



ISSN NO. 2320-5407

Journal homepage: <http://www.journalijar.com>

INTERNATIONAL JOURNAL
OF ADVANCED RESEARCH

RESEARCH ARTICLE

Senior Technicians Perception of Teaching Process Quality in Tunisian Higher Education

Raoudha Kammoun, Abdelhakim Khelifi

Faculty of Economic Sciences and Management, University of Sfax, Airport Road Km 4,3018 Sfax, BP 1088
Tunisia

Manuscript Info

Manuscript History:

Received: 12 August 2014
Final Accepted: 28 September 2014
Published Online: October 2014

Key words:

Higher education, senior technician,
Higher Institutes of Technological
Studies, Teaching process, Quality.

*Corresponding Author

Raoudha Kammoun

Abstract

Higher Education institutions are constantly trying to adapt to the changing needs and new features of the labor market and have, therefore, become increasingly interested in the concept of quality. The present study was undertaken to assess the teaching process in Tunisian higher institutes of technological studies. Accordingly, a survey was conducted on students' perceptions of their learning experiences in retrospect. The data were collected through a questionnaire administered to 'senior technicians' as graduates from different institutes of technological studies in Tunisia. The results revealed some areas of strength; with some participants reporting on their acquisition of a number of new and well-adapted competences during their studies, which facilitated their insertion in the labor market. The findings also showed several areas for improvement, including the presence of useless courses and lack of communication between students and teachers.

Copy Right, IJAR, 2014.. All rights reserved

Introduction

The Higher Education (HE) sector is facing a new era of different reforms, and quality in HE institutions has become at the heart of the concerns of states since these institutions aim to prepare suitably qualified graduates that have the skills and competences required by the labor market. According to (UNESCO, 1998), quality in higher education is "a multidimensional concept, which should embrace, all its functions, and activities: teaching and academic programs, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment". At the broadest level, education quality is perceived as a set of elements that constitute the input, process and output of the education system, and provide services satisfying both internal and external stockholders by meeting their explicit and implicit expectations (Cheng and Tam, 1997). The notion of "input" refers to entry requirements, the "process" represents mainly the process of teaching and learning, and the "output" is related to the bachelors and the academic achievement. Thus, the HE as a system, assumes that the implementation of any quality management program could not be successful without assessing the inputs, process and outputs. Focusing on the process, it should be noted that HE institutions are mainly composed of an academic department and administration department. There are two key processes in the academic area, which are 'teaching' and 'research' (Zink and Schmidt, 1995). The teaching process has often been seen as becoming increasingly more important (Jerome and Johnson, 2010). Most of the HE institutions are under immense pressure due to expectations for better performance in terms of teaching to guarantee better qualifications and graduates (Steed, 2002). They have a serious responsibility for evaluating and improving the quality of their teaching not only for accountability purposes but also because of a responsibility to prepare professionals for the society they serve. Thus, quality in (HE) is generally measured in terms of what students learn, understand and can do at the end of their experience. This requires assessing and monitoring the teaching process, as a key process, using quality models as a powerful instrument to assure the quality in the HE institutions (Vroeijestijn, 2003). The assessment mechanisms allow for the identification of strengths and areas for improvement in the teaching system through different stakeholders'

perception. They include teachers, administration staff, students, industrial organizations, other higher education establishments and society in general (Tari and Juana-Espinosa, 2007; Vroeijenstijn, 2003). Student perceptions are a prime source of information that could provide continuing insights into a number of important dimensions of teaching, including classroom performance, informal and formal contacts with students, relevance of programs. Consequently, teachers should pay constant attention to the signs of satisfaction or dissatisfaction of students with regard to the services provided. The present study aimed to gain insights on the quality of HE institutions in Tunisia. Based on a survey questionnaire, the study focuses on assessing the teaching process of the higher institutes of technological studies in Tunisia through the senior technicians' perception.

The choice could be justified by the fact that professionalization and diversification are two fundamental movements of higher education, which are manifested, for example, by the dramatic increase in the number of higher technical sections and higher education institutes of technology. In fact, students have a perspective for evaluating both individual faculty members and the program. They also have the advantage of being able to judge the relevance of course work to their current situation.

