

Audit of overseas provision

University of Warwick, the Singapore Institute of Manufacturing Technology (SIMTech) and the Singapore Institute of Management (SIM)

January 2011

© The Quality Assurance Agency for Higher Education 2011
ISBN 978 1 84979 334 6
All QAA's publications are available on our website www.qaa.ac.uk
Registered charity numbers 1062746 and SC037786

Introduction

This report considers the collaborative arrangement between the University of Warwick and two partners, the Singapore Institute of Manufacturing Technology (SIMTech) and the Singapore Institute of Management (SIM).

The Quality Assurance Agency for Higher Education

- The primary responsibility for academic standards and quality in United Kingdom (UK) higher education rests with individual universities and colleges. The Quality Assurance Agency for Higher Education (QAA) checks how well they meet their responsibilities, identifying good practice and making recommendations for improvement. QAA also publishes guidelines to help institutions develop effective systems to ensure students have high quality experiences.
- Many universities and colleges in the UK offer their higher education programmes to students wishing to study outside the UK. This is a significant and growing area of activity: data published by the Higher Education Statistics Agency indicates that over 408,000 students were studying for UK higher education awards entirely outside the UK in the 2009-10 academic year, either at overseas campuses directly run by UK institutions or through collaborative arrangements that UK institutions have made with foreign partners. QAA reviews both collaborative arrangements and programmes delivered on overseas campuses through a process called Audit of overseas provision. Audits are conducted country by country and in 2010-11 we conducted an Audit of overseas provision in Singapore. The purpose of the audit was to provide information on the way in which a group of UK universities and colleges were maintaining academic standards and the quality of education in their provision in Singapore. The reports on the individual audits will be used in the preparation of an overview report.

The audit process for overseas collaborative links

- In November 2009 QAA invited all UK higher education institutions to provide information about their provision in Singapore. On the basis of the information returned, QAA selected for audit visits 10 UK institutions with provision in that country. These institutions produced briefing papers describing the way in which their provision (or subsets of their provision) in Singapore operated and commenting on the effectiveness of the means by which they assured quality and standards. In addition, each institution was asked to make reference to the extent to which the provision was representative of its procedures and practice in all its overseas activity. Institutions were also invited to make reference to the ways in which their arrangements met the expectations of the Code of practice for the assurance of academic quality and standards in higher education (Code of practice), particularly Section 2: Collaborative provision and flexible and distributed learning (including e-learning), originally published by QAA in 2004. An 'amplified' version of Section 2 was published by QAA in October 2010.
- Audit teams visited each of the 10 UK institutions between September and November 2010 to discuss their provision in Singapore. The same teams visited Singapore in January 2011 to meet some of the staff responsible for managing and delivering the provision, and to meet students. The audit of the University of Warwick was coordinated for QAA by Mr D Greenaway, Assistant Director, Reviews Group. The audit team comprised Professor P Maher and Professor A Holmes (auditors), with Mr D Greenaway acting as audit secretary. QAA is particularly grateful to the UK institutions and their partners in Singapore for the willing cooperation that they provided to the team.

The context of collaborative provision with partners in Singapore

- In Singapore, responsibility for higher education resides with the Higher Education Division of the Ministry of Education. The Higher Education Division oversees the provision of tertiary and technical education as well as registration of private schools, including foreign providers. The Singapore higher education landscape currently comprises four publicly-funded autonomous universities, a private institution offering publicly-subsidised part-time degree programmes, five polytechnics, an institute of technical education, an institute of technology, two arts institutions, several foreign universities' branch campuses, and a number of private education institutions.
- In September 2009 the Singapore parliament passed the Private Education Act to strengthen the regulatory framework for the private education sector. Under this Act, the Ministry of Education has established an independent statutory board, the Council for Private Education, with the legislative power to implement and enforce the new regulatory framework. The new regulatory regime overseen by the Council for Private Education includes a strengthened registration framework called the Enhanced Registration Framework, and a quality certification scheme called EduTrust.
- The Enhanced Registration Framework spells out the strengthened legal requirements in the areas of corporate governance, provision of quality services, student protection and information transparency that all private education institutions operating in or from Singapore must meet. While private education institutions were previously required to obtain one-time registration with the Ministry of Education and could be de-registered only under extreme circumstances, the Private Education Act has introduced a renewable validity period for registration with the Council for Private Education, which can range from one year up to six years, and has provided the Council with the powers to impose a range of graduated penalties on errant private education institutions, including suspension, non-renewal or revocation of registration or EduTrust certification.
- 9 EduTrust is a voluntary certification scheme which provides a trust mark of quality. It replaces the previous CaseTrust for Education scheme, which was mainly focused on protection of fees paid by students, adding a number of student welfare and academic standards for all students, whether local or overseas, as well as soundness of finances and school administration requirements. As with CaseTrust, EduTrust is mandatory for private education institutions wishing to enrol overseas students. EduTrust certification is one of the Immigration and Checkpoints Authority's prerequisites for the issue of a Student's Pass. Further information on higher education in Singapore is contained in the overview report.

Section 1: The background to the collaborative link

Nature of the link

- The link is between the University of Warwick and two partners, the Singapore Institute of Manufacturing Technology (SIMTech) and the Singapore Institute of Management (SIM) to deliver a master's programme which had its first intake of participating students in 2006. This was a further expansion of an existing series of overseas partnerships, some of a longstanding nature, developed by the University's Warwick Manufacturing Group (WMG). WMG was set up in 1980 and has since grown to a department of 300 full-time staff and a further 150 associates with collaborative arrangements in the UK, India, China, Northern Cyprus, Malaysia, Russia, Singapore and Thailand. WMG now accounts for between a quarter and a third of the University's total population of taught postgraduate students. WMG's mission is 'to improve competitiveness through the application of value adding innovation, new technologies and skills deployment'. The strategic vision of WMG is to undertake world-leading research, provide excellent undergraduate, postgraduate and post-experience education, and offer unrivalled knowledge transfer through partnerships with industry and other users.
- In Singapore, WMG offers a single master's programme, the MSc in Engineering Business Management (EBM), which was first validated in 1990, together with interim awards of Postgraduate Diploma, Postgraduate Certificate and Postgraduate Award (PGA). The MSc may be studied full-time or part-time in the UK or overseas although only the part-time variant is offered in Singapore. The possibility of adding the MSc (and subqualifications) in Supply Chain & Logistics Management to WMG's offerings in Singapore was under consideration at the time of the audit team's visit to SIM.
- Between July 2006 and the time of the audit visit to the University in September 2010, a total of 128 students had been enrolled on the programme; of these, 22 had successfully completed the MSc and two had achieved PGAs. Of the remaining 104 registrations, only 60 were still 'live' students: however, some withdrawals from the first cohort had resulted from a delay to the start of the programme. Since the programme started in the academic year 2006-07, student numbers have fluctuated, partly depending on the level of funding support available from agencies in Singapore. Latterly it is anticipated that support from the Workforce Development Agency for skills development would grow numbers again.

