Petroleum-Gas University of Ploiesti (PGU)

External Institutional Evaluation Report 2019

Introduction

I was invited by the Romanian Agency for Quality Assurance in Higher Education (ARACIS) to join the evaluation team for the institutional evaluation of Petroleum-Gas University of Ploiesti (PGU). Prior to the site visit I studied the English version of the self-evaluation report (SER) of PGU. During the site visit, which took place at the premises of PGU in Ploiesti on 27-29 November 2019, I could enhance the information I had received about PGU and its operation.

The site visit started with an official meeting with the leading representatives of PGU, namely Professor Pascu Mihai Coloja, rector of PGU, and his team of PGU's top leaders. This was followed by an extensive tour of the premises of PGU, its numerous buildings, faculties and departments, laboratories, the library, teaching rooms, student dormitories and other facilities.

A series of individual meetings as well as group discussions with representatives of various positions (functions) at PGU and beyond followed during the site visit. I have met representatives of PGU executive management (all over the structure: university, faculties, departments and other units, which means four vice-rectors, the dean of the faculty and heads of the departments), president of PGU's Senate, representatives of PGU's Quality Assurance Office and International Relations Office, PGU Publishing House representative, Student Counselling Centre staff, leading student association representatives (Student Association of Petroleum Engineers, Association of Students of Republic Moldova, Student Association of PGU), groups of students of all three levels (incl. international students), alumni, employers, and other people. I had a chance to study materials related to leadership, management and governance, study provision, research, internationalization, external relations, quality assurance and other aspects of PGU's operation.

I would like to express my gratefulness to Ms Roxana Florea, the ARACIS officer, for her helpful support throughout the whole evaluation process. Also, I benefited from the collegial approach of the committee of evaluators led by Prof. Vasilica Stan. I would like to thank Professor Anca Mihaela Dobrinescu, the vice-rector of PGU, for the organizational support of our work on the spot, and to Dr. Mihaela Badea for the same. Last but not least, I want to thank Assoc. Prof. Maria-Ionela Neagu for her very helpful and highly professional interpretation during different meetings. All this was very helpful.

On the basis of the sources of information mentioned, herewith I submit my report on PGU's institutional performance as I perceive it. I am well aware that this is a limited view by an external evaluator, and a much deeper insight would be needed to really catch the essence of some issues evaluated. My evaluation, as well as my recommendations for possible consideration, should be understood as a collegial attempt to provide PGU and ARACIS with opinions aiming to contribute to possible improvements at PGU and quality assurance of higher education in Romania.

Mission statement

The mission statement is in line with the nature of PGU, being threefold: it covers education, research and "civic and cultural mission" which is stated as the third role of the university in the self-evaluation report (SER) of PGU (p. 9).

As for education, mission mainly refers to "professional training with a view to a personal development, to graduates' employment and meeting the need for competence of the socio-economic environment" (SER, p. 9). In the area of research, development, innovation and technology transfer, the exploitation and dissemination of results is emphasized in all fields relevant to the university scope (SER, p. 9). As to the third role, "the organization of cultural, artistic, and sport activities, on campus" is pointed out, among others (ibid).

While it is understandable that through its mission the PGU „seeks to strengthen the status… as a center of excellence with international recognition in the training of specialists and research in the field of oil and gas industry" (SER, p. 9), one would also expect the ambition to do the same in other fields of PGU's focus such as humanities and social sciences on which some of PGU's faculties are focused.

PGU has developed its Strategic Plan for the 2016-2020 period containing the main objectives as formulated in order to achieve the mission. There are 30 main objectives formulated, relating to the main areas of PGU's activities and being synergic to PGU's mission. Annual Operational Plans then serve to make individual steps more concrete. These operational plans are developed on the level of each of the five faculties as well.

It can be said that these sets of documents have a potential to serve as a solid basis for PGU's operation.

Recommendation:

When declaring what to achieve through the mission, aim always at the full range of disciplines carried on by PGU.

Academic freedom and integrity

PGU makes it clear that in all its activities "it is driven by the principle of university autonomy, in compliance with legislation in force and its own regulations" (SER, p. 7). It expresses its awareness and respect to public responsibility, national and European public policies and academic ethics.

