



School of Science and Technology Quality Assurance Review

Executive Summary

In the summer of 2014, the Dean of the School of Science and Technology was informed by the Vice President Academic and Provost of the impending review of the academic programs within the School. To undertake the self-study portion of the review, a Review Committee was formed, consisting of the School Dean, five faculty members from within the School, one faculty member from another School within the university, and two students. The self-study process began in September 2014 and involved extensive consultation with the School's Department Chairs. The self-study report was submitted to the Quality Assurance Committee of Senate in December 2015. It presented program descriptions, learning outcomes, faculty information, academic resources information, and an analysis of survey results and other data. The self-study addressed all programs within the School of Science and Technology, with an emphasis on the Bachelor of Science.

Two external reviewers (Dr. Christian Lacroix, Vice-President Academic, University of Prince Edward Island and Dr. Ruth Shaw, Dean of Science, Applied Science & Engineering, University of New Brunswick, St. John) were provided the self-study report, together with CVs and course syllabi supplements, on December 4, 2015, in preparation for their January 6-7, 2016 site visit. The two-day site visit included interviews with the President, the Vice-President Academic and Provost, and the School Dean, as well as meetings with students, Department Chairs, faculty, librarians, and Student Services & Registrar's Office staff.

In their report (February 3, 2016), the external reviewers summarized the input received at each of the interviews and meetings held during the site visit. In addition, they commented on various evaluation criteria, including administrative structure/governance, mission/mandate, curriculum and instruction, assessment, faculty complement and activity, student experience, and academic support resources. Overall, they provided positive feedback, stating, "The School of Science and Technology has a suite of well mapped out programs and support services that provide students with a quality educational experience". They went on to provide eight recommendations to further enhance the student experience.

The eight recommendations can be organized into four themes: (1) programming, (2) research, (3) space, and (4) administrative support.

1. Programming

1.1 Flexibility in programming: Introducing more flexibility for students in terms of course selection by reducing the number of required courses may allow students to tailor their program more specifically or broadly to meet their needs and aspirations.

1.2 Enrolment trends: While some programs are experiencing increasing enrolments (i.e. BET), other disciplines in Science have experienced a steady decline. In an institutional context where resources are limited, SST is encouraged to develop a long-term vision to succession planning in niche program areas (i.e. BAS-Environment) and introduce more flexibility in degree structures.

1.3 New / revised programming: STT is encouraged to pursue the development of unique niche programs such as the BAS-Environment, Certificate in Industrial Chemistry, and course offerings on Aboriginal cultures to attract new students.

2. Research

2.1 Level of funding to NSERC USRA recipients: NSERC USRA recipients receive \$4,500 from the funding agency and this is matched by a minimum contribution of \$1,125 by the research supervisor. The total amount of this prestigious award is well below what can be achieved through other student research positions funded by internal (RP) research grants. An institutional top-up amount should be added to the USRA scholarship to match the level of funding of other student researchers funded by the RP program.

2.2 Promotion and recognition of research: SST is encouraged to leverage community and outreach channels to further promote the research accomplishments of faculty members and their students.

2.3 Development of scholarship: In order to encourage the development and expansion of research programs in the School, including the supervision of graduate students, a process School of Science and Technology Final Report 31 whereby workload adjustments or backfilling can be provided (and tailored to disciplines) should be implemented to encourage faculty members to engage further in scholarship.

3. Space

3.1 Renewal of space: SST appears to have a relatively large number of spaces for laboratories but many of them appear outdated. With some renovations and repurposing for multiple-use spaces, more functional and efficient use of laboratories could be achieved. Also, targeting lab fees to the disciplines would allow an ongoing source of funds to upgrade and maintain lab equipment.

4. Administrative Support

4.1 Support for departmental chairs: Measures should be undertaken to identify and provide essential administrative services for chairs in SST.

In the area of programming, the reviewers suggested providing more flexibility in degree structures and encouraged the development of unique niche programs. Greater promotion and recognition of faculty research is encouraged by the external reviewers, including giving consideration to workload adjustments to support faculty in further engaging in scholarship. It was suggested that renovations and repurposing of space could lead to more functional and efficient use of laboratories. Finally, the reviewers recommended that measures be undertaken to identify and provide essential administrative services to Department Chairs.

The external reviewers' report was shared with the School Dean, who circulated it to the Department Chairs and the members of the Review Committee. The Review Committee submitted a response to the report, whereby they outlined two processes to address the recommendations. The first involves circulation of the external reviewers' report to all School members, followed by departmental responses. The second, parallel process will see the formation of four working groups, organized around the themes of the recommendations. These working groups will report into the Department Chairs, who, in collaboration with the Dean, will develop action items based on the findings of the working groups. The anticipated timeline for the development of the action plan is two months.

The Review Committee's response was received by the Vice President Academic and Provost, Dr. Dale Keefe, on February 8, 2016. Dr. Keefe responded positively to the approach suggested by the Review Committee in the form of a letter to Dr. Sue Korol, Chair of the SST Review Committee, dated February 10, 2016. He emphasized the need for the action plan to be incorporated into the departmental reports and school plan as part of the overall university integrated planning process.