DEVELOPING A QUALITY CRITERIA FOR APPLIATIONS IN THE HIGHER EDUCATION SECTOR IN TURKEY

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Abstract : This paper is an attempt to propose a quality criteria check-list for private academic institutions of higher education in Turkey. The check-list is expected to form the basis for a management strategy that harnesses the human and material resources of these organisations in the most effective way to achieve academic objectives.

Keywords: *Quality Assurance, Higher Education in Turkey*

Özet: Bu makale, Türkiye'de yüksek öğrenim kurumlarında kalite olgusunun yerleştirilmesi ve sürekli geliştirilmesinde kullanılmak üzere bir kalite kriterleri tetkik ve değerlendirme listesi sunmaktadır. Bu listenin kurum amaçlarına ulaşmada, gerek insan ve gerekse de diğer kaynakların kullanımını belirleyen yönetim stratejilerine temel teşkil etmesi beklenmektedir.

Anahtar Kelimeler: *Kalite güvencesi, Türkiye'de yüksek öğretim*

1. Introduction

Most academic institutions in the developed world have established a system of quality assurance and control to a different degree of complexity and effectiveness. In many countries, governments have felt the need to assure the quality of the awards granted by their institutions of higher education. This need has become more urgent in developing and newly industrialised countries.

In the newly industrialised countries, there is a shortage of graduate and materials resources to satisfy the social demand for higher education. Because of such shortages, the governments are under pressure to ensure that their limited resources are applied more efficiently.

This simply means that graduates should have acceptable qualifications and that their knowledge, skills and understanding are required to be in line with national development plans, particularly economic needs.

There is a strong correlation between a country's competitiveness and the quality of the higher education provided within that country. According to the the International Institution for Management (IMD) World Competitiveness Report 1997 (1), Turkey ranked as the 38th competitive nation amongst 46 nations. A brief look at some of the statistics shows that there are marked differences in terms of the characteristics of education and research between Turkey and those countries which come before Turkey in the list (2).

In terms of the percentage of distance learning students in the higher education system, Turkey ranks second in the world (4). This shows the over reliance on theoretical aspects of knowledge in the Turkish higher education system. 42% of the students in the higher education are registered on distance learning programmes. This is one of the direct results of allocating limited funds to the education sector over the past few decades in comparison to the growth rate of the population. In Turkey whilst the average growth rate of the population over the past few decades has been 2.5 % p.a., funds allocated to the education sector have stood at 2.1% of the Gross Domestic Product (GDP) leaving a gap of 0.4 % in the education sector (4). This gap has resulted in a decrease both in the quantity and quality of graduates of the higher education system.

In Turkey, including distance learning only 17.3% of school leavers have the oppurtunity to study a higher education programme, while in the UK, Canada and the USA this ratio is 45%, 75% and 70% respectively. In Turkey publications per ten thousand of population amount to only 0.3. However in the USA, UK, Israel, Switzerland the rate is more than twenty times higher than that of Turkey.

Quality assurance has implications for institutions as well within the Turkish Higher Education Sector. With the increasing number of private universities the need for establishing and maintaining competitive advantage is becoming more and more

significant. In Turkey, there are 72 universities, of which 19 are classified as private universities managed by educational foundations (non-profit making) (5).

The Turkish Government therefore decided to review the situation in the higher education sector and based on the encouragement received from OECD (Organisation for Economic Cooperation and Development), a pilot programme was instigated to implement the British system of quality assessment in the some twenty universities across Turkey (5,6,7). This pilot programme was implemented in 1997/1998 academic year.

2. Definition of Concepts

In this investigation the term 'quality' and variations of this word are used often, hence the definition of this term and the related concepts need to be stated for the sake of clarity. According to BS 4778, quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs. The standard defines:

Quality Assurance as - all those planned and systematic actions necessary to provide adequate confidence that a product or service will satisfy given requirements for quality and,

Quality Control as - the operational techniques and activities that are used to fulfil requirements for quality.

The Quality Control in this study will also include:
the systematic process of measuring actual quality performance and comparing it with a given standard and act on the difference.

The research programme is also concerned with the quality management. The BS 4778 states that:

Quality Management is - that aspect of the overall management function that determines and implements the quality policy.

According to BS 7850 (1992):

Total Quality Management (TQM) is defined as the management philosophy and the organisational practices that aim to harness the human and material resources of an organisation in the most effective way to achieve the objectives of the organisation.

