

OLPC Effectiveness Monitoring & Evaluation Plan: Educational Impact Assessment

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I. Background

OLPC Afghanistan wishes to generate statistically significant pedagogical evidence on the impact of the OLPC Laptop in education. Our hypothesis is that the XO laptop will not only improve standard measurements of educational achievement but also encourage creativity and resourcefulness which is also of the utmost importance.

In order to measure this tests will be given to all children before receiving the laptop and at regular intervals afterwards to measure the impact on reading, writing, mathematics, comprehension, art, creativity / resourcefulness.

Children will be tested before receiving the laptop and before they are aware of the project itself. A control group will be selected of similar age, achievement, and economic circumstances which will be tested using the same test at the same interval as those schools that have received the OLPC Laptop. One test paper shall be made and distributed using standard testing procedure of not more 2hrs in total.

Though it is of course impossible to measure the impact of the project through quantitative testing we believe it is important to establish baseline measurements.

At present the OLPC Laptop in Afghanistan is being distributed to Grade 4, 5, and 6. The test papers will be collected from the school in a sealed format and marked by the OLPC Afghanistan team.

II. Goals and Objectives for monitoring:

A. Goals

- To see the Effectiveness of OLPC project on education of Afghanistan

B. Objectives

- To see and measure the effects of OLPC on reading, writing, and arts) skills of kids in the schools where XO is deployed compared to other schools.
- To see and measure the effects of OLPC on Active learning and creativity of kids. We shall attempt to measure this using problem solving questions and persistence testing of difficult problems.

III. Monitoring Tasks

A. Monitoring and assessment of reading skills

- Children will be given an unseen story and be asked questions to test their comprehension of the story and the characters etc. in it.
- Marks will be awarded for correct answers / higher marks will be given for more difficult questions.

B. Monitoring and assessment of writing skills

- A comprehension test will be done where children will listen to a recording and the tape shall give them instructions to write the answers to questions about the recording.
- A small dictation test will be done on key words of appropriate difficulty to test spelling / application of grammar.

C. Monitoring and assessment of art skills The test paper will have a section for drawing key shapes with instructions. Space will be given in the test paper for drawing.

D. Monitoring and assessment of Mathematics

- Key mathematical questions related to the syllabus for the grade will be given. This shall be divided into theoretical (un-applied) mathematical questions and practical application questions (e.g. purchase of goods, speed of car, etc.)

E. Monitoring and assessment of Active learning skills of kids

- A practical problem will be given and children will be asked to draw a solution to it (e.g crossing water given certain materials, etc)
- A complicated or impossible riddle can be given and indications of persistence shall be assessed (e.g. steps taken to attempt to solve the riddle).

F. Monitoring qualitatively the effect on teachers using a focus group

- Use of various teaching methods / more active learning
- Ability to access reference material / self development impact

Time line

- The first evaluation will occur shortly after deployment(28th of June-2nd of July) second evaluation will be after 50 days considering the examinations and summer holy days of schools (23rd August-31st August) and the last will be after one month (4^h October - 8th October)

Reports of Monitoring

- Reports of every monitoring task will be prepared by monitors and a general report of every evaluation phase will be prepared as will
- A final report will be prepared after the last evaluation phase, comparison of data collected from 3 phases and measuring the quantifiable effects of the OLPC project on Education in Afghanistan.

Data management of OLPC monitoring and evaluation

- Monitoring data will be captured to an encrypted database / files in the OLPC Afghanistan office in PAIWASTOON and hard copies will be destroyed. Only those staff that need access for research purposes will have access to the database upon signing confidentiality statements.
- Anonymized reports on the effectiveness or otherwise of the XO on Education will be made available as regularly as possible through the normal channels.

Research Contact

- Anyone interested in undertaking further research on OLPC / Education impact is invited to contact :
 - Mr. Waris Niazi (waris@paiwastoon.com.af) (User Service Director, OLPC Afghanistan)
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