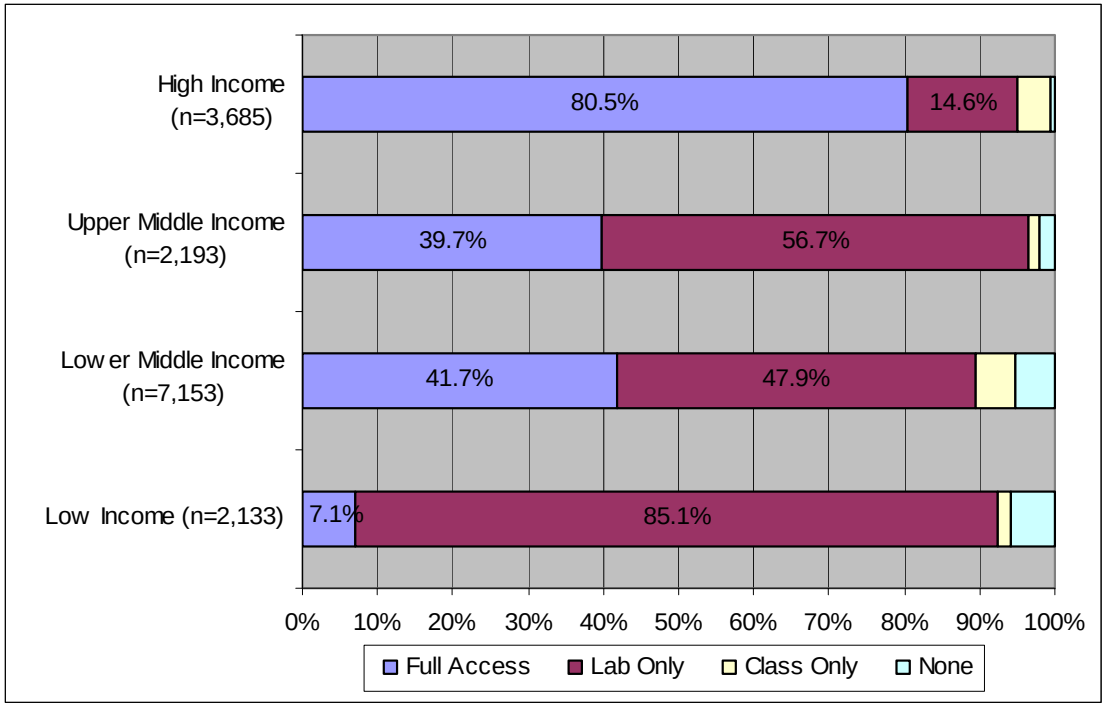
Findings: Income Level by Familiarity with Teaching Methods



The data indicate that lower income countries have disproportionately higher percentages of teachers with little prior knowledge of the targeted teaching methods.

Link to Highlights

Findings: Income Level by Availability of Computing Resources



Teachers from the lower income countries also show a pattern of weaker access to computing resources, they are more likely to only have access to lab computers than teachers in higher-income countries.

