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## Enhancing Employability Skill Sets: The Obligation of Community Colleges to be Greater Than the Sum of Their Parts

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## **Abstract**

The pressure upon post-secondary institutions in Ontario to address the persistent gap between the employability skill sets of their graduates and the changing needs of the modern workplace has never been greater. Forces such as the complexities of participating in a globally competitive economy, and advancements in information and communication technologies have shifted workplace expectations. Parents, students, and employers want to be assured that a diploma is indicative of the full range of skill sets necessary to achieve entry into a chosen occupation. The case method of analysis was used to examine one college's quality assurance strategies for teaching and assessing Essential Employability Skills (EESs). Concerns with the validity for some of the EESs and the resulting issues with the reliability of curriculum mapping matrices were identified. Fink's Integrated Course design (2013) is proposed as a strategy to address the gap between the employer expectations and what is taught and assessed in a community college. The establishment of a campus-wide working group to advance the EESs agenda, increased collaboration with Program Advisory Councils, and increased training are some of the solutions proposed. This problem of practice is considered through Bolman and Deal's Four Frame Model (2013) and examines the pragmatic obstacles that thwart post-secondary efforts to equip their graduates with these employability skills. This Organizational Improvement Plan utilizes Cawsey, Deszca and Ingols's Change Path Model (2016) as a guiding framework.

*Keywords:* generic skills, transferable skills, soft skills, community college, post-secondary, quality assurance, program mapping, curriculum matrices.

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## **List of Abbreviations**

ASM:	Academic Sector Meeting
CAATs:	Colleges of Applied Arts and Technologies
CM:	Coordinators' Meeting
DCI:	Department of Curriculum and Instruction
EESs:	Essential Employability Skills
IFS:	Instructional Feedback Survey
KPI:	Key Performance Indicator Data
MAESD:	Ministry of Advanced Education and Skills Development
MTCU:	Ministry of Training, Colleges, and Universities
NOC:	National Occupational Classification
OBE:	Outcome-Based Education
OCQAS:	Ontario College Quality Assurance Service
OIP:	Organizational Improvement Plan
OPSEU:	Ontario Public Service Employees Union
OQF:	Ontario Qualifications Framework
PACS:	Program Advisory Committees
PoP:	Problem of Practice
PQAPA:	Program Quality Assurance Process Audit
TOWES:	The Test of Workplace Essential Skills
VLOs:	Vocational Learning Outcomes
WIL:	Work-Integrated Learning

## Glossary of Terms

**Course Learning Outcomes:** The knowledge and skills that a student will be able to demonstrate after successfully completing a course.

**Curriculum Coaches:** Professors working in the Department of Curriculum and Instruction responsible for supporting faculty in curriculum development and maintenance.

**Essential Employability Skills (EESs):** The skills that, regardless of a student's program or discipline, are critical for success in the workplace, in day to day living, and for lifelong learning (MTCU, 2012, p. 26) (see Table 1.1).

**Instructor:** In the Ontario Colleges of Applied Arts and Technology, a teacher responsible for the provision of instruction to assigned groups of students through prepared courses of instruction and according to prescribed instructional formats; and limited to instruction directed to the acquisition of a manipulative skill or technique; and under the direction of a Professor (College Employer Council & Ontario Public Service Employees Union, 2014, p. 129).

**Professor:** In the Ontario Colleges of Applied Arts and Technology, a teacher responsible for providing academic leadership and for developing an effective learning environment for students. This includes the design/revision/updating of courses, the teaching of assigned courses, and the provision of academic leadership (College Employer Council & Ontario Public Service Employees Union, 2014, p. 123).

**Program Learning Outcomes:** Statements that describe the integration of learning that is to be achieved by graduates of a program of study. Also called Vocational Learning Outcomes.

**Programs of Study:** A full-time or part-time program offered at College X resulting in the achievement of a certificate, diploma, or degree.

**Program Teams:** The full time professors and part-time instructors that regularly teach within a program of study at College X.

**Regional Training:** A residential educator development program for full-time college Professors that is delivered in collaboration with other colleges in the region.

**Vocational Learning Outcomes (VLOs):** Statements that set out the culminating demonstration of learning and achievement that the student must reliably demonstrate before graduation (MTCU, 2012, p. 6). VLOs have been written by the Ministry of Advanced Education and Skills Development (formerly the Ministry of Training, Colleges and Universities) in collaboration with faculty members from the 24 community colleges. These learning outcomes are specific to a vocation and do not include the Essential Employability Skills.

## **Executive Summary**

This Organizational Improvement Plan is a theory and research-informed plan to improve one college's efforts to equip their graduates with the Essential Employability Skills (EESs) needed to secure and retain employment in the occupation of their choosing. Quality Assurance processes uncovered the Problem of Practice: in many programs, plans for assessing EESs were extensive and therefore difficult to realistically achieve. In other cases, the assessment descriptions did not indicate a clear connection to the EES. Pragmatic issues such as large classes, small classrooms, and courses that are already heavy in vocational content thwart efforts to address this skills gap. Also common are training gaps, leaving faculty feeling uncertain about teaching and assessment strategies for these generic skills. Furthermore, it is not uncommon for faculty to feel some resistance to teaching EESs, believing that these skills should have been acquired already and that as specialists in their vocations, they were hired to teach core vocational content. The literature review revealed how prevalent these challenges are in post-secondary institutions.

An inquiry into the organizational context shed light upon how political, economic, social, and culture factors contribute to the problem of practice. Nadler and Tushman's (1989) Organizational Congruence Model was used as a framework for guiding this organizational analysis. The gap analysis included both a PEST analysis of factors external to the organization and a SWOT analysis of factors internal to the organization. Furthermore, this organizational analysis was augmented by reframing the Problem of Practice through Bolman and Deal's (2013) structural, human resources, political, and symbolic frames. To further assure that these analyses were not limited by

interpretive biases, the College was examined through four of Morgan's nine metaphors (2011), and two described by Manning (2013), as viewing organizations through several perspectives can compel recognition of alternative possibilities for addressing problems of practice.

Three solutions were considered for ensuring that the College's graduates have acquired these skills: stand-alone courses where all the EESs are taught and assessed, remedial courses for students lacking EESs, and integrated courses where the EESs are embedded within discipline-specific courses. A comparative analysis lent the greatest support for the integrated course design as it was most cost effective while maximizing the students' ability to transfer the skills from one context to another. The Plan-Do-Study-Act (PDSA) method is proposed as a strategy for continual improvement of this change initiative. Much like the ongoing reflection that faculty members engage in, the PDSA method affords curriculum coaches an opportunity to adapt the cyclical review protocol as their understanding of how to best support their peers develops. If we are to narrow the skills gap, we strive to narrow the gap between how we teach and assess these skills in the classroom and what our graduates are required to do in the workplace.

## **Chapter 1: Introduction and Problem**

The most significant challenge that today's post-secondary students will face is the necessity to adapt to an unbounded degree of change. The impact of globalization, shifting economies, advancements in information and communication technologies, as well as changes in employer values will accelerate the pace of change in the world of work (Stuckey & Munro, 2013). With this unprecedented rate of change, generic skills such as critical thinking, problem solving, literacy, and information management will be essential to finding and keeping a job (Wang, 2012). For the employer, these skill sets translate into increased competitiveness, enhanced productivity and a better bottom line (Bloom & Kitagawa, 1999; Canadian Chamber of Commerce, 2013; Wang, 2012). Consequently, the pressure upon post-secondary institutions to address the persistent gap between graduate employability skill sets and the changing needs of the modern workplace has never been greater (Deller, Brumwell, & Macfarlane, 2015; Lennon, 2010). This Organizational Improvement Plan (OIP) considers potential strategies for ensuring that essential employability skills (EESs) are taught and assessed in all programs of study at one Ontario Community College.

### **Organizational Context**

In 1965, Ontario launched the community college system as a post-secondary alternative for those seeking vocational training (Cocco, 2013). Originally, the Ontario Colleges of Applied Arts and Technology (CAATs) were distinguished from the more academically-focused universities in that they offered terminal diplomas designed to meet the workforce needs of the communities in which they were located (Council of Ministers of Education, Canada, 1999; Skolnick, 2010). Over time, the 24 CAATs broadened their

breadth of offerings to include three-year advanced diploma programs, post-graduate certificate programs, and four-year applied degrees (Walker, 2001).

The responsibility for overseeing the delivery of all programs offered through Ontario's colleges and universities falls upon the Ministry of Advanced Education and Skills Development (MAESD) (previously called the Ministry of Training, Colleges, and Universities, MTCU). One of their key policy directives that distinguishes Ontario's colleges from its universities is the Framework for Programs of Instruction, (MTCU, 2009a). This binding directive specifies that the individual colleges determine which programs of study they wish to offer, with the stipulation that they are in alignment with their Ministry-approved areas of specialization. In 1993, MTCU developed standardized Vocational Learning Outcomes (VLOs) in an attempt to increase consistency in program content among the 24 community colleges. Taken together, the VLOs describe the knowledge, skills, and values graduates are expected to demonstrate that are specific to a given occupation (MTCU, 2016). For example, a VLO for accounting programs articulates the expectation that graduates are able to "contribute to recurring decision-making by applying fundamental management accounting concepts" (MTCU, 2009b). Course learning outcomes for all certificate, diploma, advanced diploma, and graduate certificate programs must be defined by the provincially defined Vocational Learning Outcomes (VLOs).

This directive also specifies that the generic skills believed to be "critical for success in the workplace, in day-to-day living, and for lifelong learning" (MTCU, 2009a, p. 6) will be taught within each program of study. The Ministry distinguishes specific

vocational learning outcomes from the more generic employability outcomes by specifying:

- six Essential Employability Skills (EESs),
- the defining skills of each EES,
- the 11 EES learning outcomes.

These are considered adaptable and transferable to other learning situations (Association of Canadian Community Colleges, 2009). Because these EESs are so critical to an understanding of this PoP and OIP, they are presented here in Table 1.1.

In spite of this directive, the cultivation of career-readiness among Ontario's students has been hindered by reductions in both federal and provincial funding. Since 1980, federal-provincial transfer contributions to post-secondary education have been eroded by 50% (Mackay, 2014; see also Canadian Federation of Students, 2013; Fanelli & Meades, 2011; Fisher et al., 2015). Subsequently, provincial funding as a percentage of college operating revenues has dropped to 50% from a high of 75% at their inception (MacKay, 2014), and tuition rates have risen dramatically. As a result of these increases, Ontario's students hold the largest post-secondary debt load in Canada (Fanelli & Evans, 2015). Understandably, with private colleges, universities, and online programs offering more choice, parents and students are taking up the role of the consumer in search of an education that develops the skills that will lead to employment (Tomlinson, 2012).

Employers also view themselves as consumers in search of a college able to reliably produce graduates with the employability skill sets they need. Industry leaders are advancing the skills agenda through collaboration efforts with national organizations such as the Conference Board of Canada, Human Resources and Skills Development for



Table 1.1

## EESs, Their Defining Skills and Learning Outcomes

<b>Skill</b>	<b>Defining Skills</b>	<b>Learning Outcomes</b>
Communication	Reading. Writing. Speaking. Listening. Presenting. Visual literacy.	1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. 2. Respond to written, spoken, or visual messages in a manner that ensures effective communication.
Numeracy	Understanding and applying mathematical concepts & reasoning. Analyzing & using numerical data. Conceptualizing.	3. Execute mathematical operations accurately.
Critical thinking & problem solving	Analyzing. Synthesizing. Evaluating. Decision making. Creative & innovative thinking.	4. Apply a systematic approach to solve problems. 5. Use a variety of thinking skills to anticipate and solve problems
Information management	Gathering and managing information. Selecting and using appropriate tools and technology for a task or a project. Computer literacy. Internet skills.	6. Locate, select, organize, and document information using appropriate technology and information systems. 7. Analyze, evaluate, and apply relevant information from a variety of sources.
Interpersonal	Teamwork. Relationship management. Conflict resolution. Leadership. Networking.	8. Show respect for the diverse opinions, values, belief systems, and contributions of others. 9. Interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals.
Personal	Managing self Managing change and being flexible and adaptable. Engaging in reflective practices Demonstrating personal responsibility	10. Manage the use of time and other resources to complete projects. 11. Take responsibility for one's own actions, decisions, and consequences.

Canada, the Association of Canadian Community Colleges, and the Organization

Economic Cooperation and Development (OECD). In the context of neoliberal Ontario,

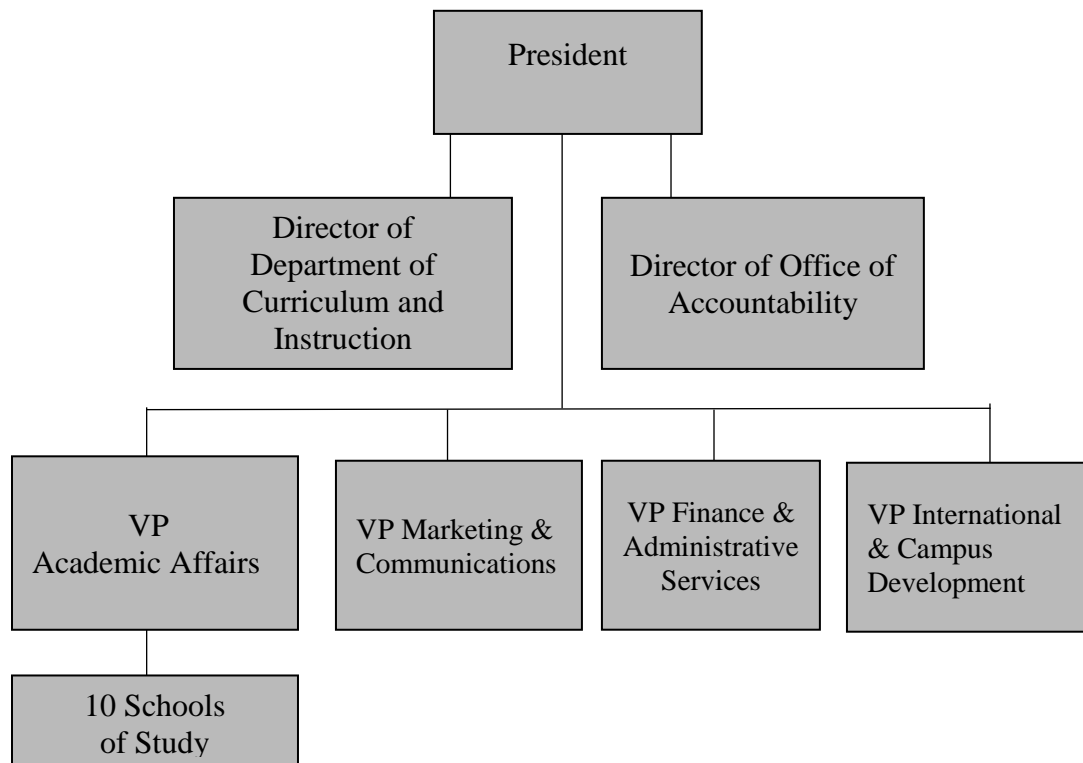
the persistent skills gap has increased the pressure to hold post-secondary institutions accountable for the tax dollars they receive (Fisher et al., 2015).

College X was established in 1967 as a CAAT under the legislation that distinguished it from universities by requiring that it offer “career-oriented, post-secondary education and training to assist individuals in finding and keeping employment, to meet the needs of employers and the changing work environment” (Ontario Colleges of Applied Arts and Technology Act, 2016, Schedule F, section. 2). As a community college, its original program offerings were responsive to the specific needs of the community in which it was located. Since its inception, the College has grown from serving fewer than 500 students in technology and business programs, to serving over 20,000 full and part-time students enrolled in over 100 degree, diploma, and certificate programs of study.

College X envisions itself as an innovative leader in the delivery of quality education and life-wide learning. To accomplish this, College X cultivates vocational knowledge and employability skills through enriched experiential learning designed to help graduates meet the needs of today’s labour market. Its core values include responsibility, cooperation, equality, inclusivity, honesty, excellence, sustainability, and transparency. Over the next five years, the College seeks to increase the number of courses delivered online and to continue to develop pathways for its students towards related programs of studies and to other academic institutions. Related to the employability skills agenda, the College plans to increase opportunities for work-integrated learning for all programs of study, enhance life-wide extracurricular

experiences for learners on campus, and to continue to develop evidence-based teaching and learning strategies.

**Organizational structure.** The hierarchical organizational structure at College X is typical of most community colleges (Duddy, 2015). Reporting to the president are four vice-presidents, who oversee ten schools of study that comprise the academic sector (see Figure 1.1).



*Figure 1.1.* A simplified leadership chart for College X depicting the reporting structure for the senior management team, as well as the two divisions responsible for quality assurance: The Department of Curriculum and Instruction and The Office of Accountability.

The academic sector includes all programs of study including apprenticeship, certificate, diploma, advanced diploma, graduate certificate, and applied degree programs. The Director of the Department of Curriculum Instruction and the director of the Office of

Accountability both report directly to the president and work in collaboration with the Vice-President of Academic Affairs.

The Department of Curriculum and Instruction (DCI), includes five faculty curriculum *coaches* seconded from the professor teaching faculty. These coaches support faculty members by offering training, and by facilitating the development and renewal of all curriculum through the annual and cyclical reviews of each program of study. In anticipation of a transition from an audit to an accreditation process in Ontario (OCQAS, 2015a), the DCI, and the Director of the Office of Accountability are responsible for ensuring that all academic policies and procedures are adhered to.

The Department of Academic Affairs includes almost 300 full-time professors and 900 part-time instructors. The Collective Agreement defines the duties and responsibilities of professors, instructors, counsellors, and faculty librarians. One of the central distinctions between the role of professor and the role of instructor is that professors are responsible for the designing, revising, and updating of courses (i.e., curriculum planning) (College Employer Council & Ontario Public Service Employees Union (OPSEU), 2014, p. 144). This responsibility includes determining where employability skills will best be taught. Both full-time professors and part-time instructors are considered to be part of the faculty. Thus, this OIP addresses the exclusive responsibility of the professors for curriculum planning, as well as the responsibilities of both full and part-time faculty responsible for teaching and assessing the essential employability skill sets (EESs).

**Leadership approaches and practices.** In Ontario, colleges were also differentiated from universities by their governance models. Universities are governed

by a Board of Governors (BOG) responsible for administrative and financial matters; curricular issues are addressed by a Faculty Senate. In contrast, Ontario's community colleges do not use this bicameral mode of governance; their BOGs govern administrative, financial, and curricular issues (Gannon, 2013; MacKay, 2014). Consequently, faculty members have a limited role in governance. MASED permits one faculty member on the College BOGs to represent perspectives of the faculty, and while each college has an Academic Council, these committees only advise senior management. Decisions related to curricular issues made by Academic Councils are not binding.

Davis (2013) notes that prior to the 1990s, leadership approaches for community colleges were strongly influenced by the industrial, hierarchical leadership styles of their founders and as such can be categorized as bureaucracies. Manning (2013) agrees, noting that most colleges and universities are organized as bureaucracies to some extent; there are clear lines of authority, accompanied by clear protocols for communication, with policies and procedures that dictate how work is to be accomplished. However, when change initiatives necessitate that the work be distributed throughout the organization, as is the case with this OIP, more collaborative leadership approaches are more effective in promoting cross-departmental networks and partnerships (Kezar & Eckel, 2002). Promoting learning communities in educational settings is more likely to be successful when traditional hierarchical approaches are replaced with a more collaborative leadership approach (Williams, Brien, Sprague & Sullivan, 2008).

### **Problem of Practice**

This problem of practice was discovered when curriculum mapping of EESs was introduced as a quality assurance process in 2015. These curriculum maps are designed to visually illustrate where learning outcomes are assessed within individual courses, and across a program of study (Bath, Smith, Stein, & Swann, 2004). The maps are based upon the identification of the EESs assessed in each assignment on the course outlines. Table 1.2 illustrates the format used by the faculty for writing assessment descriptions on course outlines used at College X.

*Table 1.2*

#### Sample Assessment Description

---

Cultural Interview Project: Worth 20%

Description: Students will interview a member of a cultural group that differs from their own. Students will submit a biography of the person interviewed as well as an analysis of their culture, and an analysis of their experience as a bi-cultural Canadian.

Vocational Outcomes Assessed: 1,2,4

Essential Employability Skills Assessed: 8,10

---

Note: EESs numbers refer to the numerical ordering assigned by MTCU (2009a). See Table 1.1. EESs 8 refers to the ability to show respect for the diverse opinions, values, belief systems, and contributions of others; EESs10 refers to the ability to manage the use of time and other resources to complete projects.

Along with a general assignment description, the course outline indicates which vocational learning outcomes and which EESs are being assessed. This example illustrates a problem with validity: it is not clear from the description how EES# 10 is being assessed. That is, it is not clear if specific time management skills are being taught

and assessed in this course or if the instructor is merely taking away marks for late submissions.

To create the curriculum maps, curriculum coaches note which courses assess each EES. Table 1.2 is a mapping matrix created for a three-year program of study at College X. For clarity, only the first semester is shown here (Level 1; 6 courses). The eleven learning outcomes for the EESs appear in the left-hand column; course codes would appear in the top row. The number of different EESs assessed in each course is presented in the bottom row, illustrating for example that courses 1 and 2 include plans for assessing nine of the 11 employability skills *at least once* in each course. The number of courses that include the assessment of each EES at least once, appears in the far right column. This column is labelled “Total Courses.” The 11 EESs learning outcomes were reportedly assessed a total of 168 times at least once in the 29 courses that comprise this three-year program. This is in addition to the vocational content that is to be taught and assessed. In other cases, it appears that certain EESs are not assessed frequently enough, as was the case in this example (see EES#s 8 and 11 in Table 1.3). The ability to take responsibility for one’s actions (EES#11) was not assessed at all in this first semester. When varied patterns of over and underestimation such as this appear across many courses, it calls into question the reliability of the assessment plans as articulated on course outlines. That is, are the faculty truly assessing each of these skills or are they simply marking them as assessed on the course outlines because they appear to be a fit?