Thus, the paper is organized as follows. In Section 1, we focus on the assessment of the teaching quality in higher education. Section 2 describes the methodology adopted to collect information, including details about the choice of the population, design of the questionnaire and data collection. The results are presented and analyzed in the section 3. The last section provides a conclusion and summary of major results.

2. Assessing teaching quality in higher education

During the last decades, quality assessment has gained increasing importance in higher education worldwide. The recent trends have particularly increased the attention given to the teaching process, as a key process (Harvey and Green, 1993). The evaluation of teaching process quality in higher education has become an area of interest for different stakeholders, and a subject that goes beyond the world of researchers. Thus, teaching quality throughout the world is affected by contextual changes within the higher education environment. The main factors influencing the quality of teaching include the internationalization of higher education, the increased pressures of global competition, the salient expansion scope of education, the diversity of student profiles, the rapid changes in technology leading to reviewing program contents and pedagogies, and the need to produce a skilled workforce (Henard and Roseveare, 2012). In such circumstances, HE institutions need to ensure that the education they offer meets the current and desired expectations expressed by the students and labor market. This implies that their visions and strategies should be well-aligned with the new practices and innovations in teaching and learning (Henard and Roseveare, 2012). Accordingly, the HE institutions have become increasingly devoted to anchor the quality principles and the culture of assessment in the teaching process to produce qualified graduates and guarantee a continuous improvement in HE (oecd, 2012). Hence, to embed quality principles into its organizational culture, the institution should have well articulated mission, vision, and policy statements pertaining to quality. Teachers themselves should know the content of these statements to be committed to implement them. The institution and its operating units should also have formal programs to assure quality levels and spur continuous teaching quality improvement while promoting a motivating environment (Milanowski and Heneman, 2001). According to (Massy, 1996), the teaching process can be described in terms of four sub- processes, which are:

- The curriculum design, which provides a framework and makes a relevant and reactive teaching and learning environment for both lecturers and students. It is defined as a process which focuses on developing curricula for students. This process leads to the production of core program documents, such as a course description, validation documents, prospectus entry, and course handbook.

The Curriculum design is the architecture of a course that embodies a philosophy of learning and teaching, articulates the learning outcomes, and describes how the planned learning environment supports the student to achieve those learning outcomes. Thus, each curriculum should have lucid learning objectives that must be aligned with relevant and appropriate teaching activities through which students acquire the knowledge and master relevant skills. Ideally, curriculum development should involve a balance between professional and frameworks of knowledge (Srikanthan and Dalrymple, 2007).

- The pedagogical design: This criterion focuses on teachers' duties, since it is important to check whether or not teachers are fulfilling their duties. The latter are involved in developing objectives, ensuring lectures, asking and reformulating questions, and providing feedback. They also are expected to be able to lead discussions, illustrate with examples, use audio visual materials, and set rational exams. In fact, to maintain a strong relationship between teachers and students, effective teachers should treat students fairly, be available to students, pay constant attention to the signs of students' satisfaction or dissatisfaction with regard to the service offered, and be enthusiastic about their course content (Pratt, 1997).

- The outcomes assessment: this clarifies the ways the institution monitors student outcomes and links outcomes assessment to the improvement of the teaching process. It is important to refer to the student learning outcomes and

to give some thought as to how to offer feedback to students. Learning outcomes correspond to statements of what a learner is expected to know, understand and/or able to demonstrate and do after the completion of the learning process.

- The resource provision and infrastructure: If students need to become lifelong learners and be able to achieve the learning outcomes described in the curriculum, they should have the opportunity to access information and to use it in ethical, creative and active ways. Thus, it is essential that students have access to a wide range of technical and quality resources that complement the curricula. The provision of resource would, therefore, specify the extent up to which the institution offers technical assistance and training to teachers who wish to improve the quality of their teaching and the extent up to which those resources are utilized. Resources, such as space and equipment, are often at a premium.

In fact, to guarantee the teaching success, infrastructure plays an important role in ensuring the teaching quality. Educational infrastructure is defined as all of the facilities required for effective teaching and learning, such as classrooms, play areas, furniture, and administrative buildings.

