



PROFESSIONAL
VOCATIONAL
FORMATION PROFESIONAL
BILDUNG

BERUFLICHE BILDUNG
MACIÓN PROFESIONAL
FORMATION PROFESSIONAL
BILDUNG
IONAL TRAINING

Final evaluation 2010 – Brief Report

Labour-Market-Oriented Vocational Education in the ICT Area,
Uzbekistan

Published by:

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH
Evaluation Unit

Postfach 5180

65726 Eschborn

T +49 61 96 79-1408

F +49 61 96 79-801408

E evaluierung@giz.de

Prepared on behalf of:

Federal Ministry for Economic Cooperation and Development

Internet:

www.giz.de

Produced by:

Zafar Jo'rayev

Peter Stricker and Katharina Walker (KEK-CDC Consultants, Zurich)

This report was produced by independent external experts.

It reflects only their opinion and assessment.

Zurich and Tashkent, April 2011

Tabular overview

The evaluation mission

Evaluation period	March 2010 to January 2011
Evaluating institute / consulting firm	KEK-CDC Consultants, Universitaetstrasse 69 CH-8006 Zurich, Switzerland
Evaluation team	Peter Stricker (team leader) and Katharina Walker (both KEK-CDC Consultants) and Zafar Jo'rajev (local consultant)

The development measure

Title according to the offer	„Labour-Market-Oriented Vocational Education in the ICT Area“
Number	2001.2110.3 / 2003.2066.3 / 2007.2165.4
Overall term broken down by phases	<u>Phase I</u> : 05 / 2003 – 01 / 2005 <u>Phase II</u> : 02 / 2005 – 06 / 2008 <u>Phase III</u> : 07 / 2008 – 06 / 2010
Total costs	GTZ contribution: Phase I: € 1,277,000 Phase II: € 1,000,000 Phase III: € 800,000. KfW contribution: € 9,892,000 Total costs: € 12,969,000 CSSVE: in-kind contribution € 10,250,000
Overall objective as per the offer, for ongoing development measures also the objective for the current phase	Employability of vocational college graduates in the field of ICT is improved as their professional competences meet the labour market demand
Lead executing agency	Centre for Secondary Specialised Vocational Education (CSSVE), Tashkent, Uzbekistan

Implementing organisations (in the partner country)	CSSVE and 32 Vocational Colleges (VCs) all over Uzbekistan
Other participating development organisations	KfW, DED, InWEnt and CIM
Target groups as per the offer	Male and female students of Vocational Colleges

The rating

Overall rating <i>On a scale of 1 (very good, significantly better than expected) to 6 (the project/program is useless, or the situation has deteriorated on balance)</i>	The overall rating of the project is good (level 2).
Individual rating	Relevance: very good (level 1); Effectiveness: good (level 2); Impact: good (level 2); Efficiency: good (level 2); Sustainability: satisfactory (level 3)

Project Background: the Uzbek Vocational Training and Education (VET) system began being reshaped and updated through the National Programme for Personnel Training (NPPT) in 1997. This programme addresses about 1,500 senior secondary institutions (138 academic lyceums and 1,370 Vocational Colleges, VCs) for approximately 1.6 million students at upper secondary level. In addition to the challenge of providing secondary education to a growing number of young people, the VET system also faces a quality challenge in terms of outdated study programmes. There is a mismatch between the senior secondary education system and the manpower demand of the economy because the quality of the workforce does not meet the professional and qualification-based requirements of employers.

Project approach: the basic change theory of the project was to introduce a new vocational training at upper secondary level in order to improve the employability of graduates of VCs and to ensure the sufficient supply of skilled Information and Communication Technology (ICT) manpower to the Uzbek labour market. This shall improve the competitiveness of enterprises and the income of the target group (youth) and thus contribute to reduced poverty. The project's main activities consisted of the development of professional standards and curriculum for mid-level ICT specialists (= technical assistance (TA) provided by GTZ) and by the provision of teacher training and the equipment of workshops and computer labs (= financial contribution (FC) provided by KfW). The project was implemented by the Centre of Secondary Specialised Vocational Education (CSSVE) and 32 vocational colleges. On the German side, GTZ contributed project management and technical assistance equalling € 3.1 million. This was complemented by a financial contribution (FC) from KfW totalling € 9.9 million and covering the supply of computer labs and workshop, costs of teacher training, purchase of other equipment as well as development and provision of teaching and learning aids. DED, InWEnt and CIM provided additional TA. The project started in 2003. The first pilot classes commenced at 11 VCs in September 2004. From 2005 to 2007, 21 additional VCs got involved and when the project was closed in June 2010, around 12,000 ICT students were enrolled at 32 VCs covered by the project.

