The Special Diploma in Technical/Vocational Teaching: Low Tech for High Value in Technical and Vocational Teacher Training

A Case Study

By: Mr. John Bartram, Education Specialist – TVET,
The Commonwealth of Learning
and
Dr. Nancy George, Director, Curriculum Development and Evaluation, University of Technology, Jamaica

Presented at: The Pan-Commonwealth Forum on Open Learning
July 29 – August 2, 2002
Durban, South Africa

Background

The Commonwealth of Learning's (COL) Core Curriculum in Technical and Vocational Teaching has been developed specifically to offer training in pedagogical skills to practising Technical and Vocational teachers who are strong in their specialisation but lack teacher training. The Core Curriculum was originally developed as a joint venture between the Caribbean Community Secretariat (CARICOM) and The Commonwealth of Learning (COL) in the early 1990s to meet an expressed need of the island states in the Commonwealth Caribbean, and its development involved all Commonwealth Caribbean countries in the initial planning.

Originating from the COL-sponsored Hong Kong Conference on Technical and Vocational Education by Distance Education (1990), the project really began in Nassau in 1992, where Technical and Vocational Education and Training (TVET) representatives of 14 countries developed an action plan to address the pedagogical training needs of Technical and Vocational Education (TVE) teachers. Between 1993 and 1999, COL contracted recognised distance educators with curriculum development skills in TVE throughout the Commonwealth to write units and modules for the Core Curriculum.

As units in the various modules of the supporting learning materials were completed, COL reviewed the submissions and then circulated a selection of them to TVE institutions to pilot with their students to test the utility and completeness of both the Curriculum and the supporting learning materials.

The resulting Curriculum was not – and is not – intended to replace entry level teacher training programmes. This Curriculum concentrates solely on developing the pedagogical skills of currently practising Technical and Vocational teachers, therefore improving the learning opportunities for students in Technical and Vocational classrooms.

The original objective of the programme is important; "…to provide technical and vocational teachers with a recognised base qualification that reflects an appropriate level of competence in pedagogical skill and knowledge."[1]

Since the Core Curriculum is covering a diversity of subject areas and focusing solely on the development of pedagogical skills, the learning materials associated with the Core Curriculum are also necessarily generic.

Because the Core Curriculum, associated learning materials and Assessor's Guides were originally developed in a variety of countries across the Commonwealth, the developers apparently assumed very different users and user base competencies when they prepared the materials to support the Curriculum. Therefore, the first draft of the completed Core Curriculum was uneven at best. Since the piloting was being done on a unit-by-unit or

---

[1] _________ *Technical and Vocational Teacher Training Core Curriculum 5th Edition;* Vancouver: COL, 2001.

module basis in different institutions in different TVE systems, that unevenness was not detected at the outset.

However, the original *intent* was consistent: that a practising teacher could pick up the Curriculum and choose those modules/units that met specific needs to improve his/her instructional skills. In other words, the Curriculum could be used independently of an institution. In such a case, however, it was hard to see how an employing Department of Education or Ministry would be able to standardise the remuneration or even identify the successful completer of the Core Curriculum: there was no system of official sanction considered in the design of the programme.

There is an important phrase in the original programme objective that has significant implications for the implementation of the Core Curriculum: "…to provide technical and vocational teachers with a *recognised* base qualification…". The implication, then, is that the governments and corresponding quality assurance agencies need to agree that successful completion of the Core Curriculum ensures the minimum standard of pedagogical skill in those practising teachers who undertake the programme.

Building an institutional partnership for the Core Curriculum

For the project to move forward, it needed an institutional partner whose award would be recognised in the Caribbean as being credible and valuable - and worthy of recognition in the government salary scales if the Core Curriculum was to be useful to institutions and teachers alike.

Consequently, in early 1999, as the field testing of units in the Core Curriculum was coming to an end, COL approached the University of Technology, Jamaica (UTech) to enquire whether it would be interested in accrediting this Core Curriculum as a distance programme for technical and vocational teachers in the Caribbean.

COL was requested by the Chief Education Officers to organise a Regional Steering Committee to discuss the finished product and reach agreement on the implementation of the Core Curriculum. This meeting was held in St. Lucia in July 1999. Respective Ministers of Education nominated delegates to the meeting who were mandated to represent them. These delegates, in reviewing both the Curriculum and the learning materials , identified some unevenness in the target levels of the learning materials and the demands implicit in the competencies in the Curriculum, and agreed that both the competencies and the learning materials needed standardisation. In some cases such as the module on Information Technology the Module and associated learning materials needed complete rewriting and updating[2]. They also asserted that these revisions had to be done before the Core Curriculum could be implemented, even on a pilot basis.

[2] IT courses which teach computer and related software programme use need continual updating. Since the IT module had been developed in 1997, its content was dated. This Module has recently been updated again. It is clear that this Module will need annual revision to remain current.