Furthermore, in Table 1.3 the instances where the validity of an EESs assessment has been called into question have been highlighted in gray. In these cases, assessment results may not adequately reflect skill development. For example, an assessment would

Table 1.3

Mapping Matrix with an Over-Estimation of EESs

PROGRAM XXX		Level 1						Total Courses
<b>Essential Employability Skills</b>		Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	
Learning Outcomes								
1	communicate clearly, concisely, and correctly in the written, spoken, and visual form that fulfils the purpose and meets the needs of the audience	X	X					19
2	respond to written, spoken, or visual messages in a manner that ensures effective communication	X	X					21
3	execute mathematical operations accurately	X	X		X	X	X	28
4	apply a systematic approach to solve problems	X	X		X	X	X	25
5	use a variety of thinking skills to anticipate and solve problems	X	X			X	X	22
6	locate, select, organize, and document information using appropriate technology and information systems	X	X		X		X	17
7	analyse, evaluate, and apply relevant information from a variety of sources	X	X					16
8	show respect for the diverse opinions, values, belief systems, and contributions of others	X						3
9	interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals	X	X					6
10	manage the use of time and other resources to complete projects	X	X					10
11	take responsibility for one's own actions, decisions and consequences							2
Number of Different EESs Assessed		9	9	0	3	3	4	168

Note: The letter X indicates that the Essential Employability Skill was assessed at least once within the course. The number in far right column represents how many times the specific EESs (Left column) was taught and/or assessed in the course.

be flagged if the ability to work in teams (EES#9) was mapped to a multiple choice test.

In this example, it is doubtful that performance on a multiple choice test would



adequately reflect a student's ability to manage relationships in a group in a manner that contributes to the achievement of group goals. This skill is best measured when students are put into groups to complete an assignment.

Realistic and valid plans for teaching and authentically assessing the 11 EESs learning outcomes within a program of study need to be implemented by faculty teams within each program and these plans need to be reflected on course outlines and program mapping documents. The problem of practice in this organizational improvement plan is: How do I, as a Curriculum Coach, improve the reliability of EESs curriculum mapping as a process that assures that College X is meeting Ministry Standards?

**Challenges with curriculum mapping.** Q. Liu (2015) outlines the many benefits to investing in curriculum mapping. The maps give faculty and curriculum coordinators a bird's eye view of what is taught, and they identify where any gaps and unnecessary duplications lie. They promote proper sequencing of student learning within a program of study. For example, curriculum maps at College X permit faculty to ensure that the EESs are taught prior to sending students out on a field placement or co-operative learning experience. When faculty members are collegial, and collaborative, the process can prompt meaningful conversations about where each of the skills needs to be developed and how each should be taught and assessed (Sumsion & Goodfellow, 2004).

However, several researchers have raised questions about the validity and reliability of mapping as a quality assurance tool (Bath et al., 2004). In a review of studies detailing the specific processes used in course mapping, Ervin, Carter, & Robinson (2013) note that the potential for bias is present when instructors map their own courses, possibly contributing to the overestimation of EESs taught and assessed.

Furthermore, the validity of the process is called into question when instructors with differing areas of teaching expertise interpret essential employability skill sets differently (Sumsion & Goodfellow, 2004).

A variety of strategies to rectify problems with reliability and validity have been suggested, such as increasing the level of detail on course assignments that evaluate EESs (Sumsion & Goodfellow, 2004), and surveying students to determine what employability skills they believe they learned (Bath et al., 2004). Other strategies include having additional faculty verify the assessment of EESs on course outlines (Ervin, Carter & Robinson, 2013) and distinguishing between skills that are assumed to have been previously learned and those that have been explicitly taught (Sumsion and Goodfellow, 2004). Furthermore, the investment in creating the curriculum maps is only realized when faculty teams gather to reflect and discuss the feedback regarding program level plans for teaching and assessing EESs.

**Factors contributing to the problem of practice.** The recent discovery of unrealistic plans for teaching and assessing EESs (the Problem of Practice in this OIP) by curriculum coaches prompted those in the Department of Curriculum and Instruction to reflect upon the training offered to new faculty. This revealed that the training program for new faculty offered regionally was minimally addressing the Ministry's requirement that EESs be taught and assessed. Plans were immediately put in place to offer this training locally, which should lessen confusion among new hires regarding various interpretations of the essential employability skills (Bloom & Kitagawa, 1999), and reduce any assumptions that these skills can be taught indirectly. Training for seasoned

and part-time faculty that includes strategies for teaching and assessing EESs is still needed.

This discovery of training gaps also prompts consideration of what is being taught to college students about their duty to manage their own employability. Students tend to view employment as an object they possess, with little consideration to the skills they need to keep that job or advance their careers (Lees, Anderson, & Avery, 2013). Teaching students to reflect upon and document their learning, including EESs acquired through extracurricular activities, can prompt students to take responsibility for managing their own employability (Thompson, Clark, Walker, & Whyatt, 2013). This is an important consideration as participation in extracurricular activities, such as membership in student clubs and team sports, differs from student to student and is not captured in formal quality assurance processes.

One of the key challenges to addressing this problem of practice is time. The collective agreement for Ontario's faculty specifies duties, and the time allotted to complete them, within a 44 to 47-hour work week (College Employer Council & OPSEU, 2014). This agreement does not include the in-house volunteer committee work many faculty members engage in, or the community-based volunteer work expected of them. It also does not include the time full-time faculty members spend training, supporting, assisting, and mentoring part-time instructors who outnumber the full-time faculty three to one in Ontario (MacKay, 2014). While there is a clause within the agreement that states curriculum review and development be attributed on an "hour by hour basis" (Section 11.01, D 3, ix), there is a hesitancy to request it, particularly in this fiscally lean environment. Furthermore, the reliance on temporary instructors has

increased dramatically since the cutbacks to post-secondary education took place in the 1980s (Mackay, 2014, p. 36; see also Daku, 2014; Holyoke, Sturko, Wood & Wu, 2012). The continual turnover of part-time instructors, coupled with the practice of not providing compensation for lesson preparation and assessment, seriously hinders the ability of part-time instructors to build expertise in teaching and assessing EESs.

Insufficient classroom time is also a key challenge (Sumsion & Goodfellow, 2004). The province has articulated a standard range for a two-year, four-semester program at an Ontario Community College of 1200 to 1400 hours (MTCU, 2009a). At College X, all two-year programs are delivered within 1200 hours, and this can include the hours students spend in work-integrated learning such as field placements.

Conventional wisdom has it that the employability skill sets need to be taught through active learning strategies; they are not learned effectively through passive lectures taught in large classes (De Villiers, 2010; Gonzalez-Negrete, 2004; Prince 2004; Washer, 2007). Furthermore, these skills are best learned when integrated into the core vocational curriculum (Knewstubb & Ruth, 2015) and when authentically assessed in ways that resemble workplace demands (Dow, Heslin, & Measley, 2014). If we are to narrow the skills gap, we must begin by narrowing the gap between how we teach and assess these skills in the classroom and what our graduates are required to do in the workplace, all of which requires time for curriculum development and implementation.

**Stakeholder reaction to OIP.** Ontario's binding directive for community colleges, the Framework for Programs of Instruction, ensures that key stakeholder groups have input towards the development of curriculum at Ontario's Colleges. It specifies that Program Advisory Councils (PACs), including representatives of current students, recent

graduates, and employers, will ensure occupational relevancy through the regular review of the curriculum (MTCU, 2009a). For the most part, employers readily participate in PACs, and therefore it is expected they will welcome plans that will help reduce any employability skills gap. It is anticipated that students will also welcome strategies that will increase their chances of being gainfully employed, particularly when it involves more real-world assessment strategies.

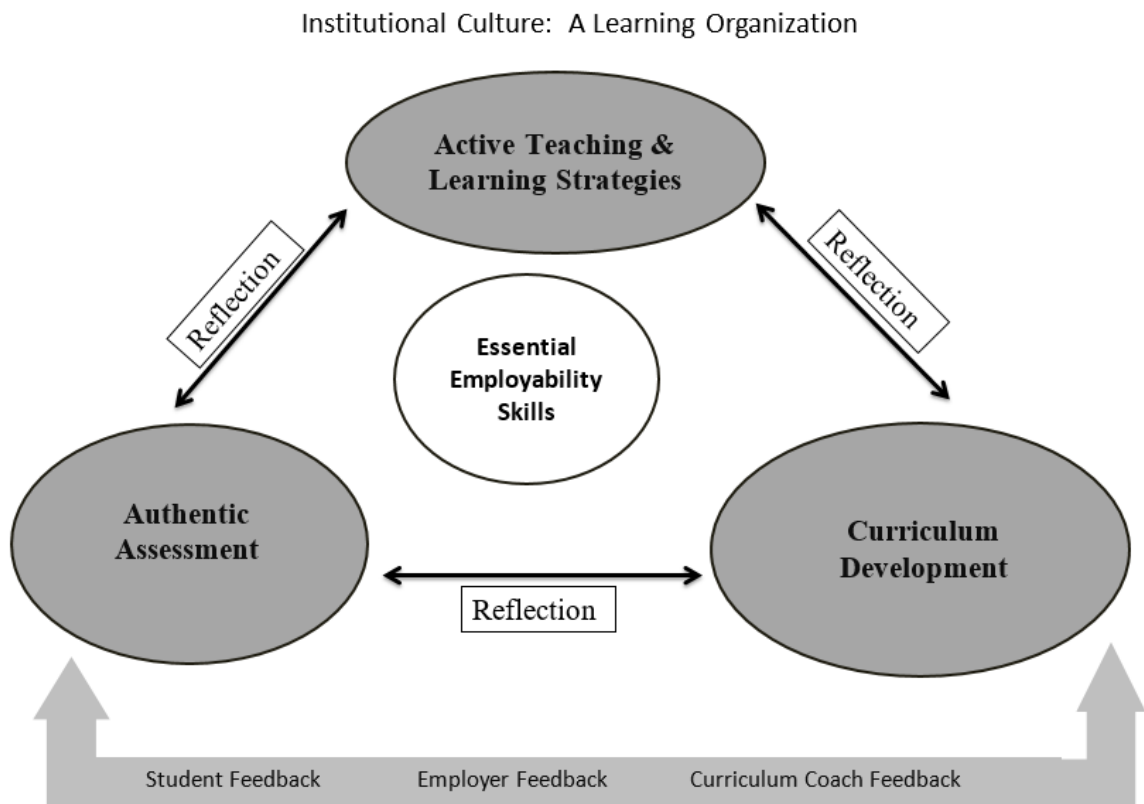
Most college faculty members understand that the mandate for community colleges is to promote career readiness. Any faculty resistance to teaching and assessing EESs may be precipitated by very real pragmatic issues that thwart their efforts to develop and/or teach EESs. These include a shortage of total contact hours or courses that are heavy in vocational content (Sumsion & Goodfellow, 2004), large class sizes and small classrooms (De Villiers, 2010; Gonzalez-Negrete, 2004), an unfamiliarity with some of the EESs content, or with the teaching and/or assessment strategies specific to EESs (De Villiers, 2010; Rosenberg, Heimler & Morote, 2012). Faculty may resent being told what to teach by employers and/or industry leaders. Alternatively, they may feel a strong obligation to their professional colleagues in the field and express this through a dedication to the core vocational curriculum. Faculty may also believe that the foundations for a strong work ethic and other EESs such as a sense of personal responsibility are learned prior to entering post-secondary education (Berry & Glenn, 2004), and that it is unrealistic to hold faculty accountable for these skill sets. It is understandable then that faculty reaction to the OIP may be mixed. Opportunities for discussion and input will be essential in addressing this PoP.

**Conceptual framework for course design at College X.** If colleges are to bridge this persistent gap in EESs in the midst of neoliberal austerity and accountability measures, then they must adapt by becoming what Peter Senge (1990) calls “learning organizations.” Patrick and Fletcher’s (1998) application to post-secondary institutions builds upon Senge’s key features: shared ideals, collaboration, flexibility, and reflection. When applied to this OIP, collegial conversations among faculty members, coupled with feedback from students, recent graduates, and employers would ensure that course content and assessments are relevant to the changing nature of work.

The process of curriculum design and renewal at College X is guided by L. Dee Fink’s (2013) model of integrated course design which stipulates that learning goals, teaching activities, and assessment must be interrelated (See Figure 1.2). Working with the Department of Curriculum and Instruction (DCI), professors develop learning outcomes and then design authentic assessment strategies that resemble real-life issues, problems, and decisions (Fink, 2013, p.15). With that information in mind, the faculty members determine what active learning experiences will best prepare the learner for those assessments. Fink contrasts this approach to teacher-centred models where the lesson is developed first, and the assessments are constructed based on what is covered. Situational factors such as class size, room size, and classroom design are considered in course design. In this OIP, the College X’s mission to cultivate employability skills is at the centre of all curricula.

Reflection is central in the development and subsequent modifications of course outlines. In this model, the following distinctions in defining reflection have been considered. Reflecting on practice refers to thoughtful reconsiderations after the lesson,

with the expectation that the instructor will adjust the teaching strategy the next time it is implemented (Schön, 1987). Critical self-reflection is the reevaluation of previously held assumptions (Brookfield, 2002) and both are essential in the development and revision of curriculum plans for teaching and assessing EESs.



*Figure 1.2* The continual process of curriculum development in the context of College X as a learning institution. Adapted from “Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses” by L. Dee Fink (2013). (2nd ed.). San Francisco, CA: Jossey-Bass.

Faculty members need to remain flexible and reflect upon feedback offered by key stakeholders through mechanisms such as Program Advisory Councils, Instructor Feedback Surveys, Key Performance Indicator Surveys, and Cyclical Program Reviews.

## **Perspectives on the Problem of Practice**

Certain milestones such as the beginning of a new year, a new decade, and certainly a new century trigger reflection upon where we are, where we are going, and what challenges we may be called upon to overcome. These turning points prompt consideration of the tremendous impact education can have on individual personal development as well as its potential to advance social change. As the 20<sup>th</sup> century came to a close, numerous studies documented the gaps in graduate preparedness for the modern workplace. Deficiencies in EESs were reported in key areas such as numeracy (e.g., Bikson, 1996; Carnevale, 1996), communication (e.g., Carnevale, 1996; Levenburg, 1996), personal and interpersonal development (e.g., Levenburg, 1996), as well as basic problem solving and critical thinking (e.g., Levenburg, 1996; Tanyel, Mitchell, & McAlum, 1999).

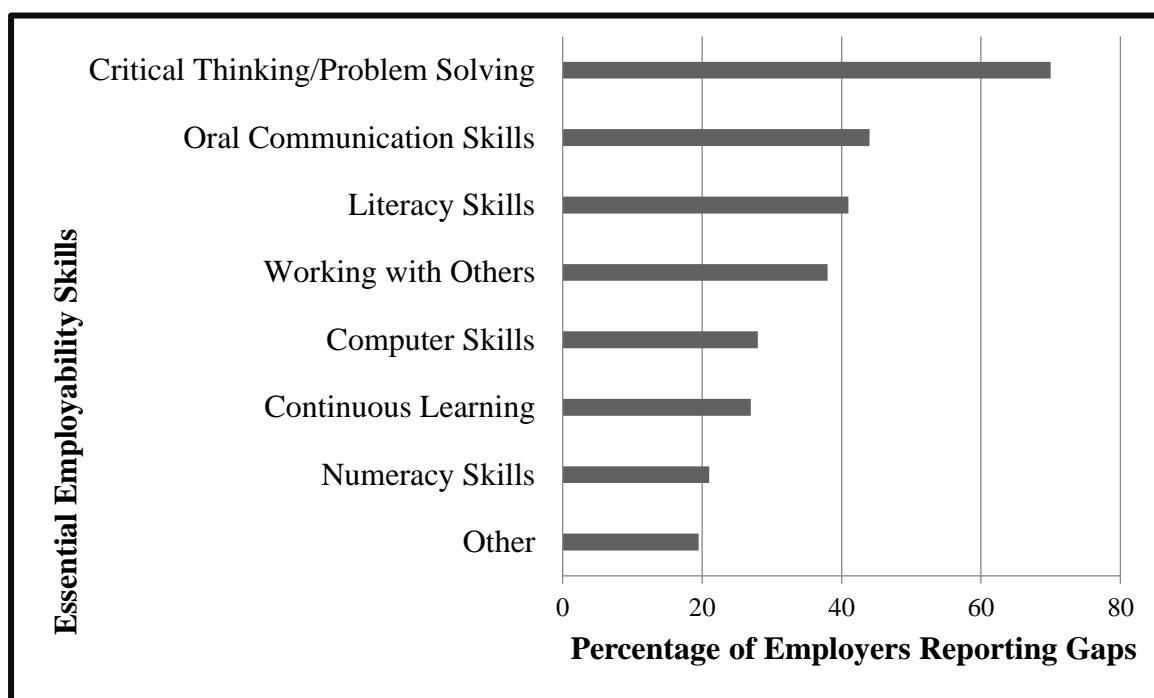
As Canada approached the new millennium, industry leaders called upon leaders in education to prepare graduates for the increasing competitiveness of a global economy and the opportunities afforded by innovations in the information and communication technologies. The release of several positional reports highlight this influence:

*Understanding Employability Skills* (Bloom & Kitagawa, 1999), *A Report on Public Expectations of Post-secondary Education in Canada* (The Council of Ministers of Education, 1999), *Stepping Up: Skills and Opportunities in The Knowledge Economy* (Advisory Council on Science and Technology, 2000) and *Employability Skills 2000+* (Conference Board of Canada, 2000). The term “employability skills” gradually replaced the terms “generic” or “soft” skills, increasing the focus on the needs of the employer.

The employability skills gap has been documented across Ontario in a recent



study funded by the Conference Board of Canada (see Figure 1.3). Stuckey and Munro (2013) surveyed over 1,500 employers who identified skills gaps among their employees and conveyed their concerns that the skills gap impacts their overall productivity as well as their ability to advance through innovation.



*Figure 1.3* Essential skills gaps reported by Ontario employers Reprinted from “The Need to Make Skills Work: The Cost of Ontario’s Skills Gap” by J. Stuckey, and D. Munro, 2013, p. 27. Copyright 2013 by the Conference Board of Canada. (Permission granted).

Gaps were noted in all the EESs studied, with over 40% of employers in Ontario reporting dire shortages in critical thinking, problem solving, communication, and literacy. Of particular concern is the gap in continuous learning, as globalization, shifting economies, advancements in information, and communication technologies will continue to accelerate changes in the workplace. While employability skills for post-secondary

graduates were slightly better, Ontario's colleges are still graduating students who lack these vital skills.

In a recent pan-Canadian study, EESs were assessed among college students and employed graduates using a nationally recognized assessment tool, The Test of Workplace Essential Skills (TOWES). The authors found that 61% of the 426 workers and 67% of the 882 adult college learners had scored below a level required of most entry level jobs in the foundational skills (reading, writing, numeracy and document use) that are required to learn technical skills and to succeed in college and at work (Taylor & Taschereau, 2014, p. 61). This study highlights the importance of raising awareness among college faculty, as many reported being surprised by the skills gap among college students. The erroneous assumption that students enter college with employability skills highlights the obligation to ensure students have an opportunity to develop these skills.

Another contributing factor for the persistent skills gap is that faculty and employers differ in terms of the importance they place on the various employability skill sets. Rosenberg et al. (2012) surveyed college graduates, their professors, and Human Resource (HR) managers regarding the perceived need for these core skills. While all three groups rated the need for work ethic and leadership as important, graduates and employers rated numeracy and literacy higher than the faculty did. Furthermore, faculty and graduates estimated the need for critical thinking to be higher than employers did. In a study of business graduates, Ellis, Kisling, & Hackworth (2014) found that while employers indicated a strong need for honesty, integrity, and listening skills, this content was not covered in the college business curriculum. These discrepancies between the perspectives of faculty, graduates, and employers may account for a portion of the gap.

The lack of consensus surrounding employability skills as a construct further complicates the problem. Some researchers assert that employability skill sets must only include those skills deemed to be core or common to all occupations (Dunne, Bennett, & Carré, 1997), but there is considerable disagreement over which skills belong in the set (Jones, 2013; Hager & Holland, 2007; Rosenberg et al., 2012). Furthermore, there is disparity over whether EESs, once learned, can transfer from one context to another (e.g., Elander, Harrington, Norton, Robinson, & Reddy, 2006; Jackson, 2012; Jones, 2013). This consideration may influence whether an institution opts to teach EESs through one compulsory course delivered to all students or chooses to integrate EESs with core course content (Fenton & Barry, 2014; Oliver, 2013) as is done at College X.

The Ministry of Advanced Education and Skills Development (MASED) does not explicitly include the concept of transferability in their definition of EESs but declares them to be the “skills that, regardless of a student’s program or discipline, are critical for success in the workplace, in day-to-day living, and for lifelong learning.” (MTCU, 2009a). This definition gives colleges the autonomy to choose to meet the EESs requirements in one of two ways:

1. A generic course containing all 11 EES learning outcomes that can be delivered to all programs of study.
2. Embedding EESs into vocational courses (MTCU, 2009a).

Embedding EESs into courses can be done by identifying tasks that correspond to employability skills. For example, a legal assistant can be taught how to execute mathematical operations by learning how to calculate the net worth of estates (Government of Canada, 2013). Faculty program teams determine which skills are best

integrated into which courses. Considering the lack of student buy-in when taught separately in a generic course (Green, Hammer, & Star, 2009; Hager & Holland, 2007; Moore, 2004), curriculum leaders at College X initiated processes to ensure that employability skills are embedded within the vocational content in all programs of study.

**Framing the problem of practice.** This problem of practice is considered through Bolman and Deal's (2013) four frames: Structural, Human Resources, Political and Symbolic. Comparing the organizational context at College X to each of the four frames or mental models provokes reconsideration of firmly held assumptions and interpretations and supports change agents in seeing circumstances in a new light. The Structural Frame prompts consideration of two key questions: How will College X determine which division is responsible for what, and how will the organization coordinate efforts across departments to accomplish the full range of responsibilities assumed by a post-secondary institution (Bolman, & Deal, 2013, p. 44). Over the past 15 years, College X lost many of its most experienced managers and along with them, the history of what worked and what did not. As a result, the workload for chairs, program coordinators, and seasoned faculty has increased. Under stressful conditions such as these, reliance on social networks across the campuses can diminish (Gillespie, Walsh, Winefield, Dua, & Stough, 2001). Rekindling existing social networks and facilitating the development of new ones is critical to this problem of practice.

