

Application of the Principles of Total Quality Management in the Knowledge Formation

Jadvyna Ramanauskienė, Julius Ramanauskas

*Lietuvos žemės ūkio universitetas
Universiteto g. 10, Akademija, LT-53361, Kauno r.*

The economy of developed countries is very much dependent on the production of knowledge, distribution and application. According to foreign researchers and practitioners, future is the age of knowledge, knowledge organizations, new economy that forces organizations to create new methods of work, competences, processes, management methods and the principles of strategic management. The scope of knowledge sectors (education, communications) increases very rapidly. Knowledge is obtained through thinking, experience, observation, information channels and other sources.

Modern managerial science has introduced a lot of new terms, theories and the ways of problem solution. These developments have been stimulated by changing business conditions. Thus, the main objective of organizations is to increase both international and international competition. It should be noted that it is not only the people who are the agents of change, but their knowledge and abilities play a crucial role in this competitive world. New management methods are very useful in forecasting the organization's future, however, human resources are of the utmost importance in this process. Both human and financial capital open wide possibilities for further growth and development. The intensification of these agents under the conditions of growing globalization and competition is the main obligation for every organization and its managerial staff.

Seeking to survive in contemporary stiff competition, the organization is to concentrate its efforts on the development of human intellect and managerial practice. Only highly qualified employees with considerable experience are expected to feel and be able to overcome difficulties and support their organization in the struggle for advance. This situation has called for special research in order to ensure the quality of studies, the latter begun the main facet in knowledge development and dissemination. European and other countries have already introduced advanced methods of total quality management.

The aim of this research is to determine the main factors influencing the quality of studies. The research was conducted in the period of 2002-2004. The students of Bachelor and Master studies of Lithuania Agricultural University took part in the investigation. So called mind attack method was used for data collection. The method of cause and consequence as well as Paret law were used for the generalization of the results.

The investigation has helped to determine the level of the knowledge delivered to the students. Seeking better results in this field, total quality management should be

introduced. The introduction of the system of quality management according to ISO 9001 is the obligation motivated by both clients' requirements and the necessity to increase the University's service quality through the improvement of studies process management.

Keywords: *knowledge, information, competence, quality, management.*

Introduction

Human intellect becomes the main capital in future organizations. People are not only resources or one of the main resources in organizations. It is the factor influencing the creation of competitive advantage. Moreover, people themselves do not make organizations competitive and more advanced in the market. It is the ideas that are embedded in people's minds as well as the ability to use and manage them that lead to advantages. Therefore it is not enough to manage people, the main task is to manage people's knowledge, abilities and intellect. Organization management theories use the term "human capital" meaning organization employee's intellect. Working in changing surroundings under the conditions of changing environment, increasing competition and globalized markets, organizations turn to the aspects of quality and quantity. This process increases the importance of management, competence and knowledge. Thus, it is not only knowledge quantity that matters, but its quality, effective use and constant inspection as well as adaptation to the changing environment assisting in seeking foreseen objectives (Ramanauskienė, 2005).

Some USA and European universities apply the principles of Total Quality Management in teaching and administration processes. According to these considerations, the application of quality standards and approaches is one of the main requirements for higher schools, seeking to satisfy their clients' wishes and realize the objective foreseen. The application of quality methods in administration is somewhat easier and not so much threatening to the academic personnel, the latter often suspecting its freedom limitations. When the success in the field of administration improvements has been achieved, it is easier to attain the approval to improve quality in teaching processes (Adomaitiene, 2002).

Present science of management has introduced a lot of new terms and new ways of decision making. It is some kind of reaction to the changing conditions of business environment. Knowledge, new management methods are necessary in order to forecast the future of

organizations. According to most scientists and practitioners, future is the age of knowledge, knowledge organizations, new economy stimulating new work methods based on knowledge, competence, managerial methods and the strategies of organization management (Bieliusas, 2000; Evans, 2003; Hoyle, 2001; Jucevicius, 1998; Vanagas, 2004; West, 2000).

Lithuania as well as other EU countries face a very important and complex task to create an effective system of higher education quality adopting the most advanced experience of other European countries and developing their own system (Zekeviciene, 2005).

The main problem is how to manage, develop and convey knowledge as well as to create new programs, i.e. what study programs, new methods and aids should be used in order to achieve a proper level of the knowledge conveyed and competition advantage on the way to long-term success.

Research **aim** is to determine the main factors influencing studies quality and suggest the means to improve it.

The main **tasks** in achieving this aim are as follows:

- 1) to analyze the importance of teacher's knowledge and competence in developing studies quality;
- 2) to investigate the level of university teachers' knowledge and competence approached from the view of business management programs (students' approach);
- 3) to determine the main factors influencing the quality of conveyed knowledge;
- 4) to evaluate the means improving the level of knowledge quality.

Research **object** – the process of business management studies

Research methods. Theoretical analysis is based on the study of scientific literature; practical analysis employs empirical data obtained from the research in 2002-2004. The problem dealt with in the article is based on general and special methods of investigation: systems analysis, logical analysis, expert evaluation methods that have helped to determine the factors influencing studies quality; the method of phenomena causative relationship and Pareto law in grouping factors have been used.