UTech, with COL's support, undertook the assignment to standardise the level of the competencies and revise the learning materials. A second Regional Steering Committee meeting was held in Jamaica in 2000 to discuss implementation of the Core Curriculum and associated learning materials.

At that meeting, some of the operational and systems difficulties involved in using the Core Curriculum were identified and resolved. Again, COL was instrumental in ensuring the support needed for the Core Curriculum to be used successfully. COL agreed that it would provide training for the tutors supporting the offering of the Core Curriculum in each state, contract an evaluator to review the Core Curriculum and the implementation process, and provide a database programme in which the students' results would be stored. UTech agreed that it would franchise the Core Curriculum offering to each state, and that successful completion of the programme could lead to entry into the UTech Post Diploma Bachelor of Education programme, depending on UTech's evaluation of the strength of the individual's base of knowledge in his/her content specialisation at the time of application. Any graduates applying to UTech would be assessed individually.

The Regional Steering Committee agreed that the Core Curriculum would first be introduced on a pilot basis in a maximum of six states. In preparation for the introduction of the Core Curriculum pilot, COL arranged training in distance education principles for the tutors who would be involved in implementing the pilot of the Core Curriculum in those states scheduling the pilot to begin in 2000. Tutor training workshops were held in both The Bahamas and St. Kitts & Nevis[3] in late 2000. Initially it was projected that the pilot could begin in early 2001.

Identifying the award

During the second meeting of the Regional Steering Committee, the title of the award was discussed in some detail. From UTech's perspective, since the level of the courses was going to be consistent with the level of similar courses in the SOTAVE teaching Diploma, it seemed natural to call the award a Diploma, even though the number of credits in the award was only equivalent to UTech's Certificate level awards[4]. In the end, UTech agreed to call the award a Special Diploma - The Special Diploma in Technical and Vocational Teaching (In-service) signifying the fact that the award was not the same as a regular UTech Diploma[5].

[3] The tutors from Antigua travelled to St. Kitts & Nevis to participate in the same training workshop.
[4] The Core Curriculum was translated into 40 credits.
[5] UTech Certificates range in value from 28-49 credits; UTech Diplomas range from 50-90 credits. However, UTech certificate programmes do not normally articulate with the Diploma and undergraduate degree programmes, because the matriculation requirements for Certificate programmes are considerably less than for Diploma and Degree programmes. Therefore, because the credit value of this Diploma is less than for the standard UTech Diploma, it was agreed that the programme would be called a Special Diploma.

Choosing the technologies to support the pilot offerings of the Special Diploma

While the Core Curriculum and associated learning materials were paper-based in reality, and were written and formatted on the assumption that students would be working with text in hard copy, the imperative was to offer the course by distance to each of the participating states; therefore, it was important to choose the *technologies* to be used in the teaching/learning process carefully and correctly.

From the outset on-line was not a possibility for the participating teacher/students: their access to computers was limited; the materials would have had to have been completely re-written yet again[6]. On-line costs, even where access is available in the Caribbean, are prohibitive, not only for ISP connections but also for telephone line time, which is charged by the minute; therefore, self-instructional paper-based materials were likely to be more user friendly, cost effective and convenient for the target group[7].

However, the cost of circulating approximately 1200 pages of paper[8] to each participating country either from Jamaica or from Vancouver would have added further significant cost to the project. Therefore, instead of sending boxes of paper to each participating state, COL and UTech agreed that it made much more sense and was more convenient to circulate the materials on CD-ROM.

When UTech completed the revision and review of the Core Curriculum and the learning materials, both were burned on a single CD and circulated to COL and the participating states. This strategy had both strengths and weaknesses. First, the shipment was swift, as the CD-ROM was shipped by courier, and so it arrived within a few days. *However, sending only a CD-ROM meant that the individual states had to stand the cost of the printing of the materials.* In hindsight, when the cost of offering the programme became so important to states' participation, this idea didn't prove as useful as imagined originally.

In addition to using CD-ROMs, the pilot is also making significant use of the telephone and e-mail.

In 1999 following the St. Lucia Regional Steering Committee meeting, COL established a list server facility among all of the members of the Steering Committee to keep them abreast of developments and progress in the project.

Following the most recent meeting in The Bahamas, it was agreed that there is need for the creation of two other lists: one for tutors, and the Country Co-ordinator in St. Kitts &

---

[6] The learning materials were prepared in self-instructional text-based format, which is most easily managed in a paper-based hard copy.
[7] It should also be noted that when the initiative began in 1992 until the first drafts of the learning materials were completed, distance learning in the Caribbean was really text-based. There was little connectivity – and still is, even in 2002. In Jamaica, for example, where connectivity is identified as being the highest level in the Caribbean, only 3% of households are estimated to be connected to the Internet.
[8] The estimated total number of double-sided pages of paper required for one compete set of Core Curriculum plus 12 modules of learning materials plus Tutors' Guides and Assessor's Guides.

Nevis and The Bahamas respectively to communicate with the UTech module advisors, Programme Manager and Project Manager on a regular basis, and one for each of the students and tutors in the participating states to communicate with each other and share their learning as they progress through the pilot.

