Using Internships to Enhance Engineering Programs

Case Study of an Industrial Partner

Context
UQAR’s engineering students have the chance to do internships during summer sessions. While being a trainee at Novika, Mr. Côté was approached by the chief of the laser division, who wanted to create a challenge about industrial applications of lasers.

Undertook Actions
Mr. Côté contacted his professor Mr. Barka to go further. The contest was integrated to two courses. Experiments were build up around surface hardening (Materials science) and autogenous laser welding (Automated production systems).

As the internship ended, projects were completed at UQAR. By November, protocols were finished and students started to interact with the laser cell and processes.

Outcomes
The activity was a real success:
- Professional teaching assistants were trained and lack of expertise is now corrected
- A graduate engineering student was involved
- Novika is now well known by students and has stimulated their interest in laser applications
- 50 undergraduate engineering students had a chance to interact with UQAR’s cell – a premiere since its acquisition

A new partnership
Both institutions and students have earned a lot from the initiative. Cell’s exclusivity to graduate students has fallen. Baccalaureate students and professional TAs are now introduced to laser technology, and groups have enjoyed their experience with Novika. Results of experiments have been drawn up, and improvements will be made in future joint activities.

Opportunities
Establishments should make use of opportunities created with students to supplement their programs. Involvement could even come from recent graduates, while links with professors are still fresh. Universities really should encourage students to keep contact.

Acknowledgments
This whole project wouldn’t have been possible without the commitment of UQAR’s engineering teaching assistants, Prof. Noureddine Barka and Mr. Rachid Fakir. A big thanks to the devoted team of Novika and Mrs. Lorraine Blais, our consummate coordinator.

Who is Novika?
Novika Solutions is an industrial research center based at La Pocatière. Linked with the local Cégep, the NPO helps partners developing mechanic, electronic and software solutions. It has expertise in efficiency, healthcare and laser processes.

UQAR’s Cell
The laser cell was used only for research work before the actual project. Employees had little experience with it.

Who is Novika?

Novika Solutions is an industrial research center based at La Pocatière. Linked with the local Cégep, the NPO helps partners developing mechanic, electronic and software solutions. It has expertise in efficiency, healthcare and laser processes.

A new partnership
Both institutions and students have earned a lot from the initiative. Cell’s exclusivity to graduate students has fallen. Baccalaureate students and professional TAs are

Opportunities
Establishments should make use of opportunities created with students to supplement their programs. Involvement could even come from recent graduates, while links with professors are still fresh. Universities really should encourage students to keep contact.

Acknowledgments
This whole project wouldn’t have been possible without the commitment of UQAR’s engineering teaching assistants, Prof. Noureddine Barka and Mr. Rachid Fakir. A big thanks to the devoted team of Novika and Mrs. Lorraine Blais, our consummate coordinator.

Who is Novika?
Novika Solutions is an industrial research center based at La Pocatière. Linked with the local Cégep, the NPO helps partners developing mechanic, electronic and software solutions. It has expertise in efficiency, healthcare and laser processes.

A new partnership
Both institutions and students have earned a lot from the initiative. Cell’s exclusivity to graduate students has fallen. Baccalaureate students and professional TAs are now introduced to laser technology, and groups have enjoyed their experience with Novika. Results of experiments have been drawn up, and improvements will be made in future joint activities.

Opportunities
Establishments should make use of opportunities created with students to supplement their programs. Involvement could even come from recent graduates, while links with professors are still fresh. Universities really should encourage students to keep contact.

Acknowledgments
This whole project wouldn’t have been possible without the commitment of UQAR’s engineering teaching assistants, Prof. Noureddine Barka and Mr. Rachid Fakir. A big thanks to the devoted team of Novika and Mrs. Lorraine Blais, our consummate coordinator.