In this project the above definitions which are the international definitions for various terms associated with subject of quality are applied throughout the research work. However the term Quality Assurance and Control often used in this project proposal refers to the establishment and refinement of a higher education system incorporating of all the above definition statements.

3. Previous Research

There are many management theories and postulations. Hoyle (cited in Bush 1986, Ref 8) defines management as a continuous process through which members of an organisation seek to coordinate their activities and utilise their resources in order to fulfil the various tasks of the organisation as efficiently as possible.

The function of management is the process of achieving organisation goals. There are generally four areas which managers need to consider (Hannagan,1985; Pascale et el, 1997, Refs 9-10), these are: planning, organising, leading and controlling.

Therefore it is essential that any system of quality assurance and control considers these functions to ensure procedures take into consideration the role of managers and the employees in all aspects of the four functions summarised above.

There is a great deal of research which advocates the role of leadership in successful management of change (Schwahn et el, 1998; Harrison, 1999; Juechter et el, 1972; Refs 11-14).

The management of change according to Gore et al (1998, Ref 15) is to some extent a misleading phrase in that it has been used in a number of different contexts and with a variety of different emphases.

Champy, Hammer and Champy, and Harrington (1995; 1993; 1991; Refs 16-18) have focused on radical change programmes such as TQM, Business Process Re-engineering (BPR) and associated techniques required by managers for implementation of such change initiatives.

Pascale et al. (10) state that success of any change programme depends on leadership quality. Leadership they believe is the most important function of management in instigating and implementing change. They also believe that the problem is not the programmes for change, but the evidence that the burden of change usually rests on so few people. They believe in the involvement of every body in the organisation.

The shared attitudes, behaviour, beliefs and values of people form the culture of any organisation. Roger Harrison (13) identifies four separate organisation cultures: power culture, role culture, task culture and person-oriented culture.

The question of culture is also an important consideration. It is interesting to note that Juechter et al.(1998, Ref 14) say culture has long been regarded as "soft stuff" – difficult to manage, cumbersome to change, and almost impossible to measure. They argue that any organisation can be viewed as a system with three distinct sub-systems, these are: 1) Why the organisation exists and where it is going? 2) What the organisation does to pursue its purpose and accomplish its mission? 3) And how the individuals, teams, departments, and other sub-groups interact

Donald Kirkpatrick (1997, Ref 19) identifies three factors in managemnt of change: empathy, communication and participation. Catherine Bartol and David Martin (1994, Ref 20) defined two distinct types of change: reactive change - action and response to a perceived or real problem, a threat or an opportunity; and planned change - action based on a well planned set of activities in case of difficulty, threat or opportunity in the future. Both types are thought to have a role in management of change and hence would be considered.

Others have taken a case study approach and examined both the reasons for the introduction of such change programmes within specific organisations and the impact of the changes on the structure, culture and employee attitudes. Among such researchers are Oram and Wellins (1995; Ref 21) and Dawson (1994; Ref 22).

Another interesting variant has been the focus on the impact of new technology as both the cause of change and a tool for its implementation as reported by Preece (1989; Ref 23).

Gore et al (15) "management of change" has been used to describe how managers should introduce more minor changes in organisations. This approach was reported to focus on employee attitudes and responses to change and how managers can minimise negative effects of these, through for example, effective communication and participation in decision-making.

Another area for study is that of contingency theory. Child (1984; Ref 24) regards contingency theory as "the design of an effective organisation as necessarily having to be adopted to cope with "contingencies" which derive from the circumstances of environment, technology, scale, resources and other factors in the situation in which the organisation is operating".

The approach taken by some researchers in managing change through empowering teachers and peer coaching is also worth considering. Research by March et al (1994; Ref 25) has clearly indicated some positive results.

Amongst new ideas is the application of novel management philosophies and approaches such as the learning organisation which has been reported to turn the strategy, structure and culture of the organisation into a learning system (Nyham; 1991; 26).

In recent years, attention has been diverted to developing a learning organisation (Ref 26 and Ziarati 1995; Ref 27). This is an important consideration since the main elements of such organisations are in line with the TQM philosophy. The characteristics of a learning organisation are: decentralisation of decision-making in the areas of responsibilities and quality assurance, integration of functions at the work place, flattening of hierarchical structure, along with new moderating, coaching and guidance roles for management personnel, and use of lateral networks to solve institutional problems and for planning purposes.

The management systems in higher education in the UK have gone through rapid transformation (Ziarati; 1996, Ref 28). The applications of the International Quality Standards (ISO) viz., ISO 9000 in some academic institutions (Ziarati, 1992; Moreland & Clark, 1998; Refs 29-30), are considered as interesting developments. Moreland and Clark (30) provide an interesting account of the development and implementation of ISO 9000 certified quality assurance systems in three educational institutions, a university, a college of further education and a primary school.

