

A Quality Assurance Concept for Higher Education of Ukraine

Mariia Golovianko, Liudmyla Titova

Department of Artificial Intelligence, Kharkiv National University of Radioelectronics (Ukraine)

Svitlana Gryshko

Department of Economic Cybernetics, Kharkiv National University of Radioelectronics (Ukraine)

Olena Kaikova, Vagan Terziyan

Faculty of Information Technology, University of Jyvaskyla (Finland)

Cite as follows:

Golovianko, M., Gryshko, S., Kaikova, O., Terziyan, V., & Titova, L. (2013). [Концепція забезпечення якості вищої освіти України. \(A Quality Assurance Concept for Higher Education of Ukraine\)](#). *Technical Report* (25 pp.). [TRUST Project](#) (516935-TEMPUS-1-2011-1-FITEMPUS-SMGR): Kharkiv National University of Radioelectronics.

Full text in Ukrainian: <http://openarchive.nure.ua/handle/document/3430>

Current state of QA in the HE system

The Ukrainian HE is outdated, non-effective and closed, low quality of the national HE is proved by international evaluations (rankings), absence of the visible impact to the national economic growth or social progress and mostly negative reviews of its internal members and industry which is a direct consumer of the HE results.

We consider the following aspects to be main obstacles for the effective quality assurance functioning in Ukraine:

1. The core problem which leads to all the other aspects is absence of the motivation for HE quality increase by all the HE players (students, teachers, employers, governmental organizations, etc.). There is no link between the HEI's performance level and the amount of resources to obtain from the state. That's why a HEI is not motivated to evolve, perform unbiased self-evaluation or any other quality assurance procedures;
2. National QA is based on the distorted, outdated value system. The concept of the "HE quality" is not yet defined;
3. Full Quality Assurance System as such is absent. It is partly implemented in form of quality monitoring procedures which are performed on the basis of the same criteria set for all

HEIs while the diversity of HEIs types is not considered. There are no procedures for strategy planning of the HEIs evolution or real quality assurance to achieve, maintain or enhance quality, the reason for this can be seen in the next aspect;

4. QA goal is not to help HE players to evolve towards higher quality but to control, push and punish those ones not corresponding the given criteria set;

5. Existing QA procedures are transparent neither for the participants nor for the external observers (society, industry, international experts, etc.);

6. With all this, there is a redundancy of the QA players. Their uncoordinated activities and a large number of the education quality evaluation procedures result in depreciation of the corresponding procedures and decrease of the HEI's motivation to take part in them;

7. Data about educational processes declared by HEIs in different reports are redundant, irrelevant and get outdated quickly. Moreover their statistical nature cannot reflect the real quality of the HE services;

8. Not all the state commitments regarding HE and science are implemented (financing, etc.);

9. All the QA bodies are governmentally dependent and therefore hardly trusted due to the possible bias;

10. The HE is managed by administrative-command system, there is no HEIs independence;

11. Important players are absent in the national QA (students, industry, external organizations, international experts), the QA system is too closed;

12. HEIs' staff note a high level bureaucracy which is one of distractive issues for the education content;

13. Numerous surveys of public opinion by different funds [1,2], law enforcement authorities and State statistics service data, HEIs staff and students reviews indicate systemic corruption presence on all the levels of the HE system. One of the latest reports was introduced by the Ukrainian delegation in Strasburg in May 2012 at the GRECO (Group of States against corruption) meeting.

Overall objective

Development of a HE QAS for effectiveness increase of the higher education system of Ukraine.

Specific objectives

- Creation of the Quality Assurance concept;
- the value system development in accordance with the modern leading European practices and definition of the HE quality in terms of the knowledge triangle;
- increase of the motivation of all the HE players;
- step-by-step movements from bureaucratic procedures towards new transparent and therefore trusted QA procedures;

Main activities for the current QA crisis turnaround

1. Creation of the environment for the social evolution towards awareness of the HE quality importance and involvement of the wide public into the QAS

Apparently no essential changes in the current HE ecosystem are possible from inside of the system which is always concerned to stay stable and static being uncontrolled from its main consumers. All previous experience of political reforms in Ukraine has demonstrated social inertness and detachment which gives us clear understanding of the fact that separate activities and efforts or new schemes and recommendations in HE will not succeed to get any visible nationwide results till the society evolves towards awareness of the HE quality importance. Only powerful request and control from the society which is the main consumer for HE services and results is able to stimulate real national reforms and increase the motivation of the system players to evolve towards higher effectiveness and European standards.

Therefore the first and the most urgent need which is a basis for a successful HE QAS development, its further sustainable adoption and exploitation is creation of conditions to become an impulse for such evolution.

The one possible way to push the evolution process is to ensure the transparency of different levels of the national HE system and give a channel (open information platform) for direct communication between society and the HE to provide: 1) public access to the information about existing educational system, players and processes within it, orders and transactions, achievements and their impact, etc; 2) means of the public influence and control over the truthfulness of the published information by social verification mechanisms; 3) tools for the versatile processing of the raw information to get necessary analytics in form of statistics, rankings, etc.