The partner organisations: SIMTech and SIM

The Singapore Institute of Manufacturing Technology (SIMTech) is a research institute of the Science and Engineering Research Council (SERC) of A*STAR, Singapore's Agency for Science, Technology and Research. SIMTech describes itself as developing 'high value manufacturing technology and human capital to enhance the competitiveness of Singapore's manufacturing industry'. It has around 370 staff, of whom 85 per cent are research scientists and engineers; three research divisions in manufacturing processes, systems and automation plus additional research programmes; three industry innovation centres; and four innovation and commercialisation departments. It has a wide range of international partners and strong links to manufacturing companies in Singapore. WMG saw SIMTech as an appropriate partner because of the fit between their missions and SIMTech's A*STAR status and backing. The rationale for the University involving SIM as a second partner was that SIM could provide the administrative support and teaching facilities to complement SIMTech's research and technical capability.

SIM is the largest provider of private tertiary and professional training in Singapore. It was founded in 1964 as a membership society under the Economic Development Board and today has over 33,000 corporate and individual members. SIM now has three educational divisions: SIM, SIM Professional Development and SIM Global Education. The latter, which offers degree programmes from a range of overseas universities and institutions, is WMG's working partner. SIM has comprehensive campus facilities and was among the first private educational institutions to be registered under the Enhanced Registration Framework. It was awarded EduTrust certification in May 2010.

The significance of the link and the extent to which it represents WMG's other partnerships

- The link with SIMTech and SIM is the latest addition to WMG's set of 10 overseas teaching partnerships and follows a similar model to those existing links. In addition to WMG, there are 12 other Warwick departments with overseas teaching collaborations, of which four also have links in Singapore. In total, the University has teaching partnerships in 19 different countries.
- The link follows a similar model to WMG's previous teaching partnerships in adopting an approach described by the University as 'distance delivery'. This arrangement is defined by the University as being when 'Warwick staff may teach at the premises of a partner institution while the partner provides some teaching and/or administrative/learning support.' In this link, WMG staff travel to Singapore to deliver the taught component of the programme and deliver the same component at other overseas partners and in the UK, with only occasional local input usually from industrial practitioners. WMG sees this as an important factor in ensuring a high level of consistency in delivery between the various sites at which the programme is offered as well as avoiding potential quality assurance problems and reputational risks associated with franchise arrangements. The distance delivery approach is not uncommon in the University's overseas collaborative provision.

The UK institution's approach to overseas collaborative provision

The University expects collaborative courses to comply with the University's standard quality assurance arrangements with an additional layer of oversight by the Collaborative, Flexible and Distributed Learning Sub-Committee (CFDLSC) of the Academic Quality and Standards Committee (AQSC). For all collaborative courses, the University states that the key role of its staff is 'to ensure that the academic standards of the courses are, and continue to be, of the highest possible level, and that they justify the award of a University qualification'. In the case of WMG's overseas provision leading to University of Warwick awards, the distance delivery approach and common arrangements for assessment of overseas and UK-based students are seen by the University as important factors in assuring common standards across the programme.

Policies and procedures underpinning the management of overseas collaborative arrangements

- The University's stated policies and procedures underpinning the management of collaborative provision are set out in the 'Collaborative, validated and franchised courses' section of its Teaching Quality website. This section includes a register of collaborative courses, and information which includes approval and planning procedures.
- The University has what it describes as 'a small portfolio of collaborative courses with carefully selected partner organisations, in the region, across the UK and around the world'. Its Teaching Quality website states that the 'development of an extensive portfolio of

collaborative courses is not an objective of the University' but that it is 'prepared to consider certain types of collaborative partnership which meet specific criteria': for overseas partnerships these include that the partner should be a 'reputable organisation'.

University-level management structures (committee and executive)

- While the Senate is ultimately responsible for the approval of new collaborative arrangements, it is advised (via its Steering Committee) by the AQSC, which in turn is advised on collaborative arrangements by the CFDLSC. In relation to new taught postgraduate provision of the type exemplified by the current link, academic content is first considered at faculty board level after which CFDLSC scrutinises the rationale for, and strength of, the partnership and makes a recommendation for approval or rejection to AQSC.
- CFDLSC's remit in relation to collaborative provision also includes monitoring mechanisms for quality assurance, promoting best practice, and considering annual course reports and external examiners' reports. CFDLSC is not involved in formal, periodic review of partnerships: the audit team was told that that would be the responsibility of the host department, though in the case of this link there were no plans for a specific review at the end of the current agreement in 2011.
- External examiner reports are forwarded to the Pro Vice-Chancellor (Education and Student Experience) for identification of any issues to be referred to departments, which are expected to report back. External examiners' reports are also sent for consideration to the Board of Graduate Studies (BGS) and those relating to collaborative courses to the CFDLSC.
- Overall responsibility for the coordination and oversight of the implementation of the procedure for establishing a new collaborative award resides with the Senior Assistant Registrar (Teaching Quality).

