

# Turn-key solutions for building schools of the future in North Sudan

"Building schools of the Future in North Sudan" is a concept developed by Devotra with the objective to provide turn-key services to the Government of North Sudan and other key stakeholders who are in the process of improving the education sector in North Sudan. It is our vision to support these stakeholders in order to create a modern, safe and inspiring learning environment, which takes into consideration the specific needs of children, students and teachers.

Devotra is a specialized company for upgrading and modernizing the education and training system. Together with our local partner we can offer turn-key solutions in North Sudan, for primary, secondary, vocational and higher education. The turn-key solution includes:

Rehabilitation and fast track construction of school buildings, workshops, dormitories and other facilities

Supply, installation and commissioning of scientific experimental laboratories and educational training equipment

(Teacher) Training and Technical Assistance

Through our unique partnerships, extensive knowledge, experience and track-record in education reform worldwide, we ensure that our projects are built on sustainable solutions that meet the precise needs of our clients.

Devotra offers a wide range of state of the art laboratories, equipment and services, to support education improvement. The company stands for successful project implementation, from concept to completion.

# CREATING A MODERN, SAFE AND IN

# **PRIMARY & SECONDARY EDUCATION**

### **EXPERIMENTAL LABORATORIES**

For primary and secondary education (years 6 - 18), DEVOTRA can supply complete experimental laboratories covering the full range of science and technology related subjects. These labs can be equipped with conventional teaching and learning recourses, such as laboratory equipment, demo units, sectioned models, etcetera. However most of the science and technology subjects are now also supported by ICT based learning programs, virtual laboratories, smart classrooms and e-learning. These are even available as a Mobile Science Cart that incorporates a series of digital presentation tools linked to an on-board computer. The inclusion of a digital camera and scientific image processing software allows the teacher to conduct experiments that are projected for whole-class viewing.

### **ICT AND E-LEARNING**

ICT is very essential in every area of industry and society. Therefore also in any educational subject. E-learning can be applied at different educational levels from primary education, technical vocational training and applied science up to university level. Practical training equipment and traditional curricula can be combined with e-content (such as virtual labs, online assessments, encyclopaedias and flash media). Full range of materials are available for mathematics, English language, technology, science, engineering, oil and gas training and much more.

### **SMART CLASSROOM**

The smart classroom combines traditional education with ICT based learning materials, which can be used in schools, colleges and universities. It is a unique product that combines hands-on practical training equipment with virtual experiments and simulation. State-of-the-Art audio/visual equipment and furniture is used. Education management, student assessment and tracking solutions, specialised software, teacher manuals and presentations are included.

- mobile science cart
- virtual experiments and simulations
- student response system
- hands-on training hardware
- specialised furniture
- arts, craft, music and sports material and equipment
- didactic learning materials
- science and technology laboratories
- smart classroom technology
- language laboratories
- ICT based learning
- virtual learning environment
- multi media laboratories
- mobile language lab
- mobile ICT lab
- e-learning













# ISPIRING LEARNING ENVIRONMENT











### **VOCATIONAL AND POLYTECHNIC TRAINING**

### **EQUIPMENT FOR EDUCATION AND TRAINING**

DEVOTRA provides an increasing range of practical training equipment for vocational training and in particular for Technical Vocational Education and Training (TVET, TIVET, TEVET and ATVET) projects. Equipment can be modified according to customer requirements and can be provided in the form of real life workshop equipment, pilot plants, experimental laboratories, demo units, including elearning, ict based resources, software, course ware and furniture.

_	automotive	surveying and measuring
	building and construction	welding and sheet meta
	carpentry and joinery	ict and e-learning
	electrical and electronics	oil and gas training
	forging and foundry	business administration
	machining and fitting	language training
	plumbing and pipefitting	health care
	refrigeration and air-conditioning	hotel and tourism
	agriculture [	services sector

### TECHNICAL EQUIPMENT and SUPPLIES

**Equipment:** 

Besides the specific equipment for education and training, DEVOTRA also supplies a wide range of other professional technical equipment and supplies. These materials are often supplied to complete the scope of supply for a turn-key education project.

**Supplies:** 

audio/visual equipment	electrical parts
office equipment	hand tools
I furniture	electrical tools
workshop furniture	fasteners
ict equipment	cleaning material
libraries	consumables
classroom furniture	industrial parts
security equipment	safety materials
sports equipment and furniture	raw materials

## **SPECIALISED SERVICES FOR TVET**

In order to ensure the sustainability of the projects that we develop and implement, DEVOTRA always includes a tailor made Technical Assistance Programme in their proposals. Our unique partnerships with professional training providers all over the world allows us to offer our clients a wide range of specialized services. Training programmes can be conducted in various professional training institutes in Europe or alternatively a specialised training facility can be created in North Sudan.

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feasibility studies	competence based training and education
training needs assesment	accreditation
specialised teacher training	auditing
curriculum development	prior learning assesment
national qualification framework	train-the-trainer skills programmes

# **HIGHER EDUCATION**

For higher education and universities DEVOTRA offers a wide range of professional science- and technology training equipment. Complete state of the art laboratories for different specialized areas can be designed and supplied.

AGRICULTURE ENGINEERING	
environmental technology	flood technology
food processing and technology	laboratories
irrigation and drainage	soil and water technology
CIVIL ENGINEERING	_
geotechnical engineering	meteorology
hydrology	soil technology
material testing laboratories	water resource management
AUTOMOTIVE ENGINEERING	
aero dynamics	diesel technology
engine diagnostics	engine demo units
auto electronics	injection systems
CHEMICAL ENGINEERING	
_ biotechnology	extraction technology
corrosion study	heat exchange technology
evaporation technology	plastics technology
ELECTRICAL ENGINEERING	
analogue communication	power engineering
digital communication	L telecommunications
digital electronics	control technology
electronic circuits	micro electronics
MECHANICAL ENGINEERING	
cad/cam	mechanisms
luid mechanics and dynamics	mechatronics
heat transfer	metallurgy
hvac	metrology
hydraulics and pneumatics	cnc technology
OIL AND GAS TRAINING	
emergency shut down systems	pressure and flow demo units
health and safety	pump systems
high and low voltage systems	valve systems
instrumentation	vibration monitoring and analyses

temperature demo units













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