As for professional (academic) integrity, honesty, correctness, good faith, respect and responsibility "in order to maintain standards of excellence in education, research and service to the community" are emphasized (SER, p. 8).

The Ethics and Deontology Code of PGU are in place, the Ethical Committee is in place and it functions in cases of need, to ensure compliance with the Code. The Ethical Committee reports regularly (annually) about its activity. An antiplagiarism software is used at PGU.

Other university bodies are in line with the law, providing the faculties with respective academic freedom within the limits of the possible.

Reduced research activity was evidenced in some areas of PGU's operation. Most importantly, the proportion of fundamental research is relatively small, which is, in some extent, due to financial reasons and high competition both nationally and internationally. In consequence, this situation can restrict indirectly the possibilities for research and the academic freedom.

Recommendation:

- Consider possibilities for implementing internal funds to support research at PGU (particularly projects potentially leading to development of applications for larger projects that are funded externally).

Organization and management

PGU is a well-established university consisting of five faculties with departments, offices and services. The faculties are of Mechanical and Electrical Engineering, Oil and Gas Engineering, Petroleum Technology and Petrochemistry, Letters and Sciences, and Economic Sciences. These faculties act quite independently in some aspects of operation, particularly in the realization of study programs.

The structure of PGU contains the Senate and Administration Board (at the level of PGU), Faculty Councils and the Deans' offices (at the level of Faculties), and Council Departments and Heads of Departments' offices (at the level of departments). These levels seem to interact well, with major responsibilities and access to power on upper levels of the structure.

Staff and student representation in the Senate seems to be well designed and the selection procedures at all levels are in line with legislation. Also, the bodies of administration are composed according to legislation. It can be concluded that the management system is well thought over, emphasizing the university level but featuring the levels of faculties and departments as well. Apart from executive bodies, there are also bodies of governance and, in some extent, bodies of self-governance including student participation at the university.

A significant aspect of organization and management is the centralization of finance. The budget seems to be located at the university level for its decisive part, with faculties and departments having a very small chance to act autonomously in this respect. This seems to be a limitation but, at the same time, this makes it possible to maintain the global perspective and harmonization within the whole institution where different programs enjoy different levels of interest among potential students.

Recommendation:

- Consider possibilities to decentralize (some part of) the budget and, therefore, provide faculties and departments with more autonomy and responsibilities.

Academic programs and student management

PGU offers a number of bachelor and master programs and several doctoral study programs (the latter in engineering only, at four domains: mains, petroleum and gas, chemical engineering, systems engineering and mechanical engineering). The academic programs correspond with the PGU's mission statement. Also, it can be confirmed that academic degrees correspond with international standards. The quality, range and academic aims of the curriculum seem to be appropriate for the academic degrees awarded.

The programs are monitored regularly and reviewed internally on an annual basis and, in some extent, with regard to the views of external stakeholders. Also, students' views are a part of the feedback collected.

Besides the full-time form of study, some programs are offered in the distant learning mode. A relatively large number of students seem to combine study and work in different proportions, regardless of the form of study.

The structure of study programs apparently provides a solid opportunity for independent study, reflection and analysis. The student workload varies depending on the faculty at which students are enrolled but seems to be manageable by them. The ECTS are calculated well.

The admission procedure and criteria are clear and the rules related to the whole process of studies, including student examination and assessment (throughout studies as well as at termination), are transparent and are understood and accepted by students.

The total number of students at PGU is decreasing, which is explained by university representatives as a consequence of demographic trends and migration of young people from the country. As stated in SER (p. 16), "this situation represents a challenge for the university that must reformulate its strategy to be able to transform this major risk into an opportunity".

According to SER, there are 131 bachelor, 45 master, and 10 PhD foreign students at PGU. At the bachelor level, the number of foreign students decreased continuously and significantly during the last 5-6 years. Also, the university organizes preparatory courses for newly coming foreign students who, however, do not necessarily choose a PGU program after completion of the preparatory year.

Students can use career counselling and career guidance support (via services of the Career Counselling and Career Guidance Centre). Some students were very appreciative about it while others were not at all aware of the existence of the Centre during our meeting.

