Teacher Motivation - the key to implementation of new pedagogical tools

Krzysztof Pikoń, Silesian University of Technology, Konarskiego 18, 44-100 Gliwice, Poland
Magdalena Bogacka*, Silesian University of Technology, Konarskiego 18, 44-100 Gliwice, Poland
Katarzyna Piecha-Sobota, Silesian University of Technology, Konarskiego 18, 44-100 Gliwice, Poland

Suggested Citation:

Abstract

The academic staff is an important pillar in achieving good pedagogical results in any university in the world. The role of teachers in the process of transforming educational systems on all levels should be underlined. It should be considered as an important strength of any educational institution. On the other hand lack of motivation and commitment can have a negative impact on the students’ learning effects and overall performance of institutions. Teachers’ contribution in development and implementation of new pedagogy in significant extent depends on their motivation and willingness for taking initiatives. There are many factors which affect the academician’s motivation which includes rewards, incentives, reduced workload, professional career opportunities etc. The standard of educational institutions can be improved through knowledgeable, committed and motivated staff. The important challenge for universities is to get the teachers have the work done willingly and efficiently. The research on factors that could motivate academic teachers are discussed in the manuscript. The evaluation is made on the basis of survey carried out in several technical universities. The results could be treated as a founding for change of policy towards teachers in order to make progress in modern pedagogical tools implementation in teaching process in different engineering courses.

Keywords: teacher motivation; active learning; case teaching method; engineering courses

* ADDRESS FOR CORRESPONDENCE: Magdalena Bogacka, Silesian University of Technology, Konarskiego 18, 44-100 Gliwice, Poland
E-mail address: magdalena.bogacka@polsl.pl/ Tel.: +48 32 2371213
1. Introduction

An educational institution gains better ranking position and enjoy better reputation through competent teachers. The teachers’ performance is essential for a successful and efficient educational system. Only the motivated, skilled and having adequate knowledge teachers can help programs to reach a high position among other educational programs available on the market. Teaching is considered to be highly respected and dignified profession and teachers are always taken as role models (Adelabu, 2005). The standard of educational institutions can be improved through knowledgeable, committed and motivated staff. The biggest challenge for universities is to get the teachers have the work done willingly and efficiently. Quality of teachers and teaching itself is the most dominating factor that affects learning process at large scale. If EU has ambitious plans in changing the future European university teaching state of art, the special attention should be paid to teachers skills and satisfaction. The last could be reached by efficient motivation system. It would not be easy due to various problems like diversity of structure and corporate culture in different countries and universities. This would suggest that the system should be flexible and location oriented in order to be highly efficient.

If the factors associated with work or outcomes are emphasized, such as promotional opportunities, career advancement, acknowledgement, responsibility and achievement then the individuals will find their work rewarding (Robbins, et al., 2007). Good teachers are definitely more work loaded that others. This suggest that additional benefits should be granted for them.

The notion of “motivation” is often described (Helligel, et al., 1992) as the force acting on or within a person that causes the person to behave in a specific, goal-directed manner. Sometimes it is suggested that motivation can be defined as the reason why people do the things they do, and in a work setting, motivation is what makes people want to work. The motivation refers to the forces either within or external to a person that arouse enthusiasm and persistence to pursue a certain course of action (Daft and Marcic, 2004). It means that motivation is linked with a person’s behavior and consequently individual behaviors may differ because of different individual needs (Dongho, 2006).

2. The survey

The goal of the survey was to outline the possible motivators which could help teachers and help introduce changes in pedagogical approach inside universities.

The questions in the survey were designed to learn about teachers opinions and experiences and to understand what kind of staff motivation methods, to help introduce changes in teaching process, would be the most effective.

The survey was made in a way which ensured the efficient information flow and the most reliable results. It was anonymous. The respondents were academic teachers in technical universities from Poland.

In the survey, respondents were asked to rate the effectiveness of seven methods of teacher motivation. Respondents were also asked to rate their level of knowledge about modern pedagogy as well as the experience in implementing of several new methods and teaching tools. Finally, respondents were asked to provide written comments on what kind of motivation would be the most effective and what would help them to introduce new model of teaching.
Teachers were asked about the being familiar with notions which are close to modern pedagogy like: learning pyramid, learning by doing as well as knowledge triangle.

Learning Pyramid clearly illustrates that active participation in the learning process results in more effective consolidation and retention of learning. An effective teacher will design lessons and activities with this information in mind, and ensure students are actively engaged in the learning process (fig. 1).

Learning by doing is a concept within economic theory by which productivity is achieved through practice, self-perfection and minor innovations. An example is a factory that increases output by learning how to use equipment better without adding workers or investing significant amounts of capital. Learning refers to understanding through thinking ahead and solving backward, one of the main problem solving strategies.

