

Product Brief Intel® skoool™ Healthcare Education

### Intel<sup>®</sup> skoool<sup>™</sup> Healthcare Education Platform

A practical approach to address critical shortages of healthcare workers in developing countries

### **Product Overview**

The Intel® skoool™ Healthcare Education Platform is a multi-media content delivery and assessment solution that enables education to take place anywhere, anytime. It is designed to help address the critical shortage of healthcare workers, especially in developing countries where health facilities and faculty are in short supply and access to the Internet is not always possible. It enables health institutions to:

- Provide all levels of healthcare workers and medical students with access to rich, local-language content with or without the Internet
- Deploy numerous forms of interactive healthcare education and training multi-media content to help maximize learning and educational experiences, and gain new and improve existing skills
- Verify user participation and understanding via associated assessments which are stored and reported over the Internet as connectivity is available
- Facilitate uniformity in training and education of health workers and students by providing consistent video and presentation materials in their local language
- Easily maintain synchronization of multi-media content and assessments in challenging environments such as remote rural areas
- Aggregate multiple sources of third-party content which can be turned into course modules
- Maintain quality by using a platform available at no charge through an Intel® Open Access License agreement



### Intel<sup>®</sup> skoool<sup>™</sup> Healthcare Education Platform Features

The Intel skoool Healthcare Education Platform provides a crucial capability for Ministries of Health and Ministries of Higher Education to help improve capacity and focus on the priority needs required for skills building. It is designed to be both more scalable and more sustainable versus classroom-based capacity building methods by using ICT to reach people where they live and work. It also yields cost savings by reducing facility use, travel, lodging, shipping, and communications.

The platform currently consists of an Adobe AIR\*-based application running on Microsoft Windows\* OS for content consumption and a LAMP (Linux\*, Apache, MySql, and PhP) web server application for content publication and administrative functions.

#### The power of multimedia education

The Intel skoool Healthcare Education Platform displays content in existing standard formats including html, Adobe Flash\* (including video), and Adobe PDF\*, making it easy to create new or repurpose existing materials to provide rich learning experiences in local languages. The simple user interface can accommodate both first-time users and more experienced users.

#### Reaching the most challenging locations

Rich digital content is often large in size, and broadband connectivity is still intermittent or non-existent in many locations. To address this issue and facilitate content distribution, skoool Healthcare Education courses can either be imported from another PC or thumb drive or downloaded from the Internet directly. Once obtained, this content can be started fresh or resumed from a previous session. Modules can be accessed over and over again without Internet connectivity. Low-power mobile PCs enable use on the go.

## Closing the loop: assessments enable ongoing measurement and evaluation

The Intel skoool Healthcare Education Platform supports the Question and Test Interoperability (QTI) specification, enabling embedded formative and summative assessments within course modules. Assessment results are then stored on the PC and reported back to administrators when the client application can connect to the Internet. A simple colorcoded table displays course titles along with due dates, completion status, and the latest assessment results.



## Strategic planning and well-managed execution of healthcare education and training programs

The server application enables Ministries of Health and Ministries of Higher Education to deliver aggregated content into course modules, assign those modules to user roles via programs with due dates, and to track assessment results on group and individual levels. Administrators can easily manage user accounts and track user activity using dashboards. With these features it's possible to identify gaps in knowledge and skills of groups or individuals, identify trends and effectiveness of specific training modules, and help standardize and improve healthcare education and training across the healthcare sector.

# Healthcare education and training curriculum and content strategy

Currently enabled multi-media content includes flash-based learning objects and assessment focused on maternal, infant, and child health to help improve the knowledge and skills of the front-line health worker and midwives. Hesperian (www.hesperian.org), the publisher of books such as *Where There Is No Doctor* and *A Book For Midwives* is a typical example of the content providers using the Intel skoool Healthcare Education Platform.

Intel continues to build out a portfolio of content sourced from a wide range of third-party content providers, including local and international non-profit organizations, non-governmental organizations (NGOs), and academic institutions.

#### A flexible, general-purpose platform that meets local needs

The Intel skoool Healthcare Education Platform simplifies customization and localization such as local language support. For example, the Government of Sri Lanka is deploying the Intel skoool Healthcare Education Platform with language support including English, Sinhalese, and Tamil across local education and training content. The client application supports language localization of the user interface, SCORM-compliant content, and assessments. The server application also supports language localization and can be integrated with existing learning management systems.

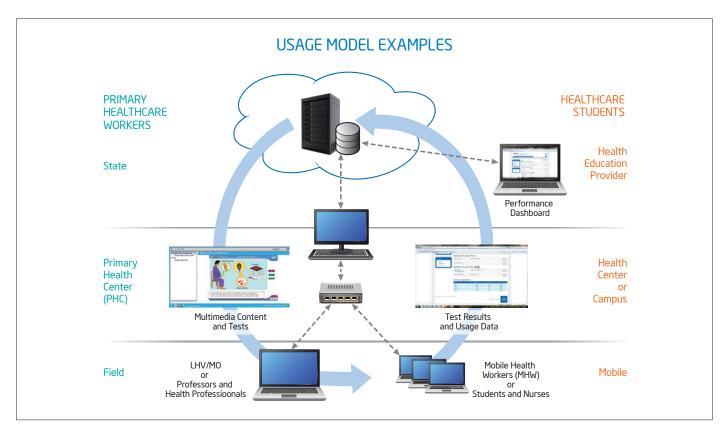


Figure 1. High-level architecture for training and education of healthcare workers and students.

Danger Signs skoool Object C Quiz Danger Signs Quiz Danger Signs Quiz See through skin Hospital
Sovere anemia: The woman is waik, true, and has pair or transparent skin (The Signs of Anemia)     Severe Anemia

Figure 2. Example of an Adobe Flash\*-based multimedia training module on Danger Signs in Pregnancy.



#### About World Ahead

The Intel World Ahead Program promotes access to technology for the next billion people to help enrich their lives and stimulate economic opportunity. Millions of people each year are getting access to helpful technology, high-speed connectivity, education and healthcare improvements, and digital content that help them achieve sustainable social and economic gains. Key programs focus on increasing access to technologies best suited for local needs; connections to the world via high-speed Internet technologies; education that prepares youth for the future; localized Internet content and services to improve lives; and healthcare improvements through technology.

### Combining public/private partnerships with a comprehensive design approach

As a leader in Information and Communication Technologies (ICT) innovation, Intel focuses on activities that increase access to technology to enrich lives and stimulate economic opportunity. Intel's experiences show the power of collaboration between government, private sector companies, and NGOs in initiatives that employ cutting-edge technology.

Building on this experience, Intel is working with governments, privatesector companies, academia, non-profit organizations, NGOs, and international and local content providers to enable effective, sustainable, and scalable healthcare education and training programs. The Intel skoool Healthcare Education Platform is based on Intel's 15+ years of combined experience in the Education and Healthcare sectors.

#### **Call to Action**

What is your vision for healthcare in the world ahead? Contact your Intel representative to learn more about Intel's initiatives in healthcare and to work together on using the Intel® skoool Healthcare Education Platform to help make your vision a reality. Intel skoool Healthcare Education Platform is available through an Intel Open Access License Agreement. There are additional possibilities for adaptation. Contact your local representative for more information.

For further information on how technology can help deliver quality education and training to your healthcare workforce, visit www.intel.com/worldahead.



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