The above-mentioned sub-processes could be used as criteria to assess the teaching effectiveness with which teachers perform their teaching. Focusing on these axes, the real merit of the study is in clarifying the current status of the higher education teaching process. HE institutions have a serious accountability for evaluating and improving the quality of their teaching due to their responsibility to prepare professionals for the society they serve. Serious social and professional consequences could result if the evaluation misrepresents the quality of teaching. A relevant evaluation should highlight the strengths to be enhanced and the weaknesses to be analyzed so as to identify their causes and overcome them (Savickiene, 2006).

3. Methodology

The actual quality of higher education is measured through the acquired knowledge and skills of students, as an important stakeholder in the teaching process. Thus, the current study focused on the quality of the teaching process as perceived by the senior technicians, graduates of the higher institutes of technological studies. The involvement of students in the assessment process contributes to detect the relevant strengths, potential weaknesses, and possible opportunities for improvement. This study uses a qualitative approach guided by a survey questionnaire administered to the 'senior technicians' in the Universities of Sfax, Kairouan and Sousse, in Tunisia. The following section will provide a detailed description of the methodology used, including the choice of the population, the design of the questionnaire, and the data collection techniques and procedures.

3.1. The choice of the population

The target population in this study is 'senior technicians' graduating from Tunisian higher institutes of technological studies, particularly from the universities of Sfax, Kairouan and Sousse. The choice of the population is driven by two main causes. First, the higher institutes of technological studies in those universities account for a substantial share of these graduates. They represented 70% of the total number of Tunisian graduates in 2011 (MES, 2012). They belonged to two main areas of specialty: the scientific specialty, including computer science, mechanical and electrical studies, and the literary specialty, including languages, history, geography, and law. This category of graduates also remains the most affected by unemployment since in 2013, for instance, it had an unemployment rate of 50% against only 17.8% for engineers (NIS, 2013). Given such circumstances, one may inquire whether the teaching process has been responsible for the increase of the unemployment rate.

3.2. The design of the questionnaire

The design of the questionnaire is based on qualitative questions. The questionnaire includes 17 close-ended questions covering the themes detailed above, which are the curriculum design, pedagogical design, outcomes assessment, resource provision, and infrastructure. We tried to make the questionnaire as short and simple as possible. The survey was anonymous because no identity information was included in the questionnaire. This type of questionnaires is more likely to produce honest responses than those identifying the respondent (Sakaran, 1992).

The questionnaire was revised several times to avoid ambiguous questions and to ensure smooth and easy answers.

3.3. The data collection

Data collection was performed adopting two methods: the first is to perform a questionnaire face to face. This questionnaire was filled by 504 participants: 132 graduates from university of kairouan, 196 graduates from university of Sfax, 176 graduates from university of Sousse. The global rate of response is of 69,44% since some participants did not answer all questions and some others refused to fill out the questionnaire.

To improve the response rate, the same questionnaire was also sent by email to 1000 graduates. Only 300 participants responded to the questionnaire (rate of answers is 33%). The overall investigation lasted two months. The distribution of the overall respondents is detailed in the table1 below.

Table1. Distribution of respondents by specialty and university

Specialty University	Scientific	Literary	Total participants	Percent (%)
Sfax	220	150	370	46.02
Sousse	167	79	246	30.6
Kairouan	104	84	188	23.38
Total	491	313	804	100
Percent (%)	61.07	38.93	100	100

The main outcomes that emerged from participants' responses during the study are analyzed in the next section.

4. The results analysis

In this section we try to determine the strengths and areas for improvement in the teaching process from the results obtained. The survey findings are interpreted by theme.

The curriculum design

HE institutions are fundamentally required to design their curricula in such a way that promote success among all students. Attention to curriculum design encourages pre-planning and allows staff involved in teaching in higher education (HE) to adopt a proactive anticipatory approach to their learning and teaching (Morgan and Houghton, 2011).

