Essential Skills for Success: Nova Scotia Community College Students Enhance Learning

Nova Scotia Community College

Kingstec Campus, NSCC

Kentville, Nova Scotia

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Summary

Do community college students in the School of Business have the Essential Skills necessary for program completion? What impact would using Essential Skills interventions have on their learning and future work? These were questions that NSCC academic leaders sought answers to by asking students in Business Administration, Culinary Arts and Tourism Management at the Kingstec Campus to participate in a research project. There were 90 students who agreed to participate with 66 students completing the initial Test of Workplace Essential Skills (TOWES). Forty participants scored at Level 2 in Document Use. Six completed some Essential Skills (ES) training and the second TOWES assessment. All the students showed improved results on the three TOWES subscales Reading, Document Use and Numeracy.
**Business Case**

Nova Scotia’s working age population is shrinking. Over the next 10 years 47,000 workers will leave the workforce. Adding to this is the growing number of jobs requiring post-secondary education and proven skills for continuous learning and up skilling. The Nova Scotia’s Workforce Strategy (2011) notes that Nova Scotia has the lowest labour market participation rate in Canada for a host of different reasons. “The challenge before us is jobs without people and people without jobs.” The plan highlights three priorities with which to build a strong, vibrant and competitive economy.

The priorities are:

1. learning the right skills for good jobs
2. growing the economy through innovation
3. helping businesses be more competitive globally

The School of Business Administration (Business Administration, Culinary Arts, and Tourism programs) at Kingstec was targeted for this research project due to the high demand for employees working in small to medium businesses in Nova Scotia. As well, this faculty had been exploring the Essential Skills (ES) framework in the past two years in regards to new curriculum development and delivery. As well, the School was completing a renewal process for the Business Administration Program as it was experiencing low student retention. Related to this project, the Dean had two questions; was retention low due to lack of motivation? and did students not have the prose and numeracy skills to acquire work content learning?

**Partnerships**

The partnership consisted of the Dean, School of Business and Academic Chair at Kingstec campus, the Career Development Specialist at Kingstec campus, the ES coordinator and the ES coach. The team reviewed the project scope and logistics of
implementing this research with the students. The proposal from Douglas College to collaborate in a national study which focused on principles of diversity, creating a respectful learning environment, and meeting learners where they are using the TOWES, was key to the schools’ participation. The project also supported the recruitment and training of an “in-house” faculty member to be the Essential Skills facilitator enabling the School to use this as capacity building. Another strong selling point was the opportunity to determine if Essential Skills interventions could improve retention and encourage student success.

The choice of the Kingstec Campus, Kentville, Nova Scotia was made as the Academic Chair was an integral player in the program renewal work. Collaboration was essential in the deliberations on access to the students during class times, logistical details and to confirm as well the learning supports for people who scored at Level 1 in Document Use.

Another influencing factor in choosing Kingstec students was access to a larger pool of students (culinary arts, tourism management and business administration) with enrolment projected at over 120 students. Student services staff were familiar with Essential Skills as the Career Counselor is a certified TOWES administrator. The final factor for successful partnership was the approval of the Chair, NSCC Ethics Committee who provided a statement supporting the research as benefiting both program delivery and student success.

**Awareness and Promotion**

Essential Skills had been promoted to faculty members through an on-going review by the Business Administration Program Renewal (BAPR) committee at NSCC in 2010 - 2011. Presentations on ES with supporting documentation on retention and program success were made to faculty working groups, the campus management committees, and the student services offices.

October meetings discussed the implementation of the ES research project at Kingstec campus. Topics covered included: reviewing the expectations of the project, making a time-line to mark off accomplishments, compiling a list of staff members who needed to be informed about the project, and how to best motivate students to volunteer to be part of the research. In November 2011, the School of Business Academic Chair gave an overview of the National Framework for Essential Skills research project to her faculty.
The ES Coordinator was not present during this presentation and the project lost an opportunity to promote the ES Framework more fully.

In mid-December, a presentation was made to student services at Kingstec. Staff sustained the decision to provide support outside the scope of this project to students who scored at Level 1 in Document Use. Consultation with the principal on how to address the support and learning needs of students at Level 1 was also completed.