WMG-level management structures (committee and executive)

- At WMG level, there is an Executive Director of Postgraduate Programmes who is responsible to the WMG Board for education matters and for the implementation of WMG's education strategy. Day-to-day direction of overseas partnerships is the responsibility of the Academic Director of Graduate Studies, who acts as the programme director, with the Director of Professional Programmes acting as a deputy programme director as and when necessary.
- Administrative support is provided by the Programmes Manager, who has specific responsibility for module scheduling, and the Overseas Programme Co-ordinator who provides operational support for WMG's overseas programmes and day-to-day contact with partners. The Academic Director of Graduate Studies is also responsible for academic quality across all WMG's postgraduate taught activities and provides the academic lead for all WMG's overseas collaborative programmes. The Director of Professional Programmes is also a module tutor as well as a member of WMG's moderation team, with specific responsibility for the Singapore programme.
- The key parts of the WMG committee structure are:
- management meetings, which are monthly and at which all major matters affecting programmes are discussed

- the Academic Quality Group (AQG), which gives detailed consideration to new programme and module proposals prior to their submission to the Faculty of Science, and subsequent University bodies; approves the appointment of external project supervisors and monitors their work; reports any concerns arising from its monitoring and review activities to the relevant WMG programme committees and/or partners; and is responsible for the production of 'any annual reports required by University bodies'. Perusal of minutes of the last four AQG meetings showed no evidence that annual reports had been considered there, although the audit team was subsequently told that the reports were circulated to committee members
- the Overseas Programme Committee (OPC), which meets quarterly and monitors
 the operations of the overseas programmes which lead to a University qualification.
 This includes admissions; module schedule; feedback from module reviews and
 from visiting tutors; and post-module marking turnaround. When turnaround
 problems are raised, for example by student complaints, they are dealt with
 directly by the Academic Director of Graduate Studies and/or discussed at the
 OPC for further action
- the Assessment Review Panel (ARP), which has the primary function of ensuring the quality, fairness and consistency of WMG's academic assessment of students. Among its various remits is to review procedures for monitoring the level of marking, amount of feedback and speed of feedback and to consider the special implications of overseas operations. In particular, the ARP receives and discusses external examiners' reports and conducts regular reviews of tutors' views on assessment issues.
- The AQG, OPC and ARP are all chaired by the Academic Director of Graduate Studies.

Public information on collaborative activities

There is a publicly available collaborative courses register on the Teaching Quality Website. The register is organised by department and shows approved courses, the names and locations of partners, qualification aims and types of collaboration.

Effectiveness of policies and procedures underpinning the management of collaborative arrangements

- The University acknowledges that certain overseas partnerships that are 'established on a financial basis which allows sufficient resources for regular contact to permit the monitoring of academic standards, may assist the University in meeting its objectives as an international University where the partnerships will contribute to enhancing the University's reputation overseas'. The audit team was told that, while collaborative provision was not the University's core business, there was a growing interest in taught postgraduate collaborations as exemplified by WMG's arrangements.
- The University has clearly defined and initially separate routes for consideration of both the academic and partnership aspects of collaborative arrangements that are brought together at AQSC. The CFDLSC plays a key and effective role in advising AQSC on collaborative provision. The WMG has many years of experience of setting up and managing overseas partnerships using a standard model which it applied to its relatively recent extension into Singapore. The audit team took the view that the University's approach to the management of collaborative activities as exemplified by the current link is generally well organised and effective.

Section 2: Arrangements for establishing the link

Selecting and approving the partner organisation

- The University has a well-documented and rigorous procedure for establishing new collaborative awards, which starts with approval in principle by the proposing department before the proposal is considered at University level. Responsibility for the coordination and oversight of the implementation of this procedure resides with the Senior Assistant Registrar (Teaching Quality). A key component in the process is the consideration of an outline of the proposal by a group which includes the Pro Vice-Chancellor (Education and Student Experience), the chair of CFDLSC, the Chair of the Board of Graduate Studies (BGS) or Board of Undergraduate Studies (BUGS), as appropriate, the chair of the relevant faculty board, and for overseas collaborations, the Director, International Office. This group can give strategic approval in principle if the proposed collaboration is deemed to be non-controversial and responds to the University's strategic objectives and accords with its collaborative policy. Otherwise, the proposal has to be submitted to the Senate Steering Committee for further consideration. For proposals that have successfully passed through this stage there is then a series of more detailed scrutiny and due diligence steps which include the development and approval of the financial model and contractual arrangements, a partner site visit and the preparation of course proposal documentation. The latter has dual approval routes: the academic content is considered by the relevant faculty and then by either the BGS or BUGS; the partnership aspect is considered by the CFDLSC. Final approval is given by Senate acting on the advice of AQSC.
- 32 In the case of the current link, the MSc programme had originally been approved in 1990, and similar partnerships involving this programme in several overseas countries had also been approved previously. Therefore, the Singapore link, which was facilitated by the Director of WMG being a member of the Advisory Board of SIMTech, was an extension of a long-running and well-established set of overseas partnerships involving two new partners with recognised expertise in their respective fields and, in the case of SIM, considerable experience of successful collaboration with UK universities. The audit team saw documentary evidence of a thorough and rigorous process of investigation of, and negotiation with, the proposed partners, who worked together to produce the required documentation, before approval was granted, and was told of strong support for the initial development of the partnership from the Singapore government. External advisers and external examiners were consulted as part of this process. SIMTech and SIM conducted their own processes to test the market and select the programme that met their requirements, and they continue to monitor the programme's performance as part of their regular review processes.

Effectiveness of procedures for selecting and approving the partners

- The University makes it clear that its ambitions for collaborative provision are limited. Its strategy is to concentrate on developing core partnerships with a small number of internationally renowned overseas institutions in which individuals and departments build up relationships in an organic way and which provide potential for research collaboration.
- WMG's approach to overseas partnership, which predates current university strategy statements, is partly opportunistic in that it identifies opportunities to extend its overseas programmes to new markets. However, WMG staff members were at pains to point out that their approach is highly selective and that WMG has declined a high proportion of approaches made to it by potential partners.

The audit team took the view that WMG was given a relatively high degree of devolved authority to pursue such partnerships, but that it took a selective and responsible approach to assessing potential partners and that the University had a well-documented and rigorous approach to gauging the suitability of any proposed extension of WMG's overseas programmes. Accordingly, the team endorsed the effectiveness of the University's procedures for selecting and approving partner organisations.

