# Evidence of Impact Intel<sup>®</sup> Learn Program Impact Evaluation

## Evaluation Results for the Intel Learn Program

The Intel<sup>®</sup> Learn Program produces major effects—through Intel Learn, children now use technology on a regular basis in regions of the world where historically they have had minimal or no access to technology.

Evaluation of Intel Learn confirms that in terms of three main program goals—increased technology literacy, use of critical thinking, and collaboration—the program is succeeding in all regions where it is implemented.

Most students in every country demonstrate that within the instructional and curricular environment of Intel Learn they are able to create digital products that meet and in many cases exceed the demanding rubrics used to assess student outcomes. As students create digital products, they gain experience in technological literacy, critical thinking, and collaboration.

#### The Intel Learn Program

Intel Learn is bringing the future within reach for tens of thousands of young people in developing countries around the world. The program is targeted to young learners in communities with little or no access to computers in homes or schools. Through this program, young people acquire valuable technical skills through hands-on learning in informal learning environments.

While developing these capabilities, learners also master skills such as technology literacy, critical thinking, and collaboration. These skills are necessary to compete in the 21st century. To develop skills in analysis, problem solving, and adaptability, students must use today's technology in relevant, hands-on learning activities that require higher-order thinking.

#### **Evaluation of the Program**

SRI International evaluated Intel Learn using a comprehensive approach combining such simple measures of student engagement as attendance figures with staff reports about student learning and achievement, site observations, and analysis of student work samples. This wide-ranging research enabled SRI to develop a clear picture of how well the program is meeting its goals and effecting positive outcomes in students.

SRI International collected data for two years from the following eight countries:



#### **Engagement and Perception**

For voluntary, after-school programs, one of the most obvious and important measures of learner engagement is attendance. If students do not find a program to be valuable, relevant, and interesting, they simply stop participating in the program. Country education managers have consistently reported that the Intel<sup>®</sup> Learn Program attracts very high rates of continued attendance.

In fact, the international average of program completion rates is a remarkably strong 95 percent. Observations and staff reports also reveal that students are overwhelmingly enthusiastic and engaged in the program activities. Students highly value the new skills they learn as well as the collaborative and explorative learning experiences they share.

	Start	Finish	Average
Brazil	1,686	1,319	78%
China	54,228	53285	98%
Egypt	2613	2427	93%
India	2131	2119	99%
Mexico	11,048	8839	80%
Turkey	1862	1718	92%
Russia	861	707	82%
Total Sample	74,429	70,414	95%

#### Program-wide completion rate of 95%

In a sample of CTCs in seven of the eight countries reporting as of February 2006, the overwhelming majority of learners who start the program successfully complete it.

**Note:** The data represent a large sample of CTCs but not the entire set of CTCs or the entire learner population for each country reporting.

#### Students Are Developing Technology Literacy

In terms of the impact on students, one key measure is the assessment by the Intel Learn staff of whether students are prepared in terms of technical skills to create final projects. Because the curriculum is progressively complex, with each activity building on the skills of previous activities, this assessment of student readiness is an indication of whether students have developed their technological literacy to the level required by the program. Overall, staff reports reflect that students are improving in technology skills and are prepared to create final projects.



# Learners are prepared to create their final projects

Across countries, staff members report that learners are well-prepared to undertake their final projects by the time they begin them. This means that learners have the technological, analytical, and collaborative skills necessary to undertake larger projects with their peers. (Rating of 1 to 5 from staff survey; all eight countries reporting.)

#### **Student Projects Meet or Exceed Expectations**

Local evaluators also analyze a sample of student work products according to rubrics based on the required attributes of the projects described in the curriculum.

The samples are rated as Needing Improvement, Approaching Expectations, Meeting Expectations, or Exceeding Expectations.

The standards used to measure the expectations are complex. In fact, in many cases, work samples are awarded a rating of Exceeding Expectations if they demonstrate all the required technical components and involve a high level of creativity and originality. Even samples rated as Approaching Expectations demonstrate a high level of achievement as well as creativity, but they might not include every component called for in the project directions. Despite the strict measurement strategy, approximately 75 percent of student work samples meet or exceed expectations.

**Note:** The sample rubric shown here is the most current version, reflecting edits to versions used in earlier research.

#### Evidence of Impact Intel<sup>®</sup> Learn Program Learner Work Evaluation Rubric

This rubric is designed to help evaluators assess learners' work products and processes. The "Required Elements" category refers to the "Review it" section at the end of each activity or project. Note that it is not expected that all aspects of a piece of learner work will fail which just one level. You must assign a level by determining which category has the most evidence that applies to the product, meaning that if the product meets most of the requirements of "Exceeding Expectations," the product should be marked "Exceeding Expectations," even if it is "Meeting Expectations" in one or two ways.

Expectations	Overall, the learner's work goes beyond the requirements of the task and stands out as an excellent example of this kind of product (starms survey, a dwe temement, and so forth) Skill were used tomake a highly original product that reflects the learners' unique and oreat he ideas. All the "Review It" elements were completed, and one (or more) of the dailenges war also attempted. There is evolute, and the choices for oblins, sizes, words, and other detail dearly communitate the learners' message.	
Meeting Expectations	Overall, the karner s' work meets the requirements of the task and is a good example of this kind of product (stamp, survey, advert beament, and so forth). Skills were used to make an original product that reflects the karners' one lobes, and all the "Neview the learners were completed. There is evidence that the karners's are able to use the technology skills needed to make the product, and the choices for colors, sizes, words, and other details communicate the karners' message.	
Approaching Expectations	Overall, the karner s' work approaches the requirements of the task and includes some but not all elements of a good example of thiskind of product (stamp, survey, advertement, and so forth). Silki were used to make a somewhat or ginal product that reflects some of the learners' own blast, and most of the "Review It" elements were completed. There is evideno that the learners' could mprove their use of the technology silk needed to make the product, and the choices for ooker, sites, words, and other details only partly communicate the learners' messa get.	
Needing Improvement	Overall, the kerner's work is below expectations and needs improvement to be a satisfactory example of this type of product (stamp, survey, advert kernert, and so for th) The work wasmostly opoled from an example or somecene else's work, and few, if an of the "Review it" elements were completed. The work also shows that the learners need help with the technology skills needed to make the product, and the choices for colors, size words, and other details distract from the kerner's message.	

### **Further Reading**

(2006). Review of evaluation findings for the Intel<sup>®</sup> Learn Program. Menlo Park, CA: SRI International.