A 40 minute orientation presentation on ES and the research project was created for students and delivered in the first week of classes in January 2012. The orientation was given in 6 classes over two days to all first year business administration, tourism and culinary arts students at Kingstec. At the end of the class presentation, the team asked students to sign the ACCC consent form.

Part of the promotion focused on the potential benefits for the students. They included the use of ES training to: 1) assist students with class assignments, 2) to improve the quality of their school work and 3) to integrate the ES Framework into their portfolio assignments. External incentives were added to make participation more attractive.

**Essential Skills Intervention**

**Adult Education Principles**

The Essential Skills Practitioner was an experienced adult educator who used basic adult education principles such as student engagement, relevant materials and assessment of learning needs. Students were encouraged to be autonomous and self-directed by giving them an open schedule so they could choose individual times that fitted their schedules. Workshop materials were chosen to focus on business and tourism workplace documents as much as possible. The types of business workshop materials included using an exercise on cash flow forecast and reviewing a specific company’s annual report. Every effort to customize the learning to business and tourism
students’ needs was made. Students were also encouraged to focus on self-identified study goals. These were developed from their in-class assignments.

**Professional Practitioner Skills**

The ES Practitioner, Janice Henderson, was a member of the School of Business and seconded to work on the project for four months. She has a strong knowledge of adult education principles which were obtained through working for 25 years with young adults in a wide variety of teaching capacities in the Nova Scotia Community College. From 2005-2011, her teaching duties were combined with curriculum development and the role of coordinator of program renewal for the Tourism Management Diploma Program and the Business Administration Diploma Program for NSCC’s School of Business.

The ES Coordinator, Clarence DeSchiffart, has extensive background in career development including testing, assessment, skill analysis, and program planning. These skills were used throughout the development of the Essential Skills pilot project. The ES Coordinator acquired skills necessary for the facilitation of the research through previous ES projects. Prior to these years, the ES Coordinator had worked with the TOWES department (Michael Herzog), Bow Valley College, and BC Skill Plan on using the TOWES and creating ES Profiles.

In 2005 Janice became aware of HRSDC’s ES research and was excited by the fact that the Essential Skills Profile descriptions were directly related to many of the programs offered at NSCC. She utilized the online skills indicators and worksheets to help culinary art and tourism management students learn about their Essential Skills: such as Numeracy, Reading, Writing, and Oral Communications. The intended use of ES profiles and measurements was to relate the student’s learning directly to their employment path.
Examples of related course work were taken from program textbooks. More specifically, they provided examples of tables, spreadsheets, databases, advertisements, flyers, brochures, and other sales documents that were re-created and modified to use with the students. Another customization was tying the ES learning to possible future work. Students created their résumés and cover letters to highlight their Essential Skills. They also went out to interview people in their field of interest and then reported on their job shadowing experience. Additional research on career information was completed using online sites. This provided relevance to their programs of interest and gave them input into what they were learning.

**Types of Interventions**

In the School of Business at NSCC, the question was asked, “Did students have the Essential Skills needed to complete the work successfully in their program choice?” was asked. The students in the first year of the two-year programs in the School of Business programs of Culinary Arts, Business Administration, and Tourism Management at Kingstec were invited to participate. Orientation sessions on the research project were provided to six classes in the School of Business. Results are presented in Figure 1.

![Summary and Results of Students Participation](image)

**Figure 1**

There was a total of 123 students in the three School of Business programs and most participated in an orientation session. Ninety students agreed to participate in the
research and of that number, 66 wrote the TOWES. Forty people scored in the Level 2 range and of this eligible group, six students volunteered for the ES learning interventions.

The results for the 6 students who participated in the ES interventions are contained in Figure 2.

Twelve hours of individual ES learning were offered to the students as well as 8 hours of ES related workshops. The average of contact hours per participant was 16 hours.

The Essential Skills training consisted of weekly workshops and individual training sessions. The students who scored at Level 2 in Document Use were invited to participate in one-to-one and group workshops. Six students participated in the ES learning and were asked to identify their occupational goals. After this individual session, students focused on improving their Reading, Document Use and Numeracy skills related to their occupational choice.