Interrelationship of teachers' competence and studies quality

The experience of foreign researcher's shows that only the wishes and activities of the members of the whole organization can lead to the expected results. It is very important to direct the activity of the whole organization to these activities. Employees should be treated as a decisive factor of organization developments. This feature manifests the distinct significance of the staff. Moreover, employees' obligations are very high and their role is very important. Employees' competence becomes more and more important. V.I. Škatula (Škatula, 1998) singles out the following types of competences (Figure 1):

- speciality – ability to conceive and solve speciality problems;
- personal – personal development, ability to communicate with people and groups of people;
- methodical – participation in social processes;
- managerial – management of the field.

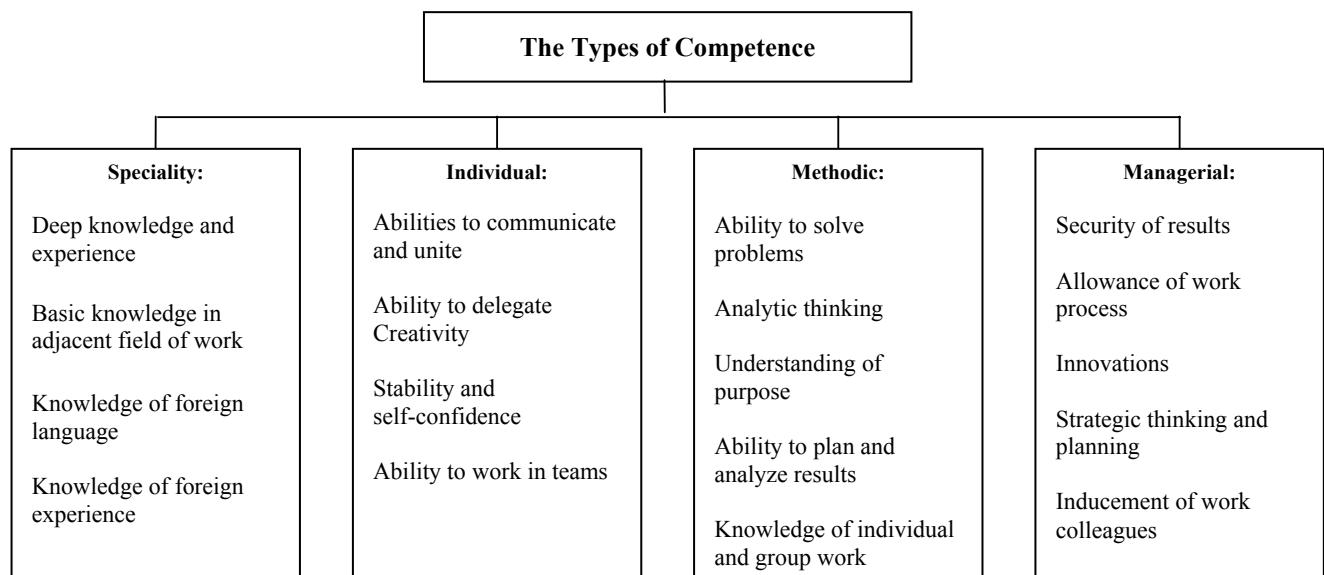


Figure 1. Presents the constituents of general competence

Thus, it could be concluded that rapid environmental changes increasing competition and globalized market, close European integration processes require full commitment on the part of employees and activity itself. Competitive advantage is created by the following factors: loyalty, competence (knowledge and ability to use it) and work processes. Knowledge as any other

process should be managed. Knowledge management means intelligent knowledge accumulation seeking to optimize its use for the organization (Kédaitienė, 2000). There exist several stages of knowledge management: identification, acquiring, dissemination, distribution, expansion, application, preservation, assessment (Figure 2).