The Human Resource lens offers a strategy for understanding the diverse perspectives of the professors by prompting consideration of their varied educational backgrounds and skill sets. Through this frame, change agents in educational settings are reminded that faculty members find meaning and purpose in their work in various ways.

Some value the autonomy and numerous opportunities to challenge themselves, others view teaching as an opportunity to have an impact on their students, and yet others are strongly motivated by a passion for their particular discipline (Turns, 2010). While individual faculty members are often perceived as working independently preparing lessons and grading papers, the Human Resources Frame provokes a shift away from individualism towards interconnected, self-managing teams (Bolman and Deals, 2013, p. 152). This perspective prompts recognition for the important role curriculum coaches play in facilitating conversations among faculty when reviewing curriculum mapping documents (Sumsion & Goodfellow, 2004). It also highlights the collaborative process in the production of well-aligned mapping matrices (Ervin, Carter & Robinson, 2013). Through this lens, there is a call to connect the College's vision and mission statements and the teaching of EESs as a core activity for faculty in a community college setting.

Through the Political Frame, Bolman and Deal (2013) spur contemplation of community colleges as over-bounded systems where decisions are controlled by senior management teams. In a historical analysis of the community college system in Ontario, MacKay (2014) characterizes the leadership style as generally autocratic and notes that college faculty members have little opportunity for input into decisions that impact what happens in the classroom. This OIP will certainly flounder without faculty input and buy-in. It is dependent upon faculty ingenuity and a college-wide commitment to developing realistic plans for teaching and assessing EESs. Opportunities to address the real barriers and challenges faculty face, along with opportunities to offer input on strategies to overcome them, are essential to narrowing the gap.

Bolman and Deal's (2013) Symbolic Frame spurs consideration of the organizational culture and the symbols that represent the meaning of our work. Symbols are placeholders in that they communicate the vision as we attempt to bridge the gap between the need for change and the vision for change (Abel & Sementelli, 2005). With a new leader at the helm, the College has been afforded an opportunity to renew or redefine the organizational culture and to commit to a different set of values and principles that will guide its actions (Kouzes & Posner, 2012). As a community college, we can draw upon our heritage and recognize that in our broader community we are recognized for the role we play: we cultivate employability. The Symbolic Frame recognizes the power of stories in depicting this role and gives rise to the consideration of faculty sharing their own stories of innovative approaches to teaching and assessing employability. This frame urges the envisioning of annual faculty retreats as a tradition laced with the power to "revive deep collective commitments" (Bolman & Deal, 2013, p. 260) to our mission and purpose but also to each other. Through this lens, we recognize the value of telling stories not only about trophies and competitions won but also those quieter moments when collaboration and cooperation served to unify us in purpose. The ability of an institution to be greater than the sum of its individual parts is dependent upon it. Taken together, the four frames enable the College to embrace the diverse perspectives and to recognize that diversity strengthens us.

**Internal data.** In 2017, Ontario's colleges will participate in their first round of institutional accreditation which is intended to assess compliance with internationally recognized best practices in quality assurance, such as outcome-based education (OCQAS, 2016). The new standards directly express the expectation that EESs are

consistent with current workplace expectations (OCQAS, 2015b). Internal processes at College X include a cyclical five-year review that consists of a stakeholder review of course outlines, mapping of VLOs and EESs, and stakeholder feedback through surveys and/or focus groups in this round. Approximately 50% of the programs have participated in a cyclical review to date. Almost all of these programs included instances where course outlines included unrealistic or vague plans for teaching and assessing EESs. This raises the concern that College X's educators are either struggling with conceptualizing some of the EESs, or they need support with strategies for teaching and assessing them.

**Author's perspective.** The responsibility for ensuring Canada's workforce is equipped with these essential skills is shared by parents, elementary, secondary, and tertiary educators, students and employers (Wang, 2012). As previously noted, childhood is the ideal time to begin to acquire most of the employability skills, including but not limited to, managing oneself, respecting diversity, and collaborating with others. However, should those early experiences be lacking in opportunities to develop these skills, it is reasonable to expect that employability skills will be acquired through studies at an Ontario Community College. From this author's perspective, it is possible to teach these skills without adopting the view of the "student as consumer" or the "employer as consumer" when one approaches this work with compassion for those students whose early life experiences did not afford the opportunities to develop EESs.

As young people mature, employability skills need to be coupled with learning how to track and manage one's own employability (Bridgstock, 2009), which includes planning to engage in these activities, reflecting upon the experience, and documenting the learning. Portfolios are an excellent tool for reflecting upon and documenting life-

wide and lifelong learning (Lopes & Dion, 2015). Figure 1.4 illustrates the breadth of opportunities for developing these skills available to students both on campus (gray) and off campus (white) through academic studies, and also through extracurricular activities, employment, and social engagement opportunities. The responsibility to promote EESs is widely distributed across the campus. A collaborative leadership approach could promote a campus-wide awareness of this responsibility, while highlighting opportunities for their development. This approach could help students become more able to articulate their understandings of these skillsets to employers (Cranmer, 2007). And although it is commonly expected that college graduates will possess the skill sets necessary to gain entry into the workforce, it must be maintained that these are entry-level skill sets.

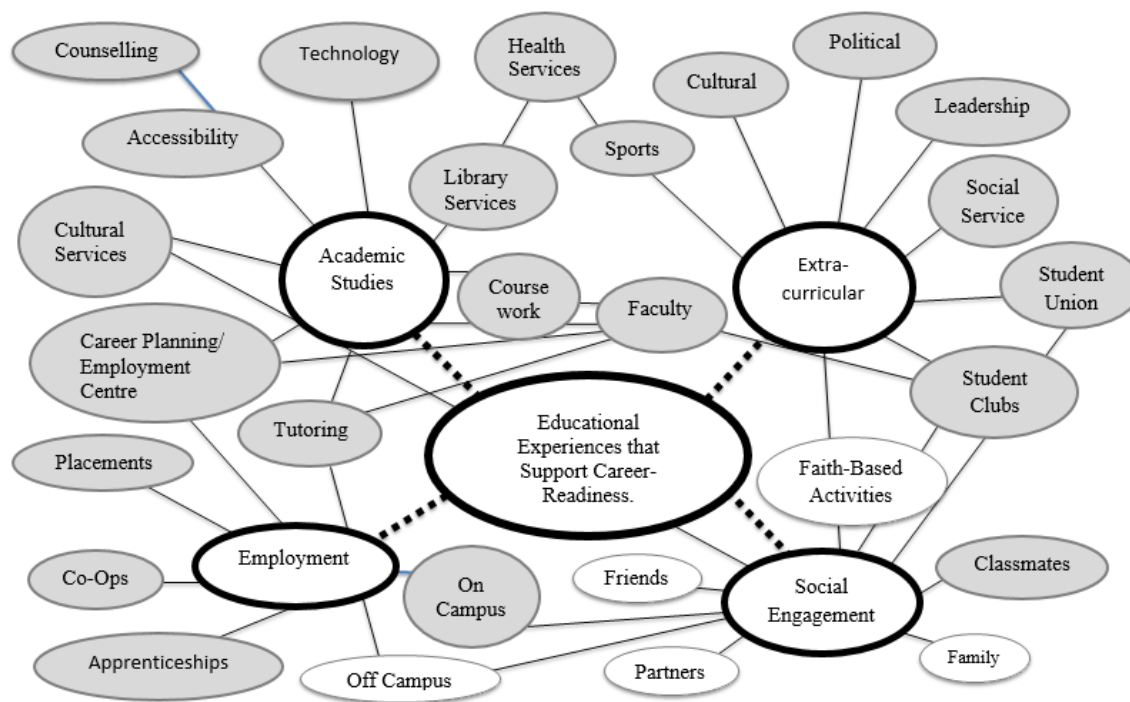


Figure 1.4 Opportunities for developing EESs on (grey highlighting) and off campus.

Stuckey and Munro (2013) found that employers are investing less in on-the-job training as they are fearful employees will take positions with their competitors. From



this author's perspective, offering fair wages, benefits, and opportunities for professional growth will promote the loyalty employers are looking for. Expecting students to graduate prepared for the yet-to-be-imagined realities of the future labour market is, from this writer's perspective, impossible. It is not uncommon for faculty in community colleges to provide ongoing professional development opportunities to graduates. Regularly discussing training needs with employers at PAC meetings is a viable strategy for ensuring the gap does not widen with years of experience in the workplace.

### **Guiding Questions Emerging from this PoP**

The problem of practice in this Organizational Improvement Plan is the need to improve the reliability of EESs curriculum mapping as a process to assure that College X is meeting Ministry Standards. A review of the literature uncovered a number of factors that contribute to this Problem of Practice including pragmatic obstacles such as large classes, contrasting stakeholder perspectives, and differences of opinion around EESs as a construct. Several lines of inquiry emerge from the main problem of practice:

1. What is needed for instructors to accurately map EESs on their course outlines?
2. What does it mean for EESs to be mapped accurately and reliably?
3. How can College X support the faculty in developing strategies for actively teaching and authentically assessing EES?

The determination of how and *what* to change must be grounded by a vision for change that considers the perspectives of key stakeholder groups.

### **Leadership-Focused Vision for Change**

In this section a vision for change is outlined that considers the needs of the College and its employees, as well as the needs of our students and our community partners. College X's commitment to facilitating career readiness has been expressed

through its recently revised vision and mission statements, and its five-year strategic plan. Policies and procedures for integrating EESs into vocational content have been developed. Some of the necessary groundwork to address this PoP has been established; however, as Mintrop (2016) points out, the development of policies will not be enough to resolve this PoP.

Flowing from this organizational vision for change are plans for increasing instructors' accessibility to teaching and learning resources (e.g., Human Resources and Skills Development, Canada, 2011) by linking them from the College's main website. The use of portfolio assessments will be promoted as a means of teaching students to manage their own employability. Faculty training will promote a greater awareness of the Framework for Programs of Instruction (MTCU, 2009a) and of the criteria upon which College X will be judged during the accreditation process (OCQAS, 2015b). Increasing the use of rubrics will inform students of how vocational and employability skills will be assessed on assignments and in-class activities. Policies regarding the assessment of EESs need to be developed to limit the number of EESs assessed in each course, with increased allowances for courses that include work-integrated learning opportunities where more of these skills can be demonstrated (Jackson, 2015). Policies have been recently implemented to promote the inclusion of work-integrated learning opportunities in each program of study.

The proposed change vision is oriented towards building a supportive culture through increased interdisciplinary communication and collaboration. The sharing of strategies for teaching and assessing EESs can be promoted within social networks where experimentation and instructor reflection are encouraged (Fallon & Barnett, 2009).

Communities of Practice (e.g., Boud & Middleton, 2003; Eddy & Mitchell, 2012), Learning Cafes (e.g., Lefika & Mearns, 2015) and Teaching Circles (e.g., Colgan & DeLong, 2015) are some of the strategies that could be implemented to achieve this goal. This vision for change encourages a shift away from programs operating as insulated units and a move towards the inclusive discussions that characterize learning organizations (Holyoke, Sturko, Wood, & Wu, 2012; Patrick & Fletcher, 1998).

**Priorities for change.** The first priority for change is training to promote the development of active strategies for teaching EESs that are integrated with authentic assessment strategies. This has been added to the internal training offered to new hires in the fall of 2016. Professional development opportunities for full-time faculty need to be offered in the May/June period each year as fewer college classes are offered at this time. EESs need to be added to the training offered to our new part-time instructors at the start of the fall and winter semesters. This training would include building awareness of the importance of employability skill sets, and strategies for incorporating them.

In addition, College X needs to compile EESs teaching resources such as sample lesson plans, assessment strategies, and rubrics and make them easily accessible to our teaching staff. Meeting this need for our part-time instructors is challenging as they only gain access to Blackboard and our online teaching resources when employment contracts have been processed. When a need for a part-time instructor is identified just prior to the start of a semester (due to sudden illness, permanent employment elsewhere and other unforeseen circumstances), it can take two weeks or more before access is granted. The college's main web page recently added a link to the Department of Curriculum and Instruction. As noted, EESs resources will soon be added to this site.

College X's strategic plan articulates our intention to include opportunities for experiential learning in every program of study. A database to track the contributions of our community partners through field placements, apprenticeships, and practicums is being created. An Industry Liaison Committee is being formed with the goal of enhancing our relationships with external partners. Employers, students, and recent graduates will continue to be invited to take an active role through Program Advisory Councils (PACs) and Program Review Committees by discussing how vocational content is being taught and assessed. The PAC agenda s could be expanded to include the EESs. Faculty teams are required to consider all feedback, and report which recommendations will be implemented. The Office of Accountability will continue to ensure these internal policies and quality assurance processes are followed and documented.

### **Organizational change readiness**

This next section describes College X's readiness for change using Cawsey, Deszca and Ingols's (2016) Change Path Model as a guiding framework. A force-field analysis highlights potential reasons for resistance to change. Finally, strategies for addressing stakeholder concerns are presented.

Cawsey, et al. (2016) propose a four-stage model for promoting organizational change: The Change Path Model. The preliminary stage is *Awakening* where change agents deepen their understanding of the need to change and then unsettle the status quo by communicating this need to various stakeholders (p. 53). This change process began with the identification of the skills gap as a problem of practice and it is continued with an examination of the various factors that contribute to the lack of validity for some of the EESs, and the resulting issues with the reliability of the curriculum mapping matrices.

The second step in the Change Path Model proposed by Cawsey et al. (2016), *Mobilization*, prompts consideration of systems and processes that support achievement of the vision for organizational change, as well as those that will resist it. To this end, a force-field analysis (FFA) was conducted to facilitate an understanding of the complex forces operating for and against the alignment of EESs (see Figure 1.5). Variables identified through the literature search, as well as those specific to this organizational context, were included in the analysis. The FFA is summarized in a graphic depiction of the forces promoting and resisting change and it supports change agents in determining where to focus their efforts.

Figure 1.5 also depicts the distinction between internal forces, or those forces the college has some degree of control over (arrows with a solid border), and external forces, or those forces the college has less control over (those with a dashed border). The analysis prompts the consideration of more immediate forces (e.g., faculty workload) as well as those forces that will exert their full influence in the future (e.g., criteria for degree submissions).

With this information in hand, various strategies that add new driving forces or increase the strength of existing ones can be considered. Alternatively, the balance could be shifted by reducing the strength of resisting or opposing forces. Lewin (1947) proposed that weakening resistance is most effective in unfreezing the status quo, as increasing driving forces can escalate resistance (Lunenborg, 2010).

The visual summary of competing forces facilitates the consideration of the relationship between forces. In Figure 1.5, the interdependent forces to be addressed by this OIP have been accentuated in dark gray.

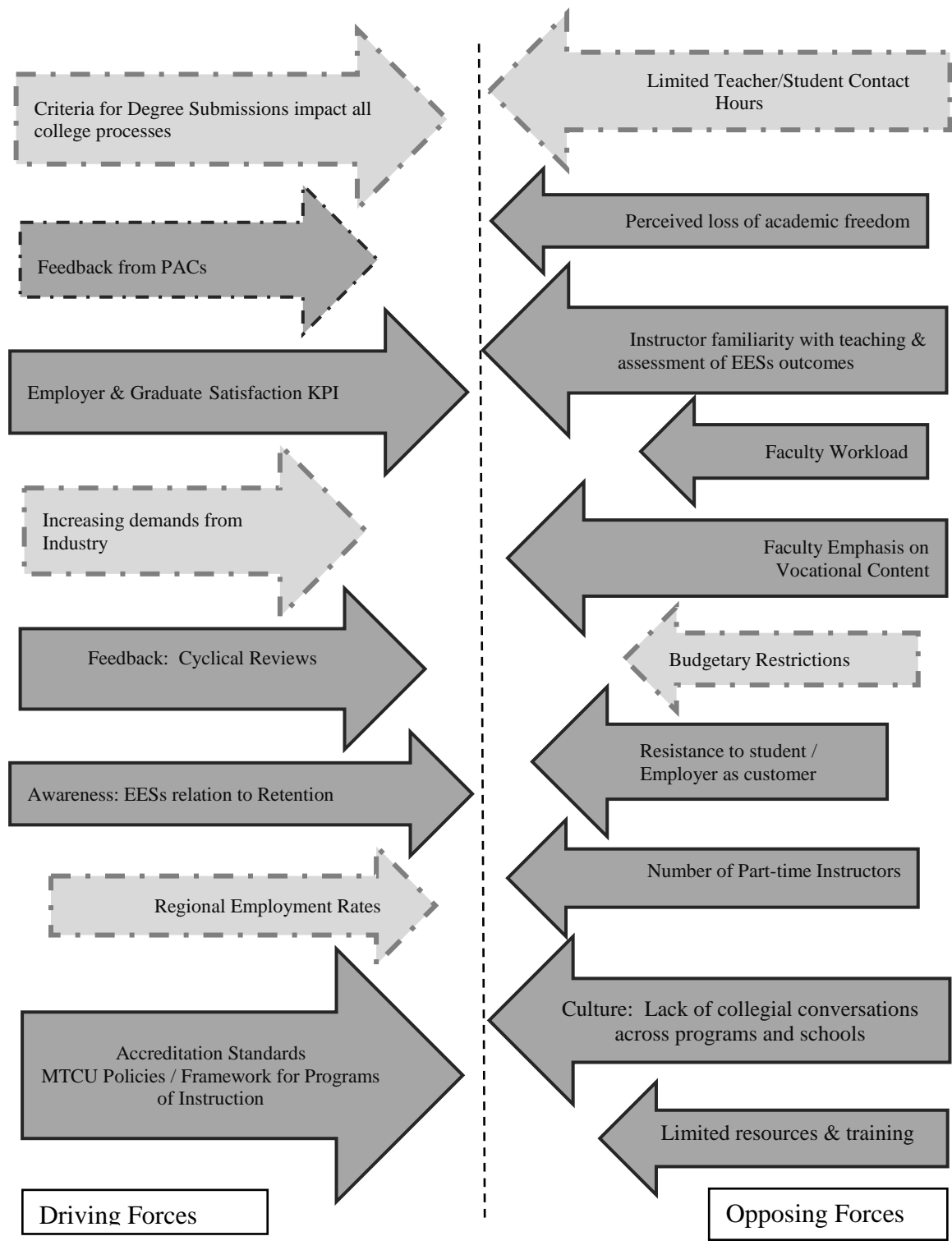


Figure 1.5. Forces opposing and driving inclusion of EESs in the curriculum at College X. Dashed borders indicate external forces, solid borders indicate internal forces. Interdependent forces addressed in this OIP are highlighted in grey.

The force-field analysis reveals that there are a greater number of forces opposing the realistic alignment of teaching and learning strategies with the authentic assessment of EESs than there are forces driving this change. However, the potential impact of several of the driving forces is quite substantial. The single most consequential driving force is the provincial accreditation process which came into effect January 2016 (Ontario College Quality Assurance Service, 2015a). Among the criteria for accreditation is the stipulation that Ontario's colleges must comply with the Framework for Programs of Instruction which describes expectations regarding the inclusion of VLOs and EESs in all programs of study (MTCU, 2009a). Failure to maintain accreditation status could have unforeseen consequences. Likely, this would negatively impact application rates, opportunities for work-integrated learning, and graduate employment rates, and could, therefore, impact the sustainability of the College. Parents, employers, and other external stakeholders believe colleges have an obligation to ensure that graduates have the essential employability skills for the modern workplace (Drummon, Finnie, & Weingarten, 2015; Huber & Kuncel, 2015). For these reasons, accreditation standards have been identified as the most potent driving force. Increasing awareness of how College policies and procedures designed to comply with Ministry standards is important; providing resources and supports to support faculty members in meeting these expectations is essential.

Feedback from our key stakeholders through PACs and the Provincial Key Performance Indicator (KPI) survey data have also been identified as strong forces promoting change. Employer and Graduate KPI scores are tied to institutional funding; low scores could result in lost funding. For these reasons, employer and graduate

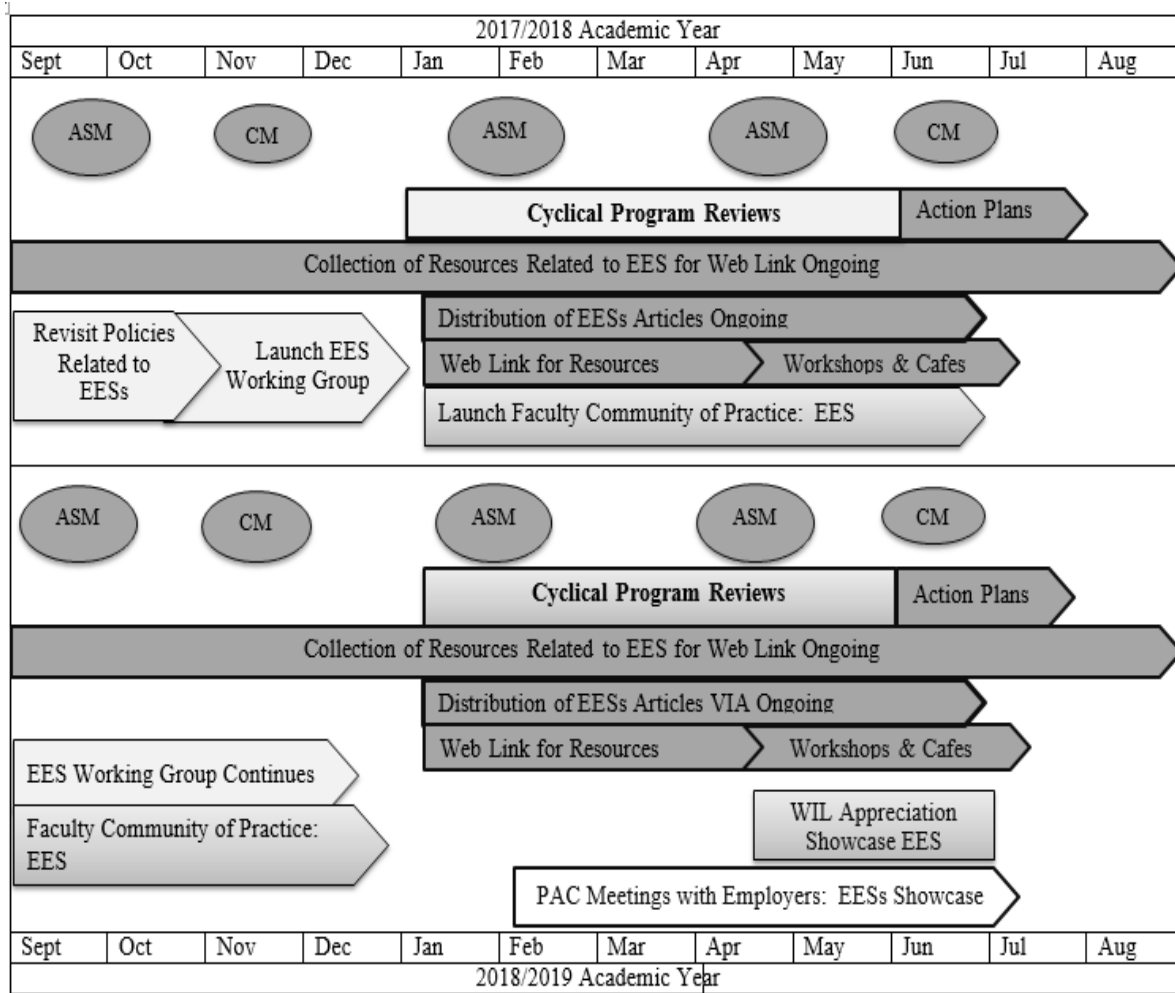
satisfaction data have both been identified as potent driving forces. Faculty members need to be aware that the questions on the employer survey are related to the 11 EES learning outcomes.