Programme approval

- The MSc in Engineering Business Management was originally approved in 1990, predating at least some of the University's current arrangements for programme approval, which are fully documented on the Teaching Quality website.
- Course specifications for all undergraduate and taught master's courses are publicly available on a searchable website, setting out the aims of the course, the skills and knowledge a graduate from that course will possess, and how it is taught and assessed. There is also helpful advice on the production of new specifications and a template document. The course specification for the MSc in Engineering Business Management is included on the website. MSc students whom the audit team met were not familiar with the course specification; its future inclusion in the Participant Handbook would help to bring it to their attention.
- The MSc in Engineering Business Management was delivered in other overseas locations as well as in the UK before the 2005 proposal for its extension to a new pair of partners in Singapore. The existing network of delivery points shared the same set of module tutors, assessments, external examiners and examination boards. Therefore, the case for approval of this extension could point to the experience of successfully operating that network while concentrating on the suitability of the new proposed partners.

Programme amendments and re-approval

- In terms of programme amendments, the audit team was told that minor modifications of less than 10 per cent of the total programme each year could be made by the programme team, while more major modifications would have to be referred to the BGS for approval.
- There is no formal time-limited arrangement for programme reapproval. Instead, periodic programme review of WMG's programmes is included in the process of strategic department review that was introduced in 2006. The MSc in Engineering Business Management would therefore have been included in the strategic review of Engineering and WMG provision in 2008. The audit team was provided with part of the report of this review relating to postgraduate programmes and, on request, with a single printed copy of the full report, but was not able to ascertain the extent to which the academic content of the MSc in Engineering Business Management and the quality of that programme's student learning opportunities had been reviewed in a process which covered a large portfolio of programmes. Given the longevity of the MSc, the University may wish to consider how it can periodically reassure itself of the standards and quality of WMG's overseas provision.

Written agreements with the partner organisation

The University adopts a standard template for collaborative agreements, which is publicly available on the Teaching Quality website and is adapted for each partnership in consultation between the sponsoring department and the Finance Office. The agreement for the Singapore link covers a wide range of areas including respective responsibilities; the role

of the CFDLSC; financial arrangements; publicity and confidentiality; language requirements; and termination and dispute resolution. In the audit team's view, the agreement was comprehensive and clearly sets out the responsibilities of the University and its two partners in Singapore.

Section 3: Academic standards and the quality of programmes

Day-to-day management

There is a clear division of responsibilities between the three partners. The University is responsible for the standards and quality of the academic programme, admissions decisions, and module teaching and assessment. SIMTech is responsible for project supervision, the provision of academic supervisors and laboratory facilities, and conduct of the project oral examination. SIM markets the programme and recruits students, and provides teaching facilities and resources, and Singapore-based administrative support and student services.

Key management roles and arrangements for liaison between the partners

- The key management role in WMG is that of the Academic Director of Graduate Studies, who acts as the programme director, chairs the three WMG committees which have key roles in quality assurance, is the author of the annual course reports and is a member of the Faculty of Science Graduate Studies Committee and at university-level of the CFDLSC and the BGS.
- Both SIM and SIMTech have senior staff whose range of duties include oversight of their institutions' responsibilities for the Warwick programme and who are supported by administrative staff members with designated responsibilities.
- The Academic Director of Graduate Studies holds annual, minuted programme management meetings in Singapore with representatives of SIMTech and SIM. The audit team was given documents related to other examples of frequent and effective liaison between staff at the three institutions including visits to Singapore by the Director and other senior staff of WMG, the scheduled teaching visits by module tutors, and regular contacts including videoconferencing between members of academic and administrative staff over details of programme management. At module level there is regular liaison between the visiting module tutors and students. Students' choice of projects and project supervision is managed in Singapore by the Project Management team based in SIMTech, which liaises with the Academic Director of Graduate Studies at the University. In terms of project assessment, the principal link is between the Director of Professional Programmes in his role of assessment moderator for Singapore and project supervisors in their assessment role.

Management of student records

The management of student records at WMG is primarily the responsibility of the Overseas Programme Coordinator. The audit team was told that WMG had previously had its own student record system but that this was being integrated with the main University record system.

Student support arrangements

- Academic support for students is primarily provided by visiting university staff who deliver specific modules in face-to-face sessions; students are required to attend to be eligible to undertake the post-module assessments. Module tutors deliver the same modules at other overseas sites and in the UK. In Singapore, classes are conducted in an intensive block spanning two weekends and the intervening weekday evenings, which students confirmed was compatible with their other work commitments.
- Students are not assigned personal tutors but Warwick staff averred that students were ready and able to discuss any problems that they encountered with their project supervisors or with visiting Warwick staff or at other times by e-mail, a view supported by students themselves.

Project supervision

- Project supervision is organised by SIMTech. An 'Open House' meeting allows students to interact with potential supervisors and view SIMTech's facilities. Students then complete draft project proposals on the basis of which the Deputy Group Manager matches them to an academic supervisor, who is a member of SIMTech research staff approved by WMG. Students also have an industrial supervisor, who is normally a more senior member of staff from the student's place of work; however, the audit team was told that if a student opts not to undertake a work-based project, a member of SIMTech staff will act as the industrial supervisor. There are documented guidelines for supervisors and an annual briefing by visiting Warwick staff.
- In the wider context of WMG's suite of overseas programmes and partnerships, a concern about some aspects of project supervision and marking had led to AQSC setting up a group to work with WMG 'to review mechanisms employed on WMG overseas courses for assuring that Warwick standards of academic quality and fairness are maintained in the supervision and marking of projects/dissertations'. Among other actions the group had agreed that WMG would:
- 'bring forward proposals to rebalance weightings attached to different aspects of project assessment
- draw up a framework with clear milestones against which to assess students' progress and project management achievements, giving clarity to supervisors and students, and providing an evidence base for moderation
- draw up a framework for the assessment of students' oral presentations and oral exams, including guidance on expectations that the mark for the oral exam is generally unlikely to be significantly higher than the mark for the written dissertation'.
- Subsequently, WMG reviewed project assessment, which is now completed electronically, and revised its guidance to supervisors. This was reported to be completed in two stages: a UK pilot in September 2009 and roll-out to overseas centres in March 2010. Feedback on these changes and continuing work on tracking project progress was being monitored by the CFDLSC and was due to be discussed at the Committee's first meeting in the 2010-11 academic year, after the audit team's visit to the University.
- These various concerns arose in consideration of WMG's total range of overseas taught postgraduate programmes and the audit team was told that the Singapore partnership had not been problematic in this respect. The team noted the action that the University and WMG had taken and were continuing to take in relation to concerns about project

supervision and assessment and the University's commitment to continue to monitor progress through the CFDLSC.