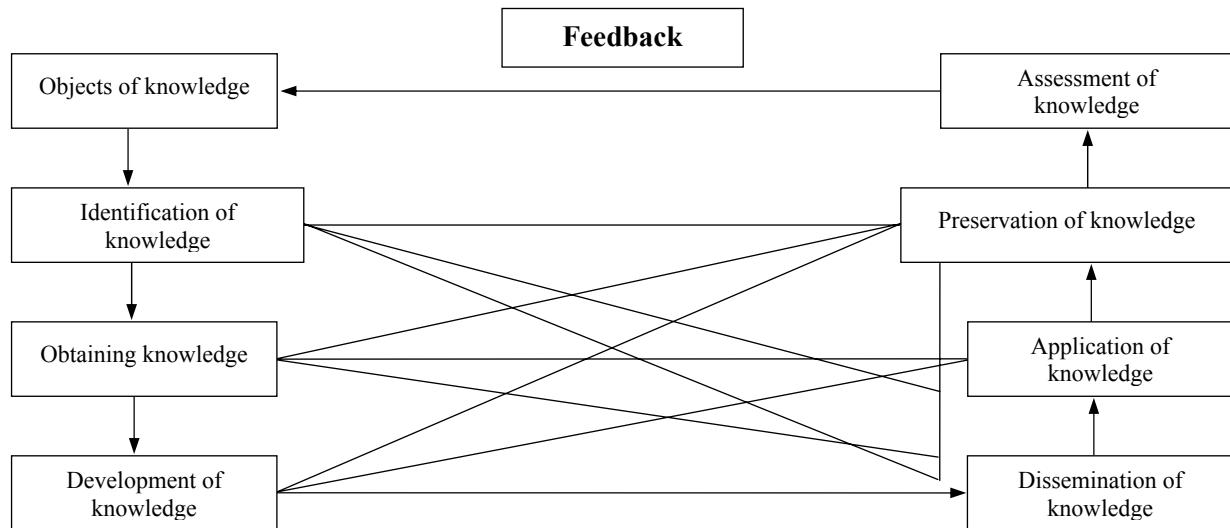


Figure 2. Stages of knowledge process management

The research has been firstly related to knowledge dissemination and application phases. Knowledge dissemination is expressed by various terms in scientific economic literature: "professional education and development" (Friedman, 1998), "investment into human capital" (Quinn, 1996; Nahapiet, 1998; Schultz, 1998, Starkevičiūtė, 1999). In this research we use these concepts in conveying knowledge to the subjects. The first group of investments comprises direct expenses assigned for the development of teachers' professional abilities and qualification. Thus, university management representatives (heads of departments) are to ensure constant staff development. University should have the plan of constant staff development. Personal development is not only the matter of the staff, it is also the commitment of management. Staff development plan is an integrated document. The main thing is teaching, assessment is the secondary matter. The guru of quality management E. Deming paid much attention to training. He held that it was very important to implement training programs and to create the atmosphere of universal development. Training expenses should be considered as necessary investments. Qualification development is to engage all hierarchical levels. Starting with the top level management training is no the only thing, the staff should be motivated and motivation also needs expenses. The realization of quality conception is to be started from the top level. There should not be the situation when you come to the chief with your own opinion and leave the office with the chief's opinion.

The second group of investments includes the investments which should create general university culture, attractive working conditions and payment system. There should not exist sphere barriers. Vertical barriers create communication issues between the management staff and staff. Horizontal direction raises the problems between structural units and their staff. Coherent ties appear when the quality system ensures the rationality of all plans and actions. The third group includes the investments that change the nature of the work itself. These investments are assigned for the development of work and objectives. A number of factors are singled out in economics, management and practice. These factors are successfully carried out by business sector, universities, governments and non-

governmental organizations (Anskaitis, 2000)

This research embraces only those factors, which help to improve employee's work. People are not simple screws in both manufacturing and service processes. Much depends on them, and they should feel this. They are community members, and they could be identified with the organization itself. Person should be allowed to show himself/herself as a personality. Only then it is possible to speak about work quality. There should not be baseless tasks. Situations improve when employees get real tasks reflecting not only managers' wishes but the possibilities of a real system.

What conclusions could be drawn from these considerations? Seeking the answer to this question, the students' attitudes towards knowledge quality acquired from business management programs has been investigated side by side with the study of the knowledge conformity to the requirements of the present developments. Fifty students of the Bachelor and Master studies of Lithuania Agricultural University, took part in the investigation in 2002-2004. So called mind attack method has been used. According to this method, each student has been asked to write down five causes predetermining the quality of their studies. The information obtained has been grouped according to similarities into five groups. Paret diagram has been used to present the influence of the causes in a decreasing order (Figure 3).

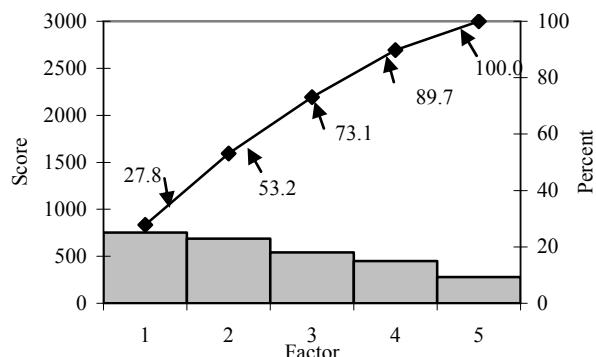


Figure 3. Factors, influencing the quality level of studies:
 1 - novelty of knowledge and information; 2 - study programmers;
 3 - competence of lecturers; 4 - financial lack for implementation
 of training devices; 5 - activity of students

Figure 3 presents the factors determining the level of the knowledge conveyed to students. The factors have been presented in a decreasing order: 1) knowledge and information novelty – 27.8 %; 2) studies programs 25.4 %; 3) teachers competence – 20%; 4) shortage of finance for the implementation of new teaching aids – 16.6; 5) students' activity – 10.3%. Thus, it could be concluded that earlier acquired knowledge needs constant innovation.

The quality of studies is very much dependent on the unification of quality regulations and norms as well as the introduction of European standards. The standards of International Standardization Organization (ISO) are of the utmost importance. ISO standards are the basis of all activities.

There are educational institutions in Europe that have already created quality systems or they are in the development phase, however, only few of them have the certificate of ISO series standardization in the field of management systems. The biggest number of certificated educational institutions is in Great Britain, Germany, Holland and France. The standards of ISO 9000 series are mostly applied in technical universities because it is easier for them than for humanitarian institutions to adapt to special requirements. Besides, the former are much closer related to business practice and can use their experience in creating quality systems (Adomaitienė, 2002; Ruzevičius, 2004; Slatkevičienė, 2005).