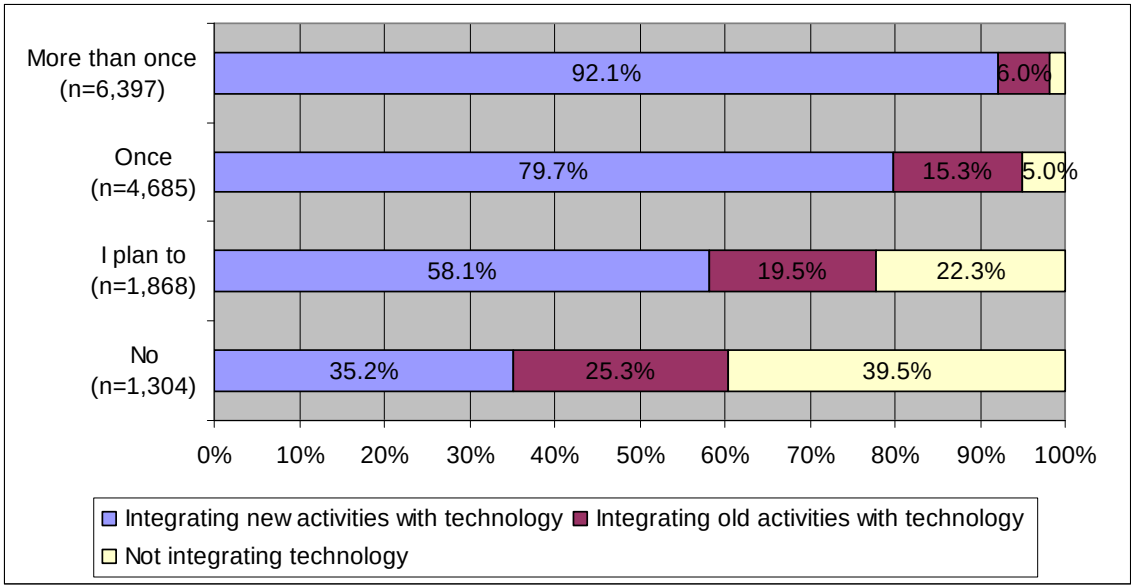
Link to Highlights

Findings: The role of implementing the unit plan

The data suggest that teachers may be using their Essentials Course unit plan as a “testing ground” for new practices before extending the use of these methods to other topics or activities.

- The survey data illustrate a clear relationship between teacher implementation of all or part of the unit plan and shows their increased use of the technologies and teaching methods emphasized in this training.
- Repeated implementation of all or part of the unit plan is associated with a greater likelihood of increased use of the targeted practices. This relationship appears stronger for integrating new technology activities than for adopting new teaching methods.

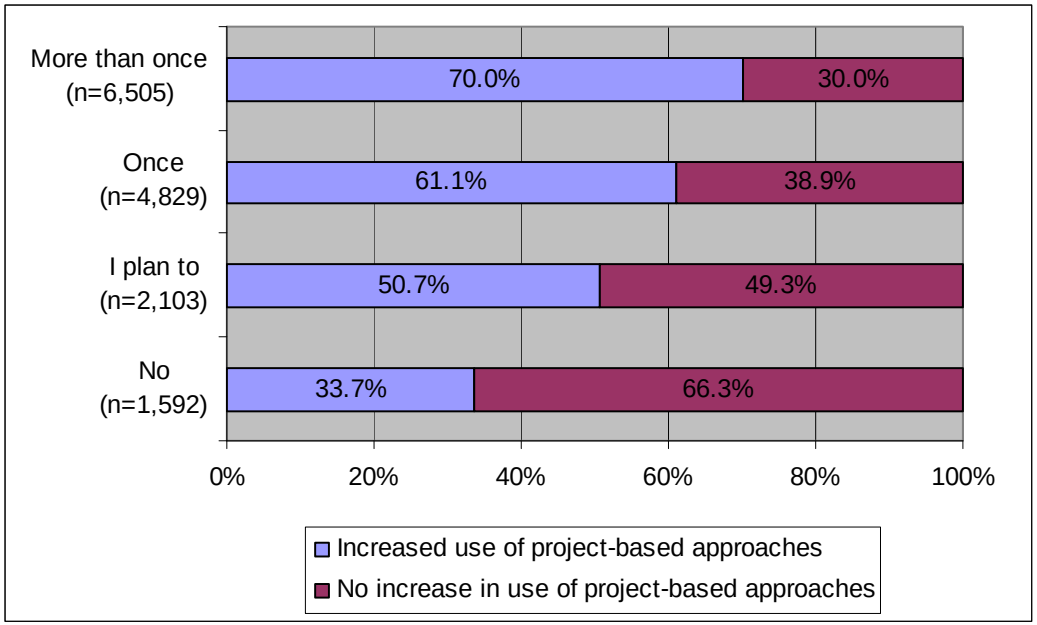
Findings: Unit Plan Implementation by Integration of Technology Activities



The data illustrate a clear relationship between teacher implementation of all or part of the unit plan and the integration of new activities with technology.

