

Is there a skills gap?

Understanding what Niagara employers are looking for in recent graduates

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By Kate J. Cassidy, Ph.D.

Director, Community Learning & Youth University,
Brock University

The workplace is changing and so are the skills required of workers (Organization for Economic Co-Operation and Development [OECD], 2013; World Bank, 2015). Increasing global competition, rapid technological advancements, the decline of basic manufacturing and the growth in service-based industries are just some of the changes affecting the nature of employment today. There is mounting speculation locally, nationally, and across the globe that organizations are being held back by a lack of workers with the right skills to meet modern organizational needs (Green, 2013; Stuckey & Munro,

national and provincial data can help identify large-scale labour-market trends it is also important to understand conditions and needs at a local level. This policy brief reports on an inquiry that explored Niagara employers' perceptions of career-readiness today. The inquiry helps identify what is needed to improve the career-preparation of young people and who is in a position to facilitate this process.

Background

There has been much attention directed to the skills gap, yet it is a concept that remains unclear. This is in part because there are a number of different issues that exist within this broad concern. The preparation of young job seekers, labour shortages specific to certain occupations, workforce barriers for underrepresented groups, skills upgrading for older workers, and succession planning for the impending baby boomer retirements are some of the topics that have been lumped together within the skills gap discussion in popular media.¹ A lack of consistent, easily accessible labour market information, both locally and nationally, has further complicated skills gap discussions (Drummond, 2014). Given the complexity of the interrelated topics and mixed evidence, it is not surprising to find that there has been no consensus on what is to be done about a potential skills gap, or by whom (Meredith, 2014; Weingarten, 2013). What is clear however is that if there is a skills gap in some form, it will have economic and well-being costs for organizations, communities, and individuals. Consequently, deeper scrutiny into what is needed to help workers and organizations find a good fit and succeed is warranted, particularly within a local context.

Niagara's economic development plans focus on attracting value-added and knowledge-based industries

2013; Tal, 2012). This has become known in popular discourse as the "skills gap" problem. Although there is a lack of agreement on the existence of a skills gap, some economists and business groups believe that younger generations are not being adequately trained to join the modern workforce. The preparation and retention of young people is of particular interest in Niagara, where the economy is undergoing major transformation. While

¹ For a recent overview of the various—and sometimes contradictory—Canadian perspectives on the skills gap problem see S. Borwein, "The great skills divide: A review of the literature," Toronto, Canada: Higher Education Quality Council of Ontario (2014), and S.A. McDaniel, B. Watt-Malcolm, & I. Wong, "Is the math sufficient? Aging workforce and the future labour market in Canada," Ottawa, Canada: Social Sciences and Humanities Research Council (2014).

Abstract

Globalization and technology are two major forces changing the nature of the workplace today. This has led to wide speculation on what employers are now expecting from employees and whether those looking for work match employer requirements. The training of young people is of particular interest in Niagara, where the economy is undergoing major transformation. This paper describes findings from a research inquiry in which 44 individuals representing 39 organizations across the Niagara region were asked about their experiences hiring and working with post-secondary graduates. The research found that employers were generally satisfied with the hard skills of young workers but felt their "soft skills" needed improvement.



to the region (Niagara Economic Development, 2013). The Niagara Regional Council (2016) has designated "creating a labour-ready workforce" as a strategic priority. With an aging population and a shifting economy, the preparation and retention of young workers is of particular importance for economic prosperity. This policy brief specifically takes up the skills gap issue of youth career-readiness from the perspective of employers. What local employers believe they need, and their perception of the readiness of young people to meet modern labor force expectations, is explored. This brief offers career-preparation recommendations and stimulates discussion on how policy makers, educators, parents, employers and individuals themselves can work together to achieve employment success in contemporary times.

A Niagara conversation

This policy brief describes findings from a 2015-16 research inquiry that examined Niagara employers' experiences of hiring and working with recent post-secondary graduates. The study specifically looked at:

- 1) what employers are seeking in entry level hires,
- 2) whether they find young applicants to be adequately prepared for work, and
- 3) what employer perspectives indicate about preparing the workforce of the future.

The overarching question that guided the project was: What does career-ready mean to Niagara employers? Those that participated in the study were asked questions such as: What matters to you when evaluating entry-level job candidates? How easy is it to find good candidates based on what matters to you? And, do you feel there are any areas for improvement in the career-preparation of young people? The study included 44 individuals representing 39 organizations located across the region of Niagara, Ontario. Of those organizations, 34 were considered small enterprises, two were considered medium, and three were considered large. The following sectors were represented.