Quality improvement and its support are not the only causes why universities seek to get the certificate of ISO 9000 series. The most important motive is interior need, e.g. studies programs, examination and assessment quality. Furthermore, universities strive for better image because ISO 9000 certificate can be some kind of an indicator for clients proving that the institution is very much interested in teaching quality (Hang, 1996).

The quality management system of ISO 9000 introduces strict documentation and management control, raises employees' responsibility, motivates management staff to keep to the requirements. The universities that have introduced the quality management system assert that ISO 9000 certificate is neither obligatory nor sufficient condition to ensure the quality of educating and administrating, however, the certificate serves as a basis for constant improvement and indicates that the improvement has already been achieved.

Implementation of the system of Total quality management

Quality is achieved through the introduction of quality management system. This system has been created in order to improve the results of organization activity taking into account the needs of all those who are interested in the issue, Quality management systems (QMS) and their introduction are rather complex issues, they call for bigger solutions on the part of the managerial staff and other employees. The experience of most universities shows that the introduction of Total Quality Management (TQM) is quite possible in higher schools, especially if the model has been created by the institution itself (Canic, 2000; Dew, 2000; Ho, 1996; Michael, 1997; Montano, 1999). The system is to be prepared according

to ISO 9001:2000 standard. Quality management system functions and is reliable when:

- The system is easily understood, implemented, controlled, renovated and producing results.
- Products/ services satisfy clients' needs and expectations.
- The system has been created taking into account the needs of society and environment.
- There is a possibility to stop the occurrence of problems.

Quality management system is usually applied for the whole activity concerning the quality of product/ service. The system should include all the stages of product life service: from the primary market need analysis to the total satisfaction of need (Ramanauskienė, 2004). Typical stages of the realization of quality management system keeping in line with ISO 9000 series of standards are as follows:

Stage 1. Preparation work for the creation of quality management system:

- Decision to create quality management system (the order of the head of the organization);
- The preparation of the main program:
 - ✓ The study of ISO standards.
 - ✓ Formation of managerial and work groups for the introduction of ISO standards.
 - ✓ The analysis of the present elements of quality system.
 - ✓ The formation of the program for quality system creation.
 - ✓ Preparation of quality policy.
 - ✓ Distribution of capacities and authorizations according to the functions of quality system.

Stage 2. The preparation and implementation of the documents of the quality management system:

- ✓ Documentation structure and composition.
- ✓ Working out the schedule for document preparation.
- ✓ Document preparation and implementation.

Stage 3. The preparation of the quality management system for certification:

- ✓ The assessment of the quality management system (interior organizational audit with the help of consultants).
- ✓ Correcting activities and their realization.
- ✓ The choice of a certification institution, documents preparation.
- ✓ Presentation of the order for a certification institution.
- ✓ Creation of certification conditions.

In order to introduce TQM in the university it is necessary to form a multifunctional team able to solve the issues of teaching services quality and interdepartmental activity. Moreover, it is indispensable to ensure feedback from all the participants who are engaged in program implementation. The model of quality system implementation based on the previous stages is presented in Figure 4. The model defines the order of the system introduction. Every step in this activity is very important, especially

the very first steps as the effectiveness and the end result depend on them.

The implementation of the system according to ISO 9001 standard is motivated not only by clients' requirements, but by the need to guarantee high quality of teaching services according to the obligatory demands to improve educational process.

Not a single stage can be omitted in the realization of the model. If there is some need for the highest competence, consultants could be hired. The motives for this might be as follows; 1) the practical application and interpretation of standards and their requirements; 2) need to save the time of organization employees; 3) a smoother process of implementation and less mistakes.

Introducing TQM universities should follow the fol-

lowing attitudes:

- Not to make any concessions that could decrease the quality of teaching services.
- To acknowledge mistakes and try to correct them.
- Teaching services should be supplied according to the most recent programs and with less expense.
- To fix decent and unconditional relationships with clients and suppliers.
- Not to make any decisions or to take actions that could worsen quality or consumers' need satisfaction.

Striving to achieve that the team of TQM implementation were able to manage the process, its members should be trained according to TQM conceptions, methodologies and modern theories.