The Force-Field Analysis suggests that several interrelated opposing forces could be weakened with an OIP that would help faculty understand the need for change. Curriculum coaches could offer full-time and part-time faculty resources related to teaching / learning and assessing EESs. Demonstrating how these strategies could be tailored to fit with vocational content would preserve a sense of academic freedom, reduce faculty workload, and minimize the need for additional student/teacher contact hours, particularly if faculty teams collaborated on the mapping of EESs within their programs of study. Before meaningful change can occur in this institution, long-held assumptions regarding EESs that can lead to a sense of complacency need to be unsettled or unfrozen (Cawsey et al., 2016, p. 45).

### **Planning to Communicating Change**

The third stage in The Change Path Model is *Acceleration* (Cawsey et al., 2016) where change agents build momentum through continued training, communication, and the celebration of accomplishments (p. 229). In her portrayal of colleges and universities as organized anarchies, Manning (2013) describes how the participation of faculty for committee work and administrative duties declines by necessity during peak teaching and assessment periods. As a result, Manning notes that communication, memos, and announcements can be easily missed. Figure 1.6 presents a Critical Path Analysis (CPA) plotting proposed strategies for change across the 2017/ 2018 and 2018/2019 academic years.





*Figure 1.6.* Critical path analysis for EESs change initiatives across the 2017/ 2018 and the 2018/2019 academic years.

Planning to maintain momentum through the cycles that are inherent in the academic calendar is essential. For this reason, the CPA includes varied and repeated strategies for communicating with overloaded faculty, including Academic Sector Meetings (ASM) and Coordinator Meetings (CM). This CPA capitalizes upon the availability of most faculty members during the May/June period but recognizes that many continue to teach during May and June. The repeated announcing of the additions to resources to our EESs web link will build reliance upon this just-in-time resource.

**Communication strategies.** Through the cyclical review process, instructors will continue to receive feedback on their progress to accurately record how and when EESs are being taught and assessed. The distribution of new and revised policies and resources, particularly those related to EESs, assessment and capstone projects, is anticipated. Faculty will be made aware of upcoming professional development opportunities related to EESs. Increasing awareness will also be facilitated through the regular distribution of articles by our college librarian.

Opportunities for discussing changes to policies and processes with faculty include Academic Sector Meetings (ASM) and Coordinator Meetings (CM), both of which are depicted with gray circles in the Figure 1.6. These larger ASM meetings are essential in that they are currently the only avenue for open, large group discussions with the entire faculty regarding new initiatives, along with the barriers and challenges inherent in change initiatives. The ongoing influence of increased access to resources and training initiatives are represented by gray arrows.

The proposed OIP includes opportunities to celebrate small wins (Kouzes & Posner (2012) through a showcase of student work that demonstrates vocationally specific EESs. Bringing faculty, students, and employers together to celebrate these accomplishments can lessen differences in understandings regarding EESs, inspire a shared vision for EESs (Kouzes & Posner, 2012), and promote the collegial conversations that define learning organizations (Senge, 1990).

In conclusion, the mandate of community colleges to meet industry's vocational training needs gave rise to institutions that can be described as classic bureaucracies with formalized lines of communication, decision-making, and chains of command (MacKay,

2014; Manning, 2013). College X's quality assurance measures revealed that curricular plans for teaching and assessing EESs were either unrealistic or were not clearly articulated on course outlines, making it difficult to ascertain whether key policy directive to ensure that graduates have achieved the skills needed to secure and maintain employment. Fink's model of integrated course design (2013) offers a strategy for narrowing the gap between how the demonstration of EESs in the college classroom and the skills demands of the modern workplace. A collaborative leadership approach will promote cross-departmental networks and partnerships, enabling faculty members to learn from each other, and from students, graduates, and employers' feedback. In this manner, College X may become a learning organization (Senge, 1990) capable of learning from itself. The next chapter presents an organizational analysis, along with possible change initiatives for improving the implementation of active teaching strategies and authentic assessment tools with the goal of equipping our graduates with the essential employability skills to meet today's workplace demands.

## Chapter 2: Planning and Development

Chapter Two addresses the challenges faced by the institution in relation to the EESs by using the second stage found within the Change Path Model, Mobilization. This approach will not only help determine the *how* and *what* to change within the organization but also provide this OIP with possible solutions to the PoP.

### Framework for Leading the Change Process

In the Mobilization stage, change agents seek to understand and utilize the formal systems and structures of an institution to advance the change initiative (Cawsey et al., 2016, p. 98). Change agents within the institution are those who have a greater understanding of the need for change, as well as the uncertainty surrounding a PoP. Galbraith's Information Processing Model (1974) is of particular use for this PoP. He explains that in conditions of uncertainty, employees can be overburdened by the large amount of information that must be gathered and understood. At College X, many of the instructors have a strong understanding of how to develop an integrated course where the EES learning goals, the corresponding teaching activities, and the assessment are clearly interrelated. Their course outlines display an alignment between what is articulated in the learning outcomes, what is taught, and how it is assessed. However, faculty who did not, or could not, attend workshops related to integrated course design may be unfamiliar with it, and may struggle applying it to EESs. This unfamiliarity with assessing EESs is not uncommon (De Villiers, 2010; Rosenberg et al., 2012), especially for many part-time instructors who have little or no classroom teaching and assessment experience, and are often hired close to term beginning. Even experienced faculty may not fully grasp the importance of these activities.

Galbraith (1974) notes that when the task is unclear or when resources are scarce, the ability to plan ahead is compromised. In this OIP, a lack of clarity around employability skills impacts an instructor's ability to plan ahead, a task crucial to the effective delivery of course content. Galbraith points out that seeking assistance through hierarchical relations may not be feasible when expertise is specialized. Such is the case in community colleges in Ontario where chairs and deans may not have teaching expertise or when their area of expertise differs from that of the faculty. Building lateral relations is a viable alternative. Facilitating connections between those instructors who demonstrate a strong understanding of EESs and those who need additional support would enhance their understanding of how to integrate and assess the EESs.

**Framing theories.** When tasks involve a degree of uncertainty, the Human Resources Frame offers a useful frame for further analysis, particularly when employee commitment to success is high (Bolman and Deal, 2013, p. 311). In collaboration with Joan Gallos, Lee Bolman extended the Four Frame model for organizational analysis to post-secondary institutions (2011). In this extended model, these authors explain that underlying the HR frame are the basic leadership assumptions that organizational health is dependent upon the quality of relationships between its employees and their ongoing professional development (Bolman & Gallos, 2011, p. 93). Based on over 15 years of teaching experience, this author makes the additional assumption that the overwhelming majority of faculty members at College X are deeply committed to student success.

Looking through the HR frame, there is an acknowledgment that board members and senior managers need to be made aware of the benefits of faculty development in achieving organizational goals (Westmoreland & Tew, 2013). Making the connection

between the College's obligation to meet the criteria for institutional accreditation and the instructor's ability to develop realistic plans for teaching and assessing EESs is key in advancing this OIP. Additionally, through this frame, there is recognition that faculty members who typically work autonomously need to work collaboratively in high-performing teams (Bolman & Gallos, 2011). Bolman and Gallos describe highly-functioning teams as those who are committed to healthy working relationships. These teams are comprised of the right combination of complementary skill sets, and they are capable of holding themselves to self-generated and specific goals (p. 99). When faculty teams set their own goals, their engagement increases (Austin & Sorcinelli, 2013; Shagrir, 2003), however, failure to support these goals with the necessary resources and training only serves to lessen that commitment.

A shift to the Symbolic Frame draws our attention to organizational culture. Effective teachers hold a positive image of their students. They believe their students are capable, competent learners given the right resources. The same is true of effective leaders in the college system. Schein (2010) notes that when leaders hold a belief that college instructors are lazy or not dedicated to student learning, that belief will certainly be cultivated. It is a self-fulfilling prophecy. Kouzes and Posner (2012) strongly assert that when there is a failure to hold a positive image of others, there is a failure to trust. Without trust, there is no innovation.

The Symbolic Frame highlights the importance of negotiating shared understandings through courageous and collegial conversations between the academic leadership and the faculty. Kemmis (2010) notes that if the academic leadership can welcome this open exchange, barriers and hurdles that thwart team goals can be brought

to the light. Bolman and Deal (2013) strongly assert that the failure to listen to different perspectives “almost always guarantees stiff opposition later on” (p. 377). Consequently, any plan to improve an organization will most certainly be derailed.

**Approaches to leading organizational change.** Colleges and universities typically function as distributed leadership organizations since leadership tasks are widely dispersed across the institutions (Stefani, 2015). However, Jones (2014) warns that distributing responsibilities does not ensure that collaboration occurs. When professors develop and revise curriculum independently, it becomes difficult for the learnings to be shared. Bryke, Gomez, and Grunow (2011) suggest that community colleges could solve complex problems of practice by creating networks of improvement communities that cross the boundaries of schools and departments. Applied to this PoP, faculty teams would conduct action research studies to test innovative strategies for teaching and assessing employability skill sets in their own classrooms. Those that are successful in elevating student performance on summative assessment strategies could be shared more locally with other programs, where they are tested again before they are shared more broadly across the college.

Furthermore, the advancement of this vision necessitates that the instructors at College X possess what Carol Dweck (2008) describes as a growth mindset. Dweck explains that those with a growth mindset understand that intelligence is fluid. They believe one’s potential is revealed over time by working through challenges and reflecting upon failed attempts. Individuals with a fixed mindset believe that intelligence is predetermined, and not something that can be heightened with effort. In other words, if you have to work at something, you are not that intelligent (p. 16). For Dweck, educators

and leaders with a fixed mindset see themselves as finished products. They are resistant to constructive feedback and likely to blame the messenger rather than reflect upon the message. This mindset discourages instructors from asking for assistance. Hidden assumptions (e.g., EESs are learned through osmosis (Rosenberg, Heimler, & Morote, 2012)) are not uncovered without a disposition to inquiry. The promotion of a growth mindset among faculty and management could nudge the organizational culture to one where instructors feel safe to experiment, to discuss their reflections with their peers, and to continually learn from each other.

**A model for cultural change.** Edgar Schein (2010) offers a model for Managed Culture Change that prompts leaders to recognize that the artifacts and behaviours that seemingly define the culture are only surface level tangibles. Related to this OIP, the artifacts would include course outlines, mapping matrices, and the published policies defining how curriculum is to be developed. Beneath the surface lie the time-tested values and beliefs about why things are typically done the way they are done. As an example, faculty may believe that quality assurance efforts are futile given the reliance on a transient workforce in the college system. And beneath this layer lies what Schein (2010) refers to as basic underlying assumptions or theories which come to be accepted as reality over time. Toma (2010) points out that within individual departments and schools, the culture will differ as it is influenced by the specific discipline or vocation as well as individual faculty perspectives. It is these assumptions that make up the culture of the group. Schein (2010) notes that these theories and assumptions provide a sense of stability as one interprets what is happening in the workplace. Reluctance to move into a period of uncertainty breeds resistance to change.



Schein (2010) proposes that change agents must first unfreeze, or in Schein's terminology, "disconfirm," the notion that current practices are helping the organization reach its goals (p. 301). Schein proposes that learning about such shortcomings provokes a sense of guilt and may create anxiety among followers if they perceive the threat to the organization is real. At College X, survival anxiety might be felt if faculty were to wonder about the consequences of not meeting accreditation standards. In contrast, Schein also notes that strategies to reduce anxiety may be called upon, such as the assumption that the community college system in Ontario is invincible. Instructors may also feel a sense of learning anxiety if they perceive the learning of new ways is too challenging or too time-consuming. College faculty may feel anxiety over the loss of academic freedom or fear reprisal from their managers. Schein notes that helping faculty feel that the new tasks are not beyond their reach is essential to building a sense of psychological safety, and essential to shifting organizational culture, thereby reducing anxieties found both at the survival and learning levels.

To this end, Bolman and Gallos (2011) propose that a servant leadership style is the best fit for situations where followers need support, coaching, and care. Servant leaders, according to Greenleaf (1977), are "those with the natural feeling that one wants to serve – to serve first" (p. 27). This leadership style advances organizational goals by focusing on the growth of the followers (Zou, Tian, & Liu, 2015). Northouse (2016) notes that historically there has been concern regarding the validity of servant leadership as researchers have struggled to reach agreement on the core characteristics of this leadership style. However, following an extensive review of empirical cross-cultural studies Parris and Peachey (2013) conclude that the core characteristics are dependent

upon organizational context. A broader review of literature which included conference presentations and online resources was conducted by van Dierendonck (2011) who found servant leaders to be those who lead by “empowering and developing people; by expressing humility, authenticity, interpersonal acceptance, and stewardship; and by providing direction” (p. 1254).

Ortquist-Ahrens and Torosyan (2009) agree and emphasize that the promotion of post-secondary institutions as learning communities is dependent upon servant leadership. One possible reason is that servant leadership promotes an increase in helping behaviours among followers including the sharing of information (Zou, Tian, & Liu, 2015). Furthermore, servant leaders tend to demonstrate authenticity and humility which facilitates the establishment of trusting relationships with colleagues (Flynn, Smither, & Walker, 2015). The influence of a servant leadership approach has the potential to impact this PoP to the extent that it impacts what happens behind the closed doors of the college classroom.

**Categorizing organizational change.** Over the past five years, the academic sector at College X has undergone a major restructuring with the movement to outcome-based education. Instead of thinking about what content will be covered, instructors have been encouraged to plan lessons around what understandings and skills students will be expected to demonstrate. Patrick and Fletcher (1998) refer to this change as a movement from “teacher to student and from instruction to learning” (p. 158). Emerging from this initiative is the integration of EESs with core vocational content. Curriculum enhancement is an ongoing process, one that can be classified as continuous. When an

incremental change is nudged further by something external to the organization, this change is further categorized as an adaptation (Nadler & Tushman, 1989).

This PoP came to light with the discovery of frequent misalignments on mapping matrices of EESs. As noted earlier, the community college system in Ontario is moving to an accreditation system. The new standards explicitly and repeatedly express the expectation that colleges will demonstrate a commitment to continuous improvement (OCQAS, 2016). Weick and Quinn (1999) note that it is common for incremental change to be triggered by the realization that you are not doing what you think you are doing. The results of program mapping triggered that realization.

### **Critical Organizational Analysis**

Through the Mobilization stage of The Change-Management Process, Cawsey, et al. (2016) spurs consideration of “what” to change through a critical organizational analysis. This consideration began with the process of reframing advocated by Bolman and Deal (2013) and continued with Bolman and Gallos’s (2011) application within post-secondary institutions. Their reframing theory highlights that many colleges often lack collaboration between departments and schools (Jones, 2014), which can be problematic especially if the college functions as a distributed organization (Stefani, 2015). However, Morgan (2011) cautions that our interpretations of theories and conceptual frameworks can be influenced by underlying beliefs and assumptions. He suggests that we should examine and refine our understanding of problems of practice by examining the meaning behind the metaphors that serve as typical representations of organizations. By examining organizations through several metaphors, our understandings and biases are not limiting or misleading within our organizational analysis. To this end, four of

Morgan's nine metaphors (2011), and two described by Manning (2013) are used to inform this organizational analysis.

**Metaphors as perspectives.**

*College as a machine.* Using the symbolic representation of a machine draws attention to how departments are organized, how work is assigned, and how policies and procedures are consistently followed. While many faculty members prefer a vision of post-secondary institutions that offer more flexibility and more academic freedom (Hyslop-Margison & Sears, 2010; MacKay, 2014), the “college as machine” is an essential metaphor for consideration in an organizational analysis (Manning, 2013), particularly in the context of increasing demands for accountability. This is quite evident as provincially College X is moving from auditing towards an institutional accreditation process to ensure compliance with Ministry directives. Quality assurances are based on the fundamental belief that “good processes will produce good results” (Ontario College Quality Assurance Service, 2015a, p. 3). In accordance with this belief, College X has created the Office of Accountability, charged with the responsibility for monitoring adherence to its own academic policies and practices. Morgan (2006) notes that the machine metaphor is a good fit when tasks are simple and repetitive. However, responding to the escalating rate of change facing today's post-secondary institutions is anything but simple and repetitive. Intellectual communities need to continually balance the perspectives of internal and external stakeholders. This necessitates inspiring more participatory and adaptive approaches.

*College as a web.* In contrast to the hierarchical, top-down, organizational structure typical of most community colleges (Duddy, 2015), Manning offers a structure

where the leader is more centralized. In *webs of inclusion*, leaders are not shielded from followers because everyone is encouraged to take on leadership roles throughout the organization. Responsibilities and reporting lines are more flexible as employees take on tasks they are best suited for. This openness provides greater opportunities for involvement, collaboration, and consensus building. Expertise is recognized, and as a result, power is shared (Manning, 2015, p. 166). This model breaks down the silos that are typical of distributed organizations (Jones, 2014).

***College as an organism.*** One should also consider colleges as adaptable organisms because of the need to continually evolve in response to substantial societal changes as well as increasing threats from competitors. The rise of private colleges in Ontario, the expansion of online learning, and Massive Open Online Courses (MOOCs) have expanded student choice beyond the boundaries of a hometown community college (MacKay, 2014). Changing student demographics and shifting workforce needs also necessitate that colleges adapt if they are to survive. Of particular relevance is the emphasis this metaphor places on relationships with the external environment. Many Colleges will not meet their mandate to remain occupationally relevant without community partners willing to offer feedback on program offerings. These partnerships are essential for the provision of experiential learning opportunities where students fully grasp EESs in the context of their chosen vocation.

***College as organized anarchy.*** Manning (2013) offers another adaptable model that recognizes the different points of view managers, faculty, and support staff hold, due to their different positions within the organization. Faculty from differing areas of specialization will also have contradictory opinions and insights. A college operates as

an organized anarchy because “no one person, regardless of power or position, fully understands the many realities and perceptions present in the organization” (Manning, 2013, p. 14). There is acknowledgment of the disruption to committee work that results when faculty members hunker down during heavy grading periods and then re-join committees when teaching workloads ease up. There is also recognition that tenured or unionized faculty hold institutional memory as the duration of their employment tends to be longer. It is essential then that faculty input is continually solicited on an ongoing basis. For Manning, what prevents chaos under these circumstances is the development of connected professional communities where differing points of view can be expressed.

*College as a brain.* At surface level, the metaphor of a post-secondary institution as a brain seems an obvious perspective to take. However, Senge (1990) asserts that qualifying as a learning organization requires an organization to be capable of learning from itself. According to Senge, five key pillars define learning organizations: (1) developing expertise among employees, (2) building highly functioning teams, (3) the adoption of a reflective stance, (4) openness to feedback, and (5) a holding a systemic view of the organization.

In this OIP, Dee Fink’s (2013) approach to integrated course design has been modified to provide a systems view of curriculum development and curriculum management. Regional and local professional development opportunities serve to replenish vocational expertise and to develop mastery in adult education. Opportunities for continual critical reflection upon student response to teaching and learning strategies as well as student performance on authentic assessments drive continual renewal of program curriculum. Mechanisms for promoting the reflection upon stakeholder

feedback include Key Performance Indicator data, Instructional Feedback Surveys, and feedback available to faculty teams through the cyclical review process. This ability to learn in order to adapt is akin to the brain's ability to repair itself (Carlsen & Gjersvick, 1997).

*College as a culture.* Schein (2010) believes that culture is not easily discernable nor is it easy to change. He defines culture as

a pattern of shared basic assumptions learned by a group as it solved its problems of external adaption and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p. 18)

Schein (2010) states that culture cannot be reduced to a single variable (Culture University, 2014, March 3). The history of the community college system and its mandate to respond to local employer needs can be seen as contributing to a culture that values vocational core content over generic employability skills.

Schein (2010) further explains that culture is often expressed through the slogans and images that an organization uses to promote organizational visions, values, and goals. For example, common to post-secondary institutions is the motto of the student as customer. Beneath this slogan rests the assumption that focusing on the needs and wishes of our customers will address all issues. All processes, policies, and procedures fall into alignment when student needs are the central consideration. However, as Laing and Laing (2016) summarize, when student as customer is adopted as a motto, the underlying assumption that the customer is always right is evoked. The student becomes the most privileged stakeholder, which promotes an expectation that the faculty, not the learner, should be held accountable for student grades. The student as customer adopts the stance that they have purchased an education, particularly in the context of rising tuition and

textbook prices. The consequences of emphasizing student needs over those of academics, employers, and professional bodies are grade inflation, student absenteeism, lower faculty evaluations, and eventually the watering down of the curriculum (Halbesleben & Wheller, 2009; Laing & Laing, 2011, 2016).