Mechanisms for student representation and feedback and for informing students of resultant actions

- The University expects each academic programme to have a student-staff liaison committee (SSLC) to allow student members to raise issues of concern raised by any students they represent. The Briefing Paper described the SSLC at SIM/SIMTech as 'not strongly established' and 'driven more by staff than students' but also noted that this was a feature of other overseas partnerships where cultural differences make the standard SSLC approach problematic. The audit team was told that a SIM staff member arranged to meet students at six to 12-month intervals to discuss the programme and write an SSLC report for WMG on any issues raised, but that attendance from students, who were all part-time and had other commitments, could be low and that no major problems or adverse comments had been reported.
- The CFDLSC had noted the cultural factors affecting SSLC operating effectively in some locations and had commissioned a number of case studies which are now included in the SSLC Handbook as examples of how SSLCs are arranged on some collaborative, flexible and distance learning courses. The examples included one from a partnership in China and another from WMG part-time programmes delivered in the UK.
- The WMG example features the module reviews included at the end of all modules and their use as a means of students feeding back on a range of issues. The audit team saw examples of post-module reviews conducted by SIM in which students were invited to comment online on lecturer effectiveness, subject content, facilities, IT and lab support, the library and programme management, and were asked to grade their overall satisfaction. These are administered by SIM with the results transmitted to WMG for discussion at the OPC particularly with regard to any emerging trends. Feedback on project supervision arrangements is not currently sought.
- The audit team was told that in lieu of a more traditional SSLC approach, the post-module reviews were an important mechanism for student feedback. Feedback was also sought directly by the Academic Director of Graduate Studies, who on her visits to Singapore meets current students. Those students whom the audit team met were well aware and made use of both formal and informal mechanisms of providing feedback, although in some cases they were unclear what effects their feedback had produced.

The effectiveness of day-to-day management

- There is regular and effective contact between a range of Warwick staff and both students and staff in Singapore, with clear lines of communication at the levels of programme management, administration and module delivery and well developed relationships between key staff. The 'distance delivery' approach means that University tutors meet students at some point in the delivery of each module and are also able to liaise as appropriate with colleagues at SIM and SIMTech, while the annual Singapore Programme Management Meeting provides a formal, minuted opportunity for any issues to be raised.
- The audit team noted the concerns expressed in a 2005 report of an AQSC working group on quality assurance issues in WMG about the heavy reliance placed on the Academic Director of Graduate Studies for the management of overseas programmes and the assurance of their standards and quality. The team also noted the subsequent designation of the Director of Professional Programmes as a deputy programme director,

if required, and the firm view of staff at SIM and SIMTech that while the Academic Director of Graduate Studies was a key and very effective contact, they had clearly defined interactions with a wide range of academic and administrative staff at WMG.

The audit team acknowledged the University's difficulties in operating a standard SSLC model in this type of programme in a different cultural environment overseas, the University's proactive use of examples of alternative approaches in collaborative programmes and the efforts that SIM, SIMTech and WMG were making to ensure adequate and appropriate mechanisms for students to feed back on their learning experience. However, as this is work in progress the University will wish to consider how it can continue to monitor these arrangements and encourage their further development.

Arrangements for monitoring and review

Annual monitoring

- The University sees effective annual review of courses of study as 'an important complementary activity to the periodic review (now part of Strategic Departmental Review), allowing departments to pay close attention to indicators of the success of a course such as application figures, degree results and student feedback on a regular basis' and enabling departments to monitor closely standards of teaching and learning on courses and to react quickly if problems become evident'. The University sets out procedures for annual course review (ACR) but allows departments a degree of flexibility in how they conduct the process to take account of differences in departmental size, management structure, and the ways that degrees are organised. However, it is expected that ACR will involve 'those staff responsible for modules comprising a degree course meeting formally annually, usually with the course leader or convenor in the chair to discuss issues associated with the development of their course such as student progress, a summary of student feedback, examination results and External Examiners' reports'. Following such a meeting, a brief ACR report is expected using the university template to cover a range of areas, including a response to the previous year's ACR and to external examiners' reports; changes to the course(s) since the previous year; admissions details; progression, non-completion and qualifications; incidences of suspected student cheating; student support and quidance; quality assurance; student feedback; external assessment; links with employers; resources; and future developments.
- The Briefing Paper states that 'WMG holds an Annual Course Review every year'. In meetings with WMG staff, the audit team was told that the composite ACR report for all the programmes in WMG's overseas collaborative provision was prepared by the Academic Director for Graduate Studies. However, other academic staff whom the team met could not recall specific consultation on its production; nor could the team find any record of prior discussion of report content. The role of staff at the partners in Singapore in relation to the ACR appeared to be confined to supplying the SSLC report referred to in paragraph 53, and post-module student feedback. SIM has its own internal processes through its Academic Board for regular review of its portfolio of programmes and partners in the light of market need. SIMTech also has a review process.
- The audit team saw the ACR reports for overseas provision for the past three years and noted that these were comprehensive in their coverage of the areas required by the University's template and included information on activity at the various overseas locations, including Singapore, although no specific issues arising from the SIM/SIMTech collaboration were noted. The reports had been considered both by the Graduate Studies Committee of the Board of the Faculty of Science (SGS) and by the CFDLSC. Faculty Board Secretariats

prepare composite reports on the ACR process for submission to either the Board of Graduate Studies or the Board of Undergraduate Studies, as appropriate, and then on to the Academic Quality and Standards Committee (AQSC).