2. Creation of the national quality concept based on the best European practices and knowledge triangle

Due to the fact that a wide range of experts cannot name either common requirements to the HE quality or a widely accepted definition of the corresponding quality concept according to the current needs of Ukraine a national value system model should be urgently elaborated as a set of general properties characterizing the HE quality.

The main preconditions to ensure its relevance are:

- denial of the numeric statistical properties used in the current quality evaluation procedures and transfer to a set of the properties showing effectiveness of the HE through its impact on real social progress.
- While forming the set it's important to understand that the main task of the HE is agreed to be knowledge transfer significantly dependent on the balanced interaction, of three vertices of the knowledge triangle – research, education and innovation.
- Best European experience and practices should be considered. This will simplify and shorten the time of the analysis and development and will lead to the Ukrainian HE globalization.

The developed model should be nationally disseminated and discussed to be widely accepted by Ukrainian society especially its academic part.

3. Development of a HEI's own evolution strategy based on the global concept in the form of value system models with respect to a HEI's specific context and goals

"... I would contend that analysts frequently should not seek a single measure and will never find a perfect measure. ... It is time to stop acting embarrassed about the supposed surplus of measures and instead make fullest possible use of their diversity ..." [3]

Each HEI should develop its own unique evolution strategy with respect to both the global national value system reflecting main society requests and specificity of the HEI's work. The developed strategy is a value system model consisting of a relevant set of properties reflecting the HE quality with the properties weighted by their importance.

Developed models should be open and fully accessible for external acquaintance with a view to the HE transparency and to be used by other HEIs for development or optimization of their own models. It should also increase the level of trust to those HE players that use subjectively appropriate value systems and lead to the creation of groups consisting of HE players with common interests and opinions regarding QA.

To find the own optimal solution a HEI would apply solutions to optimization problems using techniques inspired by natural evolution – partial artificial selection mechanisms and optimal solution search algorithms using inheritance, mutation, selection, and crossover of the value systems.

4. Development of transparent trusted QA procedures for HEIs evolution according to the chosen value systems

QA procedures may vary for different HEIs especially if they are of different types but all the procedures should be widely accessible and open ensuring achieving, maintenance or enhancing quality by compliance of the following HE conditions:

- high level qualification of the academic staff;
- motivation of all the parties influencing the HE quality;
- transparency of the information on all the levels of the HE system (including QA procedures);
- sufficient amounts of resources (material and technical base);
- flexibility of the education content;
- mobility of academic staff and students;
- academic freedom.

Monitoring procedures should be performed by an independent QA body evaluating a HEI's (or other academic resources) performance based on the global national quality concept and the HEI's value system. The QA agency should be a member of ENQA to justify its independent and trusted status and get important ENQA services like contacting European quality assurance experts, quality assurance advisory support and others. Participation of foreign (European) experts is essential.

A fitness function should be chosen to determine the correspondence of the evaluated object to the predefined criteria including the possibility to evaluate the QA procedures undertaken to achieve the goals.

Results of evaluation procedures should be transparent and influence resources allocation (meaning any type of resources: financial, technical and human resources, awards, degrees, etc.) which should be performed by common transparent rules (regulatory and legislative support) for all the HE players.

5. Increase of HEI autonomy

The current state of the national HE proves the fact that the current system of the centralized strict control doesn't bring expected results. A key solution can be seen in self-organization of the system restricted only by general rules and requirements.

A state HEI is totally controlled and managed by the Ministry of education and science, youth and sports of Ukraine (or any other ministry). It behaves reactively following orders from above which have a short-term visible effect for a HEI. Therefore a HEI can't take its own decisions and take all responsibility for its activity and results. Unlike an independent unit which is concerned to demonstrate a maximal effectiveness and has to be proactive by its nature – to set long-term goals and implement an evolution strategy, a state HEI controlled from outside cannot follow any own strategy, no matter how brilliant and timely it is. Behaviour reactivity is kept through all the HEIs' levels – from the rector to a teacher causing lack of academic freedom and creativeness.

Institutional autonomy with transparency and openness of the HE should become a basis for QA culture formation and guarantee success of all the QA concept activities.

Tools for support of the activities

The most relevant solution for involving wide public (directly and indirectly) into the QAS functioning is seemed only in use of appropriate ICT, e.g. a semantic portal making use of openness, accessibility and networking opportunities of the Web-space and becoming a kind of a social barometer of the quality. Its main functionality should support the proposed QA activities and provide means for the HE transparency, it covers:

- collaborative registering of facts about the national education and scientific resources by HE players;
- confirmation of the published information correctness by social verification methods (referencing, vote);
- manipulation of the facts to get trusted analytics;
- comparative evaluation of the registered resources in form of rankings.

Portal environment opened to the wide society and personalized approach to the QA Monitoring allow HEIs be acquainted with systems of values of the different users (players of HE) and to establish own optimal system of values which would target the definite objectives within chosen strategy.

1. http://dif.org.ua/modules/pages/files/1345098675_1911.pdf
2. http://uniter.org.ua/data/block/corruption_in_ukraine_2007-2009_2011_ukr.pdf
3. H.F. Weisberg, Models of Statistical Relationship, *American Political Science Review*, Vol. 68, 1974, pp. 1638-1655.