The investigation highlights that 76% of respondents, particularly those from the University of Kairouan, note an inadequacy in the programs of some specialties. Some courses, especially introductory courses to other more advanced courses, are considered as useless by the respondents. All respondents noted an intense redundancy between courses and sometimes a weak coherence, generally leading to the fragmentation of knowledge, which weakens the curriculum. Besides, 21, 8% of the respondents report that the courses are sometimes updated while 59, 6% say that courses are rarely updated and include minor improvements from one year to the other. They add that syllabi are rarely communicated to them. The participants argued that, in some cases, new subjects, though inappropriate to the specialty, have been inserted to the existing curriculum.

This finding disagrees with the quality principle in higher education which is based on program relevance (Fedecgeps, 2012). It is important to note that in Tunisia, as in any other developing country, most educational institutions had their curricula patterned along models of the colonizing countries. This situation remained largely unchanged even after the countries gained independence. The curriculum is designed to serve the needs of the system that is operating. In these institutions, the curriculum has been found to be inappropriate, which necessitates the development or revision of higher education curricula as a way of improving the system of education. This is the major reason for curriculum revision. Another weakness lies in the fact that teaching is not really considered as a process. Each activity is undertaken on independent basis, rather than being linked through core or common processes. For this reason, teachers are in front of many problems related to interface issues. Otherwise, with the explosion of knowledge and increasing sophistication of technology, higher education curriculums need to be frequently reviewed and developed to keep pace with the needs of learners and society. The curriculum objectives and the appropriate courses of each specialty should be clarified and diffused. Besides, the changing in technological environment should be taken into consideration in elaborating and delivering the course. Teachers ought to innovate on both the content and the teaching methods. They should be aware that different kinds of teaching methods and educational settings can produce different kinds of learning. In fact, they should update the courses to be adapted to the market requirements and particularly the need for new competences. They also should be able to stimulate open and flexible learning that will improve outcomes, assessment and recognition. Thus, they succeed to inculcate knowledge and skills in students, as well as change their behavior for better living as underlined by (Popoola and Haliso, 2009). In addition, the curriculum design should take into account student involvement in learning and urge faculty to incorporate active learning techniques in their classrooms, engage students in the educational process; and convince them to take greater responsibility for their learning. Teachers should introduce discussions, small group and collaborative projects, out-of-class assignments, and research among the active learning strategies. They are called to propose approaches that make it possible to find out not just what students learn but how they learn it and what motivates them. Informing students about the purposes of courses and program, obtaining sophisticated feedback from them, and collaborating with them are indispensable activities to promote teaching. Students, on their

side, are invited to continuously evaluate their teachers in order to contribute to the improvement. They should also communicate their dissatisfaction and have more clarifications about the utility of the courses they receive and particularly their relevance when they apparently disagree with their area specialty. Furthermore, it is important to stimulate the students' presence in lecture sessions since teachers could introduce and develop new concepts that will be explained or operated during the practical sessions.

The pedagogical design

The participants are asked about the relationship between students and teachers specifying the pedagogical design. The findings show that 85.6% of respondents suffer from lack of assimilation due to the lack of teacher's pedagogy. They also argue that teachers do not focus on explaining concepts because of the incoherence between lectures and tutorials.

However, 62.4% of the respondents are convinced that students themselves are responsible for the lack of assimilation since they are much passive and do not communicate with their teachers, knowing that communication between student and teacher has an important impact on improving teaching quality (Coulon and Paivandi, 2008).

In order to reinforce the relationship between students and teachers, teachers should be able to stimulate open and flexible learning that will improve learning outcomes, They should illustrate the theoretical concepts with practical examples, ask students to make research, studies in order to stimulate their creativity, provide an opportunity for discussion, and generate cumulative information about students' levels of understanding and skill, as argued by (Angelo and Cross, 1993). Teachers should also pay constant attention to the signs of satisfaction or dissatisfaction of students with regard to the service provided, which would make students more active and motivated.

It is worth noting that 63% of the senior technicians from the University of Kairouan confirm that exams are always about concepts studied in the courses. They add that some exams are conceived with questions of reflection, which they find interesting because they develop creativity. This is explained by the satisfactory rate of students' attendance, which achieves 82%. However, 80% of respondents from the University of Sfax and 72% of the University of Sousse say that exams often contain concepts not covered in the sessions of their courses. This is intimately related to the high rate of students' absence because if students attend regularly they will be able to understand the concepts studied.

