IICD in the Education Sector
IICD helps its local partners integrate information and communication technology (ICT) in their education programmes. Its work has already had an immediate and substantial impact on more than 300,000 teachers and students. What’s more, these programmes will continue to deliver benefits over time, as students move on to participate in the economic, political and social structure of their countries. To ensure its activities bring the most relevant benefits to the target country, IICD works in partnership with local organisations – including schools, civil society organisations, and training and monitoring institutions.

Challenges to learning

Education is key to achieving lasting social and economic improvement. It empowers people and reduces poverty through economic growth. There are, however, numerous barriers to the successful delivery of education in developing countries, particularly as these countries are characterised by a rapidly growing young population. Difficulties often include insufficient education budgets and inadequately funded teacher training, and a shortage of qualified teachers and adequate or appropriate learning materials. Particularly in isolated rural areas, poor-quality education is often the result.

About IICD

IICD is a non-profit foundation specialising in ICT as a tool for development. IICD is active in five sectors: Education, Governance, Health, Economic Development/Livelihoods and Environment.
‘Using ICT applications such as PowerPoint helps us enhance our visual presentations. With computers and the internet, my students learn more easily about their subjects.’

Mr Mutuzana Mishaik, teacher at Mpelembe Secondary School, Zambia

The role of ICT

ICT helps provide solutions to many of these challenges. Traditional ICT (radio, print) alongside modern media (internet, email) helps improve the quality of education, even in remote areas. Faculty and students can access, create and share digital materials and teaching methodologies. This not only strengthens the curriculum, it creates an inspiring learning environment for both teachers and students. ICT also improves school management and administration, enabling headmasters to allocate scarce resources and monitor student performance. Policymakers can draw on these experiences to develop national strategies to integrate ICT in education on a broad scale.

Core aims in Education

• Improving teacher competencies: Teachers and instructors are trained in basic ICT skills and ICT-based teaching methods. This way, they feel comfortable integrating ICT into their teaching methods.

• Upgrading educational material: Traditional and modern ICT enables teachers to access, create, update and share learning materials. Teachers develop their own locally relevant educational materials, some of them in local languages. This ensures a steady supply of up-to-date content and helps strengthen the curriculum.

• Improving school management: ICT enables more effective and efficient management of human and financial resources, and monitoring of student performance.

• Strengthening youth employability: computer skills are a valuable asset, and ICT improves vocational instruction.

• Integrating ICT into policy and strategy: The success that IICD has already had with educational projects has positioned it as a valuable government advisor. IICD regularly engages government education ministries in policy dialogues with a view to finding appropriate ICT strategies and implementation frameworks. To date, IICD has been a helpful partner to the governments of Bolivia, Burkina Faso, Ecuador, Tanzania and Zambia.
### What is ICT in Education?

<table>
<thead>
<tr>
<th>Aim</th>
<th>Deliverables</th>
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| Improving teacher competencies | • ICT skills training  
• Development of tailored teaching materials  
• Sharing and exchange with peers  
• New teaching methodologies  
• Integration of ICT in teacher training |
| Upgrading educational material | • Computer labs  
• Access to online information sources  
• Interactive and multimedia materials  
• Exchange and distribution via email, web, DVD, CD Rom  
• Creation of locally relevant and local language materials  
• Centralised production support services  
• Strengthened the curriculum |
| Improving school management | • Improved data collection and analysis  
• Transparent, structured and up-to-date reporting  
• Improved course planning  
• Better financial management  
• Insight into human resources  
• Monitoring of student performance  
• Online information source for students and parents |
| Strengthening youth employability | • ICT-enabled vocational training and materials  
• ICT skills training  
• Access to online resources |
| Integrating ICT into policy and strategy | • Advice on programme formulation and implementation frameworks  
• Development of training materials and methodologies  
• Capacity development  
• Monitoring and evaluation |

### Facts & Figures

<table>
<thead>
<tr>
<th>Countries:</th>
<th>Bolivia, Burkina Faso, Ecuador, Ghana, Tanzania, Uganda and Zambia</th>
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<tbody>
<tr>
<td>Number of programmes:</td>
<td>32</td>
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<tr>
<td>Direct users:</td>
<td>312,300</td>
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<td>Secondary beneficiaries:</td>
<td>1.3 million</td>
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<td>Local partnerships:</td>
<td>schools, civil society organisations, government agencies, ministries and private companies</td>
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<tr>
<td>Scope:</td>
<td>Primary and secondary schools, teacher training colleges, vocational training institutions</td>
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<td>Global Teenager Project:</td>
<td>In addition to its education programmes, IICD initiated and co-funds this global programme that provides an online learning platform linking students in more than 30 countries.</td>
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Success stories

Recent IICD activity in the Education sector includes participation in programmes developed and implemented with partners in Bolivia and Zambia. It has also been active in education in Tanzania and Burkina Faso. Based on its deep experience, IICD is developing education programmes in Ecuador, Ghana and Uganda.

Bolivia

IICD helped develop and implement a programme bringing ICT to more than 235 schools across Bolivia. Schools were equipped with computer labs, and teachers trained to develop interactive educational materials, including videos and CD-ROMs, for maths and languages. Interactive materials were also created on indigenous Bolivian culture: this initiative won an Innovation Award from the Inter-American Development Bank. To make sure rural areas were not left behind, IICD introduced a shared wireless network that supports affordable and reliable internet access in remote areas. Thanks to the programme, teachers observe faster and more effective learning, particularly among students with learning difficulties. This is supported by data that shows students using interactive materials achieve a 10% higher year-end performance. Teachers are also empowered through new skills and an improved teaching environment. Together with headmasters and parents, they own and operate the programme in the majority of participating schools. The programme is also initiating the expansion of ICT-supported content development for adult vocational training in rural areas in collaboration with the Swiss Development Agency.

Based on its experience, IICD and its partners are helping the government of Bolivia formulate and roll out its national ‘ICT for Education’ programme. This will include opening computer labs in 1,000 schools throughout the country, 80% of which will be in low-income rural areas. The success of the programme has also generated interest from the Spanish organisation Ayuda en Accion who are now working with IICD to help integrate ICT in its education programmes.

Zambia

Teachers in Zambia have always developed their own teaching materials, but in the past, this process has been inefficient and the results often inadequate. However, since the inception of a project supported by IICD, a rising number of Zambian teachers now have the support of ICT training to digitise their materials. A centralised Editing Centre reviews, compiles and packages their input so it can be easily accessed and shared. Today, teachers in 25 schools in Zambia are using this system to produce educational materials for around 11,000 students. IICD is also working with one of only two secondary level teacher training university colleges in Zambia to raise the computer literacy of new teachers. Thanks to these successes, IICD is recognized as a valuable government advisor and has been working with the Ministry of Education in Zambia to help formulate an ICT policy and strategic implementation plan. The aim is to integrate ICT into the national curriculum and use it as a tool for both school management and distance learning.

IICD also supports the integration of ICT in vocational training to combat youth unemployment. Two IICD-supported youth centres are helping 16 other centres all over Zambia to integrate ICT into their curriculum at the request of the Ministry of Sports, Youth and Child Development.
IICD is proud of the successes it has helped to achieve in the Education sector, but there is always more to do.

ICT offers developing countries enormous potential to improve the quality and reach of their educational systems, and IICD is dedicated to helping their partners exploit this potential to its fullest.

To find out more about what we do and how you might be able to help us, please contact us.