Link to Highlights

Key Findings: Unit Plan Implementation by Increased Use of Project-based Approaches



The more often teachers implemented their unit plan the more likely they were to increase their use of project-based approaches.

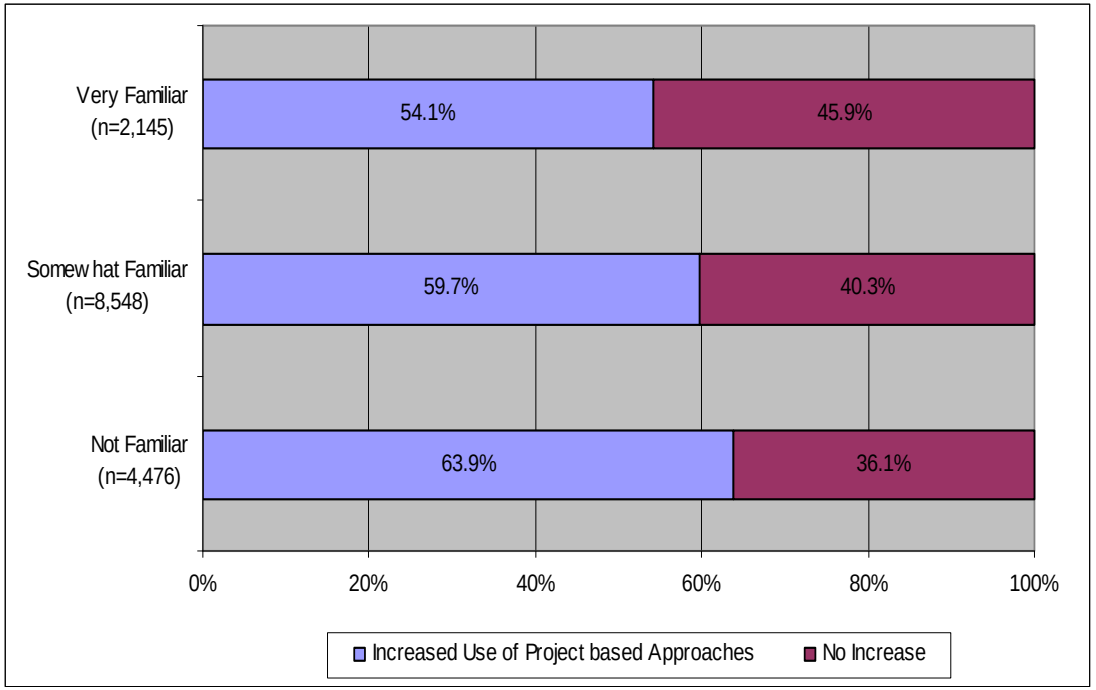
Link to Highlights

Findings: Indicators of Success by Familiarity with Teaching Methods

The survey data indicate:

- Even teachers who report no prior familiarity with project-based or student-centered teaching methods experiment with the teaching methods promoted in the training when they return to their classrooms. This suggests that the training motivates teachers to use their new knowledge in the classroom, regardless of the novelty of these ideas to the participating teachers.

