Workshop – brief

In engineering education system real-life-problem based learning (PBL) can be an effective way as it helps students to solve open-ended engineering problems.

Using technology as a teaching tool saves time and laborious calculation processes and gives the students sufficient time to think creatively. “Mixing lecture” based classes with hands-on laboratories and trips to the real engineering sites strengthen the learning abilities of students. Interaction with industry personnel gives the students ideas about their future job prospects and responsibilities.

Moreover, multidimensional competition among the students can help them to develop different skills which will be helpful in their career.

In first presentation named „Problem Based Learning (PBL): An effective method to enhance the quality of education” – principles,characteristics and learning theory of PBL will be explained with examples of applied PBL method in different fields of education. Then graduate`s attributes will be marked and how to enhance this attributes by using PBL methodology.

Traditional learning vs PBL will be explained, then PBL teaching model with essential elements and project implementation activities, also.

Finally, the main parties involved in this useful learning method, which is PBL must be in to an effective correlation, graphically represented through knowledge sharing platform within PBL activities.

Final conclusions may be drawn: PBL can able to improve the required attributes of a Graduate,

PBL has the positive impact for enhancing the quality of Education and PBL can also be implemented in different areas of education.

Second presentation show step by step how was implemented this type of project, in textile engineering in to a company from Sibiu, Romania. Documentation and tools for every PBL activities will be explained, also responsibilities for all participants to this project: teachers, students, mentors, industry, university. This project brings the benefits for all partners as mentioned above. University will develop strong relationship with industry, which is one of the prime requirements for engineering education all over the world. The learning capacity of students was improved with practical skills which will help them to be competent in the world job market. At the same time industry can enhance their product quality by applying this method. Finally, it will be a win-win situation for both parties.

Third presentation make reference to the methods evaluation of the students, using different forms and different type of grading. Feedback forms was applied the students and mentors.

At the last presentation were drafted general criteria to modify syllabus activities, also, principles of problem selection for PBL.