Sectors Represented			
Professional, Scientific and Technical Services	14	Health Care and Social Assistance	3
Manufacturing	8	Educational Services	2
Public Administration	5	Information and Cultural Industries	2
Arts, Entertainment and Recreation	3	Other Services (except Public Administration)	2

Over the course of nine months business owners, senior managers, human resource personnel and individuals most closely associated with entry-level workers were interviewed by a researcher or graduate student. Although each person interviewed expressed unique needs and expectations, common themes were found.

What are employers seeking in entry-level hires?

The inquiry revealed five themes in what employers understand as career-readiness: a post-secondary education credential, a set of meaningful experiences, hard skills, soft skills, and the ability to talk about transferable skills (particularly soft skills).

Education and hard skills

The employers reported that they generally expect a post-secondary education credential.

"We are coming to a point where post-secondary will be required for pretty much every position"

said one employer. In fact, Human Resources and Skills Development Canada (2016) estimates that 70 per cent of new jobs in the coming decade will require a post-secondary education. Some employers were seeking a particular credential and field of study; often this depended on whether it was for a role that required specific technical skills such as accountant or nurse for example. Interestingly many employers were open to any credential and field of study however, and indicated that they themselves intended to train the candidate on the specific technical skills their organization required. A recent study of entry-level Canadian job ads had similar findings. In that research, almost half of the employers were indifferent as to whether an applicant's credential was from college or university, and about the specific field of study of job applicants (Refling & Borwein, 2014). Although some recent graduates believe that completing their education is the only criteria demanded by prospective employers, all of the employers in the study indicated that they also consider factors beyond the credential and hard skills in making the final hiring decision.



Skills can be understood as the personal qualities that enable people to respond appropriately to situations. The term "soft skills" is often used to describe personal attributes such as resilience, cooperation, and communication. Other labels such as non-cognitive skills, transferable life skills, generic skills, essential skills, employability skills or key skills can also be found to refer to a similar set of qualities in the literature. "Soft" skills can be contrasted with "hard" skills which include technical expertise or content knowledge such as computer coding, graphic design, and statistical analysis. There is nothing soft or inconsequential about this cluster of skills and many have criticized these terms. However, given the wide use of "soft skills" this brief will retain that term.

"We have our 'nice to have' programs of study that seem to be a good fit, but we will look at the candidate as a whole"

commented one employer. Looking at the candidate "as a whole" involved understanding their soft skills and experiences.

Soft skills

Researchers in Canada and the United States—as well as other countries across the globe—have found that employers are increasingly interested in job candidates' soft skills (Mourshed, Farrell, & Barton, 2012; OECD, 2013; World Economic Forum [WEF], 2014). Many employers have identified soft skills as being equally important, or even more important, than technical skills when considering job applicants (Morrison Gutman & Schoon, 2013; Pont & Werquin, 2001). A recent Business Council of Canada (2016) report stated: "While grades and educational credentials are certainly important to recruiters, companies are increasingly focused on finding people who can work in teams, solve complex problems and show a willingness to learn" (p. 4). The Niagara employers we spoke to reflected this as well. One commented:

"I think my focus over the last number of years has changed, less from technical abilities to more trying to figure out if somebody has the right attitude and initiative"

Another employer said:

"We need soft skills...the other things we need are technical skills, education, and the ability to move...but in the end if they don't have the soft skills we won't hire them...we will repost if we have to."

Niagara employers indicated that soft skills are often what separate the successful candidate from others who have applied.

The soft skills employers have commonly listed in other research as most important include leadership, interpersonal skills, communication, problem solving and analysis (Canadian Council of Chief Executives [CCCE], 2014; Business Council of Canada, 2016; Pont & Werquin, 2001; Social Research and Demonstration Corporation [SRDC], 2015). Those interviewed in this study spoke of similar attributes. They wanted individuals that are sociable, able to communicate well, and problem solve effectively. They also highlighted attitudes and dispositions such as independence, initiative, flexibility, positivity, and the desire to learn. One employer said:

"Most important to us is 'do they fit in with the way we work?' We are very collaborative, we like working together and being very respectful of each other. In some companies you can be on your own, but not with us ... this trumps everything."