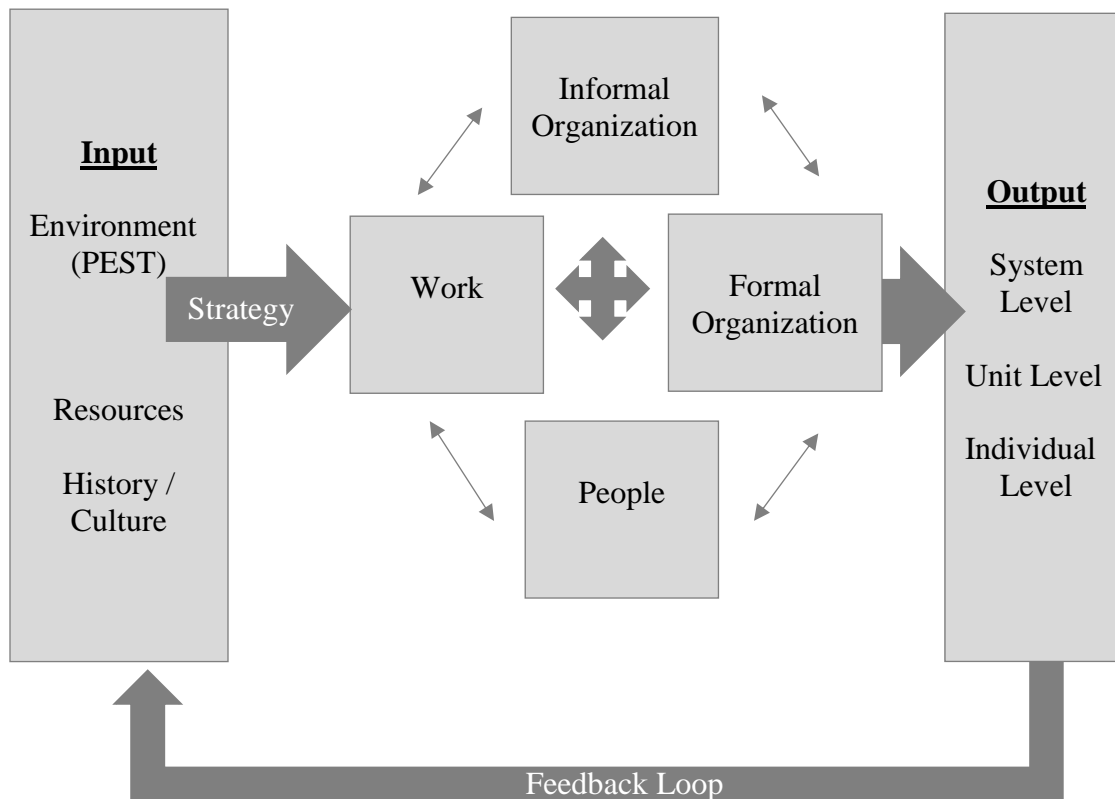
### **Gap analysis.**

This organizational analysis to determine the *how* and *what* to change continues with a gap analysis. Nadler and Tushman (1989) offer an Organizational Congruence Model as a framework for guiding organizational analysis. In this model, external input factors (environment, resources, history) are logically connected to the organization's ability to deliver output by means of four transformation processes: (1) work, (2) people, (3) the structures and systems of the formal organization, and (4) the culture or informal organization (p. 195). This Organizational Congruence Model (see Figure 2.1) is an appropriate model for community colleges as they are open institutions, dependent upon the relationships with their community partnerships. These partners rely on the College to respond to changes in employment needs. Colleges are also dependent upon those partners to provide relevant work-integrated learning opportunities that help students construct critical relationships between theory and practice.

To analyze environmental inputs, Nadler and Tushman (1989) recommend conducting a PEST analysis, along with an evaluation of resources, and the history of the organization (see Chapter 1 for a discussion of the history of the college system in Ontario). The PEST analysis considers the political, economic, social, and technological external factors that impact College X. An analysis of College X's strengths,



weaknesses, opportunities and threats (SWOT) follows and provides an assessment of the College's internal factors.



*Figure 2.1.* Nadler and Tushman's Organizational Congruence Model

Source: From Nadler, D. A., & Tushman, M. L. (1989). *Organizational Frame Bending: Principles for Managing Reorientation*. *Academy of Management Executive*, III(3), 194–204.

### **PEST analysis.**

**Political factors.** As presented in Chapter One, industry leaders have increased the pressure on community colleges to equip Canada's graduates with EESs. In Ontario, an additional driving force for change is the mandate to conform to the Ministry of Advanced Education and Skills Development's directives, including the Framework for Programs of Instruction (MTCU, 2009a), which stipulates that EESs will be taught and

assessed within each program of study. Citing increased demands for accountability and increasing diversity in instructional delivery, OCQAS is working towards the implementation of a provincial accreditation process (OCQAS, 2015a). This is a significant shift in self-regulatory processes. Audits and accreditations are similar in that through an extensive self-study process and thorough peer examinations of quality assurance processes, the institution is engaged in continual renewal. Accreditation, however, carries with it a status that publically declares a level of institutional quality (OCQAS, 2015a) that parents and applicants will consider in choosing post-secondary institutions. As the force-field analysis in Chapter One indicated, the accreditation presents the most potent driving force prompting College X to address this PoP.

*Economic factors.* It is abundantly clear: Ontario's colleges are expected to do more with less. Federal transfer contributions to post-secondary education have declined by 50% since 1980 (Mackay, 2014; see also Canadian Federation of Students, 2013; Fanelli & Meades, 2011; Fisher et al., 2015). Compared to the rest of Canada, Ontario spends the least per province on post-secondary education (Fanelli & Meades, 2011). With these budget shortfalls, it is expected that the reliance on part-time instructors will continue (Mackay, 2016) and that colleges will opt to increase online course offerings (MTCU, 2012). Furthermore, while Ontario's Premier boasts of having the fastest growing economy in Canada (Benzie, 2016), economists note that this must be interpreted in light of the economic downturns experienced by our western provinces (Eisnen, 2016). The Ontario Chamber of Commerce (2016) clarifies further by noting that there is great disparity between different regions in Ontario. Those regions still dependent on the automotive industry will experience slower growth. Understandably,

Ontarians expect that post-secondary institutions will promote economic prosperity by developing a labour force equipped with employability skill sets (MTCU, 2012) and ideally regionally-based employment.

***Social-cultural factors.*** Changes in student demographics also impact Ontario's college classrooms. Only one third of college students are entering college from high school. Many are returning to college for a second degree or diploma, while others are returning from the workforce (Colleges Ontario, 2009). In addition, newcomers are making up an increasing percentage of the student body at our colleges. These students tend to be older than their Canadian counterparts (Statistics Canada, 2013). Furthermore, rates of mental health concerns are rising among students aged 18 to 24 years (Colleges Ontario, 2012). It is important to note that these variables are not mutually exclusive and that their impact is often exacerbated by the increased financial and social demands of college life (Colleges Ontario, 2012). The increasingly diverse learning needs of college students necessitate differentiated strategies to support the acquisition of EESs. While numerous high school graduates arrive on campus without these skill sets (Taylor & Taschereau, 2014), mature students usually have acquired some of these skill sets through previous employment in the workplace (Smith & Krüger, 2008). This variance affords faculty members with an opportunity to employ teaching strategies that draw upon more experienced learners.

***Technological factors.*** Technological advances have afforded new opportunities as well as challenges for post-secondary institutions. Online offerings make it easier for students to select colleges outside of their home communities. OntarioLearn is a collaborative effort of all 24 public colleges in Ontario that makes it possible for college

students to select from a wide selection of online courses and programs. Enrollment in these courses has increased dramatically (Colleges Ontario, 2009). In addition, today's college students are accustomed to and expect technology-enabled learning opportunities. Some faculty members are eager to learn more about new applications to integrate into their teaching that will not only engage today's learner but support their ever-changing industry standards (Austin & Sorcinelli, 2013). These innovations not only require consideration of how EESs are taught in an online environment, but how EESs are redefined by technological advances.

**SWOT analysis.** An institution-wide Strengths Weaknesses Opportunities and Threats (SWOT) analysis was recently completed and presented to the Board of Governors (College X, January, 2016). For this OIP, only those factors that address College X's capacity to support the development of attainable strategies to embed EESs with vocational content have been included in this analysis (see Table 2.1). Nadler and Tushman (1989) propose that an organization's ability to produce is enhanced by an alignment between the external pressures faced by the organization, the strategies employed to respond to these pressures, and the four transformational processes depicted in Figure 2.1.

In this OIP, the College's capacity to produce graduates equipped with EESs (output) is heightened when the college aligns its organizational structure, the ability of the faculty to learn from each other, its curriculum development and management processes, and the capacities of its teaching staff as they pertain to teaching and assessing EESs. This must be done in response to increasing calls for accountability, in the context of rapid advances in technology, changing student demographics, and diminished

Table 2.1

## SWOT Analysis of College X

Strengths
<ul style="list-style-type: none"> <li>• Department of Curriculum and Instruction: Effective processes</li> <li>• Successful implementation of Outcome-Based Education (course outlines)</li> <li>• Cyclical and annual review processes are robust</li> <li>• All programs receive regular feedback from Program Advisory Councils</li> <li>• High proportion of seasoned faculty with advanced graduate degrees</li> <li>• Strong relationships between faculty and the community</li> </ul>
Weaknesses
<ul style="list-style-type: none"> <li>• Restrictive Budget due in part to increased operating costs of new buildings</li> <li>• Regional training program for new faculty hires only minimally addresses EESs</li> <li>• Gap in EESs training revealed for all groups: seasoned faculty, new hires and increasing number of part-time faculty</li> <li>• Not all programs offer work-integrated learning opportunities</li> <li>• Lack of collaboration across schools and departments</li> </ul>
Opportunities
<ul style="list-style-type: none"> <li>• Through training, we can build an understanding of EESs as retention strategies</li> <li>• Professional development: learning cafes, teaching circles, and faculty retreat</li> <li>• Networked Improvement Communities: test and share strategies</li> <li>• Web site to host teaching and learning resources</li> <li>• Rise in employment rates: more work-integrated learning opportunities</li> </ul>
Threats
<ul style="list-style-type: none"> <li>• Numerous seasoned faculty are able to retire</li> <li>• Increasing expectations of employers to teach employability skill sets</li> </ul>

Source: College X. (2016). SWOT Analysis. Adapted with permission.

funding. Considering the above analysis, it can be said College X's organizational structure adequately defines the role of the Department of Curriculum and Instruction (DCI) in curriculum development and curriculum management. The quality assurance processes that assess faculty plans for teaching and assessing EESs are robust. Indeed those processes were the very tools that identified the PoP in the first place. Feedback loops are well established and provide ample opportunities for faculty members to gauge the opinions of key stakeholder groups.

However, as noted in Chapter 1, the issues found on the EESs mapping matrices indicate that the methods some faculty members use to determine which EESs are taught and assessed in a given course may be faulty. Researchers suggest that sometimes EESs are selected on course outlines because they appear to be the most relevant for that course, or because there is an intention to integrate the EESs with the vocational content (Rutt, Gray, Turner, Swain, Hulme, & Pomeroy, 2013; Sumsion & Goodfellow, 2004). As a distributed organization, College X is like most post-secondary institutions in that there are limited opportunities for collaboration across departments and schools, prohibiting faculty from sharing strategies for teaching and assessing EESs. Full-time faculty members need training, resources, and time to solidify their plans for integrating EESs with core content on course outlines. Ensuring part-time instructors understand how to implement those instructional plans will require ongoing training and professional development.

### **Possible Solutions to Address POP**

As noted in Chapter one, The Ministry of Advanced Education and Skills Development (MAESD) is responsible for framing the delivery of all post-secondary

certificate, diploma, and degree programs. The Ontario Qualifications Framework (OQF) specifies the level of knowledge and skills graduates would be expected to demonstrate and it identifies which institutions are permitted to deliver each type of program (MAESD, 2016). It also articulates the overall program design, including the duration of the program and the range of instructional hours for each type of program. For example, only colleges can deliver diploma programs. At the diploma level of study, post-secondary institutions are required to “provide a level of *skills*, knowledge, and attitudes to allow the graduates to work within a broad range of technical and/or administrative requirements, coordination, and evaluation, and engage students in learning in disciplines outside their main field of study” (MAESD, 2016, para. 2). For two-year diploma programs, this is to be achieved within 1200 to 1400 instructional hours, typically over four semesters.

The Framework for Programs of Instruction stipulates that the EESs will be taught and assessed within each program of study. As reported earlier, this can be done by delivering them in a stand-alone course or by embedding EESs into existing general education courses. Alternatively, they can be integrated with the vocational content (MTCU, 2009a, p. 20). Neither document dictates how the EESs curriculum should be designed or delivered. The Ontario Colleges of Applied Arts and Technology Act (2016) grants colleges this freedom. To this end, a comparative analysis considering three key strategies for ensuring that graduates at College X can demonstrate EESs has been completed: stand-alone courses, remedial courses, and integration of EESs with vocational content.

**Stand-alone course(s).** The first option is the development of one or more courses where the course learning outcomes describe the graduate's ability to demonstrate the full complement of EESs. This model is referred to as either a "stand-alone," "parallel" (Cranmer, 2007), "discrete" (MTCU, 2009a), or "bolt-on" (Wingate, 2006) course. For this problem of practice, the course level learning outcomes would be the 11 EES learning outcomes listed in Appendix A. To ensure that all students graduating from College X have been taught EESs, the course would be delivered as a "directed elective." Students would be mandated to take this course in the first semester. This stand-alone course could qualify as one of the three to five general education courses if it also met the broader definition of a general education course as mandated by MAESD and articulated through The Framework for Programs of Instruction (MTCU, 2009a). At College X, all two-year programs of study are delivered with 1200 hours of instruction and include three General Education courses. If students are permitted to choose which section of this course best fits their schedule, they would be placed with students from other programs of study. In this scenario, the EESs curriculum is isolated from the core vocational curriculum: the EESs are taught and assessed more generically.

Proponents of this model believe that employability skills, once learned, can be transferred to different contexts. Overwhelmingly, researchers are attesting that this is not the case. In a review of the literature on the transferability of training, Blume, Ford, Baldwin, and Huang (2010) explain that learning is most likely to be transferred from one context to another when the learning and recall is highly similar in context, of similar complexity, and when learning is close in time to demonstration. Teaching EESs in a stand-alone course, in the first semester, with students from a variety of different



programs contradicts what is understood about the transferability of knowledge and skills. Indeed, the lack of ability to apply EESs beyond the context in which they were learned is well documented (e.g., Cranmer, 2007; Drummond, Nixon, Wiltshire, 1998; MacVaugh, Jones & Auty, 2013, Speight, Lackovic, & Cooker, 2013). This lack of transferability may partially explain employer concerns regarding the skills gap. When EESs are taught in a generic fashion, the assessments of these understandings are no longer authentic in that they no longer mirror workplace expectations.

The implementation of stand-alone employability courses would require a full-time faculty member to be hired as a coordinator, responsible for the development of the curriculum, and the coordination of the delivery of these courses within the individual programs of study (College Employer Council & OPSEU, 2012). With over 100 programs of study, this is a substantial undertaking. In all likelihood, full-time faculty members would be less interested in teaching stand-alone courses that are unrelated to their area of specialization. Given the fiscally restrictive environment at College X, it is unlikely that new faculty would be hired to teach these courses and the work would be assigned to part-time instructors. The transient nature of this workforce makes it difficult to develop expertise in teaching and assessing employability skill sets or to develop any commitment to College X's mission to promote EESs. Ongoing training in active teaching and EES assessment strategies becomes a necessity.

This solution to the problem of practice is also less desirable from the perspective of the students. When employability skill sets are isolated from career-related content, students demonstrate a lack of interest (Cranmer, 2007; Smith & Krüger, 2008) and attendance in stand-alone courses tends to be poor (MacVaugh, Jones & Auty, 2013).

When EESs certificates can be earned separately from programs of study, students are less likely to complete the coursework to earn the certificate (Drummond, Nixon, Wiltshire, 1998; Washer, 2007). Students confess they take coursework more seriously when it is connected to their core discipline (Washer, 2007).

One of the benefits of the stand-alone delivery model is that it is much easier to ensure adherence to quality assurance processes. Curriculum developers need to develop only one integrated course outline, linking assessments strategies to each of the 11 EES learning outcomes. Program-level coordinators simply need to ensure that each student successfully completes the course. There would be no need to create the time-consuming curriculum matrices which demonstrate that there are ample opportunities to assess EESs throughout a program of study. Faculty teams would spend less time completing cyclical program reviews when there are no requirements to reflect upon plans for teaching and authentically assessing EESs.

If on the other hand, students were not permitted to select the section that best fits their schedules, students would take this course with others from their program of study. The course content could then be aligned with disciplinary core content. However, while this would increase student engagement and retention of information, it would disqualify the course as a general elective course. Elander, Harrington, Norton, Robinson, and Reddy (2006) point out that with this approach, there is little opportunity to reinforce content. In one 15-week course, there is seldom an opportunity to practice these skill sets in different contexts; by the end of a program of study these skill sets can become “rusty.”

**Remedial course.** Another option for ensuring graduates possess the skill sets employers need is to require that all students take The Test of Workplace Essential Skills

(TOWES) to determine where their strengths and weaknesses lie (Bow Valley College, 2016). The authors describe this assessment tool as authentic as it uses real work scenarios constructed by consulting a database of employability skill sets created by The Government of Canada (2013). This database of *Essential Skills Profiles* identifies sample employability skills for each major career. College X could develop an EESs course that compartmentalizes each EES learning outcome, thereby permitting students to study only those skill sets they needed to develop. However, one key deterrent for this solution is the cost of purchasing a license to administer the TOWES to all students at each of College X campuses.

In addition, this solution would necessitate hiring a coordinator to provide academic leadership, and similar to the stand-alone course option, would rely on the part-time transient workforce. Students who demonstrate proficiency in EESs would not be required to take the course, which would necessitate blending sections with students from different programs of study. Learning content would need to remain generic, resulting in the same lack of student engagement found for generic stand-alone courses (De La Harpe, Radloff, & Wyber, 2000). Furthermore, students may feel isolated from peer groups and resent being identified as needing remedial coursework.

**Integrated courses.** The third option for addressing the skills gap is to continue working with faculty to embed the EESs into their discipline-specific courses (Harvey, 2005). The groundwork has already been completed at College X: All course outlines have been adapted to reflect an alignment between VLOs, EESs, and authentic assessments. Processes for creating mapping matrices and providing feedback to faculty teams are already in place. Problems with the reliability and validity of the EESs

mapping matrices can be rectified by increasing the level of specificity on assessment descriptions on the course outlines (Sumsion & Goodfellow, 2004) and by ensuring that the plans for teaching and assessing EESs are realistic.

It is important to note that it was the inconsistencies found on EESs matrices that revealed that some faculty might need additional support, either with recognizing opportunities to teach and assess EESs within their courses or with developing teaching and assessment strategies specific to EESs. The Job Banks database of employability skills identified for each major career is a rich resource. Faculty can search this database using the National Occupation Classification (NOC) attached to their program of study (Government of Canada, 2013). As Washer (2007) points out, the EESs are already being taught and assessed. In many cases, it is difficult to separate generic skill sets from core content, particularly at higher levels of study (Elander, Harrington, Norton, Robinson, & Reddy (2006). Furthermore, the awareness of the need to teach EESs explicitly even when they are embedded must be promoted (Knewstubb, & Ruth, 2015; MacVaugh, Jones & Auty, 2013). When students are cognizant that they are learning EESs, they are better able to articulate these understandings to employers (Cranmer, 2006). This alone may improve employer satisfaction with graduate preparedness.

Undoubtedly, the most significant benefit of this solution is that it maximizes opportunities for transferability of EESs to the world of work. When the EESs are integrated with core disciplinary content throughout the program, learners receive feedback on each EESs on several different tasks throughout their programs (Drummond, Nixon, Wiltshire, 1998). For example, a carpentry student demonstrates EES#6: “locate, select, organize, and document information using appropriate technology and information

systems” (MTCU, 2009a, p. 21), by learning how to successfully complete the tasks listed in Table 2.2. The Essential Skills Profiles also include an estimation of the complexity level for each task that ranges from 1 (basic) to 5 (advanced). These estimations appear in brackets after each skill set.

*Table 2.2*

Tasks Requiring Information Management Skills: Carpenters

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Use calculators and personal digital assistant (PDA) devices to complete numeracy-related tasks, such as calculating material requirements. (1)

May use databases to retrieve and print construction drawings. (2)

May use billing and accounting software to track sales, produce invoices and estimates and print reports, such as income and expense statements. (2)

Access online information posted by suppliers, manufacturers, unions, and associations to stay current on industry trends and practices. (2)

May use the Internet to access training courses and seminars offered by unions, apprenticeship trainers, suppliers, employers, and associations. (2)

May use computer-controlled layout equipment, such as total stations and smart levels, to measure distances, horizontal angles, and vertical angles. (2)

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Note: List of skill sets generally used by carpenters. National Occupation Code 7271. Selected from the Government of Canada. (2013). Explore careers by knowledge and skills. Retrieved from [http://www.jobbank.gc.ca/report\\_skillknowledge-eng.do?action=search\\_form](http://www.jobbank.gc.ca/report_skillknowledge-eng.do?action=search_form)

With this information faculty can develop EESs within the programs of study. In this manner, students receive more support and guidance as they practice these skills over an extended period of time. Transferability is maximized because the skills are practiced repeatedly in multiple real-world contexts, because the complexity of the tasks increases

throughout the program and because these skills have not had the chance to fade since first semester (Blume, Ford, Baldwin, and Huang, 2010).