Evaluation mission: on behalf of GTZ, Mr Peter Stricker and Ms Katharina Walker from KEK-CDC Consultants together with Mr Zafar Jo'rayev (local consultant) conducted a final evaluation of the GTZ and KfW cooperation project "Labour-Market-Oriented Vocational Education in the ICT Area" in Uzbekistan. The team prepared an inception report analysing the available documents and using the findings of the e-VAL report. A preparatory mission took place from June 28th to July 7th 2010 in order to prepare the ground for an online survey among graduates and representatives of companies. The main evaluation mission was

conducted between September 26th and October 9th 2010. It included meetings and focus group interviews with representatives of key stakeholders: private sector representatives, VET authorities, school management and teachers of VCs, as well as a series of evaluation workshops and alumni meetings at VCs.

Focus and methodology of the evaluation: a mix of evaluation instruments were applied: (1) document review; (2) secondary analysis of earlier tracer studies carried out by the project among graduates of 2007 and 2008; (3) online survey combined with classroom survey among graduates of 2007, 2008 and 2009; (4) time series analysis of results of the tracer studies 2007, 2008 and 2009; (5) online survey of benefitting and non-benefitting companies from the project; (6) online survey among incumbent ICT staff as reference group; and (7) interviews with resource persons. The evaluation focused on two issues: (a) employability of graduates in accordance with their labour-market performance, and (b) the impact of the project on labour-market development measured in terms of satisfaction expressed by representatives of the demand side of the labour market, such as employers, company owners, and human resource managers. A total of 355 persons were covered by online and questionnaire surveys: 213 graduates (44 graduates from 2007, 77 from 2008 and 92 from 2009), 108 representatives of companies and 35 incumbent ICT staff. A total of 15 persons were interviewed and around 60 persons participated in discussions held on the occasion of two focus group meetings and three evaluation workshops at VCs.

Assessment of project approach: the main goal of the project was to improve the employability of vocational college graduates in the field of ICT. The evaluation confirms the appropriateness of the project rationale and implementation mode. The combination of TA and FC was well conceived (though delays in tendering led to delays early in the project). At the same time, project activities included all relevant stakeholders (incl. private sector) and significantly contributed to capacity development at the level of the training providers and supported the further development and strengthening of public private partnership in the field of VET. The provision of regional coaches (DED) was an important conceptual element. The project developed a new occupational profile consisting of basic education for all students in the fields of ICT related to business, programming, and electronics. This was followed by a more specific education and training in one of these three fields leading to the corresponding sub-profile (ICT Business, ICT Programming, and ICT Electronics). Overall, the project reflects state-of-the-art practice in all technical aspects.

Project assessment: the final evaluation assessed the project's achievements according to the five DAC evaluation criteria:

Relevance: the use of ICT has become increasingly widespread in all sectors since the project started. Against this background, the GTZ project on labour-market-oriented vocational education and training has successfully introduced a new modern and labour market responsive occupational profile for mid-level ICT specialists. Project implementation was well synchronised with the growing importance of ICT in the private and the public sector in Uzbekistan. Therefore, the project has extensively added to the national efforts of modernising the VET offered at public vocational colleges. While making a relevant contribution to the modernisation of the Uzbek VET system it was at all stages of project development fully in line with national and international VET policy as well as with the BMZ guidelines. Labour-market relevance of the newly introduced VET was achieved through involvement of private sector representatives in project implementation. By furthering and strengthening cooperation between the VET sector and the economy, the project gained relevance in terms of promoting private public partnership schemes. **The rating for relevance is very good (level 1).**

Effectiveness: the project has achieved the planned results at output level (3,700 trained graduates in 2010). At outcome level, the improved employability of graduates was one of the main goals of the project. The data gathered in the 2010 evaluation confirms the results of the former tracer studies: 67% of the graduates find employment, 50% get employment according to their occupational profile “mid-level ICT specialist”, 15% continue to study while only 11% are jobless and 7% are economically inactive or have left the country. No figures are available for benchmarking at the national level. The evaluation team considers the fact that 50% of the former students of pilot classes get a job according to their occupational profile as a success. The evaluation also measured the extent to which the acquired professional competencies met the real job requirements. The survey data revealed that graduates who are employed as ICT specialists in all sub-profiles perform tasks in all three duty areas: ICT-Electronics, ICT-Programming and ICT-Business. This fact demonstrates that the initial idea for the design of the new VET for mid-level ICT specialist was highly appropriate. In terms of systems development, the project contributed to the introduction of practical and hands-on in-company training within the scope of initial internships for all students at upper secondary level and expanded internships in the 2nd and 3rd study years. In addition, the project led to a higher valorisation of practical skills through new schemes for intermediate and final exams with elements of competency-based skills testing. **The rating for effectiveness is good (level 2).**