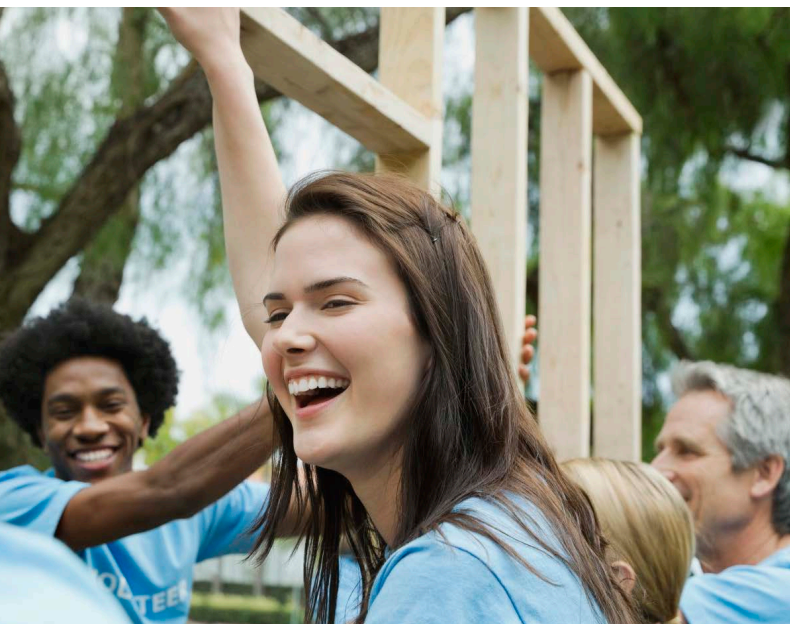
Another added:

"They have to be able to just work through a file. They need independence...and the ability to learn on their own."

A third individual commented:

"I want people who don't need their hands held... I want them to be independent, excited... and resourceful."

Although it can be tempting to rank skills and think of them as discrete and free of context, research has shown that soft skills overlap with each other and are integrated in practice (Moy, 1999; Hagar, 2006). In



this inquiry the use of in-depth interviews rather than surveys provided descriptive examples of how skills, along with attitudes and dispositions, are intertwined in employers' understandings of career-readiness.

Meaningful experience

The Niagara employers we spoke to were also very interested in the experiences of job applicants. Experience signals the practical application of hard and soft skills. Much of the research has suggested that employers attribute particular value to previous related work experience (Harder, Jackson & Lane, 2014; Refling & Borwein, 2014). We found this to be true for some Niagara employers. One of the individuals interviewed said:

"It's just a shorter learning curve...you know, if they have that experience...we can just explain to them what we're trying to achieve and they already have some appreciation for the tool set."

But graduates should not be discouraged if they have no directly related work experience. We were surprised to hear that most employers are also open to hearing about any type of meaningful experience. One employer said:

"First and foremost for us is their attitude and mindset. Experience doing a variety of things speaks to the character of the person in terms of how self-motivated they are, what their intentions are ..."

Soft skill development has been described as building experience in adapting, combining, and deploying skills in diverse contexts (Hagar, 2006). The employers suggested that many types of contexts can help develop the soft skills successful workers need.

The contexts that employers talked about most frequently included: non-related employment, experiences outside the traditional classroom, and meaningful life events. While speaking of non-related work one individual noted:

"Even working at McDonald's teaches you to be a hard worker right?—to show up, carry your load, and be diligent—all those good things."

Another employer remarked:

"If their references from a position were great it tells us that they can adapt and it tells us that they know what the day-to-day flow of the workplace looks like in terms of responsibility, accountability and those kinds of things."

Many interviewees were also interested in what candidates made of their school experience outside of

the classroom. An employer commented:

“To me, it is more about what the student makes of school—someone who participates is going to be able to learn from a lot of different things that come across their desk in four years, and so they can relate to more.”

Another participant remarked:

“You know knowledge aside, [post-secondary education] can signal things like maturity, work ethic, the ability to juggle multiple priorities...it’s those skills and competencies beyond just being educated in a field that also interest me.”

Meaningful life experiences were also touched on frequently during the interviews. Specific activities the employers mentioned they valued included athletics, volunteering, living abroad, independent training, personal hobbies or projects, and life changing challenges that brought about personal growth. One interviewee said:

“A passion, a hobby...I think there are tons of valuable skills in those types of experiences. If they can somehow link it to the types of things we need in our day-to-day operations I would take transferable skills over work experience.”

Another employer stated:

“I think any life experience should be weighted equally as important. Take the athlete example... the leadership skills that people can gain, the responsibility, the number of skills people can gain in an organized sport environment is very relevant. Or anyone who has done a lot of volunteering... this shows commitment and dedication as well.”