An additional benefit of integrating EESs throughout a program of study is that it better prepares students for capstone projects, courses, and work-integrated learning experiences. Capstone projects and courses are culminating learning experiences where students demonstrate their ability to integrate previously learned knowledge and skills (French, Bailey, Acker, & Wood, 2015). A capstone project might be the creation of a product, a performance, a presentation to several professors, or a portfolio that documents achievements across several courses. Work-integrated learning experiences (WIL) typically include apprenticeships, field placements, co-operative learning experiences, and internships (Sattler, 2011). Depending on the program of study, these may be completed on or off campus. While both capstones and WILs promote the development of EESs, Jackson (2015) cautions that students need to develop these skill sets prior to being placed in the community. Further, providing opportunities to develop EESs before WIL and to revisit them after WIL was found to be even more effective in developing transferable skills (Mason, Williams & Cranmer, 2009).

This solution utilizes full-time faculty and part-time faculty who are already teaching core courses. It requires an increase of training opportunities and the availability of resources for all instructors including our more transient workers (part-time, sessional and partial load instructors). Meeting needs of part-time instructors necessitates putting resources online (Mckee, Johnson, William, & Tew, 2013; Pruette & Pollard, 2013) as our IT security processes limit access to resources stored on the College's intranet when teaching contracts expire. The success of this solution rests on

our ability to connect instructors who have researched and developed best practices in teaching and assessing EESs with those searching for those ideas.

**Results of the comparative analysis.** This comparative analysis of potential solutions lends the greatest support to integrated course design as a solution for closing the skills gap. It is cost effective in that it does not require hiring additional staff. It does not place additional financial burdens upon College X by increasing demands for classroom space and teaching resources. This is an important consideration in the context of this fiscally lean environment. Most importantly, integrated course design maximizes transferability of EESs by optimizing the opportunities for practicing EESs in a variety of contexts, and by increasing complexity levels of authentic assessments as the student progresses through the program of study. By being explicit about what is being taught and assessed, the skill sets can be made more visible to our learners. While integrated course design has a high level of impact on curriculum design (Cranmer, 2007), these processes for curriculum design and management have already been put into place at College X and in general are recognized as effective quality assurance processes (Sumsion & Goodfellow, 2004; Q. Liu, 2015). Simply put, integrating EESs into existing courses makes the most of what we are already doing.

### **A Synthesis of Leadership Approaches to Change**

College X is committed to supporting the growth of strong and vibrant communities by cultivating vocational knowledge and employment skills in its students. This vision is dependent upon College X's ability to be a learning organization, that is, an organization capable of learning from itself (Senge, 1990). Specific to this Problem of Practice, there must be a commitment to continually update vocationally specific

expertise and to develop a sound understanding of andragogy. Those in the academic sector must be empowered to work collaboratively in highly functioning teams. At every level of the organization, there must be openness to feedback from key stakeholders and a willingness to continually improve by reflecting upon feedback and experiences. Finally, all employees must hold a systematic view of how the structures and processes at College X work together to narrow the skills gap.

This vision for change is best supported by the adoption of a servant leadership approach, where the focus remains on promoting the growth and development of the leadership team, the curriculum coaches, and the faculty members. Greenleaf (1977) explains that servant leaders listen with the intention of making a leap of imagination to understand the goals and visions of followers (p. 31). For Greenleaf, trust develops when leaders empathize and accept with a tolerance of imperfections in others (p. 34). These are the conditions that will address the training gaps as well as the lack of collaboration both within and between departments identified in the SWOT analysis.

It is abundantly clear that the achievement of this vision at College X is not something that can be solely achieved through the efforts of any one stakeholder group. It is dependent upon the support of the Board of Governors and their understanding of academic matters (Washer 2007; Westmoreland & Tew, 2013). Furthermore, this vision cannot be simply mandated or enforced by the senior management team. This vision depends upon the passion, ingenuity, and dedication of the faculty, supported by curriculum coaches who facilitate the integration of EESs into the academic programs. Strong partnerships with our employers invite feedback on our vocational relevancy as well as opportunities for work-integrated learning. In the end, students must assume



responsibility for monitoring their own ability to understand and then to demonstrate the EESs. Realization of this vision requires leadership from the top, middle, and grassroots levels (Kezar & Lester, 2009). Narrowing the employability skills gap obliges this community college to be greater than the sum of its parts.

**College leaders as change agents.** Westmoreland and Tew (2013) note that volunteer board members and those who comprise the senior management team must be mindful of the many benefits of faculty development when setting organizational goals and strategic plans. While College X recruits faculty who are outstanding experts from a variety of professions, this expertise must be maintained, and a strong understanding of theory and methods for teaching adults must be developed. The failure to support faculty willingness to experiment with the necessary resources only serves to diminish that commitment (Austin & Sorcinelli, 2013; Shagrir, 2003). The academic sector must be championed as the main business of the college.

Additionally, the senior management team at College X is supporting this vision through the creation of a database that will track opportunities for work-integrated learning such as field placements, apprenticeships, co-operatives, and practicums. The establishment of an Industry Liaison Committee, charged with the task of enhancing our relationships with external community partners, will further support faculty efforts to develop EESs among their students. College X demonstrates its appreciation of these partnerships each year with a gala event. A showcase of student projects could raise awareness among employers of the numerous strategies faculty employ to help graduates develop the employability skills employers are seeking.

Further to this goal, the development of policies that limit the number of EESs assessed in each course will guide faculty in their work as they develop new programs of study. Work-integrated learning opportunities would likely provide opportunities for demonstrating most if not all EESs (Jackson, 2015). A policy requiring the inclusion of capstone projects or courses in each program of study has recently been approved.

The academic leadership of the college also has the responsibility for building awareness among the faculty of the need for change (Cawsey et al., 2016). Faculty members need to be informed of what they can do to help achieve provincial standards related to EESs. As the leadership team mobilizes this change initiative, there is a responsibility to gauge stakeholder reaction and to understand their diverse perspectives. Kemmis (2010) notes that welcoming discussion of the very real barriers and hurdles that thwart efforts to bridge the skills gap can reduce the likelihood of change being met with resistance. Similarly, Bolman and Deal (2013) forewarn that the failure to listen to different perspectives “almost always guarantees stiff opposition later on” (p. 377). It is essential that input from chairs and faculty is sought on an ongoing basis. Furthermore, it is important to keep in mind that the fluid participation patterns for those working in the academic sector rise and fall with the cycles of academic work (Manning, 2013). Varied and repeated strategies of communication are needed to maintain communication during the start of each semester and during heavy periods of student assessment.

Manning (2013) also points out that unionized and tenured faculty are keepers of institutional memory as they tend to be employed for longer periods of time. They know what has been tried in the past, what succeeded, what failed, and they often know why. Cawsey et al. (2016) suggest that all stakeholders (chairs, faculty, part-time instructors,

and support staff) be viewed as participants in the process. Schein (2010) agrees and emphasizes that this positive view of key stakeholders helps leaders uncover cultural assumptions and beliefs that may later unravel change initiatives. As previously noted, faculty members need to feel that their managers hold a positive image of them. They will not take risks to innovate without trust (Kouzes & Posner, 2012).

**Curriculum coaches as change agents.** As change agents in advancing this OIP, the coaches in the Department of Curriculum and Instruction shoulder the responsibility for accelerating change by facilitating the development of “new knowledge, skills, abilities and ways of thinking that support change” (Cawsey et al., 2016, p. 299). Through training, these change agents unfreeze, or in Schein’s terminology, “disconfirm” the notion that standard practices are helping the organization reach its goals (Schein, 2010, p. 301). Curriculum coaches promote an understanding that when EESs are embedded, they are not ancillary learning outcomes, but rather these EESs are skills that are *essential* in supporting the achievement of the vocational learning outcomes. As such, they are equally important.

There is a need to advocate for the inclusion of EESs at regional teacher training programs. The relative importance of EESs increases when they are more broadly recognized at these regional meetings. Faculty members have indicated an interest in seeing how others have integrated EESs content into their courses. Increasing access for all teaching staff to resources, such as the Essential Skills Profiles (Government of Canada, 2013), The Framework for Programs of Instruction (MTCU, 209a), sample rubrics, and sample lesson plans can be accomplished by linking them from the college’s main web page.

Patrick and Fletcher (1998) further elevate the importance of the role of the curriculum coach by explaining how it is through their work that the academic sector learns to function as a collaborative learning organization. In this vein, curriculum coaches can promote opportunities for sharing tried-and-true evidence-based teaching and assessment strategies through networks of improvement (Bryke, Gomez & Grunow, 2011). As noted earlier, rekindling existing social networks and facilitating the development of new ones is critical to this problem of practice. Kleiner (2003, p.3) describes the power of networks in organizations:

The act of reconnecting and talking with a trusted colleague generally triggers a resurgence of mutual memory, opening the gates to fresh learning and invention...Because networks of trust release so much cognitive capacity, they can (and often do) have far more influence over the fortunes and failures of companies from day to day and year to year than the official hierarchy (in Manning, 2013).

Bolman and Gallos (2011) concur, noting that looking through the Human Resources frame there is acknowledgment that organizational health is dependent upon the quality of relationships among its employees and their ongoing professional development.

Finally, curriculum coaches mobilize faculty by offering support and feedback through the cyclical review process. After EES mapping matrices have been created, curriculum coaches meet faculty teams to review the visual displays of how learning outcomes are integrated within individual courses, within a program of study. It is these critical yet collegial conversations that offer the greatest hope for change as there are few opportunities for shared reflection at the program level (Knewstubb & Ruth, 2015). The feedback sessions are an opportunity to compare this “bird’s eye view” of the program of study to what they believe about teaching and assessing employability skills. For some faculty, the mapping matrices call into question existing beliefs and understandings. The

matrices challenge the status quo and create the cognitive dissonance that Katz & Dack (2013) note is needed for real learning to occur. As highly functioning teams, the faculty then engage in meaningful conversations as critical friends to reflect upon the feedback offered and revisit how and where the EESs are being taught and assessed (Sumsion & Goodfellow, 2004). Faculty can advocate for the time needed for this important work by requesting time on their Standard Workload formulas. The Collective Agreement stipulates that college faculty in Ontario be given time for curriculum review and development and that this work “be attributed on an hour by hour basis” (College Employer Council & OPSEU, 2012, p. 16). Making formal arrangements is crucial if faculty teams are to gather to accomplish this work.

**Faculty as change agents.** As noted, many of the full-time professors at College X have developed a solid understanding of how to develop an integrated course where the EES learning goal, the corresponding teaching activities, and the assessment are clearly interrelated. When outcome-based education was introduced, these instructors became what Katz and Dack (2013) refer to as informal leaders, by sharing their expertise and supporting others in planning an alignment between what is articulated on the course outline, what is taught, and how it is assessed. In this OIP, the curriculum development and renewal process depend upon the development of faculty in the context of highly functioning program teams. Informal leaders with expertise in EESs will continue to build momentum, and consolidate the process (Cawsey et al., 2016, p. 299). Change will be accelerated by sharing stories of what worked and what did not through social networks where experimentation and instructor reflection are encouraged (Fallon & Barnett, 2009; Washer 2007). It is these collegial relationships and inclusive discussions

that characterize post-secondary institutions as learning organizations (Holyoke, Sturko, Wood, & Wu, 2012; Patrick & Fletcher, 1998).

Sustaining institutional change depends upon faculty willingness to take risks and experiment (e.g., Taylor & Taschereau, 2014). Sharing the results of action research studies that connect these strategies to better grades, increased retention rates, and higher employment rates will promote an understanding of how important it is to develop EESs among college students. Acknowledging and celebrating these accomplishments can lessen differences in understandings regarding EESs and thereby inspiring a shared vision for EESs (Kouzes & Posner, 2012).

Finally, faculty can continue to lead the way by taking advantage of the numerous opportunities to reflect upon feedback from our students, graduates, and employers. These feedback loops include KPI data, Instructional Feedback Surveys (IFS), Program Advisory Councils, and Quality Assurance Processes. When EESs are integrated, the skill sets developed are more likely to resemble what employers are seeking. In this OIP, students, recent graduates, and employers will take an active role in offering feedback related to EESs through Program Advisory Councils and Program Review Committees by discussing what and how employability skills are being taught and assessed. These processes are already in place, and they drive the continual renewal of core vocational program curriculum.

**Responsibilities of students.** Certainly, students as learners bear some responsibility in ensuring that by the time they graduate and are ready to enter the workforce they are able to demonstrate the prerequisite employability skill sets. Throughout the elementary, secondary, and post-secondary years, there have been ample

opportunities to learn from the feedback offered by teachers and professors alike. Similarly, home chores, part-time employment, and extracurricular activities offer additional learning opportunities to develop basic skill sets such as showing respect for others, working cooperatively with others, managing time, and taking responsibility for one's actions.

However, when students arrive on campus with the mindset of student as customer, EESs become viewed as a product they have purchased as opposed to skill sets they have worked to develop (Lees, Anderson, & Avery, 2013, Tomlinson, 2012). As Laing and Laing (2016) note, the underlying belief is that the faculty member is responsible for ensuring the student possesses the learning outcomes, not the student. As an end product of this assumption, EESs are static and do not change over time. This mindset contributes to the skills gap.

Critics of the metaphor of student as consumer suggest that students should be taught to regulate their own learning. Critical self-reflection (e.g., Dweck, 2006), and learning to track and manage their own employability (Bridgstock, 2009) are possible strategies. Adopting portfolio assessments as capstone projects can increase learner awareness of the skill sets they have developed (Martini & Clare, 2014). Using an integrative approach to portfolio development, Peet (2015) found that not only did students develop EESs, but also their self-understanding developed as well. Portfolio assessment then is a viable strategy for documenting life-long as well as life-wide learning and for encouraging students to take responsibility for managing their own employability.

**Responsibilities of Employers.** If there is any hope of reducing the skills gap, employers must recognize that merely increasing the pressure upon colleges will not suffice. Faculty members and employers need a shared understanding about which EESs are needed and how they are demonstrated in the workplace (Ellis et al., 2014; Rosenberg et al., 2012). Participation in Program Advisory Councils and program review committees are two opportunities that employers can utilize to share their concerns. Here, employers could offer input on whether assessments are authentic in their ability to mirror workplace demands. Furthermore, employers need more realistic expectations for entry-level skills as the required level can vary by occupation (Chapman & Neil, 2010; Smith & Krüger, 2008). Finally, employers need to reverse the 40% decline in workplace training that has accumulated over the past two decades (Stuckey and Munro, 2013) and recognize that ongoing training is necessary if graduates are to keep their skills fresh and relevant.

In conclusion, this OIP relies on the institution's ability to be and become a learning organization (Senge, 1990). The academic leadership, curriculum coaches, faculty members, and students each play a role in closing the skills gap. The next chapter further describes plans for implementing, monitoring, and evaluating this OIP along with the ethical considerations and challenges inherent in this change process.



### **Chapter 3: Implementation, Evaluation, and Communication**

In this final Chapter, plans for implementing the change initiative are presented. The Plan, Do, Study, Act (PDSA) model is suggested as a tool for monitoring and evaluating the change initiatives. The key ethical considerations for change agents are addressed, followed by proposed strategies for communicating the OIP to key stakeholder groups.

#### **Change Implementation Plan**

Clearly, change agents must view this Problem of Practice within the broader organizational context. Mento, Jones & Dirndorfer (2002) forewarn that focusing narrowly on the problem alone leads to diminished efforts over time. Instead, these authors recommend that the focus of the problem be repeatedly related back to the vision: ensuring that our graduates are equipped with the knowledge and skills to secure and maintain employment in their chosen profession. This author is well positioned in a leadership role to advance this vision through the prioritization of the following six goals:

1. Increase the level of feedback given to faculty regarding the full integration of EESs into course design as mapping matrices are discussed during the cyclical review process.
2. Advocate for an increase access training for faculty at both the regional and institutional level. Support faculty in the development of workshops that offer strategies for teaching and assessing EESs, the value of adopting a growth mindset, and tools for creating student portfolios.
3. Support faculty in the development of resources related to the teaching and evaluation of each of the EESs that could be added to the Teaching and Learning website. This link is external and available to all part-time instructors.
4. Advocate for increased opportunities for conversations about EESs and intra-departmental collaborations. College X is working to establish itself as a Learning Community through the establishment of learning cafés, teaching circles, communities of practice, and networks of improvement.

5. Advocate for an enhancement of the processes that elicit feedback from employers regarding the relevance of EESs through surveys administered during the cyclical review and through Program Advisory Councils.
6. Take a leadership role in building a team of representatives from across the campus to form a working group responsible for advancing the EES agenda. This group would include representatives from the Student Union, Employers, Student Services, Recreation Services, Athletics, Faculty, Management, and the Department of Curriculum and Instruction. This role would involve teaching others to recognize opportunities for developing EESs in cross-campus activities as well as promoting awareness of cross-campus opportunities to support career readiness (see Figure 1.4).

This plan for change is indicative of the author's shift away from viewing change as something that happens when the right leader develops and enforces the right policies.

Reframing this problem of practice through Bolman and Deal's Four-Frame Model (2013), as well as the application of this model to the complexities of postsecondary learning environments (Bolman and Gallos (2011), moved the focus away from follower compliance towards follower engagement and empowerment. Suspending judgment and continuing to examine this problem of practice through the metaphors offered by Morgan (2006) and Manning (2013) challenged long held beliefs that adapting meant losing ground. Through these analyses this author embraced organizational anarchy (Manning, 2013) as a result of the natural cycles within the academic year and recognized the diversity within the teaching faculty as one of our greatest strengths.

**Strategic organizational chart.** An organizational improvement plan that recognizes collaboration among stakeholder groups necessitates a movement away from hierarchical organizational charts which isolate leaders from potential change agents. Figure 3.1 depicts an interconnected organizational structure with college leadership at the centre and web-like lines of communication crossing between programs of study.

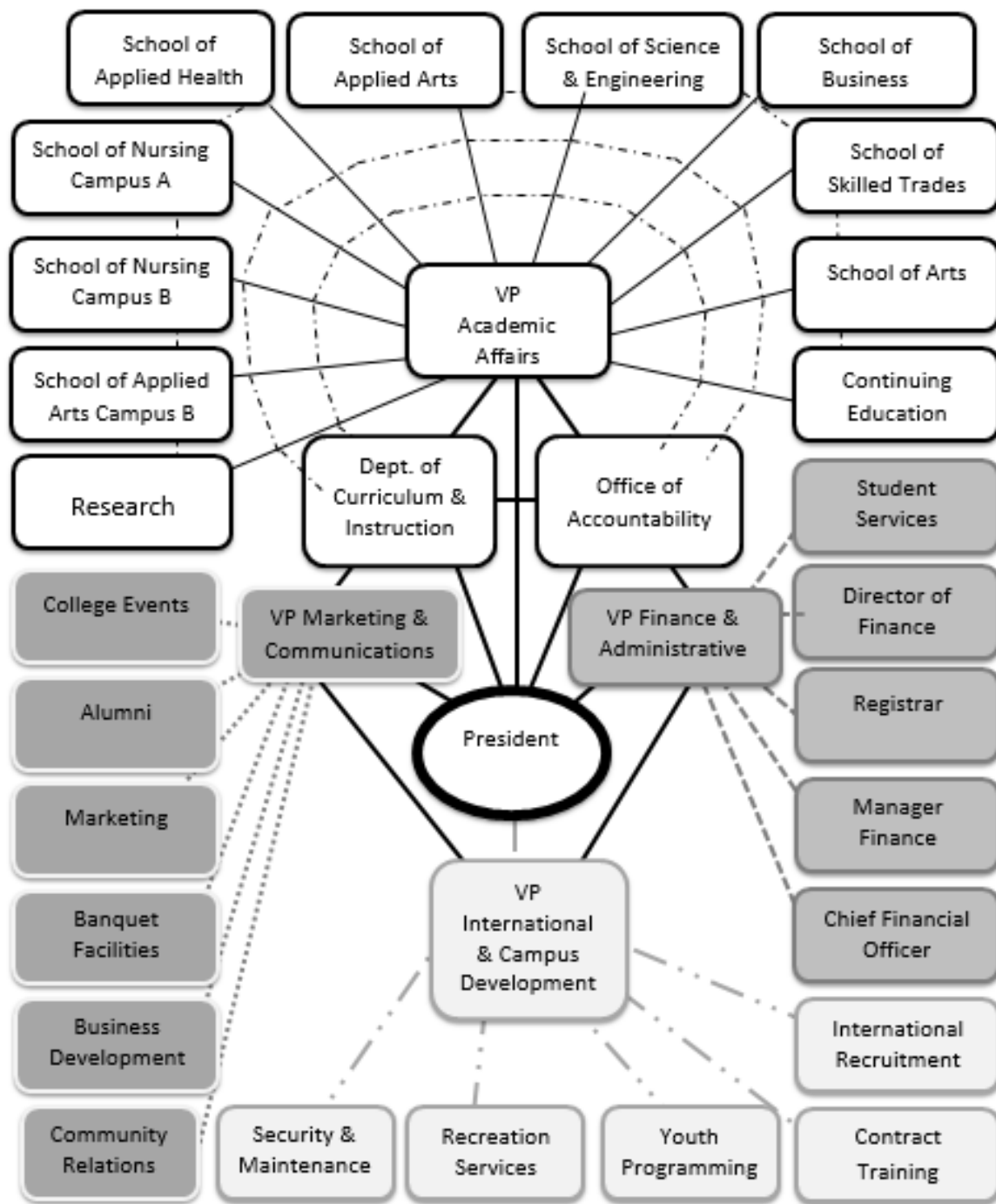


Figure 3.1. Strategic organizational chart illustrating Manning's (2013) webs of inclusion and open lines of communication.

Inspired by Manning's Web of Inclusion (2013), this feminist model encourages greater participation of key stakeholders. Instructors need opportunities to consult on proposed policy changes that may impact innovative teaching and assessment strategies before these policies are approved. Those responsible for managing Work-Integrated Learning Databases need to collaborate with those in the Registrar's office and with program coordinators to ensure that adequate placement hosts have been found to support projected enrollments and the learning requirements that vary from program to program. Opportunities to innovate and share talents across traditional lines of reporting will facilitate collaboration between professors and instructors from different schools of study. Networked Improvement Communities (Bryk, 2014; Bryk, Gomez & Grunow, 2011) are more likely to thrive when organizations are less hierarchical and more inclusive.