- The audit team took the view that while the ACR reports with which it was provided followed the University's required template, they had not been the result of the type of review process involving staff and student input that the University expected, that is, comprehensive reflection by the programme team on the academic operation of the course and the quality of students' learning opportunities. Nor was there substantive analysis of student achievement and student experience between the various delivery sites for the programmes being reviewed. The team saw this as a lost opportunity for the programme and partnership to gain maximum benefit from annual review.
- This finding above was related to a wider issue of what actually constituted the EBM programme team and the extent to which all those who made an academic input to the programme were able to contribute in deliberations regarding it. While noting that module tutors did provide feedback on the programme, the audit team was not able to discern a regular forum for all contributors to the programme to consider and review the academic content and integrity of the course and related learning and teaching matters. The University may wish to consider the advisability of WMG making more explicit its arrangements for the academic management of the programme and the constitution of the programme team for the purposes of annual monitoring.
- SIM has its own internal processes through its Academic Board for regular review of its portfolio of programmes and partners in the light of market need. SIMTech also has a review and approval process.

Periodic review of programmes

- In 2006, the University combined previously separate periodic course reviews and quinquennial department reviews into a single strategic departmental review (SDR) process. The University defined the main purpose of SDR as being 'to assure the quality of the full range of a Department's activities and provide an opportunity for reflection and external advice as to how to enhance these activities and what new opportunities there may be to pursue'. The activities are expected to include all of the department's taught provision.
- WMG's overseas provision was included in the SDR of the School of Engineering, which was held in June 2009 when the review panel included five external academic members. The review panel commended the School 'on the impressive range and quality of its taught postgraduate provision and the extremely high levels of student creativity, satisfaction and staff commitment' and considered the quality assurance mechanisms within WMG and more broadly in the University 'to be appropriate and robust'.
- The SDR report also commented on overlaps in module content and recommended that consideration be given 'to ensuring effective communication between module tutors and to further mechanisms to monitor and minimise the overlaps in module content, including specific reference to this issue on the module review feedback questionnaire. In addition, the provision for part-time students and their ability to access the full range of modules at intervals appropriate to their mode of study should also be reviewed'. The panel also recommended the adoption of a greater variety of assessment methods and agreed that 'a challenge remains in resourcing and maintaining the quality of the overseas collaborative provision'. WMG was 'encouraged to continue to monitor project marking and the need for moderation closely'.

SDR reports are considered by the University's Steering Committee which, in the case of the School of Engineering, decided that, because of wider strategic issues relating to the structure of the School covered by the report, an action plan to address its recommendations should be deferred pending discussion by a working group of the Board of the Faculty of Science, which had not formally reported back at the time of the audit visit. This meant that the SDR report's recommendations related to WMG's overseas provision had not formally been discussed by the AQSC some 16 months after the SDR. The audit team noted that this delay was occasioned by aspects of the SDR report that were unrelated to WMG's overseas provision and its Singapore partnerships, and also noted an example of action by WMG on the SDR's report findings in relation to reflection on assessment methods (see paragraph 83). However, given that a lengthy delay between a periodic review of WMG and consideration of the report of it by AQSC had been noted in the report of the 2004 QAA Institutional audit, it would be advisable for the AQSC formally to consider those aspects of the SDR report related to programme review as quickly as possible.

Periodic review of partnerships

- The Singapore partnership agreement was initially for a period of five years from January 2006 and was therefore due for renewal in January 2011. The audit team therefore asked University staff about the renewal process and was told that were no plans for a formal review of the partnership, which was considered to be working very well; the general expectation of WMG staff was that the partnership would continue into the foreseeable future. Subsequently, the team was informed during its visit to the Singapore partners that the agreement had been renewed from 19 January 2011 for a further five years.
- Taking together its overviews of the ACR, SDR and partnership agreement renewal processes, the audit team took the view that they presented limited opportunities for formal periodic reflection on the operation of a specific overseas link including the experiences of students and partner staff, and the lessons that might be learnt from such a process. While the team recognised that the University's formal procedures were being carried through in relation to the Singapore partnership, which appeared to be operating successfully, the University may wish to consider whether the renewal of an overseas partnership agreement should be preceded by a process of partnership review.

Staffing and staff development

Appointment, recognition and status of staff teaching on the programme

Teaching in the Singapore partnership is undertaken by Warwick staff, mainly principal and senior teaching fellows and associates, who act as module tutors at a number of locations. SIMTech is responsible for providing academic supervisors who have to meet internal criteria, which included a PhD and industry experience, and also be approved by the Academic Director of Graduate Studies. The nature of the programme means that academic supervisors are drawn mainly from the Manufacturing Systems division, a limiting factor in recruiting supervisors from a limited pool of busy research-active staff. The majority of industrial supervisors are drawn from the students' own employers but some from SIMTech.

Communication between WMG and module tutors

The scheduling of module teaching in Singapore and at other delivery sites is coordinated by the Programmes Manager in WMG who takes account of the teaching and travel loads of module team members. The Academic Director of Graduate Studies contacts overseas tutors by email on a regular basis for feedback on their module teaching experiences.

Staff development and support

- The University provides a range of staff development opportunities that are available to module tutors. SIMTech provides mandatory in-house staff development which includes areas such as project management skills. Most staff selected as supervisors on the Warwick programme already have supervisory experience. WMG provides a range of guidance literature on, for example, the role of the module tutor, assessment, and guidelines for academic and industrial supervisors. There are no specific training sessions for industrial supervisors, but they are invited to participate in a project study skills course aimed primarily at students. Supervisors receive moderation comments from the Director of Professional Programmes and SIMTech has its own internal monitoring arrangements.
- A meeting of partners and WMG staff was held in 2009 in Bangkok to share good practice in areas including project supervision and marketing and was well received by participants.

Effectiveness of procedures for staffing and staff development

The WMG model of distance delivery ensures that Warwick tutors teach all its modules and that Singapore students are therefore receiving an equivalent learning experience to students at other sites who are taught by those module tutors. This is seen by WMG as an important factor in ensuring consistency and quality. The supervisors nominated by SIMTech meet stringent academic and industrial experience criteria, have appropriate training and are monitored in their supervisory roles. Industrial supervisors are less likely to undertake training and to have assessment experience, but bring an industrial perspective to bear on their role. Staff in Singapore were not aware of any recent changes to assessment procedures as described in paragraph 51. However, the audit team heard from staff at Warwick that the standard of project supervision and assessment in Singapore was high and had not given rise to the concerns which had prompted the University's action. Based on the Singapore partnership, the team took the view that the University's approach to managing supervision arrangements was in general thorough and effective.