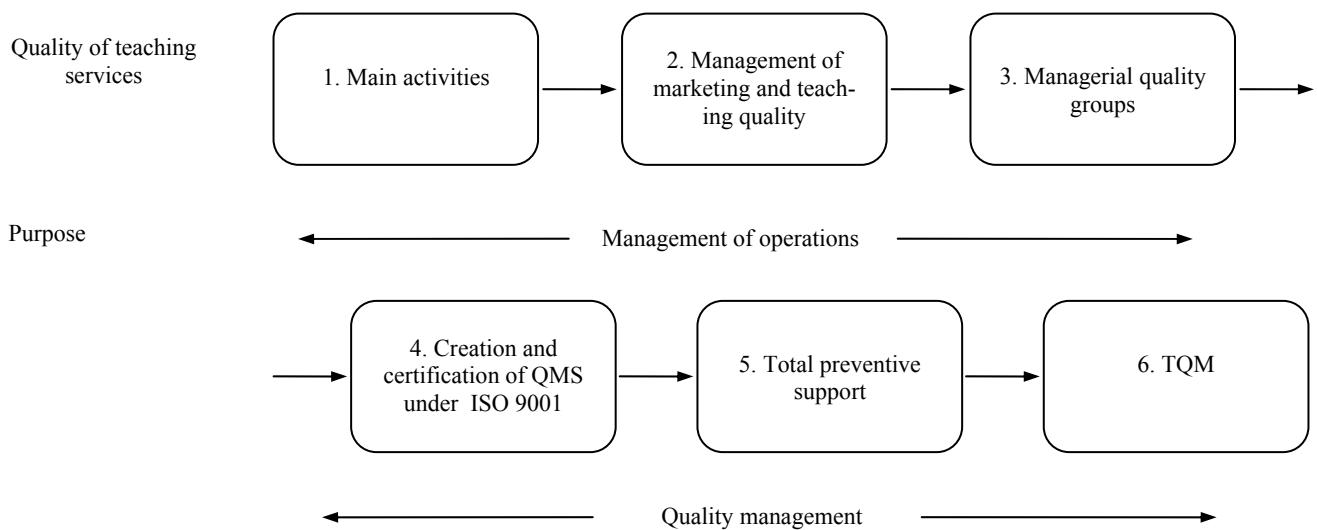


Figure 4. Model of total quality management implementation

Source: Composed under Ho S.K., Wearn K. (1996). *A Higher Education TQM Excellence Model: HETQMEX//Quality Assurance in Education*. Vol. 4, No 2.

The applications algorithm of TQM in educational organizations is similar to that in business practice. TQM introduction is carried out through the following phases:

- 1) The main forms of activity are identified (organization, systemizing management, standardization, self-analysis), and they are obligatory to every employee in order to ensure total quality environment.
- 2) Management of marketing and teaching quality management. As marketing function is directly dependent on a client and activity effectiveness, its success is the main objective. TQM principles should be applied in every marketing aspect, e.g., students' body formation needs exact and rapid information.
- 3) Quality management teams, small groups are to independently manage quality in their working places. Educational development aspect is very important in such groups. It is important to teach group leaders and members to be ready to fulfill all tasks. Discipline programs could be created and improved by such groups, as well as knowledge

assessment methods, etc. The successful activities of these groups depend on the following conditions: informed and educated employees; authorities willing to share information; "group spirit" in the team; clear tasks in the hierarchical division; stimulating system.

- 4) The creation of the quality management system according to the standards of ISO series and certification. This model should be realized in accordance with the previously mentioned sequence of ISO 9000 standards implementation.
- 5) Total support is expected. There should be created the system of all organizational equipment planning, management control, ensuring the highest effectiveness. Laboratory equipment, computer technologies producing direct influence on teaching / learning process should be controlled in order to achieve the quality level of the services supplied.

It could be concluded that the implementation of quality management system in higher schools is beneficial in these respects: better understanding of university

vision, mission and objectives could be achieved; the involvement of all employees into the process of quality improvement increases university responsibility for teaching services; team work ensures students', teachers' and administration's cooperation, better understanding of students' needs, creates friendly atmosphere; constant improvement of teaching programs and process is under way; employees' capabilities are used to the full, and business organizations start relying on educational institutions, their product and service quality; competitive advantage increases.

Conclusions

- 1) Teachers' knowledge level and competence directly determine studies quality. General teachers' competence consists of the ability to perceive and solve specialty problems, ability to cooperate and participate in social processes as well as to manage activities.
- 2) Under the conditions of the present market reality, not only knowledge quantity is important, but also its effective use and adaptation in changing environment. Qualitative knowledge management, i.e. intelligent knowledge accumulation is to help to strive for studies quality.
- 3) Knowledge management stages are: identification, obtaining, development, dissemination, application, preservation, knowledge object distinguishing and assessment. The stages of knowledge use and development are the main phases in the studies process. The leaders of the university structural units should ensure personnel's qualifications development according to a constant staff development plan.
- 4) The main factors influencing studies quality level are presented in the following decreasing order: 1) novelty of knowledge and information – 27.8%; 2) study programs – 25.4 %; 3) teachers' competence – 20%; 4) shortage of finance for new teaching aids – 16.6%; 5) students' activity – 10.3%.
- 5) Optimal use of investment into knowledge development can help to achieve positive results in increasing teachers' competence, loyalty to studies, increase of quality level and higher qualifications.
- 6) The introduction of TQM can assist in better knowledge quality. TQM standards according to ISO 9001 motivate clients' needs and higher level of university service in teaching process and its management.