**Managing the transition.** Involving all stakeholder groups will help sustain the focus on the broader goal of preparing students for their chosen careers. It is anticipated that employers will appreciate opportunities to discuss how EESs are relevant to their workplaces, particularly if examples of student projects are showcased. Their feedback may provide encouragement to faculty to continually invest their time and energy in developing innovative approaches to teaching and assessing EES. Student reaction may be mixed, with some appreciating the clear descriptions of EESs assessment and others resisting the additional requirements. The force-field analysis presented in Chapter 1 uncovered diverse faculty perspectives on this change initiative. The very real hurdles and obstacles to implementation (such as limited teacher/student contact hours and faculty workload) need to be considered as the faculty tailor their strategies for their courses and programs of study. The nuanced strategies of Humble Inquiry can be utilized

here to stimulate open and honest communication through genuine inquiry absent of the intention to influence responses (Schein, 2013). The strategies of “Humble Inquiry” must be grounded in collegial respect and a genuine interest in faculty program goals and teaching aspirations.

The review of mapping matrices between faculty teams and curriculum coaches is one occasion to learn more about faculty understandings regarding EESs. Additional opportunities exist when faculty request revisions of their course outlines. Katz and Dack’s notion of Collaborative Inquiry (2013) is useful as a collegial process for advancing and deepening shared understandings. Listening to differing perspectives often creates cognitive dissonance for all parties (Mintrop, 2016), which prompts the reassessment of current beliefs and practices. This OIP seeks to avoid “the path of contrived consent” (Mintrop, 2016, p. 217), where instructors comply by checking off EESs on course outlines (Rutt et al., 2013; Sumsion & Goodfellow, 2004). Listening with the intention of understanding is essential to the role of a curriculum coach. Respectful conversations can challenge any mistaken conceptualizations of teaching and assessing EESs (Katz & Dack, 2013). Ongoing support and the sharing of practical solutions among and between faculty teams will ease this workload. In the final analysis, it is crucial for faculty teams to select the changes they feel they can realistically accomplish given any barriers and obstacles (Armenakis & Harris, 2009).

The VP of Academic Affairs, in collaboration with the Director of the DCI and the curriculum coaches, will advance the vision of College X as a Learning Community (Patrick & Fletcher, 1998; Schön, 1987; Senge, 1990). Engaging others with relevant knowledge, skills, and abilities to accelerate the change initiative will build support for

this OIP (Cawsey et al., 2016). Monthly Learning Cafes (e.g., Lefika & Mearns, 2015) will be scheduled offering faculty a venue where they can share innovations and ask questions related to teaching and assessing EESs. A Community of Practice (CoP) will be launched as a space for facilitating the more informal interactions that often characterize workplace learning, and the discussion of both theoretical and applied understandings of EESs (Boud & Middleton, 2003; Eddy & Mitchell, 2012). Faculty will be invited to join Teaching Circles (Colgan & DeLong, 2015) where they can observe each other teach and consider different andragogic strategies. These strategies can inspire faculty to work collaboratively rather than autonomously and can promote interdisciplinary thinking and scholarship.

As noted in the Comparative Analysis in Chapter 2, there are no additional staffing requirements needed to continue implementation of the integrated course design. Existing curriculum coaches and trainers will work to build capacity as faculty members make sense of and actualize Ministry requirements. Simply providing faculty with additional resources is less likely to be effective: complex changes necessitate faculty support that is less directive and more facilitative (Higgs & Rowland, 2005).

**Potential implementation issues.** As noted in Chapter 1, the workload and resulting participation rates of college faculty ebb and flow through the academic year (Manning, 2013). Many instructors are more able to attend workshops and PD events during the May/June period when teaching loads are lighter. This season also provides an opportunity for many faculty teams to gather and work collaboratively on their curriculum reviews and resulting curriculum changes. Subsequently, the workload in the Department of Curriculum and Instruction peaks during this period. It is critical to note,

however, that some instructors carry a full teaching load during this May/June period. Varying the delivery times for the Learning Cafes to coincide with the participation rates of the full-time and part-time faculty helps to address this issue. Scheduling of Teaching Circles and Community of Practice meetings within a semester are at the discretion of the faculty. Placing resources and training materials online serves to alleviate access issues by making learning an “anytime, anywhere” option for full and part-time instructors. Figure 3.2 illustrates how these considerations impact the timing of short-term and mid-term goals by placing the strategies for organizational change along the academic calendar.

Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug
5.Add EESs as agenda item on Program Advisory Councils											
6.Launch EESs Working Group											
5.Add EESs questions to Employer Feedback Survey: Cyclical Review											
4.Teaching Circle Cycle			4.Teaching Circle Cycle								
4.Two Learning Cafes offered each month: one per month related to an EESs											
3.Add resources related to EESs on external Teaching and Learning Website											
				1. Increase feedback given to faculty on EESs: Cyclical Review							
								2.Local workshops EESs strategies			
								4.Launch Faculty Community of Practice			
								2.Regional training: EESs			

*Figure 3.2.* Priority matrix for goals mapped across the academic calendar year. Note. Numerals indicate a relationship to the six prioritized goals listed above.

Change initiatives launched early in the fall semester draw college-wide attention to the employability skills gap and provoke collegial conversations about EESs. These initiatives help to increase awareness of the skills gap and lay the groundwork for program specific conversations regarding the patterns of EESs assessment revealed by the mapping matrices.

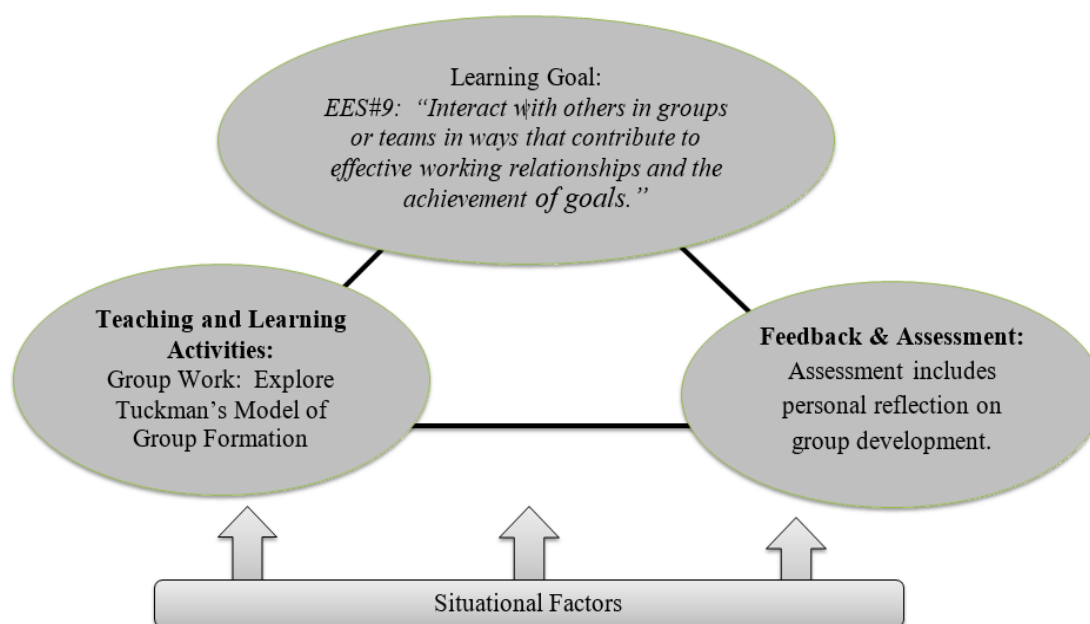
**Potential limitations and challenges.** As noted in Chapter 1, there is an over-reliance on a temporary workforce in Ontario's Community College system, with more than three part-time instructors for every full-time professor (MacKay, 2014). The task of ensuring that part-time teaching staff can integrate learning outcomes, teaching strategies, and assessments will be a recurrent one. Understandably, instructors new to teaching are often preoccupied with planning the delivery of vocational content. Pragmatic issues such as how to get keys to labs, how to handle issues with student conduct, and how to utilize college-wide computer applications and technologies often take precedence for new teachers in the survival stage of a teaching career (Liston, Whitcomb & Borko, 2006). Teaching EESs is likely not the most pressing issue for new instructors. The decline in full-time faculty positions translates into greater workload for remaining instructors and coordinators, leaving less time for engaging in EESs change initiatives.

### **Change Process, Monitoring, and Evaluation**

Despite these challenges and impediments, the alignment between what is taught, what is assessed, and what is specified in the course learning outcomes has significant consequences. Teachers tend to teach what they plan to evaluate and students tend to study what they believe will be tested (Boude et al., 2010; Goff et al., 2015). Figure 3.3



illustrates this necessary alignment for the employability skill that addresses the ability to work with others.



*Figure 3.3.* Sample integration EES learning outcome, assessment and teaching strategy. Adapted from “Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses” by L. Dee Fink (2013). (2nd ed.). San Francisco, CA: Jossey-Bass.

Failure to learn an EES can occur when course learning outcomes are not taught, or when what is assessed does not correspond to what was taught in class (Fink, 2013).

Specifying how EESs will be evaluated on course outlines can clarify the learning expectations for students and for part-time instructors who are teaching courses they did not develop.

**The cyclical review process.** Quality Assurance Processes at College X contain a Cyclical Review which is scheduled for 20% of the programs of study each academic year. The cyclical review process includes:

- an external review of the occupational relevance of CLOs completed by employers and employees working in that field;
- stakeholder feedback from employees, graduates, and current students obtained through a survey and/or focus groups;
- a review of program vocational learning outcomes completed by the faculty;
- a course outline compliancy review completed by the faculty;
- mapping of vocational learning outcomes (VLOs) across programs of study; and
- mapping of EESs across programs of study.

Curriculum coaches meet with the faculty teams to provide additional support in analyzing the laddering of VLO assessment as well as the balanced assessment of EESs learning outcomes across the semesters of a program. Department teams then review the analysis and develop action plans for modifying the curriculum. Finally, Program Advisory Councils review proposed changes and once approved, the changes are made to the overall program chart and corresponding course outlines. To date, three iterations of the cyclical review process have been completed resulting in the review of approximately 50 of the 100 college programs.

**The Plan-Do-Study-Act (PDSA) method.** The cyclical design of the curriculum development and review process lends itself to a quality improvement model that is iterative in nature. The Plan-Do-Study-Act (PDSA) method affords opportunities to learn quickly from interventions with a smaller scope while preserving the flexibility to respond to the unique needs of the individual programs of study (Taylor et al., 2013). Rather than waiting five years until all 100 programs have been through the cyclical review, it is possible to apply the PDSA to each review cycle. Moen and Norman (2009) suggest documenting unexpected observations and tracking the effectiveness of the

change initiative while changes are being implemented. Modifications in the plan are based on an analysis of data collected during the implementation. Simply put, the PDSA method frees the curriculum coaches to adapt the cyclical review protocol as they develop an understanding of how to best support their peers.

Moen and Norman (2009) explain that PDSA begins with the *planning* stage where change agents identify the improvement they are trying to make, how they will bring about that change, and how they will determine the impact of proposed changes (p. 9). In the *do* stage, the plan is then carried out, and changes are documented. Once the data is collected, the *study* stage begins, and the results are analyzed. Depending on this analysis, a decision is made to repeat, modify, or abandon the change in the *act* stage. The cycle is then repeated.

***Improvement plan.*** In this OIP, the EESs matrices reveal several problems that would have been difficult to detect without this “birds-eye” view: the tendency to either over or under assess EESs, as well as the tendency to omit details that would clearly link an assessment to the EESs to which it is mapped. As noted in Chapter 1, these problems are not uncommon in post-secondary institutions, and the root cause likely varies from program to program. For example, professors are less likely to assess EESs that seem unrelated to their core vocational curricula (Barrie, Hughes, Crisp & Bennison, 2012).

In previous iterations of the cyclical review, faculty teams were given a mapping matrix where the assessment of each EES was noted on a spreadsheet with an X (see Table 3.1). The matrix illustrates where EESs are assessed within a program of study. The column to the right labelled “total courses” provides the total number of courses that assess each EES.

Table 3.1

Example of the original strategy for mapping EESs

PROGRAM XXX		Level 1						Total Courses
Essential Employability Skills		Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	
Learning Outcomes		Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Total Courses
1	communicate clearly, concisely, and correctly in the written, spoken, and visual form that fulfils the purpose and meets the needs of the audience	X	X					19
2	respond to written, spoken, or visual messages in a manner that ensures effective communication	X	X					21
3	execute mathematical operations accurately	X	X		X	X	X	28
4	apply a systematic approach to solve problems	X	X		X	X	X	25
5	use a variety of thinking skills to anticipate and solve problems	X	X			X	X	22
6	locate, select, organize, and document information using appropriate technology and information systems	X	X		X		X	17
7	analyse, evaluate, and apply relevant information from a variety of sources	X	X					16
8	show respect for the diverse opinions, values, belief systems, and contributions of others	X						3
9	interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals	X	X					6
10	manage the use of time and other resources to complete projects	X	X					10
11	take responsibility for one's own actions, decisions and consequences							2
Number of Different EESs Assessed		9	9	0	3	3	4	168

Note. The letter X indicates that the Essential Employability Skill was assessed at least once within the course. Grey highlighting indicates that the link between the assessment and the EES was not clear. The total number of courses assessing each EES in this program is provided in the far right column.

The map is a tool to ensure that EESs are adequately assessed throughout the program and before students engage in practicums. This is essential feedback. When the

assessment details do not support that connection, it is impossible to verify that the program is meeting Ministry requirements. For example, an instructor may very well be teaching students how to take responsibility for their own actions and assessing it through an assignment that incorporates self-reflection, or, or the instructor may be selecting this EES because the outcome of the students' attempts to demonstrate a skill are visually evident (e.g., baking a soufflé). The latter approach contributes to the skills gap by not teaching and/or assessing the skill set. In this case, the links from the teaching strategy to its corresponding learning outcome and its assessments are broken (Fink, 2013). It became apparent that using an X to document assessment did not capture the number of times each EES is assessed within each individual course because each course has more than one assessment. In this regard, the matrices do not give faculty teams a comprehensive appraisal of their program-wide strategy for assessing EESs. Table 3.2 provides an example of a revised strategy for mapping EESs and illustrates the magnitude of this problem of practice by simply replacing the Xs with the number of times each EES was assessed within each course. This strategy accounts for the variance in the number of assessments in each course. The number of courses assessing each EES *at least once* is on the right. This column is labelled Total Courses. The total number of times each EES was evaluated is on the far right. Now faculty can see, for example, that EES#1 was assessed 85 times in this program. The total number of EESs assessments per course is provided along the bottom, along with the number of different skills assessed per course. In this program, the 11 EES learning outcomes are evaluated 847 times, over six semesters. This is in addition to the assessment of each vocational learning outcome. The revised matrices offer faculty an opportunity to question whether or not they need to

assess each EES as frequently as they do, and may free up time to teach and evaluate additional vocational content.

With these data in hand, faculty teams can reflect upon their curriculum plans and determine whether or not the EESs are actually being taught and assessed, or whether there was an assumption that the learning has been acquired. In fairness, it is important to note that the belief that EESs can be learned without direct instruction is not uncommon among instructors (Jones, 2010; Sumsion & Goodfellow, 2004). Furthermore, when analyzing these data, it is important to remember that the vocational learning outcomes and the EESs can be quite integrated into some tasks.

We would expect to see, for example, that “the ability to execute mathematical operations accurately” will be taught and frequently assessed in the Civil Engineer or in the Accounting Program. In these cases, it is easy to verify that the EES is being assessed because the description of the assessment clearly links to that EES or the vocational content being assessed is clearly related to the EES. However, there are times when an EES is not as easily integrated with vocational content. Here it is important to be strategic about where in the program that EES will be taught, particularly when total program hours are limited. For example, faculty teams may decide that introducing students to a reference management tool in Semester 1 is an effective retention strategy as it will help students get on the right foot in terms of organizing data files more efficiently. Alternatively, the ability to take responsibility for one’s actions (MTCU, 2009a) might best be taught and assessed along with course content that addresses industry standards.

Table 3.2

Example of the Revised Strategy for Mapping EESs

PROGRAM XXX		Level 1						Total Courses	Total EESs
Essential Employability Skills		Course 1	Course 2	Course 3	Course 4	Course 5	Course 6		
Learning Outcomes		Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Total Courses	Total EESs
1	communicate clearly, concisely, and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience	11	4					19	85
2	respond to written, spoken, or visual messages in a manner that ensures effective communication	8	3					21	77
3	execute mathematical operations accurately	9	4		7	6	5	28	141
4	apply a systematic approach to solve problems	8	4		9	1	4	25	160
5	use a variety of thinking skills to anticipate and solve problems	7	3			1	2	22	124
6	locate, select, organize, and document information using appropriate technology and information systems	11	4		7		1	17	99
7	analyse, evaluate, and apply relevant information from a variety of sources	2	1					16	69
8	show respect for the diverse opinions, values, belief systems, and contributions of others	8						3	13
9	interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals	9	5					6	37
10	manage the use of time and other resources to complete projects	1	7					10	36
11	take responsibility for one's own actions, decisions and consequences							2	6
Number of total EES Assessments per course		74	35	0	23	8	12	—	847
Number of Different EESs Assessed		9	9	0	3	3	4	168	—

Note. The number of times each EESs is assessed within a course is provided. Light gray highlights indicate that the link between the assessment and the EES was not clear. Dark gray shading indicates additional opportunities for assessing EESs.

Vocational knowledge and EESs can be integrated when this generic skill is understood as being related to a student's ability to critique the quality of his or her own work in relation to vocational standards (Boud et al., 2010). The integration of EESs and vocational content can save much-needed student/teacher contact hours. This implementation plan is based on the hypothesis that the additional data provided by the mapping matrices, coupled with EESs resources and support, will improve the fit between assessment strategy and EES. It is also expected that assignment descriptions will provide greater clarity regarding how EESs are being assessed within each course.

***Implementation (Do).*** The protocol for providing feedback about EESs to faculty typically lasts one hour. During this time the instructors are presented with their vocational and EESs matrices and descriptions of the inconsistencies that were found. The work of modifying course outlines is often done independently, with faculty editing the courses they typically teach. This protocol can be expanded to invite more discussion of the mapping matrices during the feedback session. The invitation to contemplate alternative explanations and potential solutions along with the support of the curriculum coaches who are also faculty members would promote the collegial conversations that define learning organizations (Senge, 1990). Furthermore, the active engagement of faculty teams in analyzing and reflecting upon the EESs matrices is more likely to result in the implementation of change (van den Akker, Bannan, Kelly, Nieveen & Tromp, 2013). Open-ended questions that do not try to influence faculty decisions are the best strategy for increasing collegial conversation in this context (Schein, 2013). Schein (2013) notes a greater tendency to share perspectives and seek assistance when the climate is defined by a genuine attitude of respect, curiosity, and humility.



Depending upon the needs of the faculty teams, additional resources could be offered including a list of reflective questions to prompt consideration of EESs placement within a program, a list of the defining skills for each EES learning outcome (MTCU, 2009a), a list of vocational tasks where EESs are integrated with vocational content (Government of Canada, 2013), and strategies for improving descriptions of assessments used by other instructors. A diagram illustrating integrated course design (Fink, 2013) for EESs could also be made available. Van den Akker et al. (2013) note that most instructors need ongoing support for the implementation of complex tasks. Additionally, follow up contact via email would remind faculty of the assistance available through the Department of Curriculum and Instruction, and would be an opportunity to share department-specific resources such as articles, websites, and rubrics for assessment. A multi-pronged approach to supporting faculty is considerate of scheduling conflicts and has the added benefit of easing resistance to change when the task is complex (Kotter & Schlesinger, 2008).

Moen and Norman (2009) emphasize the importance of documentation during the implementation. Reflecting upon faculty comments, questions, and areas of confusion will facilitate the iterative learning process for the curriculum coaches. Following up with faculty who are unable to attend with the provision of additional resources will ensure that no one is left out of the deliberations. A leverage analysis (Cawsey et al., 2016) will identify those faculty members who can be drawn upon to share their integrated course designs in Learning Cafes or local workshops. It can be quite difficult to facilitate a feedback session while collecting information that will be used to improve the process (Mintrop, 2016). Two curriculum coaches will participate in the feedback

sessions. Observations can be checked for accuracy and understanding immediately following the feedback session.

*Study.* The analysis phase of the PDSA model would begin once the programs scheduled for cyclical review have received their feedback. Mapping matrices can be recreated on a sample of the programs once all curriculum changes have been submitted. This pre/post comparison will help determine whether this process is repeated for the programs scheduled for cyclical review next year, or whether additional modifications need to be made in the protocol. Requests for additional support and the type of changes made on course outlines can also be analyzed with the intention of refining the cyclical review process.

*Act.* During this final phase, decisions are made as to which changes will be adopted or whether the review process will be replicated as is. Bryk, Gomez and Grunow (2011) note that the goal is to refine and revise the change strategy. The curriculum coaches may augment the feedback cycle with additional resources or tools for teaching, or they may modify the strategies used to engage the faculty in dialogue about the difference between what is recorded on the course outline and what actually happens in the classroom. The modifications are informed by the observations collected during the Do Stage. Ineffective change strategies inform change agents as well; these learnings ought to be incorporated in change plans as well. The cycle is then repeated with new lessons learned informing plans in the next iteration (Taylor et al., 2013).

### **Leadership Ethics and Organizational Change**

Certainly, one of the most powerful drivers of quality assurance among Community Colleges in Ontario is the recent movement from an audit process to an

accreditation process (OCQAS, 2015a). As noted earlier, Colleges without accreditation status may experience a decline in application rates, a loss of employer interest in offering practicums, and a decrease in graduate employment rates. Nevertheless, the motivation for meeting and exceeding quality assurance standards must come from a deeply-rooted, moral obligation to serve our students and our communities. Ethical leadership in post-secondary institutions is grounded in the steadfast conviction that the quality of our work impacts students' ability to learn, as well as quality of life after graduation (Ehrich, Harris, Klenowski, Smeed, & Spina, 2015). To this end, and specific to this OIP, is the commitment to ensure that we can ascertain what skills, attitudes, and knowledge our graduates can reliably demonstrate. Clearly articulated course learning outcomes and assessment strategies are critical steps in ensuring this obligation is met.