PGU students are involved in feedback procedures related to teaching/subjects and teachers' performance (mainly by means of questionnaires). PGU does not seem to provide systematical feedback for students on their own feedback given via questionnaires. Nevertheless, the results of data collection are discussed in PGU's Senate where students are represented besides other relevant bodies.

Several student associations are involved in a number of relevant directions within PGU. They are synergic with student learning as well as social and professional life at PGU and beyond. Among these associations, one is focused exclusively on students from the Republic of Moldova.

PGU provides students with several types of scholarships, mainly merit-based, and social. Support to students' scientific activities is available as well. PGU is a beneficiary of Student Enterpriser Scholarship, an EU-funded project that should enrich current scholarship portfolio at PGU.

Students are provided accommodation in a number of dormitories located within the main campus. It seems that demand is satisfied and, in principle, students express satisfaction with accommodation provided. Foreign students live in a separate dormitory, which is drawback for any deeper integration and mutual enrichment between Romanian and foreign students.

During the site visit we had a chance to meet very enthusiastic and talented students who were mostly positive about the programs and PGU as such. Also, positive opinions about the university were expressed by alumni, who were graduates of different programs of the university.

Recommendations:

- Develop the practice of transparent work with student feedback (especially by giving students information about what followed the feedback they had provided).
- Consider possibilities to develop a system of scholarships supporting student research work.

Research

The mission and objectives of PGU point out research as one of the key activities of the university.

PGU runs 13 research centers that are supposed to carry out research, technological development, design, consultancy and expertise. However, expectations in terms of research performance are related to every academic person. Explicitly, every staff member is supposed to publish specialist works every year.

External funds for research have a very specific structure. While money from national and/or international projects supporting fundamental research are scarce, the prevailing portion of funds/projects allowed comes from applied research (179 research contracts with companies). Internal funding of research activities is available as well. Much of the research is done without explicit funding (certainly not in humanities and social sciences).

PGU organizes numerous conferences; several journals that aspire to high indexing are published by the university's own publishing house. The number and the quality of publications have increased in recent years. Some of the publications written by staff members are well positioned (not only those in engineering but also in humanities such as English philology, for instance).

During the site visit I could gain evidence of efforts to interconnect teaching and research at PGU. On the other hand, I did not find evidence of systematic attention to supervisors´ training.

Recommendations:

- Increase support for staff members so that they can involve more effectively in the competition for external research grants (national as well as international).
- Introduce an internal granting scheme for research that would provide a basis for successful applications for external research funding.
- Make sure that supervisors of diploma theses and dissertations get sufficient training in research methodology and the process of supervision.
- Make sure that there are realistic possibilities to connect teaching with research.

International cooperation

International cooperation is declared as an increasingly significant area of work at PGU. It is part of the agenda of one of the vice-rectors and the International Relation Office at PGU.

The number of international cooperation agreements signed by PGU is increasing. This is a positive move but the most important step is the materialization of these agreements. The total number of mobility students as well as staff members is still rather low. This is true for both outcoming and incoming mobility. Instead, members of the staff take part in short-term visits/conferences, which is caused by various internal and external reasons. Among these, let us mention the absence of explicit study offer for incoming students (specific subjects, not only individual consultations as it is the practice now). Also, the language competence of students and of a significant part of the staff is to be regarded as insufficient. I wonder whether PGU has a chance to moderate the financial demands of the mobility (as far as I know, no specific scholarship that could lower the costs is part of the scholarship portfolio). More motivation and encouragement for potential candidates of outcoming study stays might be beneficial.

Low indicators in terms of mobility participation of the staff can be viewed as a potential threat for PGU. A significant number of staff members were educated as students at PGU. This raises the question of inbreeding effects. As such, these negative effects can probably be reduced by effective and frequent use of mobility opportunities (opening the “windows”, getting experience abroad, etc.).

There have recently been some significant internationalization-supported activities at the level of PGU such as Erasmus Staff Week – International Dimension, an event hosted by PGU in 2018, with participants from a number of countries. Summer schools, several international cooperation projects and some bilateral initiatives should also be mentioned in this respect as positive moves. The budget available for international mobility is on the increase.

Of course, internationalization should be part of the activities in research and development and, despite some individual achievements, there is still some potential for further development in this respect.

