

PROGRAM ORIENTATION

The Native Access Program in Engineering at Lakehead University expects to offer an orientation session for the incoming students, where the orientation session will act as a transitional phase for the student. During this time, staff and students will have the opportunity to get to know each other. The students will have time to become familiar with the university and the city of Thunder Bay, if they are not already. The staff will assess the students academic needs through course work and diagnostic testing in order to implement a suitable program of studies with the students in the Fall Term.

Orientation is expected to consist of remedial course work in mathematics, science, English, along with possible training in computers and study skills.

The intent of the Program Orientation is to help students acquire the necessary information, skills, and self discipline required to be successful at the university. The orientation is for the benefit of the student and it is expected that they will provide input into the process.

Specific Orientation Objectives

- To assist in securing accommodation, day care and schools for children, if necessary.
 - To adjust to being a student at the university, as well as in the city.
 - To develop and improve learning skills.
 - To develop a good understanding of program policies as well as the policies of Lakehead University.
1. What other orientation objectives should be considered?
 2. What activities, both academic and social, do you think would be beneficial to incorporate into the orientation?
 3. Do you envisage problems in developing a program for a small group of students with varied backgrounds? That is, age difference, varied life and educational experiences, making the transition from northern communities, and gender. What ideas do you have to make it work?
 4. In what ways should the University program connect with the student's bands/educational authority in order to help with financing decisions?
 5. How does the counsellor maintain a connection with the student's community since it is important for the counsellor to be aware of problems, stresses, which might originate in the community?

COUNSELLING

The Native Access Program in Engineering at Lakehead University expects to offer academic and social support to promote student success. Counselling, which may begin immediately following admission to the University, is expected to form a significant portion of a summer orientation program and be available until the student graduates.

The program expects to have a qualified counsellor to assist students with personal and social adjustments. The counsellor will work with students to solve problems that may arise in all areas of their lives. Since we may attract students from northern communities we must identify, as best we can, the potential problems/concerns and establish a natural learning/counselling process to intercept and alleviate the fears and unknowns that can arise from students moving to a "large city", and into an University to study the demanding field of Engineering.

1. What adjustments will students have to make to be successful at the university?
2. What should be the role of the counsellor? Who else or what other groups in Thunder Bay can help?
3. What qualifications and personal traits do you feel our counsellor should have?

In most cases the students will work hard, attend classes, complete assignments, participate in laboratories and projects, or in other words, fulfil the obligations of being a student. However there may be a few students, for whatever reasons, who are reluctant to do what it takes to be successful in engineering. In most university programs such students merely fall by the side and ultimately fail.

1. Is this process suitable for access students?
2. If the program should have tougher rules and regulations than those of the university, what rules and regulations do you suggest?
3. Do you have practical suggestions, other than additional rules and regulations, that might be successful in rectifying any situation?
4. Are there certain conditions under which the student must leave the program in order that:
 - a) the student does not jeopardize any future attempt in the program, or
 - b) the student does not have a negative impact on other students?

SOCIAL AND CULTURAL IMPACTS

Floy Pepper, a member of the Creek tribe in Oklahoma who teaches at Rudolph Dreikurs Institute in Portland, Oregon, in a paper on social and cultural impacts on Native learning style and the implications for classroom practice, suggested that Native students are often:

- skilled in non-verbal communication,
- adept at processing visual and spacial information,
- able to take a holistic approach to specific topics,
- imaginative,
- likely to learn through observation and practice, rather than discussion,
- group-orientated, and
- more comfortable in the informal setting that allows freedom of movement.

1. Do you agree with Pepper? What would you add or delete from the list? We need to be concerned about this issued because while the Native students for the most part will be in their own groups initially, they will ultimately join the regular student body. Can you suggest some appropriate teaching strategies that can be used for the instruction of Native students who will be attending university?
2. What are some of the social/cultural factors that might influence the students learning that instructors of these students should know?

THE SERIOUS LACK OF NATIVE ENGINEERS

The School of Engineering at Lakehead University is unaware of the exact number of Native engineers in Canada. However in a period close to twenty years, only two Native engineers have graduated from Lakehead University, and comparable numbers are estimated from other universities. Whether the total number is twenty-five, fifty, or a hundred, it is still too low.

1. Will access programs such as that proposed for Lakehead University be adequate to improve the situation? What else might be required?
2. Why do many Native students tend to choose career paths other than Engineering at post-secondary institutions?
3. What common perceptions might the general Native community have in regards to engineering?
4. Do Native students tend to "shy" away from mathematics and science?
5. What level of mathematics do most students attain in high schools? If it is not University Entrance, what suggestions can be made to encourage students to take these courses?
6. What role might the University or any other organization play to encourage students to prepare themselves for and then possibly embark on an engineering career?

We must have your help on this issue so that the recruitment/selection processes can encourage future students.