References

1. Adomaitienė, R. Visuotinės kokybės vadybos diegimo ypatumai Vakaru šalių universitetuose / R. Adomaitienė, J. Ruževičius // Organizacijų vadyba: sisteminiai tyrimai, 2002, No 22, p. 7–21.
2. Anskaitis, A. Kuo vertingos investicijos į žmones? / A. Anskaitis, V. Bareišis // Ekonomika ir vadyba, 2000, No 2 (3), p. 7–11.
3. Barczyk, C. C. Visuotinės kokybės vadyba. Vilnius: Technika, 1998. 68 p.
4. Bieliūnas, M. Žinių vadybos praktinis taikymas: pokyčiai, kuriuos lemia ekonomikos tendencijos// Informacijos mokslai, 2000, No 14, p. 46–56.
5. Canic, M. J. Service Quality and Higher Education Do Mix / M. J. Canic, P. M. McCarthy // Quality progress, 2000 September.
6. Dew, J. R. Roll Quality Roll. Strategic Quality Planning at the University of Alabama // Quality progress, 2000, p. 49–54.
7. Ewans, J. R. Total Quality: Management, Organization and Strategy / J. R. Ewans, J. W. Dean. Mason: Thompson, 2003. 375 p.
8. Friedman, M. Kapitalizmas ir laisvė. Vilnius: Mintis, 1998. 191 p.
9. Haug, P. Introduction of Total Quality Management (TQM) into the Process of Teaching Management: a Discussion of Initial Applications / P. Haug, K. S. Keleman // Journal of Management Education, 1996, Vol. 20, No 3, p. 319–340.
10. Ho, S. K. Higher Education TQM Excellence Model: HETQME / S. K. Ho, K. A. Wear // Quality Assurance in Education, 1996, Vol. 4, p. 35–42.
11. Hoyle, D. ISO 9000 Quality systems handbook, Butterworth Heinemann, 2001.
12. Jucevičius, R. Strateginis organizacijų vystymas. 2 leidimas. Pasaulio lietuvių kultūros, mokslo ir švietimo centras. Kaunas, 1998. 456 p.
13. Kėdaitienė, A. Marketingo žinios ir informacija: tarpusavio sąveika, valdymo proceso ypatumai bei organizavimo būdai. Marketingo teorijos ir metodai: mokslinės konferencijos medžiaga. Kaunas: Dakra, 2000. 137 p.
14. Michael, R. K. Comprehensive Model for Implementing Total Quality Management in Higher Education / R. K. Michael, V. E. Sower, J. A. Motwani // Benchmarking for Quality Management & Technology, 1997, Vol. 4, No 2, p. 104–120.
15. Montano, C. B. Total Quality Management in Higher Education / C. B. Montano, G. H. Utter // Quality Progress, 1999 August, p. 52–59.
16. Nahapiet, J. Social capital, intellectual capital and the organizational advantage / J. Nahapiet, S. Ghoshal // Academy of Management Review, 23/2, 1998, p. 242–266.
17. Quinn, J. B. Leveraging intellect / J. B. Quinn, P. Anderson, S. Finkelstein // Academy of Management Executive, 1996, p. 7–27.
18. Ramanauskienė, J. Verslo vadybos studijų kokybę salygantys veiksnių / Vagos: Mokslo darbai / LŽŪU. Akademija, 2004, No 65 (18), p. 80–85.
19. Ramanauskienė, J. The role of marketing information and consulting for developing rural tourism in Lithuania // Acta agraria et silvestria. Series agraria, sekcja ekonomiczna 44 (2). Vol. XLIV/2. Wydawnictwo oddziału Polskiej Akademii Nauk. Kraków, 2005, p. 335–344.
20. Ruževičius, J. Motivation and efficiency of quality management systems implementation: a study of Lithuanian organizations / J. Ruževičius, R. Adomaitienė, J. Sirvydaitė // Total quality management and business excellence, London, 15 (2), 2004, p. 173–189.
21. Schultz, T. W. Investavimas į žmones: Gyventojų kokybės ekonomika. Vilnius: Eugrimas, 1998. 192 p.
22. Slatkevičienė, G. Quality policy impact on competition of organizations / G. Slatkevičienė, R. Adomaitienė, J. Ruževičius, A. Marčinkas // Quality management for organizational and regional development: Proceedings of 8th QMOD international conference. Palermo, 2005, p. 797–808.
23. Starkevičiūtė, M. Ekonomika. Pranešimas apie žmogaus socialinę raidą Lietuvoje. Jungtiniai Tautų atstovybė Lietuvoje. 1999. p. 37–46.
24. Tessun, F. Managing the Knowledge // The Power of Knowledge – From Research Findings to Research Intelligence, 51-th. ESOMAR Marketing Research Congress. Berlin, 1998.
25. Vanagas, P. Visuotinės kokybės vadyba. Kaunas: Technologija, 2004. 427 p.
26. West J. Quality management principles: Foundation of ISO 9000:2000 family / J. West, Ch. A. Cianfrani, J. J. Tsakalos // Quality Progres, February, 2000.
27. Žekevičienė, A. Lietuvos aukštojo mokslo integracijos į bendrą Europos aukštojo mokslo erdvę problemos visuotinės kokybės vadybos aspektu. Konferencijos „Kokybės vadybos vaidmuo Lietuvos ūkio globalizacijos procesuose“ medžiaga. Kaunas: Technologija, 2005, p. 174–182.
28. Шкатулла, В. И. Настольная книга менеджмента по кадрам. Москва: Инфра, 1998. 560 p.

