

ES.259 ICT SOLUTIONS FOR AFRICA

Project Proposal: The Production and Distribution of Landmine and Unexploded Ordinance Awareness Software

Mark Scott
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Project Introduction

Landmines and unexploded ordinance (UXO) kill or severely injure over 20,000 people annually¹. Injuries typically result in the amputation of one or both legs, arms, hands and severe damage to torso, face or eyes. There are currently over 100 million mines still stockpiled around the world². A disproportionate number of casualties resulting from landmine or UXO accidents are children. This is as a result of lack of education. Landmines and UXO are often collected and used by children as toys, unaware of the lethal contents within. Children frequently are unable to recognize landmines or UXO, and are unfamiliar with mine markings, common mine locations and recommendations in the event of finding a mine.

The project is to produce an item of software for use in educating children on the dangers of landmines and UXO in an enjoyable manner. The software will include landmine databases, quizzes, photographs and a comprehensive teaching wizard. It will be easy to distribute to centers around Africa and other mine inflicted parts of the world. Furthermore, the software could be distributed to other countries for raising awareness of the day-to-day living with landmines and UXO.

Background – The Pain

Africa is one of the most mined continents in the world. Anti-personnel mines, anti-vehicular mines and UXO are the remnants from Africa's numerous civil wars and conflicts. Common mined areas include villages and their surrounding agricultural landscape. After the war, when refugees return to their villages, they find them riddled with mines. The social and economic effect is enormous. However, through suitable education on mine-safety, it is possible to mitigate the negative effects of mines and UXO.

There is currently no standard education practice in place for African children. An easily distributed, cheap educational tool would greatly improve many children's access to mine knowledge.

Idea Implementation

The main task of this project is in the programming of the computer software. The software will include the following features:

- A documented 4-session course on landmine and UXO safety for teachers
- A Picture archive of mines and UXO with descriptions and comments
- A quiz and game section to test the knowledge of the children. This will include naming mines, scrutinizing photographs and producing minefield maps.
- An archive of landmine incidents with advice on mitigation of effects and risks

Once the software has been produced, it can be made freely available and distributed to educational systems across Africa.

Potential Obstacles

Many areas in Africa do not have access to computers for use of the software. It is possible in these circumstances to produce paper copies of the course and quizzes, although this will be harder to produce and distribute.

The outreach programme required to raise awareness in the product amongst teaching and community circles in Africa will be difficult to pitch. It will be best to approach outreach from both the top-down and the bottom-up concurrently. In other words, connections will be established with both the central education system and individual education centers.

Project Funding

Funds will be required for the following areas:

- Collection of data:* Intensive research will be required to collect mine data. Advice will be sought from mine experts.
- Programming:* Programmers will be required for the production of the software after research has been completed.
- Production:* The software will be burnt onto CD's.
- Distribution:* An outreach programme will be required to inform and supply the teachers with the software.
- Training:* The teachers will require a small amount of training in the use of the software. Most of this can be built in to a special teacher's section of the software.

Funds can be obtained by several international development organizations. These could include demining organizations such as Halo trust, or NGO's such as Oxfam. The UN might also provide funding for such a project, (UNICEF), or finally, funding can be sought from the governments in individual countries badly affected by the landmine problem.

The Team

The team will comprise of: 1 coordinator, 2 data collectors, 2 programmers and 5 outreach staff – requiring a total team of 10 people.

Timeline

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| July 2006 | - Gain funding |
| July 2006 | – Dec 2006: Data collection |
| Sep 2006 | – July 2007: Software production |
| July 2007 | – Production |

July 2007 onwards – Outreach and distribution

¹ <http://www.landmineaction.org/problem.asp>

² <http://www.landmineaction.org/problem.asp>

MIT OpenCourseWare
<http://ocw.mit.edu>

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