

Problems arising with cooperative learning of students of different backgrounds at master programs at LTH

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Abstract—International students from different backgrounds who participate in the MSc program in Food Technology and Nutrition take courses together with Swedish students for around 1 and a half years. The international students start their program in September every year and, at once, start taking the courses of the program together with the local students. Teachers of the courses of the program have experienced problems regarding the cooperative learning of mixed working groups of local and international students during the courses. Swedish students have, in previous years, developed an efficient way to work together and problems arise when international students are assigned to the groups. For Swedish students, it is not a positive experience when the teachers mix the groups with international students and they feel that the results obtained are not as good as if the groups would be formed only by Swedish students. Strategies for improving the cooperative learning in the mixed groups need to be discussed and implemented. A mentorship program for the newly arrived international students, team building activities with the mixed groups as well as seminars for the teachers on international education are either being implemented during 2012 or planned to be implemented in the near future.

Index Terms—adaptation of international students, cooperative learning, team building

I. INTRODUCTION

LTH has a strong policy regarding internationalization of education “As a leading faculty at Lund University, the Faculty of Engineering LTH embraces internationalization as a fundamental strategy to maintain excellent research and education” [1] and more than 400 courses are offered in English [2]. In the case of the Master Program in Food Technology and Nutrition, international students follow the specialization courses together with Swedish students during 6 study periods (13 months). Teachers of the courses in the program have experienced problems regarding the cooperative learning of mixed working groups of local and international students during the courses. Tensions and conflicts within the groups strongly interfere with their collaboration towards achieving the tasks assigned to the groups during the courses.

Benefits and problems of using cooperative learning are well supported by theory and well established by classroom

research and many techniques have been developed to minimize the problems [3]. However, in the case of international students working together with local students, additional factors need to be considered: (1) adaptation to the “new environment”. International students start the program only few days after arrival day, (2) adaptation to the “new education system”. The education system at LTH tends to differ from other, some times more traditional, teaching methods applied in other universities in the world. Swedish students have, in previous years, developed an efficient way to work together; international students used to different study systems are assigned to their working groups with limited time to fulfill their assignments, (3) students from different cultural backgrounds may also have different ways to communicate, interact and collaborate with others.

Based on student interviews and pilot programs implemented in the Master in Food Technology and Nutrition during 2011 and 2012, this paper discusses different strategies for a more successful cooperative learning in international groups of students.

II. PROCEDURE

A. Student interviews

The interviews were done by Anders Ahlberg at the “Genombrottet” institution, Lund University (October 2011) with one group of 7 Swedish students and another group of 7 international students. Each group was interviewed in separate days over lunch. Swedish students were students from the Biotechnology program on the 5th year, following the food specialization, who have been taken courses together with the international students of the interview. All seven Swedish students participating in the interview were females. International students were students from the Master Program in Food Technology and Nutrition in their 2nd year, who has been taking courses together with the Swedish students of the interview. They were 2 males and 5 females.

The interview covered aspects such as the students’ view of internationalization of their education, the adaptation process of international students to the local conditions and the Swedish educational system and their views about working in mixed groups.

B. Pilot programs

From 2012, the Master program in Food Technology and

Nutrition implemented the following pilot programs:

- Mentorship, where two Swedish students had meetings with their international classmates in the courses to discuss several aspects of the academic life in Sweden. These meetings were held during the first study period of the program. Attendance by international students was volunteered. Discussions between international students and mentors included exams, report writing, presentation including power point, group work, teacher's expectations, plagiarism and Swedish social codes.

. - Team building, where last year students from the psychology department at Lund University met the mixed groups of students working in the courses. This activity was linked with a compulsory course in the program during the second study period. In this way, the psychology students met the groups actively working on course tasks. This was part of a project course for the psychology students and their teachers have experience on small group interactions and collaboration. The meetings between the psychology students and the program students were aimed at team building, conflict resolution and to give the students different tools to prevent conflicts and to find a way to work professionally together.

III. FINDINGS

During the interviews, last year Swedish students claimed that it is not a positive experience when the teachers mix the groups with international students and they feel that the results obtained are not as good as if the groups would be formed only by Swedish students. In contrast, international students prefer to be mixed with Swedish students in the working groups. They think it is much better than choosing their own groups and the groups should be as mixed as possible regarding nationalities and majors. Both groups agreed that the adaptation of the international students to the Swedish educational system and the way Swedish students work in groups, write reports and exams are very important factors influencing the efficient group work.

For helping in the adaptation process, the mentorship program was implemented with the new arrived students. In the evaluation of the mentorship the students reported that the meetings "were very useful to learn about the program, exams, presentations and lectures, also about the study culture in Sweden", that it was good to "get closer to Swedish students that are familiar with the specific education system and we can find answers to questions of interest" and "made it easier to integrate".

For helping the efficient work of the mixed groups, the team building activity had mixed comments from the students of the food program. For 50 % of the students the goals of the meetings were achieved in great extent, for 40 % they were achieved in some extent and for the rest 10 %, the aims were not achieved at all.

IV. CONCLUDING REMARKS

The results from the interviews of last year students in the

master program in Food Technology and Nutrition are reflecting problems in cooperative learning of students of different backgrounds. The pilot programs implemented with the new students starting the program made promising results on helping the adaptation process of the international students to Sweden and the Swedish education system. It also yielded promising results regarding efficient team work.

The results presented here need to be evaluated carefully. The immediate evaluation by the students taking place in the pilot programs may differ from a long term evaluation after students have worked together for some months. New student interviews are necessary for a long term evaluation of the results of the programs.

Pedagogic strategies for improving adaptation and cooperative learning must be complemented by the strong support of internationalization by teachers in the individual courses of the program. The courses should, therefore, create the framework for encouraging cooperation between local and international students in the different tasks of the project. Different backgrounds should be understood by teachers and students as an advantage for cooperation and efficient team work.

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