![Hours of Interventions](image)

**Figure 2**

*Individual Training Sessions*

Along with the occupational goals, the ES practitioner offered one hour per week to each student to focus on Essential Skills linked to completing the student’s assignments. Students booked their own times and for the most part, tried to meet the same day and time every week. The availability for individual appointments was from
January 5, 2012 to April 16, 2012. The students were offered a total of 12 hours of one-to-one learning.

Workshops

Based on student feedback and Essential Skills practices, workshops were designed to help students improve their Document Use skills including strategies for understanding questions; scanning for information in complex documents containing list, graphs, and tables; and understanding Essential Skills concepts and related National Occupational Classification (NOC) codes. Workshops ran from January to March, 2012. They included:

- Workshop #1: Document Use Skills to Build On
- Workshop #2: Using Strategies to Answer Questions
- Workshop #3: Portfolio and Essential Skills
- Workshop #4: Building an Understanding of Graphs, Pictures, and Icons
- Workshop #5: Understanding List Structure
- Workshop #6: Creating Great First Impressions for your Résumé Using Essential Skills Statements
- Workshop #7: Menial No More
- Workshop #8: Strategies for Taking a Test

The workshops were one hour in length and attendance varied for each student.

What Actually Happened and Why

The sample size from Kingstec is too small to make generalizations about the effects of the learning interventions. Figure 3 presents the ES results of the six students who participated in the individual training and workshops.

Students increased their scores in all 3 subscales in Reading, Document Use, and Numeracy. Three students increased their scores in Document Use (DU). There was a drop in one student’s DU score and this was accounted for as she missed responding to a section of the TOWES. Four students increased their Reading scores and one student improved their Numeracy score. Scott Murray, the lead research consultant with this project, indicated that it is not unexpected to see lower results immediately after the interventions because the TOWES measures learning how to learn and learning how to develop these Essential Skills in the workplace. As Murray explained the brain is going
about re-programming the way it solves problems and the practice effect and higher scores should be evident after the six months of practice.

**TOWES Results of the Pre & Post Tests**

**of School of Business Students at Kingstec Campus 2012**

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>Date</th>
<th>Reading</th>
<th>Document Use</th>
<th>Numeracy</th>
<th>Date</th>
<th>Reading</th>
<th>Document Use</th>
<th>Numeracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10-Jan</td>
<td>254</td>
<td>208</td>
<td>315</td>
<td>16-Apr</td>
<td>314</td>
<td>272</td>
<td>290</td>
</tr>
<tr>
<td>B</td>
<td>10-Jan</td>
<td>274</td>
<td>239</td>
<td>311</td>
<td>11-May</td>
<td>315</td>
<td>275</td>
<td>251</td>
</tr>
<tr>
<td>C</td>
<td>10-Jan</td>
<td>264</td>
<td>270</td>
<td>329</td>
<td>16-Apr</td>
<td>300</td>
<td>209*</td>
<td>306</td>
</tr>
<tr>
<td>D</td>
<td>10-Jan</td>
<td>294</td>
<td>258</td>
<td>279</td>
<td>16-Apr</td>
<td>279</td>
<td>245</td>
<td>273</td>
</tr>
<tr>
<td>E</td>
<td>10-Jan</td>
<td>267</td>
<td>239</td>
<td>321</td>
<td>16-Apr</td>
<td>258</td>
<td>234</td>
<td>276</td>
</tr>
<tr>
<td>F</td>
<td>10-Jan</td>
<td>274</td>
<td>241</td>
<td>270</td>
<td>16-Apr</td>
<td>315</td>
<td>260</td>
<td>329</td>
</tr>
</tbody>
</table>

* missed significant # of test items

**Figure 3**

It is also interesting to note the results of the TOWES for all of the 66 students who wrote it. Of the 66 who wrote the TOWES, a total of 71% or 40 students scored at Level 1 and 2 on Document Use. In comparison, 39% or 26 students scored at Level 1 and 2 in Reading while 31% or students scored at Level 1 and 2 in Numeracy.