Key Findings: Familiarity by Use of Project-based Approaches



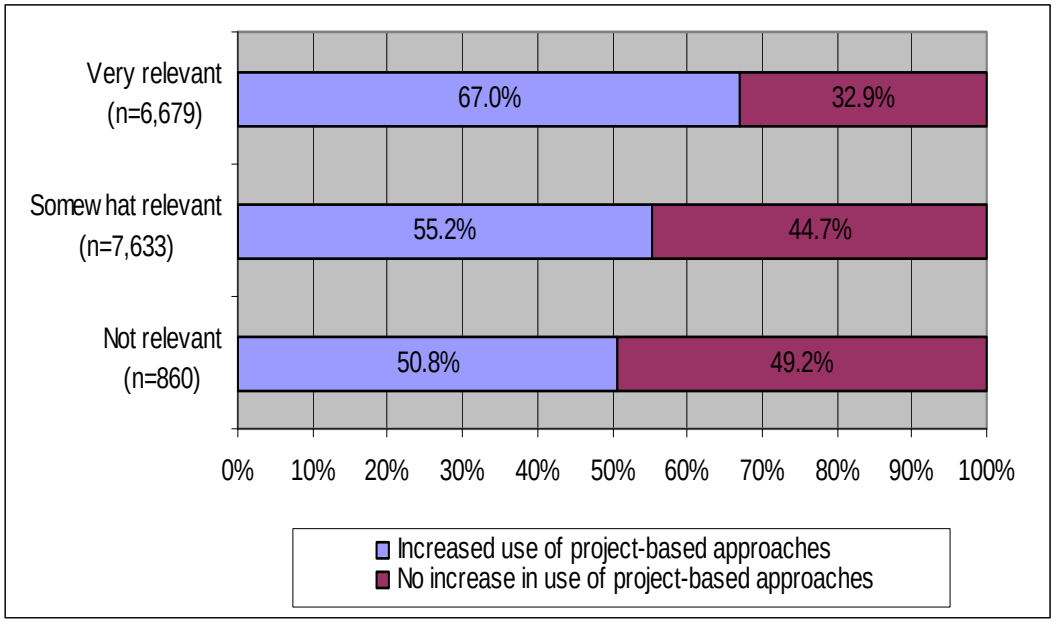
There is a noticeable increase in the use of project-based approaches after their training for teachers at all levels of prior familiarity with the teaching strategies presented in the training.

Link to Highlights

Findings: Relevance by Indicators of Success

Teachers who do not consider the teaching methods to be relevant are less likely than teachers who saw some degree of relevance to report integrating new technology activities into their teaching.

Findings: Relevance by Increased Use of Project-based Approaches



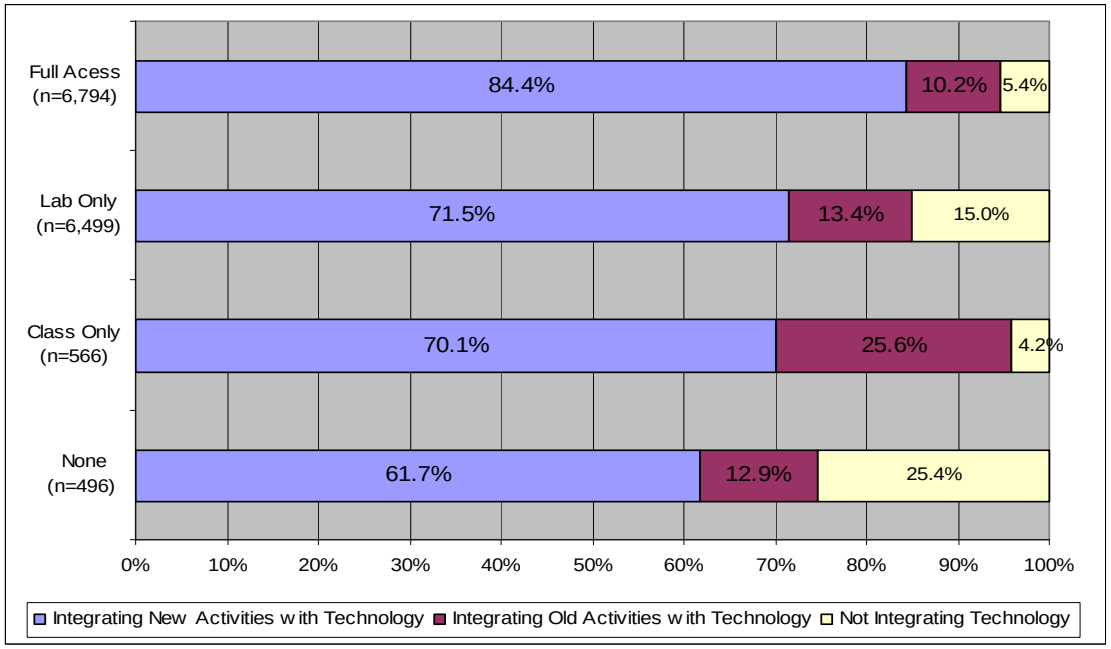
67% of the teachers who found the teaching strategies relevant had increased their use of project-based approaches in comparison to 50.8% of the teachers who did not find the teaching strategies relevant.