Knowledge (Innovation) Triangle The knowledge triangle refers to the interaction between research, education and innovation, which are key drivers of a knowledge-based society. In the European Union, it also refers to an attempt to better link together these key concepts, with research and innovation already highlighted by the development of the Lisbon Strategy and, more recently, lies behind the creation of the European Institute of Technology.

3. Results

It was revealed that 45% of respondents were familiar with knowledge triangle notion. The knowledge about it was used in pedagogical process only in 22% of cases. Similarly notion learning pyramid was known only by 35% of respondents and only 24% were trying to introduce it into pedagogy. A little better results were obtained asking about learning by doing concept. 79% of respondent were familiar with this notion and 70% are trying to introduce it while conducting classes.

65% of respondents were rather satisfied with pedagogical methods they use but they are willing to introduce some changes. Only 5% were completely satisfied. 35% were not satisfied and are eager to introduce some changes. This indicates that majority of teachers are fairly critical as their way of teaching is concerned and they are also willing to introduce changes but in majority of cases they are
suffering with work overload and lack of time as well as other principles that are important in their professional career.

What have been revealed that in some of the universities tutors are only evaluated regarding their research activities what doesn’t motivate them to spend time on teaching activities. If the teaching activities and success in that field would be taken into account in the career progress, it would definitely motivate to devote some of the research time to teaching. As we cannot changes the applicable rules at given universities we need to give something in exchange for the time the teacher would spend on teaching and learning tools and techniques.

This could lead to conclusion that some motivation would be essential to make teachers to introduce new pedagogical tools.

Regarding effectiveness of different motivation methods teachers could have chosen:

- progress in professional career
- gratitude from superiors
- gratitude from students
- competition between teachers
- additional training possibilities
- additional money for institution
- additional remuneration for teacher

Surprisingly as very effective and effective the “gratitude from students” was chosen by the highest number of respondents (nearly 80%). The second in terms of effectiveness was indicated “progress in professional career” (71%). On the third place was “remuneration for teacher” (65%). This question was about extra pay for the teacher or the amount of the base salary. Such a distant position of this response could be a little surprising. The remuneration is considered by managers as the most important element of motivating system.

About 50% of respondents indicated “training possibilities” as very effective and effective form of motivation. Similarly, about 45% thinks that additional funds for the home institution could motivate teachers for additional effort. Only 37% treat gratitude from superiors as effective motivating tool. The difference between motivating force of gratitude from students and superiors should be underlined. As the least effective was chosen “competition between teachers”. The overall results were given in fig. 2.
The above answers suggested also that the “additional money” dedicated to teacher doesn’t have to always be personal income – a budget given to the individual for mobility and conferences seems also be satisfactory and motivating.

Third of the teachers who responded to the question would see a possibility of introducing new teaching techniques if they would have more time or would be exempt from some other tasks. Solution to this issues doesn’t seem to be easily achieved, but some steps could be taken by paying the universities, who would employ another teacher for doing the teaching for the teacher being “on sabbatical”. It would give the teacher time to concentrate upon this what is important to his/hers career at the time. As the possibility has not been taken into account in the primary version of the survey, more research should be done towards understanding, in what form and what quantity, the free time given to the respondents, would be satisfactory to them.

In different location the situation could be slightly different, especially as the execution tool are concerned. In some countries second best option “additional remuneration” is not possible form legal point of view. The special attention should be paid to it to find feasible solutions.

4. Conclusions

As it could be noticed that only a very small percentage of respondents is completely happy with the way they teach. A huge majority of teachers feel that their current teaching approach isn’t the best and there is a need to introduce modification. A quarter of respondents would be happy to make changes but doesn’t have sufficient time to do so.

In general, answers to this questions are rather optimistic. They show willingness to improve teaching process besides the general satisfaction with already used teaching methods. In other words, if proper tools to motivate teachers would be used the implementation of new pedagogical tool would be easier.
The results show that less than half of the teachers are familiar with the concept of Knowledge Triangle and Learning Pyramid. Knowledge of the concept of learning by doing looks much more positive – almost 80% respondents is familiar with it. This leads to the conclusion that additional training action should be introduced.

It is scientifically proven that highly motivated teachers could deliver the high level educational product while lack of motivation and commitment can have a negative impact on the students’ learning.

Motivating teachers is essential to implement new teaching techniques and self-improvement of the fundamental issues affecting the final results of teaching. In order to reach the best results of culture quality and the best possible commitment of teachers high quality actions motivating teaches are necessary. As the most effective methods should be considered gratitude from students, progress in career opportunities, additional remuneration. As the least effective could be treated competition between teachers and surprisingly gratitude form superiors.

Motivation may differ because of different individual needs. The proper assessment of teachers needs is very important to obtain the best results of motivating actions.

Acknowledgements

This paper has been developed as a part of KIC Innoenergy activity in Clean Fossil and Alternative Fuels Energy Msc program.

References