An analysis of recent developments in quality assurance and control in selected countries including the UK and Turkey (Baloglu, 1990; Bilgen, 1993; Gopal et el, 1998; Hertling 1996; Refs 31-34) would be carried out through a range of approaches including the use of questionnaires and interviews. In addition recent developments in the management of higher education in newly industrialised countries such as Malaysia, South Korea and Hongkong (Refs 33-34) will be analysed.

Introduction of any new system of management requires a thorough understanding of the organisation and management of change (Dalin, 1978; Goddard and Leask, 1992; Handy, 1985; Ref 35-37). To this end, a review of the work on the introduction of total quality management in other organisations and their impact needs to be fully reviewed. The following is a summary of the literature review on this very important area of the research being conducted here.

Sivanci (1996, Ref 38), has put particular emphasis on the role the students play in quality higher education. He believes that to improve quality the right customer focus is essential. He has argued that there is a similarity between a manufacturing organisation and the flow of students through colleges and universities.

Fram and Camp (1995. Ref 39) in their study of finding and implementing best practice in higher education, show the influence of students in improving the quality of education.

The argument put forward by Sivanci is of particular value here viz., that there is a similarity between manufacturing (where standard quality systems such as ISO 9000 were originated) and the students admission and progression through the Higher Education Institutions (HEIs). This is because Kanji (1999, Ref 40) reported in 1996 that there had been little progress in linking the TQM process to an ISO based quality system. He states that the issue of whether ISO 9000 standards or its derivatives are suitable for application in educational establishments must be clarified first before any further progress is made. James (1996, Ref 41) also supports Kanji's view that although there has been a growing interest from individuals who see positive benefits of applying the ISO 9000 standard in HEIs, the progress on the quality management approach has been insignificant. Some people even have gone as far as accusing their government of a ploy to control academic institutions by encouraging them to introduce ISO 9000 standards in the academic departments (James & Tannock, 1991, Ref 42).

The encouragement, in the UK, if any has been based on the work of researchers such as Oakland and Rooney (1991, Ref 43) who are the prominent supporter of the application of ISO 9000 in educational institutions. They claim that they have not seen any case of failure of ISO 9000 in higher education. They reject the assertion by Buckingham (1991, Ref 44) that ISO 9000 standards are "straight jacketing" and that such standards are misleading because the translation of the standards when applied to educational institutions causes "confusion and consternation". Rooney (43) says that ISO 9000 does not impose a bureaucratic standard but it is the intepretation of the requirements that creates the bureaucratisation levels.

Kanji in another paper (1999, Ref 45) concluded that there are ways of linking ISO 9000 with TQM process. He proposed an approach to improve quality by examining the organisation's processes in terms of process definition, process improvement and process design.

Many prominent researchers are of the opinion that TQM as a 'stand alone'process has shown to have a potential of improving quality in educational institutions (Daniel, 1961, Ref 46). Kanji (45) also believes that ISO standards have a role to play although he does not state how the two can be integrated. In a lecture given by Ziarati (1998, Ref 47), the link between the two has been made clear. Ziarati says that the ISO 9000 can be the basis for the introduction of a TQM philosophy. Unlike others he stated that TQM is a philosophy or an approach and not a single or a defined process. He says, TQM is that aspect of the overall management function that determines and implements the quality policy.

The quality, he states can not be defined by simply referring to the ISO standard definitions. He states that the grade as well as main dimensions of quality should be taken into consideration when defining the quality of a product or service particularly when comparing one product or service with another. The grade, he says, is easy to establish; "do we want a 2-star or a 4-star hotel?" i.e. should a university, for instance, aim to be a 2-star or a 4-star institution?. Either way, the institution can be "fit for its purpose

Gozacan Borahan and Ziarati (1999, Ref 7) identified the twenty requirements of the ISO 9000 standards and translated these into requirements, which relates to educational terms. A copy of this translation has been forwarded to ISO specialists and when feedbacks are received these will be analysed in a great depth.

The work by Babber (1998, Ref 49), applying TQM to learning processes and Peak (1995, Ref 50), looking at TQM from a class room point of view are also intended for further study.

There is another school of thoughts, which promotes SCFs (Critical Success Factors) quality models. Holloway (1994, Ref 52), quotes the findings of a number of researchers that tend to point towards predictable CSFs of institutional quality.