Student admissions

- The University sets the entry requirements for the programme, including language proficiency, and these are clearly set out on the SIM website and further explained in a comprehensive set of associated FAQs. SIM's role is to recruit potential students, help to coordinate applications and then send them to the University. Decisions on admissions are made by the Academic Director of Graduate Studies, WMG, acting on the devolved authority of the Graduate School, and SIM is informed of the outcomes.
- Concern about falling student numbers prompted a review of admissions and plans to move from twice-yearly entry points to a rolling intake in May 2011. Support from the WDA for professional training and direct marketing to companies are expected to boost admissions.
- In line with the prevailing market in Singapore for two-year part-time master's, the EBM MSc had, with WMG's agreement, been advertised by SIM as a two-year programme rather than the three-year registration period specified by the University. However, experience has shown that most students have required longer than two years and SIM intends to change its advertising to say the completion is expected to take between two and three years. Current students whom the audit team met were not concerned about the two-year designation, being clear that their initial registration period was three years.

- The Participant Handbook has a section on joining a UK engineering institution, with the intention of ultimately becoming a chartered engineer. SIM is aware of the possibility and is mapping the limited choice of modules currently available from WMG to see whether it should pursue this accreditation route.
- The audit team found that the University sets clear and appropriate admissions criteria and that the respective functions of SIM and WMG in the admissions process are well defined and adhered to.

Assessment requirements

Regulatory framework for assessment

The MSc in Engineering Business Management is subject to the University regulations which state that students must normally complete and pass modules equal to at least nine units of academic credit and satisfy the examiners in the execution, dissertation and oral examination of an industrially oriented project. Participants on the part-time programme in Singapore must also meet the requirements for attendance at the taught component of the module.

The assessment process

Summative assessment methods for the MSc programme are set out in the course specification, and for taught modules consist of post-module assignments marked by the module tutor supplemented as appropriate by in-course tests and case study activities, which together make up 50 per cent of the total marks. The SDR panel recommended that WMG should consider adopting a greater variety of assessment methods to accommodate students' different learning styles. WMG held an assessment review meeting in August 2010 and discussed alternative forms of assessment and feedback to students for further consultation with module tutors. The project, which is assessed by dissertation and oral examination, accounts for the other 50 per cent of the marks. The same assessment strategy is adopted across all delivery sites.

Moderation of project assessment

Concerns related to project supervision and assessment and the resulting action by ASQC and WMG have been outlined above. After the examination of the projects, there is a moderation process carried out by a team of trained WMG moderators, one of whom, the Director of Professional Programmes, is specifically allocated to the Singapore partnership and, where appropriate, discusses any issues directly with project supervisors in their role as examiners. A moderation report detailing any changes to marks resulting from moderation is sent to the Board of Examiners.

Feedback to students on assessment

The SDR report had also noted the concerns of some WMG students about the time that it had taken for them to receive marks and feedback on post-module assignments from their tutors. The audit team heard from students in Singapore that assignment turnaround time had not been an issue for them and that the recently introduced online submission of assignments was working well. At Warwick, the team was told that online submission had considerably helped tutors to manage workloads and reduce turnaround times and that tutors' performance in this respect was monitored and acted upon by WMG managers if it did not meet the required standard. Electronically submitted assignments are also subjected to a Turnitin test for potential plagiarism.

Effectiveness of the assessment process

- Singapore-based students' module work is assessed by the same methods and tutors as students at other delivery sites facilitating comparability and maintenance of standards across the MSc programme. WMG's Assessment Review Panel plays an important role in helping to ensure the quality and consistency of assessment across all programmes. Concerns about assignment turnaround times in some parts of the overseas delivery have been allayed by the speedier responses possible with electronic delivery. The moderation process adopted by WMG is helping to ensure greater comparability of project assessment across the range of academic and industrial supervisors involved in the programme. Progress of further work in this area is to be monitored by the CFDLSC, a process which the audit team considers advisable.
- The academic supervisor assesses the project report for aspects such as research methodology, while the industrial supervisor assesses areas such as the rationale and outputs of the project and its benefits to the company. SIMTech staff acting as industrial supervisors felt they were at a disadvantage in that aspect of the role.

External examining

- External examiners are appointed by standard University procedures to cover the entire set of delivery sites and modes of study of all WMG's MSc programmes in a further attempt to ensure that the same standards are applied regardless of participants' locations and whether they are part-time or full-time. The Teaching Quality website contains a range of material for external examiners with further programme-specific briefing being the responsibility of departments.
- SIM/SIMTech staff members do not attend the MSc Examination Board at which the Singaporean candidates are considered. External examiners are supplied with data on student outcomes from different locations but are not asked specifically to compare the performance of students from different locations. They are, however, asked to comment on the functioning of the collaboration between the University and partner institutions. The Briefing Paper maintains that 'progression and completion rates are similar on the SIM/SIMTech and UK-based programmes'.
- Student Experience) for identification of any issues to be referred to departments, which are required to report back. In WMG, external examiners' reports are considered at the ARP and responses are prepared by the Academic Director of Graduate Studies. External examiner reports and responses are considered by the Board of Graduate Studies and by the CFDLSC; however, they are not routinely forwarded to SIMTech and SIM and consequently not shared with the students in Singapore.

Effectiveness of arrangements for external examining

The University has standard procedures for the appointment of external examiners and their reporting role. WMG's use of a single set of examiners for all its programmes facilitates consistency across delivery sites and modes of study. Examiners' reports are comprehensive and generally supportive, and WMG provides comprehensive responses to any points made. The audit team raised the point with Warwick staff that comments on the comparative performance of students at different locations could be helpful in developing partnerships but noted the counter argument that a key point in quality assurance was that students in different locations were treated as members of a single group for the purposes

of external examining. However, operational staff from SIM and SIMTech said that they would welcome information on the comparative performance of their students, and this and routinely forwarding external examiner reports to its partners are areas that the University might wish to reconsider. Aside from this comment the team took the view that the external examining process for WMG programmes was rigorous and comprehensive.