Visuotinės kokybės vadybos principų taikymas žinių formavimo procese

Santrauka

Organizacijoms dirbant nuolat kintančioje aplinkoje, didėjant konkurencijai ir globalėjant rinkoms, vis dažniau pereinama nuo kiekybės prie kokybės. Šis procesas sparčiai didina valdymo, kompetencijos ir žinių svarbą, todėl svarbu ne tik turimų žinių kiekis, bet juo kokybė, efektyvus panaudojimas bei nuolatinis peržiūrėjimas ir adaptacija kintančioje aplinkoje, padėsiantys organizacijoms siekti numatyti tikslų.

Dabartiniame vadybos moksle sparčiai daugėja naujų terminų, teorijų, naujų problemų sprendimo būdų. Tai tarsi reakcija į sparčiai kintančias verslo aplinkos sąlygas. Be abejo, nauji valdymo metodai reikalingi, norint prognozuoti organizacijų ateitį. Anot daugelio Vakarų šalių mokslininkų ir praktikų, ateitis – žinių amžius, žinių organizacijos – tai nauja ekonomika, verčianti organizaciją turimų žinių pagrindu kurti naujus darbo metodus, kompetencijas ir procesus, valdymo metodus bei organizacijų valdymo strategijas.

Lietuvai, kaip ir kitoms ES šalims, iškilo labai svarbus ir sudėtingas uždavinys – sukurti efektyvią aukštojo mokslo kokybės užtikrinimo sistemą, perimant pažangiausią Europos šalių patirtį ir kartu plėtojant savają. Tad pagrindinis šio tyrimo klausimas, į kurį ieškoma atsakymo: kaip mokymo ištaiga turi valdyti, tobulinti ir perteikti žinią, kurti naujas programas, t.y. kokias studijų programas, naujus metodus ir priemones turėtų taikyti, kad būtų pasiektais atitinkamais šiuos laikus žinių kokybės lygis bei konkurencinės pranašumas ir jos veikla būtų sėkmingesna ir ilgalaike. Tyrimo tikslas – nustatyti pagrindinius studijų kokybės lygių lemiančius veiksnius ir pasiūlyti jų gerinančias priemones.

Teoriškai analizuojama problema pagrista mokslinės literatūros studija; praktinėje analizėje naudoti empiriniai duomenys, gauti apklausus 2002-2004 m. pagrindinių studijų ir magistrantūros studentus. Iškeltai problemai tirti ir teoriniams bei praktiniams rezultatams gauti naudoti bendramoksliniai ir specialūs tyrimo metodai: sisteminė analizė, loginė analizė, ekspertinio vertinimo metodas tiriant bei nustant veiksnius, lemiančius studijų kokybę; reiškinį priežastinio ryšio metodas ir Pareto dėsnis grupuojant veiksnius ir tiriant jų įtaką tyrimo objektui.

Remiantis užsienio šalių patirtimi, pažymėtina, kad be visos organizacijos narių noro ir kompetentingos veiklos negalima pasiekti norimo rezultato. Reikia sugebėti reikiama nukreipti organizacijos veiklą, itraukiant ir visus jos darbuotojus. Darbuotojai turi būti trauktuojami kaip lemiamas organizacijos veiklos plėtojimo veiksny. Jau vien tai pabrėžia jos darbuotojų išskirtinumą. Be to, šiai laikais darbuotojams keliami ypač aukšti reikalavimai, ir jų vaidmuo ypač didelis. Tad vis svarbesnė organizacijai tampa darbuotojų kompetencija. V. Škatulla išskiria šias kompetencijos rūšis: specialybės – sugebėjimas suvokti ir išspręsti dalykines ir specialybės problemas; asmeninė – asmens išsvystymas, bendravimas su žmonėmis ir kolektyvu; metodinė – dalyvavimas socialiniuose procesuose; valdymo – savo darbo srities valdymas. Kiekvienos šių rūšių kompetencijos indėlis į bendrają tikslą siekimo sėkmę didina organizacijos konkurencinių pranašumą.

Tad konkurencinių pranašumų sukuria tokis trijų stiprybių derinys: lojalumas, kompetencija (žinios ir sugebėjimas jomis naudotis) bei darbo procesas. Žinias, kaip ir bet kurią kitą procesą, reikia valdyti. Paprastai skiriame šie žinių valdymo etapai: identifikavimas; įgijimas, plėtojimas, paskirstymas ir naudojimas, išsaugojimas, žinių objektų išskyrimas ir vertinimas. Atliekant tyrimą pirmiausia buvo domėtasi žinių plėtojimo ir naudojimo etapais. Moksliniuose ekonomikos veikaluose žinių plėtojimą (investicijos į darbuotojų mokymąsi) įvairiūs autoriai (Schultz, Starkevičiūtė, Nahapiet, Ghoshal, Quinn, Anderson, Finkelstein, Friedman ir kt.) vadina įvairiais terminais – „profesinis švietimas ir lavinimas“, „investicijos į žmogiškajį kapitalą“ ir pan.