It is pertinent to note that although the research work here seeks to find a higher education management model, nevertheless, the thesis abides by Baldridge's philosophy, namely that; "The search for an all encompassing model is simplistic, for no model can delineate the intricacies of decision processes in complex organisations. There is a pleasant parsimony about having a single model that summarises a complex world for us.

4. Developing a Model

Focus Groups

Two focus groups were formed to discuss issues relating to Total Qualty Management (TQM) and to indentify what are the areas which need to be considered for inclusion in the model. The terms of reference, composition and frequency of the meetings are given below. A number of questions were put to the groups' members.

Total Quality Management Focus Group

This group met on a regular basis in Turkey and the findings were discussed a major international symposium in Ankara involving representatives from over seventy academic, commercial and governmental agencies from seven countries including the UK and USA. The findings of the work by this group are presented in Gozacan and Ziarati. 1999 (Ref. 7).

Terms of Reference

- To define what is meant by various quality terms, and what are the main characteristics of TQM.
- To identify the main areas needed to be considered by an academic institution if a TQM approach is to be introduced.
- To review the requirements of professional institutions in Turkey, UK, USA and other countries.
- To review the management practices in academic institutions in several countries.

Questions put to the TQM focus group by the candidate:

What is Quality and TQM?
How can these terms be defined in higher education terms?
What are the characteristics of TQM?
What are dimensions of Quality and how do these relate to higher education?
Can the existing practices or models of Quality systems or TQM be exported? Or are they culture-bound?
Can a model developed in another country for quality assurance and control be implemented in Turkey? Or should we consider a model being practised in newly industrialised country which is in a similar development stage as Turkey such as South Korea which as recently become a member of the Organisation for Economic Cooperation and Development (OECD) and has established a major textile industry?

Can generic elements for a model be identified for application in higher education sector in Turkey?

Composition

The group was composed of a representative from each academic unit of the Dogus Institute of Higher Education (DIHE) and from Dogus University (DU). A working group composed of the Rector of the Dogus University, the Academic Director of the Dogus Institute (who also is the Head of the Computing Department at DU) and the Head of Department of Industrial Engineering at Dogus University were formed to coordinate the work of the group. The latter two members of staff have substantial experience of TQM and its application in academic and commercial environments.

Frequency of the Meetings

Weekly for six months.

The Ad-hoc Group

This group carried out a number of meetings and its members conducted one to one meetings with selected universities and professional bodies and considered validation and accreditation documents of the universities and professional institutions in Turkey, UK, USA and several other countries. Based on the requirements a checklist of primary requirements were compiled. References were made to processes involved in the validation of DIHE programmes by Oxford Brookes University in 1997.

Questions raised by the candidate and put to the group and for one-to-one meetings:

For the generic elements identified in the Outcome 1, can a checklist be developed for initial studies?
What should be the format of this checklist?
Should an ISO based quality system be used as the basis of a model for application in higher education systems?

Can the questions raised in the Outcome 1 on under each heading be translated to appropriate criteria which can easily be checked if present or not?

Are there any reasons as to why existing criteria developed in other countries including those by the professional institutions should not be considered? Or can they be used to fill the gaps identified in the Outcome 1 report?

What are the processes to receive approval for introduction of the checklist in an academic unit of a given university for initial studies?

Terms of Reference

To identify the main requirements for validation and accreditation of programmes practised in several universities and professional institutions in Turkey, the UK, USA and several other countries.

Composition

Representatives from Dogus Institute of Higher Education, Dogus University and Oxford Brookes University were involved in the process.

Frequency of the Meetings

Varied and on ad-hoc basis.

5. Outcomes

Outcome 1

The following is the areas of particular importance to the concept of quality in a higher education system.

Many questions raised in the first series of the Total Quality Management Focus Group were analysed and put under various categories by the candidate with support from the second supervisor.

It was found that the emerging categories could be related to those used by the Higher Education Founding Council of England (HEFCe) apart from the questions relating to programme management and operations. The following could form the first building blocks in construction of a system for quality assurance and control for application in higher education sector in Turkey.

- Programme management and operation. How is the programme planned and managed? Have issues concerning resources (physical and human) been addressed? How would these resources in terms of maintenance and development be monitored? Is access to these resources sufficient? Have staff development needs been identified and responded to? Is there a teaching and assessment plan and do students know on what, how and when they are going to be assessed? How are students and staff views taken into consideration? Have issues relating to audit of the programme planned and how are these implemented?