The College must be diligent in developing, implementing, and updating policies that guide integrated course design. H. Liu (2015) asserts that these policies must be written with the ethical consideration of their impact on our students, their professions, and the broad community. For example, a policy that specifies that students receive feedback on at least 30% their tests and assignments by mid-semester ensures that students have an opportunity to adjust their learning strategies before it is too late, thereby increasing the likelihood they will achieve the course learning outcomes. Furthermore, internal processes for monitoring adherence to these policies on an ongoing basis must be in place. Mintrop (2012) adds that curriculum coaches and administrators share in the responsibility of ensuring that there is an alignment between the College's internal quality assurance processes and those employed by accreditors.

Consistent procedures for evaluating course outlines are essential. For the sake of consistency, these procedures should be checked for understanding with others in the Department of Curriculum and Instruction (National Forum on Education Statistics, 2010). It follows that curriculum coaches must be committed to ensuring that mapping matrices are created with care, that consideration is given to the usefulness of these data to program teams, and that their interpretations of the curriculum are checked for accuracy with faculty. Revisions to quality assurance strategies and to the interpretations of andragogic practices must be properly documented (National Forum on Education Statistics, 2010).

Curriculum coaches are mindful that supporting faculty as they progress through the cyclical review process necessitates attentive consideration of the unique challenges faced by faculty teams. There is considerable variance among community college programs, created by a host of factors not limited to MAESD requirements, vocational accreditation bodies, and student demographics. Noddings (2012) labels the moral obligation to listen with receptive attention to the needs of individual faculty and program as care ethics. This is a morality that, according to Litchfield, Frawley, and Nettleton (2010), goes beyond the professional codes of conduct prescribed to college faculty. In addition, an ethic of care calls upon curriculum coaches to listen with receptive attention to faculty aspirations and goals (Parris & Peachey, 2013) grounded in collegial respect for their peers as competent, capable, and committed professionals (Price, 1998). H. Liu (2015) extends the care of ethics to include our duty to involve colleagues in processes and conversations where meaning is being negotiated. Critical to this inclusion is

consideration of power dynamics that may either limit their full participation or suppress their concerns (Cunliffe & Eriksen, 2011).

The adoption of an ethics of care in this OIP fits well with the identification of servant leadership as a leadership approach to change (Bolman & Gallos, 2011). An ethical stance towards collegial support prompts curriculum coaches to first relate to their colleagues as fellow instructors before assuming the role of a peer assessing their course outlines. The servant leader is characterized by his or her humility, authenticity, and acceptance of others (van Dierendonck, 2011) as well as the conviction that leaders must remain open to learning from their peers. In this OIP, servant leaders strive to understand how their peers see EESs as fitting within their courses and where EESs assessment best takes place. Servant leadership places emphasis on the needs of their peers while holding a vision of their colleagues as responsible, trust-worthy, and growth-oriented (van Dierendonck, 2011). It is this vision that enables a servant leader to rally behind faculty innovation, believing they hold the best interests of their students and the college at heart. Curriculum coaches then assume an ethical responsibility to advocate for resources and training that supports their colleagues' ambitions. Simply put, the image leaders hold of faculty impacts how leaders treat faculty.

Equally applicable to this OIP is the adoption of the ethics of justice (Ehrich et al., 2015) which inspires educational leaders to consider the basic principles of equity, equality, and equality of opportunity (p. 205). This prompts curriculum coaches to ensure that all instructors teaching in the program are invited to participate in the cyclical review process, including instructors from other departments who teach one or two courses within that program of study. It spurs us to be mindful that imbalances of power

within departments may result in the exclusion of those with different approaches to teaching and learning. This stance urges servant leaders to evaluate the culture of College X not only for its tolerance of contrasting points of view but for the ability to embrace the core principles of democracy in the workplace. Portelli (2012) clarifies by stating that:

Democracy is not a way of life or a moral and political ideal that promotes standardization, or one size fits all, or that promotes fear and shuts off the inquiry into differing albeit conflicting views. The authoritarian crushes disagreements and differences; the soft liberal puts disagreements aside as he or she believes they are all fine as long as they do not interfere with the rights of the individual; the genuine democrat acknowledges the differences, does not shy away from disagreements, and rather than crushing or hiding disagreements and differences, he or she meaningfully engages with disagreements and differences. (p. 10)

The potential for the marginalization of those with differences of opinion compels curriculum coaches to be intentionally inclusive in the co-construction of knowledge regarding EESs. This consideration extends to the scheduling of training events, the inclusion of faculty in feedback sessions, and the distribution of faculty resources.

Finally, Ehrich et al. (2015) include the ethics of critique in their considerations for school leadership. In this OIP, ethics of critique counsel curriculum coaches to offer provocations that inspire instructors to reflect upon their teaching and assessment strategies. Katz and Dack (2013) and Schein (2013) suggest respectful questioning strategies that facilitate the uncovering of assumptions and preconceptions. The goal of offering feedback to faculty on EESs assessment strategies is to prompt a learning conversation. Feedback must be delivered with an ethic of care, so as not to overwhelm or discourage colleagues (Kemmis, 2010). In that this OIP is an investigation into how

curriculum coaches can best support the faculty, the ethics of critique also ask the same of us: Is there a way I can do this better?

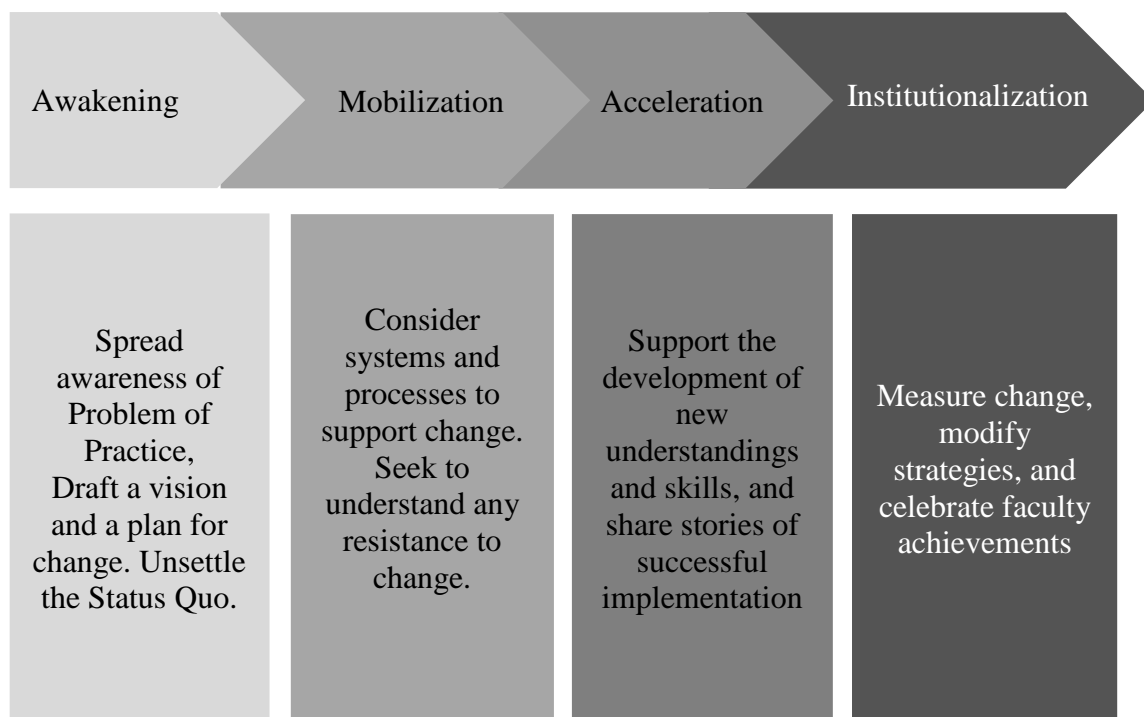
**Ethical considerations in the PDSA model.** Quality assurance and improvement studies do not necessitate a Research Ethics Board Review (The Government of Canada, 2014). Nonetheless, it is duly noted that the conversations between college instructors and curriculum coaches are deemed to be confidential. Any data collected with the purpose of improving the support offered through the Department of Curriculum and Instruction are considered to be confidential, including mapping matrices which will be used in pre-post assessments.

In accordance with the University of Western Ontario's Integrity and Ethical Protocols for Organizational Improvement Plans, any identifiers of the institution have been generalized including the location of the institution, titles of departments, and leadership titles. The institution is referred to as "the College" or "College X." Genders have been switched in some instances. Any sample data included in the OIP for purposes of explanation have been changed to prohibit identification without jeopardizing the validity of the information.

### **Change Process Communications Plan**

Cawsey et al. (2016) recommend that change agents select communication strategies that align with the goals for each stage of organizational change. Furthermore, the message itself needs to be adjusted to fit the needs of various stakeholders, with consideration of how the message will be interpreted and responded to. Figure 3.4 depicts the basic components of the Change Process Communication Plan across the four stages of the Cawsey et al. Change Path Model (2016).

During the Awakening Stage of Cawsey, Deszca & Ingols's Change Path Model, change agents analyze the problem and then unsettle the status quo by communicating this need to various stakeholders (2016). At this point, the director of the Department of Curriculum and Instruction discusses the Problem of Practice, the vision for change, and Organizational Improvement Plan with the College leadership team. Samples of mapping matrices and assessment descriptions can be shared to illuminate and clarify the Problem of Practice. The link between the change initiative and the College's strategic directions is also highlighted in this stage.



*Figure 3.4.* Change process communication plan across Cawsey, Deszca and Ingols's Change Path Model (2016).

A College-wide focus on Essential Employability Skills would need to be presented by the College President to the faculty in a Town Hall meeting. Faculty will

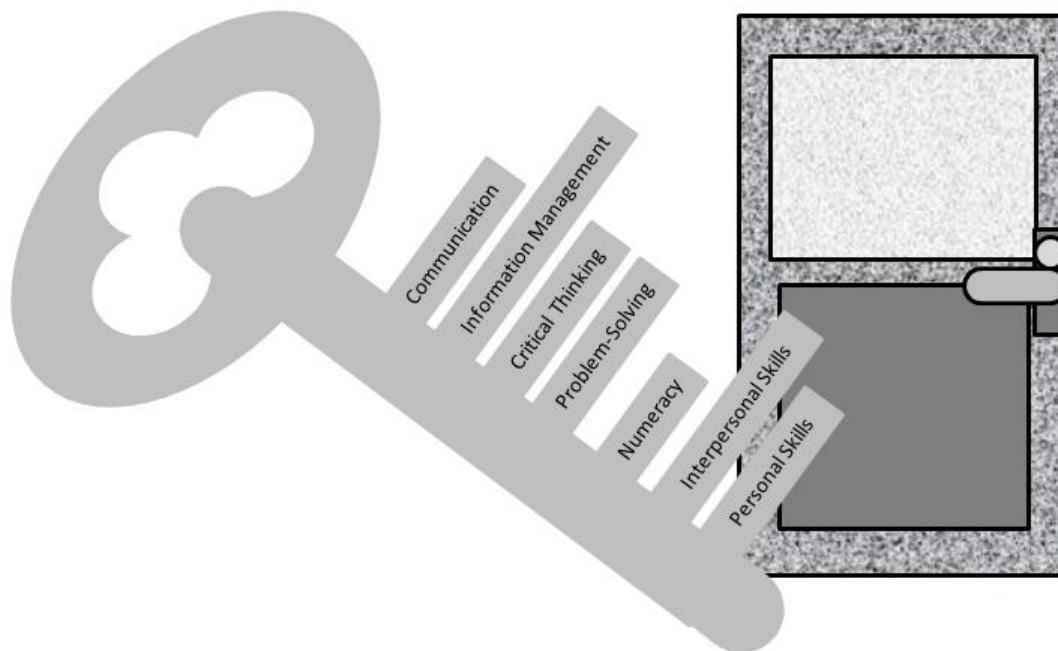


be listening for assurances that the change initiative will be sustained over time with necessary training and resources. The President's message would be shared in a follow-up email to ensure those not in attendance are notified. When the academic staff assembles at the start of each semester, the emphasis on EESs would be reinforced by the VP of Academic Affairs. College instructors also anticipate that substantial changes will be reiterated by their immediate supervisors, the department chairs.

In a post-secondary environment, strategies for presenting the OIP to the faculty responsible for implementing the change must consider the diversity among college faculty and their programs of study. The information ought to be shared broadly through multiple channels to accommodate the fluid participation rates of the faculty (Manning, 2013). Differences in delivery models for college programs dictate when the teaching staff is immersed in grading, or off campus supervising students on work-integrated learning experiences. These conditions necessitate a multi-pronged approach with intermittent messaging (Kotter & Schlesinger, 2008).

College instructors are less likely to be receptive to change initiatives when the reason for change is adherence to policy or provincial legislation (Cawsey et al., 2016; Lunenburg, 2010). Instead, Kouzes and Posner (2012) recommend that change initiatives be framed by the authentic concerns and inspirations of those implementing change. Ontario's College system was designed to meet the workforce needs of local communities (Council of Ministers of Education, Canada, 1999; Skolnick, 2010) and many of our professors identify with these early roots. For many college faculty, education that leads to employment has always been what distinguishes colleges from universities.

The broader message should connect the Essential Employability Skills directly to the probability that College X's students will find employment in their field of study. While connecting employability skills to employment sounds slightly obvious, many instructors emphasize vocational knowledge and skills over generic skills (Ellis, Kisling & Hackworth, 2014). Morgan (2011) recommends the use of metaphors or images to evoke an understanding that resonates with intended recipients. The literature on generic skills has already generated such an image as generic skills are often referred to as the *keys* to success (Ellis, Kisling & Hackworth, 2014), the *key* to gaining and keeping employment (Pool & Sewell, 2007), and the *key* skills (McCurry, 2003; Washer 2007) that will open the doors to employment (International Youth Foundation, 2013). Figure 3.5 illustrates how this metaphor might be utilized to convey the value of EESs to both faculty and students. Employing this metaphor may be effective in elevating the importance of EESs relative to the vocational content that competes for precious classroom hours. Gentle reminders that parents and employers alike expect students to graduate from college with the skill sets that lead to employment (Drummon, Finnie, & Weingarten, 2015; Huber & Kuncel, 2015) may also ease resistance to change.



*Figure 3.5.* Use of the key as a metaphor to capture the importance of EESs.

During Cawsey et al.'s (2016) second stage, mobilization, the systems, and processes for advancing the OIP are reviewed by those working in the Department of Curriculum and Instruction. This would include reviewing the information provided by the mapping matrices, the protocol for sharing feedback with faculty teams, and the resources that are available for distribution to faculty teams. The meetings with program teams afford curriculum coaches an opportunity for two-way conversations about teaching and assessing EESs. These conversations are critical in uncovering the real issues faculty face in the classroom as the curriculum coaches seek to understand how to tailor our support to meet the needs of the faculty. Overburdened faculty may appreciate a slower distribution of resources and the easy access that the new website will provide. Following up with personalized emails and one-on-one conversations (Bolman & Deal, 2013; Cawsey et al., 2016; Manning, 2013) will give insight into areas faculty are

uncertain about. Kang (2015) reminds change agents that consideration should be granted to the concerns that arise when change is announced. Continuing to genuinely empathize with the challenges faced by instructors (Kang, 2015), followed by a commitment to advocate for needed resources, is essential.

Building upon faculty strengths by connecting this message to what the instructors have already learned about integrated course design will reassure faculty that some of the interactive teaching strategies they use to teach vocational content can be used to teach EESs. Relating the individual EESs to classroom behaviours will also help faculty embrace the need to teach and assess EESs. For example, most instructors can share a story or two about a group work assignment that floundered because the students lacked the interpersonal skills needed to achieve group goals. Continuing to gather information and to welcome feedback from faculty will be essential to mobilizing this OIP (Bolman & Gallos, 2011).

During the Acceleration phase, change agents build momentum (Cawsey et al., 2016) by continuing to support program teams in achieving realistic goals for teaching and assessing EESs. Inviting faculty to share stories (Kouzes & Posner, 2012) of how they have integrated EESs into their lessons will not only germinate conversations about the meaning of our work (Bolman & Deal, 2013), but it will also break down departmental silos. Momentum builds when change agents continue to consider strategies that will expedite work and reduce uncertainties (Kang, 2012). Regularly updating the faculty about new tools and shortcuts that have been posted to the website will help keep up this momentum (Mento, Jones & Dirndorfer, 2002) and ensure that resources are also available to our part-time instructors. Cawsey et al. (2016) recommend

that key messages be varied and repeated as much 15-20 times (p. 322). This can be achieved by asking the College librarian to distribute articles about EESs on a weekly basis and by offering professional development opportunities throughout the academic year.

Cawsey et al. (2016) characterize the final stage of their Change Path Model as a time for measuring change and modifying strategies. In this OIP, this will be accomplished through the PDSA Method described earlier. Kouzes and Posner (2012) recommend continuing to celebrate small wins by highlighting the accomplishments of the faculty. These stories can be regularly shared with members of the PACs and with those employers who host students in Work-Integrated Learning experiences. Cawsey et al. (2016) note when change leaders make progress towards institutional goals public, they further clarify what the original initiative was about while acknowledging the efforts of high performing teams.

### **Next Steps and Future Considerations**

College X's policies and processes (regarding EESs) were developed to document compliance with The Framework for Programs of Instruction (MTCU, 2009a) which specifies the minimum requirement that "all graduates with Ontario College credentials be able to reliably demonstrate the essential skills required in each of the six skill categories (MTCU, 2009, p. 16)." As noted earlier, this author takes the perspective that it is in the best interests of our students to ensure that their essential employability skillsets can meet the challenges presented by an unbounded degree of change in the modern workplace.

One of the challenges not addressed by this OIP is that our course outlines do not reflect the developing sophistication of EESs over time when EESs are simply *checked as assessed* (Sumsion and Goodfellow, 2004). Asking faculty to specify how each of the EESs is developed across a program of study could be accomplished by adding brief descriptions to the assessment descriptions on the course outlines. It would then be possible to distinguish between the expression of an EESs in its *generic* form as well as the specification of that same skill as it is redefined by the requirements of a particular occupation. For example, all students need to be able to manage their school and work schedules to ensure sufficient time for the completion of larger assignments. In contrast, time management skills for various occupations vary and are therefore more specific to that profession. Hair stylists, for example, need an understanding of the time requirements for various haircuts, perms and dyes and time the arrival of the next client to ensure he or she is not kept waiting.

The generic form of many of the EESs, such as communication, information management and the ability to collaborate with others, may be linked to student persistence and retention (for example see Laird, Chen & Kuh, 2008), and therefore ought to be introduced in the first semester. The more complex and specific variations of EESs would be embedded within the vocational content throughout a program of study. Providing faculty with more generalized descriptions of the typical development of the generic skill sets, along with the estimated complexity levels of the more specific EESs provided by Job Banks Canada (Government of Canada, 2013) would be useful as faculty teams reflect upon the strategic assessment of EESs within a program of study.

Furthermore, the Framework for Programs of Instruction (MTCU, 2009a) states that there should be “an appropriate depth of achievement, consistent with the Essential Employability Skills identified for the level of credentials” (p. 11), acknowledging that this level varies for those graduating with a certificate, diploma, or advanced diploma. At the very minimum, faculty members and employers could collaborate to define what is meant by college entry level and exit level EESs, keeping in mind that different levels of the various EESs are required by various occupations (Chapman & Neil, 2010; Smith & Krüger, 2008).

The obligation to ensure that EESs are adequately taught and assessed throughout programs of study could be furthered by asking faculty to distinguish between the EESs they teach and those they assume have already been learned. Mapping matrices would capture “taught or assumed” and assessed (Sumsion & Goodfellow, 2004), affording faculty teams the opportunity to reflect upon program-wide teaching and assessment strategies. Alternatively, our course outline system could prompt faculty to distinguish between those courses where the individual skills are assessed or whether there is simply an opportunity to practice the skill without assessment. These modifications to the course outlines would therefore provide a means for uncovering and challenging assumptions about how EESs are learned within a program of study (Barrie, 2007).

It is important to conclude with a reminder that this problem of practice cannot be resolved solely through the provision of faculty feedback on plans to teach and assess EESs. It must be addressed within the broader context of organizational change, recognizing existing workloads and the fluid nature of teaching. Organizational change requires the investment of time, effort and resources (Nadler & Tusman, 1989). Without

time to consider the change initiative and to share ideas with colleagues about what the change means at the classroom level and across the broader campus, a change initiative is unlikely to take hold (Gaubatz & Ensminger, 2015). This OIP proposes conversations and collaborations across divisions that have historically divided the academic sector. It will take time to learn to work together, for trust to develop and for collegial relationships to form. Fullan (2006) reminds us that success isn't a straight forward linear progression. Instead, it is more cyclical with change leaders taking time to pause, re-evaluate and consider adjustments to strategies in response to feedback from our stakeholders.

### **Conclusion**

In conclusion, this OIP presents new and revised strategies for ensuring that College X's graduates are equipped with the Essential Employability Skills that prepare them for work in their chosen careers. This change initiative seeks to narrow the skills gap by increasing the level of feedback given to program teams during the cyclical review, and increasing the individualized support to faculty following that feedback. Changes to the mapping matrices are a means to increasing both the level and the uniqueness of feedback provided to the faculty teams. The Plan-Do-Study-Act (PDSA) Method is an effective strategy for studying the effectiveness of this change initiative. Much like the ongoing reflection that faculty members engage in, the PDSA Method affords curriculum coaches an opportunity to adapt the cyclical review protocol as their understanding of how to best support their peers develops. This OIP integrates the ethics of care, critique, and justice into a process for ongoing monitoring and evaluation of EESs curriculum mapping as a quality assurance process.



It appears that College X has an excellent opportunity to effect organizational change by engaging all stakeholders in closing the skills gap, whilst being mindful that preparing students for their chosen careers remains at the heart and soul of this change. If College X is to fulfill its obligation to ensure students have an opportunity to develop these skills, the policies and practices associated with teaching and assessing EESs need to remain robust, faculty and administration need to remain vigilant and resourceful, and students need to be reminded regularly that their successful learning is vital to the development of Ontario and Canada.

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