In addition, the pilot has scheduled regular monthly conference calls among the UTech stakeholders, the respective Country Co-ordinators and their Steering Committee Representatives, and the COL Education Specialist for TVET to ensure that problems are aired regularly and solutions are shared among all concerned groups.

These relatively “low tech” solutions are assisting in moving the pilot forward.

The pilot has also made some use of audio tapes and limited use of video tapes. The only reason for not making more use of video tape is financial.

Innovative Regional Arrangements

In order to gain the UTech imprimatur for the programme while it is being offered far from the UTech campus in Jamaica, the Special Diploma is being offered on a franchise basis with institutions in participating states in the Commonwealth Caribbean.

The franchise arrangement means that each institution offers the Special Diploma according to standards and guidelines established by UTech (and in this case, also the Regional Steering Committee and COL); UTech provides advice, guidance and assistance to the module tutors in participating states, facilitates access to the UTech library for the participating students, and monitors the offerings to ensure the standards of the programme bearing its name. In return, the students will receive a UTech ID (since they are students in a UTech programme) and an award on completion of a UTech Special Diploma.

The offering institutions (or governments of the participating states) pay a fixed fee to UTech for administration of the franchise arrangement. For the pilot, the cost per student is approximately US$1,000 over the 24-month implementation period of the pilot in each state.

The states meet their own local costs for classroom space, tutors, materials reproduction and distribution. If teachers are given time off to study, the participating state meets the cost for their classroom replacement.[9]

---

[9] The Bahamas estimated that UTech’s administration costs over the two years constitute approximately 20% of the total cost of offering the Special Diploma to the initial group of students. The Bahamas’ costs are unusually high, however, because of the necessity for tutors to travel to the Family Islands for face-to-face sessions with the students participating in those locations.

Meeting the costs of offering the Special Diploma

Although six countries volunteered to pilot the Special Diploma, only two of those have actually initiated the programme to date. At a recent meeting of the Regional Steering Committee in The Bahamas, the Representatives stated that although they want to participate, they cannot meet the UTech administration fees. The Caribbean economies are not only small, but their budgets are calculated 18 months in advance of the beginning of the financial year, and the likelihood of their being able to add an additional US$21,000 (in foreign exchange) to train their teachers, however badly needed, is remote at best.

While The Bahamas is supporting their teachers to undertake the Special Diploma entirely, St. Kitts & Nevis is charging the participating teachers 50% of UTech's administrative cost, and even so, to initiate the programme, the Ministry had to appeal to the Cabinet to authorise the additional expenditure that simply wasn't in the country's educational budget.

Because of this cost challenge, the members of the Regional Steering Committee agreed that they would prepare a proposal requesting some support from the Caribbean Development Bank (CDB) for the implementation of the pilot programme. This proposal will be submitted to the CDB through the Association of Caribbean Chief Education Officers.

Learning from the project to date

The most obvious lesson from this exercise is that the development time has been much too long. This time span was in some part responsible for the unevenness of the work. It was also directly responsible for the module on Information Technology being totally out of date by the time students were enrolling for the course.

It also presented some difficulties in the compatibility and reliability of the different versions of word processing software that were used.

The second lesson was that it took much longer than envisaged in any case. UTech undertook a complete revision and a review of all of the modules. This revision in itself took longer than anticipated. In the process, the files became contaminated with viruses and as a result of this unexpected intrusion, all of the modules had to be reformatted , adding another six months to the development timeline.

Because curriculum is not static, it was apparent when the group met in St. Lucia in 1999, that the earlier modules had been written in a different educational milieu. Thinking on assessment, for example, had changed. Ideas had moved toward action research and action learning. The programme needed to be more grounded in the working life of the learner-teacher.

A long term planning strategy at the outset certainly would have helped with the development of this project. It would have identified the tasks that still needed to be done and given some way of measuring the progress by identifying milestones along the way. It would have also enhanced the efficiencies when key staff changes took place when the project was well down the track.

A work plan together with a long term budget strategy would have identified in advance, the likely cash flow needs.

The regional model is very interesting. UTech does not teach the course. The students work with tutors in their own countries and the delivery is very much controlled by the respective countries. Each country is entirely responsible for its own delivery costs. There is a very high degree of ownership exercised by each of the countries involved in the delivery. UTech does provide access to a moderated standard. They provide the value for the courses. Students who complete this course may be able to articulate into the UTech degree B. Ed. programme[10], from the Special Diploma.

Conclusion

The development of the draft of the much-needed Core Curriculum in Technical and Vocational Teaching is complete, and a pilot of the programme is underway in two countries. The student achievement to date in the participating states is promising, and it appears that the Core Curriculum in T/V Teaching may well be a resource COL can share with other small states following the conclusion of the pilot in these six states in the Caribbean.

[10] Articulation will depend on an evaluation of each individual's content expertise. Some bridging courses may be necessary in the content area.