- Curriculum design, content and organisation. Is the curriculum designed appropriately and how changes can be implemented? Is the content relevant, sufficient and valid? Is the curriculum planned in an appropriate way and are pre-requisites carefully considered?

- Teaching, learning and assessment. This concerns issues relating to teaching, learning and assessment strategies and methods. How is the learning material to be delivered? Have any assessment criteria been developed and do these relate to learning outcomes for each course? Has a decision been made as to whether the assessment is part of the learning process or designed to check that learning has taken place? Do learning and assessment activities ensure that all students attain the required standards? How is the effectiveness of teaching, learning and assessment going to be monitored and evaluated? Are students given support to remedy learning difficulties? Are they given opportunities to become involved in taking responsibility for their own learning? Is the learning strategies based on teacher-centred or student-centred activities or both, and if the latter, is this planned?

- Student support and guidance. What kinds of support are available to students and are they aware of these? Is there a handbook for the programmes and are there course descriptions informing them of the regulations and of requirements?

- Learning resources. What sorts of resources are available to students? Have the quality, quantity and range of resources been determined? How are the development issues addressed and acted upon? Is the access to these resources adequate? How is the adequacy measured?

- Quality assurance and enhancement. These related to main issues highlighted in the earlier part of this report. It is crucial to identify various processes to ensure that the quality of provision is assured and that there are mechanisms to control non-conformance when this occurs and that there are policies and procedures to enhance quality on a continuous basis.

Outcome 2

The questions raised in the Outcome 1 report were extended and expanded and transformed into a more comprehensive checklist. This revised checklist was presented to the TQM Focus Group and it was agreed that it is a more comprehensive set of questions than those reported in the Outcome 1. While the checklist provides a basis for a quality model in its present form is should be noted that it is only a set of criteria and more work needs to be carried out to turn it into a model for application in a university in Turkey.

The suggestion by the authors to pilot the checklist in a given Faculty of Dogus University was fully supported by the Group.

a) Programme Management and Operation

Criteria:

- A cost/benefit analysis together with market research for the proposed programme has been conducted prior to consideration by the Institution.

- Physical resources for the programme have been identified.
- The staff involved are sufficient in number, appropriately qualified and experienced.
- A staff development and training plan has been prepared.
- A system for taking students' and staff views has been established.
- The details of staff currently involved in delivery, assessment, internal and external quality assurance and control, are available.
- A Programme Leader has been identified and roles of other staff involved with the programme have been established and details of technical and administrative support staff are available.
- A programme handbook identifying the following is available:
    - Description of the programmme
    - Rationale for the programme
    - Aims
    - Intended learning outcomes
    - Programme structure
    - Learning and teaching strategies
    - Assessment strategy
    - Student experience – support, progression and achievement.
    - Programme review and evaluation
    - Entry regulations
    - Academic regulations
    - Examinations – regulations and procedures.
    - Institution Management Structure
    - Appeals – procedures.
    - Counselling and advice
    - Summary Syllabuses
- There is a programme committee with a defined composition and terms of reference to oversee the programme operation and evaluation.

b) Curriculum Design and Structur e

Criteria:

- The year has been broken down into specific periods of study, i.e. semesters, terms etc.
- Modules/courses within the programme have been clearly identified.
- The academic depth for each module/course has been decided based on the intended student entry.
- The mix of core, elective and basic science modules satisfy the Institution's rules and regulations.
- The level of modules/courses, including electives, has been decided.
- Pre-requisites for each module have been investigated and established and the structure of modules is coherent.
- Each module/course content has been developed after discussions with internal and external staff with expertise in that particular area.
- The modules selected satisfy the range and depth of knowledge required and their

content has been developed to ensure minimal overlap unless otherwise intended.
- All electives have been identified and classified appropriately.
- Delivery methodology of programme modules has been decided.
- Total number of credits has been established.
- The curriculum content satisfies the academic requirements of the profession.
- The assessment methodology for each module has been determined.
- Progression routes are well defined.
- The transferrable skills have been identified.
- Progression to further study has been made possible.
- A map of student-centred activities and opportunities for students' personal development are available.