Recommendations:

- Implement a set of measures effectively improving the mobility of outcoming students/staff.
- Develop explicit study offer for incoming students.
- Increase the number of incoming staff.
- Develop pressure on staff members so that they improve their English language competence.

Staff

PGU has a number of distinguished professionals among the staff. Apart from these, there is probably a sufficient number of staff members of acceptable academic quality. Students as well as alumni were positive about the staff and their performance.

A slight decrease in the numbers of staff is associated with the decrease in the numbers of students.

As for the staff development activities and relevant supporting measures, limited evidence was found in terms of the development of pedagogical/didactical skills, research methodology and English language competences. Individual activities by staff members were identified rather than systematic and thorough measures.

Some staff members invest a lot of time into the work in service activities/units such as the counselling and guidance center, international office center and the like. Surprisingly, this activity is based on volunteering.

Recommendation:

- Consider possibilities to provide staff with development opportunities in teaching skills, research methodology skills and foreign language proficiency.

Finance, infrastructure/space and equipment

As indicated above, means of finance are centralized at the level of the university. There are several major sources of income: core revenue, special purpose funds, own private funds (tuition fees and other activities) and research.

In general, the infrastructure is on a good level. Almost everything is concentrated in one place (11 hectares) with some of the buildings in a very good shape and some in need of rather prompt reconstruction. PGU has roomy buildings with sufficient equipment and rooms that make study programs feasible. Some of the research facilities are very good while others need further development. Also, PGU operates a drilling base for practical and experimental activities, but I did not have a chance to visit it during my short stay.

There is a zone of student dormitories located in the campus; they probably meet students' basic needs. The demand for accommodation in dormitories seems to be satisfied at PGU.

Also, there are facilities for social and cultural activities at PGU.

The whole area is covered by wi-fi connection.

The area of the campus is highly structured. Although some of the very basic arrangements for students with special education needs (SEN) are in place, a visitor gets the impression that it is very hard for such students to fully access many a place.

The information system is helpful for studying (especially for part-time students) as well it is an aid to administer various aspects of the life of the university. It is perceived as sufficient for the moment but more attention and progress will certainly be needed in the near future. The same is true about study conditions for part-time students. The library is helpful but more development might be needed in the future as well. Both staff and students have access to several relevant international databases.

Recommendations:

- Continue developing the information system as supportive to learning and teaching.
- Continue determining explicitly the research funds and funds for internationalization.
- Consider developing a more elaborated system of scholarships.
- Continue making PGU facilities SEN-students friendly.

Quality management

Quality management is a significant part of PGU's strategic plan and the objectives are formulated consequently. The Quality Management Office seems to be the main unit dealing with the issue at PGU; quality assurance is a part of the agenda of one of the vice-rectors and the Quality Assurance Committee is actively involved in these activities as well.

In general, it can be said that PGU has a solid and sufficiently organized system of quality assurance focusing on both education and research. It has a clear structure and procedures. Quality assurance policies that are developed have the potential to support quality development in two main areas of the operation of PGU. Focus of quality assurance processes on what is called "third role of the university" was not evidenced.

It seems that the main focus is still on the teaching process. Each study program is monitored, evaluated and regularly revised through data collected in feedback and with regard to other developments and needs. As already mentioned, clear procedures are related to evaluation of student work at PGU.

Several forms of evaluation have been developed and implemented at the PGU. The leading role is probably played by student evaluation of the staff and, in some extent, peer evaluation among staff members, evaluation of research performance (publication activity), some external evaluation as well as evaluation by graduates.

Recommendations:

- Consider further development of quality assurance policies focused on research and its link to teaching and on internationalization and its links to teaching and research.
- Consider possibilities of focusing quality assurance explicitly on the third role of the university as defined in PGU's mission.

Final recommendation:

I recommend to provide PGU with institutional accreditation with the rating High Confidence.

Professor Milan Pol

prof. PhDr. Milan Pol, CSc.
Digitálně podepsal prof. PhDr. Milan Pol, CSc.
Datum: 2019.12.18 22:22:12 +01'00'

Masaryk University

Brno

Czech Republic

Brno, December 18, 2019