The current study also reveals that 88% of the overall participants agree that teachers are neither motivated nor available to supervise the graduation project. Nevertheless, only 12% of participants gave a positive view on the supervisor, saying that the latter is often available and committed to contributes new ideas. If the graduation project aims to develop the student autonomy and their responsibility and to put into practice the theoretical approaches learned, this will allow students to assert their expertise. However, teachers share a part of this responsibility. Thus, they should coach students, plan meetings with them, discuss and check the various aspects of the project, and validate the final results (Boutefara, 2012).

The Outcomes assessment

The questionnaire dedicates four questions to have an idea about the quality of the teaching outcomes. These questions deal with the opportunities that the senior technicians had for insertion in the employment market, the demand of the employment market of these specialties, the acquirement of new competences, and the deficiencies noted.

The findings show that 55,2% of respondents are not sure about the availability of employment opportunities after graduation. They argue that the diploma level has a greater effect in terms of employability than the specialty In fact, 74,2% of participants, especially the senior technicians of the scientific and technical specialties, think that their profile is rarely adapted to the new needs of the employment market since their learning is more theoretical than practical. Therefore, 21,4% agree that their specialty is not adapted to the employment market needs. The respondents are aware that employment market needs new competencies and skills and not accept disqualified employees. Since, they are convinced that the training gave them a good basis for developing their future careers. Such feeling can have a negative effect on students' motivation in class and can explain the high rate of student's absenteeism.

According to their experiences, all respondents suffer from difficulties associated with low communication, which hinders them from showing their abilities, and suggest that teachers encourage students to discuss in class and work in groups so as to develop their autonomy, responsibility and self-confidence. In the same vein, institutions should organize meetings between employers, students, and teachers to exchange and negotiate the reasons and possible solutions to facilitate their insertion in the labor market. Higher education institutes should also revise the courses and programs taking the new needs of the employment market into account. They should encourage partnership with industry through collaborative projects that offer training for the graduates and guarantee their successful integration into professional occupations. This opportunity offers them the opportunity to learn more about planning, starting, running and growing a project. A variety of methods, such as open door days, seminars and conferences, could be organized in order to warrant a suitable matching between labor supply and demand as recommended by (Nuland et

al, 2000). In addition, the institutes should try to guarantee the successful placement of their graduates into professional occupations. According to (Mansfield, 2011) one possible explanation for an academic advantage from placements is that placements give students opportunity to mature. A further contention is that experience of being in a workplace environment enables students to develop their abilities. Thus, the placement in enterprise during the studies has a positive and meaningful effect on the insertion of the superior graduates (ZAIBI, 2010). The results show that 89% of participants achieved one placement during their academic studies and 11% have performed over a placement. It is also noted that scientific disciplines are more solicited and that 85% of these students enjoy placements adapted to their specialties against 92% of literary students whose placement is not adapted to their specialties. This latter category also argues that they rarely practice what has been studied during the placement. Therefore, it is necessary to enlarge the possibilities of access to the placement by the setting up of “cells of placement” in the institutes gathering the offers of placement proposed by the enterprises. The institutes of higher education should try to guarantee the successful placement of their graduates into professional occupations. Therefore, collaborative projects between the institutes of higher education and industry can offer placement for students. Such a reevaluation of the teaching process for qualifying graduates involves communication and relationships with companies and adaptation of courses, contents, methods and pedagogy (Bouchard, Lichtenberger; 2012). Moreover, relationships with companies can be very favorable for students’ employment. The organization of open days of sensitization and information on the placement in enterprise during the studies facilitate graduates’ access to jobs. These days can include meetings involving the enterprises, the students and the structures concerned by the employment of the graduates. Furthermore, participation in exhibitions and conferences help institutions to introduce their most recent developments, such as students’ research projects. The graduation project represents an opportunity for the students to improve their creativeness. It would be of interest that the topics of the projects are oriented toward the practical side. To achieve this point, the higher education institutes can require that the end-of-study projects are performed in the enterprises. This can provide students with opportunities to experience and practice what has been studied during their studies.