c) Teaching, Learning and Assessment

Criteria:
- Methodology in terms of lectures, seminars and workshops for each module has been decided.
- The assessment papers ie. examinations and assignment briefs have been prepared in accordance with the assessment requirements for the intended outcome.
- For each assessment, there is an assessment criterion as well as a grading criterion.
- The assessment ensures the students attain the required standards, ie. examination papers and coursework satisfy depth and range requirements.
- There are mechanisms to assess teaching quality and this mechanism provides a grading system and includes the following area:
  - Clarity of the objectives for the session related to the intended outcomes.
  - Student participation.
  - Resources used during the session and appropriateness of the accommodation.
  - Planning, content, method, pace and examples used.
- There are mechanisms for suppoting students with learcning difficulties
- Students are given opportunities to become involved in the programme operation and taking responsibility for their own learning.
- The learning strategy clearly identifies teacher-centred and student-centred activities and that these activities are planned.
- There is a system for sampling students'assessed work.
- Students are expected to provide feedback on the quality of teaching provided and their modules of study.
- There is an assessment schedule so that students know when, what and how they are going to be assessed.
- Learning expriences of students are relevant to employment.
- There is a systematic and progressive development and assessment of transferrable skills.
- The assessment procedures are open, fair and free from bias.
- Records of assessments are up to date and available for scrutiny.
- There are procedures for internal verification and evaluation of all aspects of the assessment process.

d) Student Support and Guidance

Critera:

- There is a strategy to provide meaningful support and guidance to students.
- There are planned arrangements for students'admission and induction and all staff are aware of these arrangements.
- There are arrangements for counselling and welfare support and all students have a tutor and know how to access a counseller.
- The students have been introduced to learning and IT resources and full information has been given to them to use these facilities.
- There is comprehensive service to students on careers and the world of employment.
- Relevant statistical and progression data are available.
- A mechanism is in place to identify student needs in terms of support and guidance.
- Students have access to an office for their social and club activities.
- A liaison staff as been identified to support students' social and club activities.
- Students have access to relevant and appropriate IT facilities including internet, application software and on-line databases.

e) Learning Resources

Criteria:

- There is an overall strategy for learning resources and their development.
- There is a library handbook which details library resources and opening times.
- Details of Learning Resources, including library and IT, and their availability,are provided.
- Details of all physical resources – their location and availability to studetns, including those availble off-site are given.
- Each category of learning resources, namely laboratories, library and IT, are staffed accordingly (sufficient in number, appropriately qualified and experienced).
- Roles of staff involved in learning resources have been identified, including details of technical support staff.
- Training development needs of learning resources staff have been identified and a programme of staff development for these staff is in place.
- The accommodation provided for laboratories, library and IT is appropriate.
- The students have access to learning support facilities in addition to books periodicals and CD-Roms etc.
- There is evidence of effective liaison between academic staff and learning resources staff.
- Students are provided with open access and independent learning materials.
- There are arrangements for introducing staff and students to learning resources.

f) Quality Assurance and Enhancement

Criteria:

- The needs of the organisation are clearly identified.
- The needs of job specifications are clearly identified.
- The needs of individuals are clearly identified.
- The academic depth for each module/course has been decided based on the intended student entry.
- There is a policy to improve quality and maintain standards.
- There is a quality system in operation which contains a Qualtiy Assurance and Control manual with clear procedures and instructions.
- The views of staff/students on operational aspects of the organisation and quality issues are sought.
- There are periodic and on-going arrangements for monitoring the quality of academic programmes as well as administrative support services.
- Qualtiy Assurance and Control arrangements are clear, rigorous and understood by staff and students.
- There is a staff development programme which supports the staff development of academic and non-academic units.
- There is an appraisal and peer review of staff, including teaching skills.
- There is evidence of support for continuing professional development.
- There is a central and localised support for research.
- Research programmes, in the main, underpin the academic programmes offered.

g) Student Progression and Achievement

Criteria:

- There is a clear strategy for entry arrangements of students onto academic programmes.
- The student entry and intended outcome of programmes and modules are carefully matched.
- The progression rates and non-completion rates are clearly identified.
- Transfers in and out of programmes or courses/modules are clearly reconsidered and recorded.
- There are clear procedures to ensure grades and qualifications awarded to students are fair and unbiased.
- The arrangement for credit rating is such that the students are not disadvantaged if they decide to opt out of the institution at any time.

  There are clear arrangements to monitor students' career development after graduation.

6. Conclusion

The implementation of the quality criteria check-list at Doğuş has led to the development of a ISO based TQM quality model. The check-list was asked to

identify a management strategy for Doğuş and has led to the development of a TQM quality model. The quality system of the model is based on an ISO 9000 where manufacturing terms have been translated to procedures appropriate for adoption in the higher education environment. It is pertinent to state that the ISO Quality System is more to do with the process rather than the students' performance. The check-list would enable the TQM requirements to be built in the overall TQM quality model.

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