Šiame tyime, taikant šias sąvokas žinių perteikimo subjektams (t.y. dėstytojams), *pirmajai* investicijų grupei priskiriamos tiesioginės išlaidos dėstytojų profesiniams sugebėjimams gerinti, jų kvalifikacijai kelti. *Antrajai* investicijų grupei reikėtų priskirti tas investicijas, kuriomis būtų sukuriama bendroji universitetinė kultūra, patrauklios darbo sąlygos ir atlyginimo už darbą sistema. *Trečiąjai* grupei galima priskirti investicijas, keičiančias paties darbo prigimtį ir skiriamas darbo procesui ir jam keliamiems tikslams tobulinti. Ekonomikos ir vadybos moksluose bei praktikoje išskirta grupė veiksmų, kuriuos vienodai sėkmingesni vykdo verslo sektorius, universitetai, vyriausybinės ir nevyriausybinės organizacijos. Šis tyrimas apima tik tuos veiksnius, kuriais tobulinami studijų procesai.

Tyrimo procese nustatytu veiksniai, lemiantys studentams teikiamų žinių kokybės lygi. Šių veiksnų rangavimas pagal lyginamąjį svorį mažėjančią tvarka atroda taip: 1) žinių ir informacijos naujumas – 27,8 proc. 2) studijų programas – 25,4 proc.; 3) dėstytojų kompetencija – 20 proc.; 4) lėšų trūkumas naujoms mokymo priemonėms diegti – 16,6 proc.; 5) studentų aktyvumas – 10,3 proc. Taigi galime teigti, kad nepamirštant tos naudos, kurią teikia praeities žinios, būtina sekti naujoves kaip svarbiausius studijų pažangos komponentus.

Didele įtaką studijų kokybės orientacijai turi taisyklių ir kokybės normų unifikacija, vienodų europinių standartų įvedimas. Be to, ypatingą reikšmę kokybės pranašumui išsigyti turi Tarptautinės standartizacijos organizacijos (ISO) serijos standartai. Organizacijoms, naujančioms šią orientaciją, ISO standartai tapo pagrindiniu jų veiklos elementu.

Europoje yra mokymo institucijų, kuriose jau sukurtos kokybės sistemos arba atliekami jų rengimo darbai, tačiau dar nedaugelis jų turi ISO serijos standarto kokybės vadybos sistemos atitinkties sertifikatą. Daugiausia sertifikuotų mokymo institucijų yra Didžiojoje Britanijoje, Vokietijoje, Olandijoje ir Prancūzijoje. ISO 9000 serijos standartus dažniausiai taikyo techninio profilio universitetai, nes jie lengviau prisitaiko prie reikalavimų nei humanitarinių mokslų institucijos. Be to, pirmieji turi daugiau ryšių su verslo praktika ir pasinaudoja jos patirtimi kuriant kokybės sistemas. Kokybės gerinimas ir palaikymas nėra vienintelė priežastis, kodėl universitetai siekia gauti ISO 9000 serijos sertifikatą. Daugumos mokymo institucijų kokybės sistemų diegimo svarbiausiu motyvu buvo vidas poreikiai, pavyzdžiui, mokymo programų, studentų egzaminavimo ir įvertinimo kokybės užtikrinimas ir kt. Be to, universitetai siekia geresnio įvaizdžio, kadangi ISO 9000 sertifikatas gali būti rodiklis, kad institucija derai rūpinasi mokymo kokybe.

Įdiegta ISO 9000 kokybės vadybos sistema sugriežtina dokumentacijos ir vadybos kontrolę, išryškina darbuotojų konkrečią atsakomybę, suteikia vadovams tikrumą, kad laikomasi nustatytų standartų ir procedūrų. Universitetai, įdiegę kokybės vadybos sistemą, tvirtina, kad ISO 9000 sertifikato gavimas nėra nei būtina, nei pakankama sėlyga užtikrinti mokymo ar administravimo kokybei, tačiau sertifikatas gali suteikti pagrindą, kuriuo būtų siekiama nuolatinio gerinimo bei patvirtinimo, kad tai jau pasiekta. Be to, įdiegti kokybės vadybos sistemą motyvuojama ne tik klientų (organizacijų, kur dirbs būsimieji specialistai) reikalavimai, bet ir universiteto poreikiai garantuoti aukštą studijų paslaugų kokybę, gerinti studijų proceso valdymą.

Kokybės vadybos sistemos taikymo mokymo organizacijoje algoritmą yra panašus į naudojamą verslo praktikoje.

Apibendrinant galima teigti, kad, aukštojoje mokykloje įgyvendinus kokybės vadybos sistemą, efektas pasiekiamas šiaisiai pagrindinių aspektais: išsamnesi universiteto vizijos, misijos ir tikslų suvokimas; visų darbuotojų itraukimas į kokybės gerinimo procesą sustiprina universiteto atsakingumą už teikiamas mokymo paslaugas; komandinis darbas užtikrina studentų, dėstytojų ir administracijos bendradarbiavimą, palengvina išsklausymą į studentų poreikius, sukuria draugišką atmosferą; vyksta nuolatinis mokymo programų ir mokymo proceso tobulinimas; geriau panaudojami darbuotojų sugebėjimai ir išsauga verslo vadovų pasitikėjimas mokymo institucijos teikiamu produktu ir paslaugų kokybe; didėja konkurencinės pranašumas.

Raktažodžiai: žinos, informacija, kompetencija, kokybė, vadyba.

The article has been reviewed.

Received in January, 2006; accepted in February, 2006.