Figure 4 indicates that Document Use was lower compared to the other two Essential Skills in this student group. A higher percentage of students scored at Level 3 and 4 in both Reading and Numeracy.

![Results of TOWES](image)
Transition Pathways to Employability

The pathway to employability which best describes these students is technical training. With the concern about the retention rate within the Business Administration programs, it was hoped that the Essential Skills assessments and interventions would provide some insights into student’s prose skills levels. The ES results do support the notion that the low ES of students coming into the program may be a factor in the issue of retention. It has been suggested that students with low ES may also have difficulty in attaching to the labour market and maintaining employment. Researchers on ES have pointed out that the skill levels needed to do work effectively in Canada is at a minimum of Level 3 complexity in Document Use (The SCALES PowerPoint Training Presentation, 2011). Having lower ES levels (Level 1–2) in reading, Document Use and Numeracy will affect productivity, safety issues, and may impact satisfaction by people in the work they are doing.

Reflections from the ES Coach and ES Coordinator

If only we could start the project with what we know now. There were valuable lessons learned during these phases of Developing a National Framework for Essential Skills. For example, identifying an ES Coach earlier in this project would have allowed for additional planning time and may have helped students become more engaged in the value of ES interventions. Having marketing strategies and tools developed nationally for all pilot colleges may have assisted with getting the projects implemented sooner and increased student engagement. As well, a promised online TOWES version would have been valuable. If the online TOWES had been available, it may have encouraged more students to participate.
Helping NSCC’s Kingstec School of Business faculty and students deepen their understanding of the ES framework prior to the research project orientation sessions would have been beneficial. Workshops on Essential Skills by the ES Coordinator and the ES Coach could have linked the ES profiles to future employment and made the research project more attractive to students. The idea of ES interventions were not familiar to many faculty and students and more time helping staff understand what the ES training looked like may have helped increase participation in the project.

It became evident that it would be valuable to offer the ES training to all participants instead of only to those who obtained Level 2 in DU. It was noted that Level 1’s at the very least should have received support; moreover, several of the Level 3+ DU students may have also taken advantage of the extra support. It appeared that singling out the Level 2 students in Document Use added a negative stigma to the project – some students were embarrassed by their results and would not have wanted anyone to know that they were at Level 2. This stigma issue is being addressed in all subsequent projects by offering the ES interventions to anyone who would be interested and not be dependent on their scores.

There also seemed to be some disconnect between student’s perception of their ES and the actual results of the TOWES. Students who scored at Level 1 in Reading, Document Use and Numeracy reported they were getting 90’s for grades during the first semester. This may have given them the impression that they had the Essential Skills to be successful in their training and in future work. Examining grades and the results of these TOWES may add further data to putting together a business case for colleges to look at Essential Skills. There was confusion about the name Essential Skills, as students thought they already had the skills.

Another reason for low participation may have been a gap between students’ literacy Essential Skills and their strong ability for oral communication. It would be helpful to develop students’ ES skills to a level where they feel as confident in their actual literacy Essential Skills as they do in their oral presentation of self.

So where do we go from here? A meeting was held with the Dean of the School of Business to review the results. Another meeting will be held with the Academic Chair at the Kingstec campus to review the learning and action items from this research. Essential Skills workshop materials may be shared with faculty and staff to assist students in achieving success at NSCC and in their future work.

Another aspect of NSCC’s involvement in this ES research is how it stretched people’s capacity to conduct action research. Learning happened around specific research
elements such writing ethical reviews, seeking answers to specific research questions from experts, strategizing around promotion and marketing of results to participants, faculty, and employers. It also increased NSCC’s capacity to do effective reporting and make staff better equipped to manage interventions as they arise. In closing, it seems that the ES project helped us to become better field researchers and prepared us for the next action research coming our way.
References


Personal Communication with S. Murray, on May 3, 2012, ACCC Debriefing Workshop, in Calgary, AB.

SCALES PowerPoint Presentation for National Pilot Project with Career Development Practitioners, created July 2011; CONNECT, Toronto, ON (Source: Matching Canadians’ Literacy Attainment to Actual Occupational Requirements, May 2001.)

Acknowledgments

The workshop list was provided by Cat Adler of Douglas College