Link to Highlights

Findings: Access to Computing Resources

A sizeable portion of teachers are increasing their usage of technology for these student-centered activities at all levels of infrastructure availability. But, the survey results suggest classroom access and lab access support frequent use of technology activities for students.

Findings: Access to Computing Resources by Integration of Technology Activities



- Teacher integration of new activities with technology is moderated by availability of technology resources.
- More than half (61.7%) of respondents who report having no access to computing resources report integrating new activities with technology.

Link to Highlights

Appendix

Appendix A

2005 Intel® Teach to the Future Impact Survey

1. Which Intel® Teach to the Future 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
Jan.-March, 2001
April-June, 2001
July-Sept., 2001
Oct.-Dec., 2001
Jan.-March, 2002
April-June, 2002
July-Sept., 2002
Oct.-Dec., 2002
Jan.-March, 2003
April-June, 2003
July-Sept., 2003
Oct.-Dec., 2003
Jan.-March, 2004
April-June, 2004
July-Sept., 2004
Oct.-Dec., 2004
Jan.-March, 2005
April-June, 2005
July-Sept., 2005
Oct.-Dec., 2005

3. Since completing your Intel® Teach to the Future training, how many times have used your:

	More Than 10 Times	*4-10 Times*	*1-3 Times*	*Not At All*
a) Intel® Teach to the Future manual?				
b) Intel® Teach to the Future CD-ROM?				

4. Since completing your Intel® training how many times have you visited the Intel® Innovation in Education website?

More than 10 times
4-10 times
1-3 times
Never / Don't know

5. Since your training, have you implemented some or all of the unit plan you develo your Intel® Teach to the Future training?

Yes, more than once
Yes, once
Not yet, but I plan to use the lesson before the end of this school year
No, never

6. Since completing your Intel® Teach to the Future training, how often have you had your students engage in technology-integrated lessons?

Daily
Weekly
Monthly
Several times a year
Once a year
Never **(Skip Question 7)**

7. Have you used technology with your students in new ways since you participated in the training?

Yes
No

Question 8 is only for teachers who DO NOT use technology with their students

8. Did any of the following reasons influence your decision not to use technology with your students? Please indicate the extent to which you agree or disagree with each statement.

	Strongly Disagree 1	*Disagree 2*	*No Opinion 3*	*Agree 4*	*Strongly Agree 5*
a) Not enough computers were available.					
b) The necessary software was not available.					
c) You did not have adequate access to the Internet.					
d) The lesson did not fit well into your curriculum.					
e) The lesson would not help your students meet required learning goals.					
f) You did not feel confident enough in your technology skills.					
g) You did not have enough planning and preparation time.					
h) You did not have adequate administrative support.					
i) You did not have adequate technical support.					
j) You did not have adequate instructional support.					

(Skip to Question 13)

Link to Overview

Questions 9 to 12 are for teachers who HAVE used technology with students

Think of a class in which you implemented a particular technology-integrated lesson or activity. Please answer the following questions about that experience.