The resource provision and infrastructure

To have an idea about the resources and the infrastructure available in the surveyed institutes, the participants are asked about the state of equipments, rooms for practical work and the occupancy of the classrooms. They are also asked about their cultural and sportive activities. The findings show that 82,6% of the respondents particularly whose discipline is scientific agree that equipments are too old and depreciated. This adversely affects the quality of the experiment conducted during practical work. Students do not have suitable working spaces nor adequate access to the equipments needed for their research.

The respondents add that classrooms are overcrowded during the direct and practical sessions since student’s presence is obligatory. Thus, it is evident that the more charged the rooms are, the more difficult it would become for the students to assimilate what the teachers explain. It is recommended that such sessions are ensured in small student groups to guarantee better teaching quality.

The survey also highlights that there are rarely provisions for students to engage in various sporting activities, such as basketball or table tennis, to improve their physical well-being. Regarding the cultural activities, students express the need to be members in clubs and associations in order to develop the interaction between them; however, these activities are almost absent in all the institutions surveyed. The survey underlines that the resources and the infrastructure should be reinforced.

Conclusion

Due to changes in the social and economic environment, new jobs are created, needing new abilities and skills. Employers require graduates whose knowledge and skills are related to their new and changing needs. In order to prepare students with the need required by the labor market, special attention has to be paid to the quality of the teaching process. Improving the teaching quality assumes an assessment of this process. Assessing the teaching process should particularly take in to account a careful consideration of module objectives and syllabuses, selection of readings, classroom activities, feedback to students, design of exercises, projects, quizzes, and final examinations. The quality of these ingredients must be assessed in the context of a reasonable estimate of the quality of learning outcome.

Thus, the present paper aims to assess the teaching process in Tunisian institutes of technology via the students’ perception in order to contribute to the enhancement of the teaching quality. The survey is based on a questionnaire that is articulated around four axes which are: curriculum design, pedagogical design, outcomes assessment and resource provision and infrastructure. The assessment approach reveals some areas of strength. Some participants are satisfied, since they believe they have acquired new competences during their studies. They are optimistic toward their insertion in the labor market. However, there are many weaknesses, with participants pointing to inappropriate curricula that lead to the defragmented knowledge, uselessness of some courses, and redundancy between courses. The results show that the equipment is too old and need reinforcement.

The study leads to some recommendations addressed to teachers. For instance, to be on the road to effective teaching, teachers should have sufficient knowledge on their content, be responsible for time management, and be willing to treat students fairly.

The reinforcement of equipment by new equipments contributes to the improvement of the teaching process. Finally, HEIs should guarantee to their graduates greater opportunities for employment by improving their quality and building partnerships with companies. It is worth noting that the present paper is limited to the perception of the graduates and, precisely, the senior technicians. However, assessing the quality of teaching is not a simple matter of looking at student feedback. These considerations are no doubt important, but are insufficient. They should be combined with the perception of the other stakeholders, such as teachers and employers, who have a crucial role in improving teaching quality. Further studies, some of which are currently underway in our laboratories, are needed to explore those issues and gain a broader picture on the quality of teaching process.

References

Angelo, T. A., and Cross, K. P. (1993), 'Classroom Assessment Techniques: A Handbook for College Teachers. (2nd ed.) San Francisco: Jossey-Bass.

Boutefara.T, (2012), 'L'encadrement: encadrer des étudiants en fin de cycle' Available on the <http://dz-encadrement.blogspot.com/2012/08/bienvenue-sur-dz-encadrement.html>.

Bouchard.J ;Lichtenberger.Y(2012), 'La licence universitaire: enjeu d'innovation pour le pays FutuRIS' 2012 - Chapitre 6.

Coulon, A., Paivandi,(2008), ' État des savoirs sur les relations entre les étudiants, les enseignants et les IATOSS dans les établissements d'enseignement supérieur,' .Rapport pour L'Observatoire national de la vie étudiante avril 2008.

Cheng, Y. C. and Tam, W. M. (1997), 'Multi-models of Quality in Education,' *Journal:Quality Assurance in Education*, 5 (1) : 22-31.

Fedecegeps, (2012), 'La qualité de l'enseignement supérieur au Québec'. Contribution Fédération des cégeps à la rencontre thématique sur la qualité de l'enseignement supérieur au Québec (26 novembre 2012).