Certificates and transcripts

The University is the awarding body for all academic awards arising from its partnership with SIM and SIMTech. The audit team was provided with examples of academic transcripts and certificates, and noted that neither included the name of the partner and place of study. The team was told when visiting Singapore that this was a requirement of the Council for Private Education. The team recognises this local requirement and acknowledges that it reflects precept A24 of the Code of practice, Section 2: Collaborative provision and flexible and distributed learning (including e-learning) - September 2004, namely 'subject to any overriding statutory or other legal provision in any relevant jurisdiction, the certificate and/or the transcript should record the name and location of any partner organisation...'.

Section 4: Information

Student information

Information for prospective and registered students

- Information for prospective students on the MSc in Engineering Business Management is available on the SIM website with a comprehensive set of FAQs on the programme and admissions process, and a downloadable application form and course brochure.
- On registration, students receive a Participant Handbook which introduces them to the University and its library, WMG, SIM and SIMTech, and to the programme. It also provides information on the scheduling of and attendance at modules; module outlines; guidelines on assignments and the project; dealing with problems, which includes a section on plagiarism, and information on appeals and complaints; and contact points.

Evaluation of student information

The audit team was given the 2008-09 version of the Participant Handbook. The team noted that it was generally comprehensive but parts of it did not seem to have been tailored for the intended recipients: for example, it included information on modules that were not being offered in Singapore, the course specification was not included and most of the brief module outlines contained no information about assessment. The team took the view that the Participant Handbook, while useful and informative, would benefit from editing and updating. However, those students whom the team met had not experienced any difficulty in acquiring the information they needed and were confident that they could continue to do so, using staff contacts in Singapore and at WMG if necessary. They had found that the information available to them prior to registration was very clear, as was the distinction between the roles of the three partners. The team concluded that the various sources of information available to prospective and registered students were appropriate for the student population that the EBM programme attracts.

Publicity and marketing

The Briefing Paper alluded to a concern about publicity material in QAA's 2007 report on WMG's collaborative courses with Hong Kong Polytechnic University, and subsequent action by the University to ensure that all departments have mechanisms in place to oversee publicity on an ongoing basis.

The partnership agreement between the University, SIM and SIMTech sets out the University's requirement to check all advertising and publicity material used by SIM and SIMTech in relation to the programme and its rules on the use of logos. WMG provides partners with basic information that they can adapt for local use after the adaptations have been checked by the Academic Director of Graduate Studies. Staff at SIM felt that the guidelines were very clear and were in no doubt about the approval requirements. The audit team considered that the University's procedures for ensuring the accuracy and appropriateness of publicly available information as applied to this partnership were clear and effective.

Section 5: Student progression to the UK

There is no formal arrangement for students to undertake part of their MSc Engineering Business Management studies on the University campus in the UK nor, given that the programme is intended for part-time study by people in employment, is there an expectation that any would wish to do so. However, the option would be available on a case-by-case basis.

Conclusion

In considering the partnership, the audit team identified the following positive features:

- the rigour and effectiveness of the University's procedures for selecting, investigating and approving partner organisations as exemplified by this partnership (paragraphs 32 and 35)
- the commitment of the Academic Director of Graduate Studies and the related academic and administrative teams to maintaining and developing the University's link with SIM and SIMTech (paragraph 45)
- the role of the Collaborative, Flexible and Distributed Learning Sub-Committee in advising the Academic Quality and Standards Committee on collaborative provision and monitoring its delivery, and in commissioning case studies of alternative means of seeking effective student representation and feedback (paragraph 51)
- WMG's arrangements for the moderation of project assessments (paragraph 84)
- the clarity and effectiveness of the University's procedures for ensuring the accuracy and appropriateness of publicly available information as applied to this partnership (paragraph 97).

The audit team also identified the following points for consideration by the University as it develops its partnership arrangements:

 the continuation of efforts to ensure effective student representation and feedback taking account of cultural differences which require the adaptation of the standard University model of a Student-Staff Liaison Committee (paragraph 56)

- the advisability of developing and formalising more clearly WMG's arrangements for academic programme management and the constitution of the programme team for the purposes of annual course review (paragraph 61)
- the need for the University through its Collaborative, Flexible and Distributed Learning Sub-Committee to continue to monitor WMG's ongoing work in strengthening the arrangements for the supervision and assessment of projects (paragraph 67)
- the provision of a formal opportunity for periodic review of overseas collaborations prior to the extension of partnership agreements (paragraph 71).
- The Briefing Paper was a helpful summary of the main points to be covered by the audit; the University initially supplied some useful additional information which was subsequently supplemented at the audit team's request. Together, these sources helped the team to a reasonable understanding of the University's view of its partnership with SIM and SIMTech.
- The findings of the audit generally confirmed the University's view of the link and that the University was operating the partnership with an appropriate regard for the *Code of practice*. On the basis of the Singapore example, which was typical of WMG's large range of overseas partnerships, the audit also found that the University was providing effective management of overseas collaborative arrangements.

Appendix A

The University of Warwick's response to QAA's report on its collaboration with the Singapore Institute of Manufacturing Technology (SIMTech) and the Singapore Institute of Management (SIM)

The University welcomes the report on the collaborative link between the Warwick Manufacturing Group (WMG) and the Singapore Institute of Management (SIM) and Singapore Institute of Manufacturing Technology (SIMTech). The University in particular welcomes confirmation of its own view that quality and standards are high on these courses, as with other provision whether delivered in the UK or in collaboration with its other overseas partners, and that the University's procedures for selecting, investigating and approving partner organisations are both thorough and appropriate.

The positive acknowledgement of the key role of the Collaborative, Flexible and Distributed Learning Sub-Committee in the effective management of collaborative provision is welcome, and the points for consideration highlighted in the report have already been the subject of discussion and action by this group. The University continues to pursue new ways of enabling best practice to be shared effectively, including through the use of technology to support effective student representation and feedback. The recommendation for the adoption of a formal review process prior to extending or renewing contracts with collaborative partners is also being taken forward.

Audit of overseas provision: Singapore

Appendix B

Student numbers for 2010-11

	Year 1	Year 2	Year 3	In extension
MSc Engineering Business Management	24	14	4	2

RG 762 07/11

The Quality Assurance Agency for Higher Education Southgate House

Southgate House Southgate Street Gloucester GL1 1UB

Tel 01452 557000 Fax 01452 557070 Email comms@qaa.ac.uk Web www.qaa.ac.uk