9. How many students were in that class?

1-10
11-20
21-30
31-40
41-50
51 or more

10. Below are some possible objectives of that lesson. Please mark an "X" beside the ONE goal that was most relevant or important for that lesson.

Students learn curriculum content
Students work on basic skills (such as math and reading)
Students express their ideas/opinions by creating multimedia products
Students conduct research
Students gain preparation to succeed in the workforce
Students present information to an audience
Students improve their computer skills
Students learn to work in groups
Students learn to work independently
None of the above

11. Please indicate the degree to which you agree or disagree with each statement about the impact of this technology-integrated lesson on your students.

	Strongly Disagree 1	*Disagree 2*	*No Opinion 3*	*Agree 4*	*Strongly Agree 5*
a) Students were motivated and actively involved in the lesson.					
b) Students worked together more often than in previous, comparable assignments.					
c) Technology-integrated lessons addressed students' different learning styles.					
d) Student work showed more in-depth understanding of content than in previous, comparable assignments.					
e) Students were able to communicate their ideas and opinions with greater confidence than in previous, comparable assignments.					

12. The following statements are about challenges you may have faced while implementing this technology-integrated lesson or activity. Please indicate the extent to which you agree or disagree with each statement.

	Strongly Disagree 1	*Disagree 2*	*No Opinion 3*	*Agree 4*	*Strongly Agree 5*
a) It was difficult to manage your students on the computers.					
b) Not enough computers were available.					
c) You did not have adequate access to the Internet.					
d) The class time or lab time that was available was too short.					
e) You did not have strong enough computer skills.					
f) Many students did not have strong enough computer skills.					
g) You did not have adequate administrative support.					
h) You did not have adequate technical support.					
i) You did not have adequate instructional support.					

13. In addition to its focus on technology skills, the Intel® Teach to the Future training suggests strategies that participants might use to incorporate project-based lessons into their teaching. Please indicate whether the teaching strategies presented in the training were new or relevant to your teaching.

	Not True At All 1	*Somewhat True 2*	*Very True 3*
a) The teaching strategies were new to me.			
b) The teaching strategies were relevant to my teaching goals.			

14. Since completing your Intel® Teach to the Future training, has there been a change in how frequently you do the following?

	Do This Less 1	*No Change 2*	*Do This More 3*	*Not Applicable 4*
a) Use a textbook as a primary guide for instruction.				
b) Use Essential Questions to structure lessons.				
c) Access the Internet to aid in developing lessons or activities.				
d) Use a computer for administrative work (for example, grading, attendance, creating handouts).				
e) Present information to students using computer technology.				
f) Use rubrics to evaluate student work.				
g) Have students review and revise their own work.				
h) Have students present their work to the class.				
i) Have students engage in independent research using the Internet.				
j) Have students work on group projects.				
k) Have students choose their own topics for research projects.				

15. How many computers are in your classroom (the room(s) in which you primarily teach, not the school computer lab)?

0 computers **(skip to question 17)**
1 computer
2-4 computers
5-7 computers
More than 7 computers

16. Do the computers in your classroom have Internet access?

Yes, all of them do
Yes, some of them do
No, none of them do

17. In your school do you have computer labs or media centers?

Yes
No **(skip to question 22)**

18. Do some or all of the computers in the labs/media centers have access to the Internet?

Yes
No

19. In total, how many computers are available in the computer labs or media centers? (Please give a combined total if your students have access to multiple labs or media centers.)

1-10 computers
11-20 computers
21-30 computers
31- 40 computers
41 or more computers

20. How often do you work with your students in the computer lab or media center?

Daily
Weekly
Monthly
Less than once per month
Never

21. How easy or difficult is it to schedule time in the computer lab/media center?

Very difficult
Somewhat difficult
No opinion
Easy
□ *Very easy*

22. Do you have your students use computers at home to do their schoolwork?

Yes
No

23. To do their schoolwork, do you have your students use computers outside of school at a community center, library, or public technology center?

Yes
No