Impact: around 8,000 graduates have left the pilot VCs since 2007 and the major part of them have entered labour market. With the intent to explore the impact of the project on

labour-market developments in terms of supply and demand of skilled ICT personnel, the evaluation gathered opinions and appraisals from company representatives and employers. Survey results show that respondents from companies not involved in project activities and not employing graduates of VCs have a different perception of the situation of their companies or organisations in terms of supply with ICT specialists. While around 66% of the respondents from companies that were involved in the project confirm that their companies' needs are satisfied, only 42% of the rest of the respondents are of the same opinion. However, around 80% of the respondents say that the offer of skilled ICT manpower has significantly improved and more than half of the respondents associate this positive tendency with the fact that the project provides the labour market with ICT specialists. Based on these figures and opinions discussed on the occasion of interviews and workshops, the evaluation team concludes that the project has a positive impact on labour-market developments. As the national VET administration considers the training approach and the curriculum introduced by the project to be a showcase for modern vocational educational and training in Uzbekistan the project will continue to have a significant structural impact on the VET system as a whole. **The rating for impact is good (level 2).**

Efficiency: the project made efficient use of financial and personal resources. Being implemented as a cooperation project (Kooperationsvorhaben), the project combined GTZ support (TA) and KfW support (FC). Further German development organisations such as DED, InWEnt and CIM provided TA or short-term consultancy. The coordination between TA and FC in the field – i.e. GTZ project activities on the one hand and procurement of equipment for the pilot VCs funded by KfW on the other hand – was not optimal at project start and the inputs were not properly synchronised. As a consequence, project implementation was delayed and the duration of the project had to be prolonged by 24 months. The project maintained good contacts with other German initiatives in the field of education and it has benefitted from close cooperation with the Skills Development Project (SDP) funded by Swiss development cooperation. Co-operation with the national partners and the VCs was a key factor, as the project during all stages of project implementation maintained good co-operation relationships with the national partner institutions. **The rating for efficiency is good (level 2).**

Sustainability: the training offer for ICT specialists will be sustained. The new occupational profile is officially introduced at national level. In addition to the 32 VCs covered by the project, around 30 more VCs are currently preparing structures and capacities in order to be able to provide this type of training. The number of students is expected to grow further and will reach over 12,000 soon. The new approach is very much appreciated by all stakeholders

and roll-out throughout the country is currently under way. The long-term sustainability of some components of the project, however, is not assured as the VCs generally lack the necessary resources for the maintenance and updating of the installed hardware and software. Pilot VCs of the project over the next 2 or 3 years will have to address the issue of updating the already installed equipment of computer labs and workshops. While they will continue to train ICT mid-level specialists and additional VCs will also start to offer the newly introduced VET, there are doubts about the capability of the whole system to keep up with future technological developments and the maintenance of the quality level of the training.

The rating for sustainability is satisfactory (level 3).