Some research has suggested that employers expect up to two years of experience for entry level positions (Refling & Borwein, 2014). Many of those interviewed indicated that one to two years of experience was a loose term they might use to indicate some basic real-life engagement—whether work related or other. Although many commentators have focused on work-integrated learning such as co-op programs as the solution to developing experience before the first job (see Canadian Chamber of Commerce, 2014; Sattler & Peters, 2012), the employers interviewed suggest that other types of experiences—non-related work, co-curricular, or life—may also help foster the qualities entry-level employees need.

Talking transferable skills

The employers involved in this inquiry made it clear



that simple exposure to an experience does not confirm that individuals possess the skills they need. The employers sought people that had fully engaged in experiences, could discuss their learning, and were prepared to articulate how they would transfer what they learned to performance in new contexts. One interviewee noted:

“For me it’s about... so you had an experience, what was your participation in that experience? Because that defines what you get out of it. If you didn’t contribute to that situation you were part of... just because you went....so what?”

Another explained:

“I don’t know if they realize...it is their experiences, what they have learned from what they’ve done, and how they articulate their skills to employers that sets them apart”.

A third employer said:

“If they can’t show me how it is going to transfer then it’s not going to work. They have to be able to look at a job posting and show how what they have done connects.”

It was clear that credentials are not enough in today’s job market. The employers told us they are attracted to candidates that are engaged, self-aware, and can talk about their transferable skill development in an in-depth manner.

Are young workers prepared?

When it came to hard skills, some employers told us they would like a little more experience with industry-specific software while others suggested that writing skills could be improved. In general however, the Niagara employers were quite satisfied with the credentials, knowledge, and hard

skills young employees brought to the table. Soft skills, however, were of concern—an issue that has also been reflected in the broader literature (Mourshed, Farrell, & Barton, 2012; OECD, 2013; SRDC, 2015; WEF, 2014) — suggesting a potential soft skills gap for some young workers in Niagara.

While many of the employers reported an excellent experience with individual graduates, they also suggested that some of the applicants they encounter would benefit from improving their soft skills. One employer said:

"[I find] the challenge is not with the hard, technical skills but on the soft skills side..."

Another commented:

"If you can't relate or communicate well, it's difficult. Most of the time this is the disconnect we see."

A third employer noted,

"I find problem-solving skills are harder to find; that critical thinking piece..."

Those we interviewed also said that applicants have a hard time talking about soft skills. They told us many young people cannot convincingly illustrate the presence of skills with good examples and cannot talk about how specific soft skills will enhance their performance in the role they are applying for. Other research has also noted this inability to adequately discuss soft skills as well (Martini & Clare, 2014; Moon 2004).

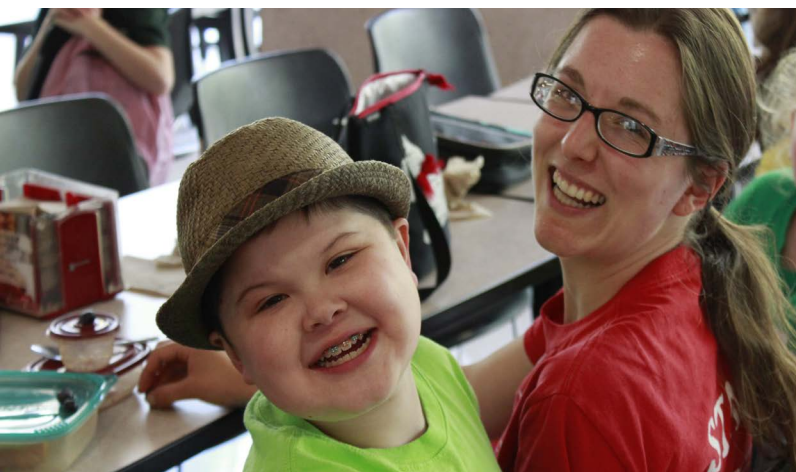
It may be that young graduates are lacking the level of soft skills they need, or it could be that they simply

find it challenging to articulate the development and application of these skills, or it may even be that employers have a hard time identifying the more abstract soft skills that they seek. Regardless, it seems that the individuals who are most experienced, reflective, and articulate about their soft skills and dispositions will have a much higher likelihood of getting the jobs they want.

What does this tell us about career-preparation today?

The employers' descriptions of what they are seeking in entry level job candidates provides important insight in how best to prepare for a career today². What we heard suggests that preparation should involve educational training as well as hands-on experiences that cultivate transferable skills. The ability to talk about the development and transfer of skills—particularly soft skills—is an essential aspect of career-preparation as well. The path for obtaining credentials and hard skills is fairly straight forward. Seeking experiences that cultivate soft skills and building the language necessary to talk about them may be a more elusive undertaking; this indicates the significance of intention and reflection.