Harvey L. & Green, D. (1993), 'Defining quality', *journal: Assessment and Evaluation in Higher Education*, Vol.18, pp.8-35.

Hannah Morgan, Ann-Marie Houghton (2011), 'Inclusive curriculum design in higher education ,Considerations for effective practice across and within subject areas' (Available from the Higher Education Academy website).

Henard,F; Roseveare,D (2012), 'Fostering Quality Teaching in Higher Education'. Policies and Practices An IMHE Guide for Higher Education Institutions.

Jerome, D.; Johnson.A; Johnson.T; Treslan.D; (2010), 'Students' perception of effective teaching in higher education'. 26th annual conference on distance Teaching and Learning. Available on the site :

MESRS, (2012), the web site of the Ministry on Higher Education and Scientific Research available at www.mes.tn.

Milanowski, A. T., & Heneman, H. G., III. (2001), 'Assessment of teacher reactions to a standards-based teacher evaluation system': A pilot study. *Journal of Personnel Evaluation in Education*, 15(3), 193-212.

Mansfield, R. (2011), 'The effect of placement experience upon final-year results for surveying degree programmes' *Studies in Higher Education* Vol. 36, No. 8, December 2011, 939-952.

Nuland, Y.V, and al. (2000), 'Excellent: A guide for the implementation of the EFQM Excellence model'. First edition. Belgium: Comatech. 439p. ISBN 90-803934-7-9.

NIS, (2013), The web site of the National Institute of Statistics available at www.ins.tn (accessed in December 2013).

OECD,(2012), 'Assessment of Higher Education Learning Outcomes' available at <http://www.oecd.org/education/skills-beyond-school/AHELOFSReportVolume1.pdf>.

Popoola, S.O., and Haliso, Y. (2009), 'Use of library information resources and services as predictor of teaching effectiveness of social scientists in Nigerian universities'. AJLAIS 19(1): 65-77.

Pratt, D.D. (1997), 'Reconceptualizing the Evaluation of Teaching in Higher Education.Higher Education', Kluwer Academic Publishers, the Netherlands, vol. 34,pp. 23-44.

Steed, C. (2002), 'Excellence in Higher Education. Evaluating the implementation of the EFQM Excellence Model in Higher Education in the UK'. Beitrage zur Hochschulforschung, Vol. 1, n° 24, pp. 74-98.

Srikanthan, G. and Dalrymple, J.F.(2007), 'A conceptual overview of a holistic model for quality in higher education'. International Journal of Educational Management. 21(3) 173-193.

Sakaran, U. (1992), 'Research methods for business, A skill building approach'. Second edition. Singapore: John wiley & sons INC. ISBN 0-471-57371-X.

Savickiene, I. (2006), 'Priorities of Higher Education Quality Improvement: Student and Teacher Attitude'. The Quality of Higher Education, Vol.3, pp. 68-80.

Tari, J.J; Juana-Espinosa, S. (2007), 'EFQM model self assessment using a questionnaire approach in university administrative services'. The TQM Magazine, Vol. 19, n° 6, pp. 604-616.

UNESCO, (1998), 'World Declaration on Higher Education for the Twenty-First Century: Vision and Action,' adopted at the World Conference on Higher Education, Paris, October 1998.

Vroeijenstijn, A.I. (2003), 'Towards a Quality Model for Higher Education'. Journal of Philippine Higher Education Quality Assurance, Vol. 1, n° 1, pp. 78-94.

Zaibi.F, (2010), 'Effet du stage en entreprise au cours des études sur l'insertion des diplômés du supérieur dans le secteur privé: Quels enseignements en termes de politique d'emploi en Tunisie' Ministère de la Formation Professionnelle et de l'Emploi Observatoire National de l'Emploi et des Qualifications.

Zink, K.J; Shmidt, A. (1995), 'Measuring universities against the European Quality Award criteria'. Total Quality Management, 1995, Vol. 6, n° 5&6, pp. 547-561.

William F. Massy (1996), 'Offers guidance for implementing reforms in the allocation of resources in colleges and universities' Resource Allocation in Higher Education. Published in the university of Michigan 1996.