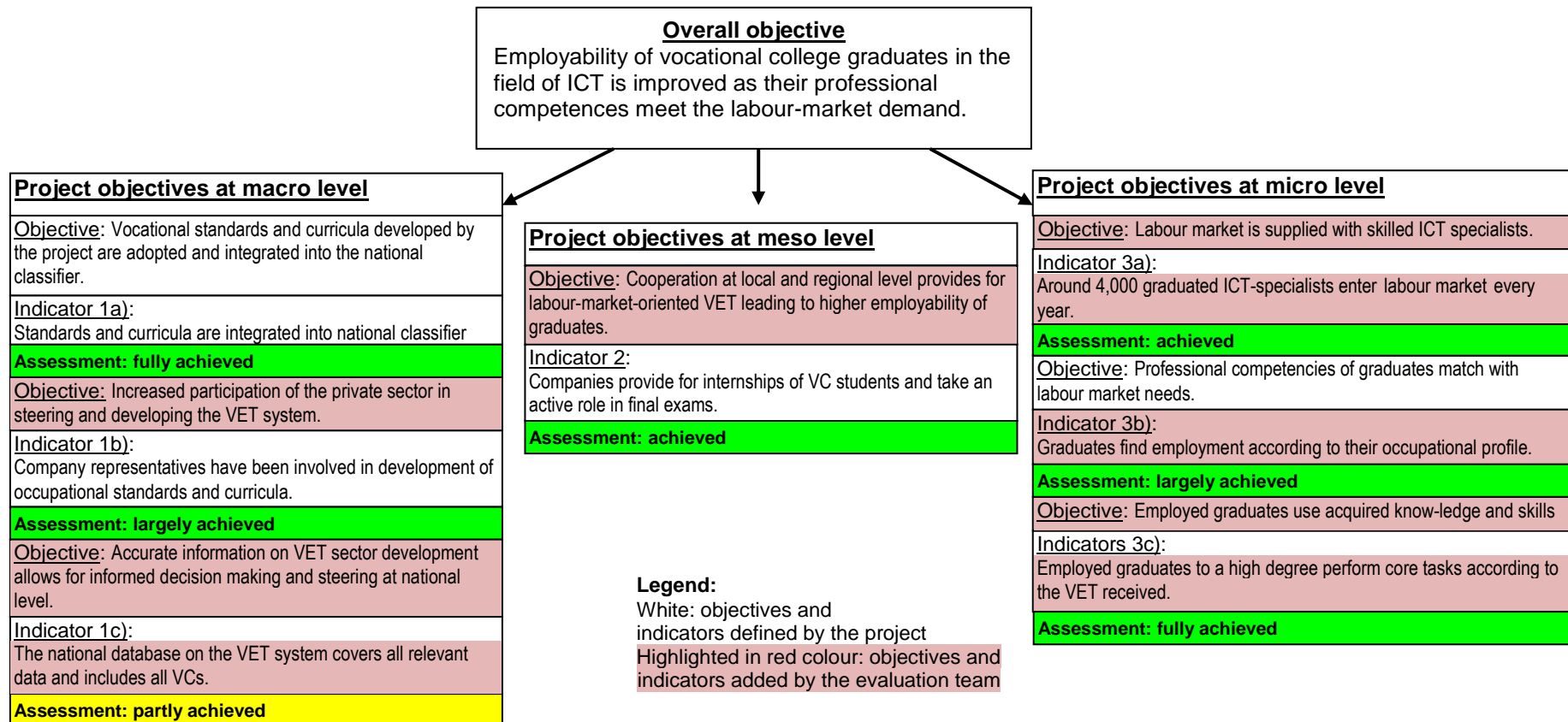
Overall rating: the project has achieved its objectives and, moreover, makes a significant contribution to the modernisation of the Uzbek VET system while being in line with national and international VET policies as well as BMZ guidelines. Graduates of pilot colleges perform well when entering the labour market because the occupational profile developed by the project obviously meets labour-market needs. **The overall rating is good (level 2).**

Recommendations to German international cooperation: (a) **Changes at systems level:** international initiatives aiming at modernising selected courses within a national VET system at the same time affect systems development. Intended affects at this level should be better reflected in the programme theory, e.g. in the results chain (*Angebot*) and in respective objectives and indicators of the project. (b) **Project coordination:** when scheduling project activities of a joint initiative with KfW, GTZ should put special attention to duration of tender procedures because these could delay contracting and procurement. (c) **Support to training providers:** when purchasing and implementing high-quality equipment for secondary vocational education and training, the following issues need to be addressed in project planning and during project implementation: (1) how can spare parts/consumables be purchased after project completion? (2) to what extent is the maintenance/internet security of the equipment assured? (3) how can out-dated equipment be replaced in the medium/long-term perspective? (d) **Female participation:** development initiatives in the field of VET should always address gender issues with the aim to ensure that young women have access to the modern VET. If an updated or newly introduced occupational profile does not specifically target males or require male students, the project should promote a 50% participation of female students, e.g. by introducing a quota system.

Recommendations to the Uzbek partners: (a) **National VET Strategy:** in addition to developing the infrastructure, the national VET administration should pay more attention to improving the quality of training programmes and the related delivery processes. (b) **Maintenance of equipment:** the CVSSVE together with the VCs must develop a midterm

budgetary plan that assures the proper maintenance and regular replacement of teaching aids (e.g. computer labs)

Comparison of target and actual situation with respect to achievement of the objective, on the basis of the indicators laid out in the contract (or the subsequently modified indicators) in an overview diagram, including the status of BMZ markers (integrated)



KNOWING WHAT WORKS
KNOWING WHAT WORKS
KNOWING WHAT WORKS
KNOWING WHAT WORKS
KNOWING WHAT WORKS
KNOWING WHAT WORKS
KNOWING WHAT WORKS
KNOWING WHAT WORKS

Deutsche Gesellschaft für
internationale Zusammenarbeit (GIZ) GmbH

Dag-Hammarskjöld-Weg 1-5
65760 Eschborn/Germany
T +49 61 96 79-1408
F +49 61 96 79-801115
E evaluierung@giz.de
I www.giz.de