Employers said they were interested in hearing about what candidates gained from experiences that were meaningful to them. Research has shown that the learning process is enhanced when learners take ownership of their learning, engage with intention, and have an explicit goal of transferring learning to future contexts (Pugh & Bergin, 2006). This suggests the importance of understanding the role soft skills play in career advancement, learning to set explicit skill development goals, and finding skill-building experiences that each learner cares about. The employers' words also point toward the role of reflection. Those interviewed sought candidates that were self-aware and had thought about the meaning of their experiences. Research confirms the importance of critical reflection for the transfer of learning (Bransford & Schwartz, 1999; Moon, 2004; OECD, 2005). Reflection in this sense is not simply recalling an event. Critical reflection involves a process of testing experiences against pre-conceived ideas, pulling out new insight that goes beyond a particular context, and considering how this learning might apply in future events (Kolb, 1984; Dewey, 1938). Reflecting 'out loud' helps individuals learn more



² For further reading on how soft skills can be nurtured and the need to address these skills within educational policy see E. Garcia "The need to address non-cognitive skills in the education policy agenda". Washington, DC: Economic Policy Institute (2014), and S. Shanker, Broader measures for success: Social/emotional learning. In "Measuring What Matters", Toronto, Canada: People for Education (2014).

deeply and builds familiarity with skill development language. This can help young people build the awareness and words necessary to discuss their learning with future employers (Bransford, Brown and Cocking, 2000; Martini & Clare, 2014; Moon, 2004; Sawyer, 2008).

Conclusion

This study suggests that career-readiness involves credentials, and the ability to talk about hard and soft skills developed within formal education, work, and other experiences. The employers identified soft skills as the area in most need of improvement in young workers. This gap is certainly a shortfall that matters. As the general population achieves higher levels of education, employers are becoming more demanding, expecting outstanding and proven skills in addition to credentials (Pont & Werquin, 2001). Soft skills are required in the modern economy to adapt to changing business practices and to perform within the flatter organizational structures of modern times. Overcoming a soft skills gap is an issue that is important to economic stability but also to personal well-being. Research is showing how essential these skills are for success at school and in other important domains of peoples' lives³. Fortunately, the soft skills and dispositions that were once thought to be more static have shown to be able to develop across life stages (Durlak et al.; 2011; Kautz, Heckman, Diris, Weel, & Borghans, 2014). This study makes a compelling case for the development of soft skills as a much needed component of career-readiness, and in fact life-readiness. This is something that should be taken up by the education system; but insight from



this inquiry and other research suggest that skills are developed in a variety of contexts, and consequently everyone should be involved. Educators, employers, families, the broader community, and individuals themselves all play a critical role in coming to value and cultivate the soft skills and dispositions necessary for employment, and also for a healthy and happy life.

Key Questions

The intent of this paper is to raise awareness and generate discussion about the meaning of career-readiness in Niagara. The 44 employers in this study provided insight into what they look for in recent graduates and indicated that soft skills is an area that could be improved. This paper concludes with broad level questions and suggestions for policy makers, educators, families, and community stakeholders to help improve the career-readiness of Niagara's youth.

Does economic policy support the development of soft skills?

Investment in soft skills development is important for children's lifetime success. It has been found that these skills build exponentially over time, making it important to start skill development early to maximize future progress. Research shows that these types of skills are particularly malleable between early childhood and adolescence and that various learning contexts become more or less important at different stages of development (OECD, 2015). A coordinated approach across contexts is likely to be the most effective. Some populations may not have equal access to the opportunities that help cultivate soft skills.



³ For further reading on the relationship between soft skills and employment, health, and academic achievement, see Kautz, Heckman, Diris, Weel, & Borghans, "Fostering and measuring skills: Improving cognitive and non-cognitive skills to promote lifetime success" (pp. 1-87). Chicago, US: OECD (2014), and L. Morrison Gutman & I. Schoon, "The impact of non-cognitive skills on outcomes for young people: Literature review". London, United Kingdom: Institute of Education (2013).



Addressing any skills deficits early has been found to be an essential step in reducing socio-economic inequalities.

Do formal and informal educational practices and policies support the valuing and development of soft skills?

Soft skills are an important learning outcome that can be taught in both formal and informal learning environments. These skills can be fostered within subject-specific classes when the curriculum explicitly integrates them. Active forms of learning such as project-based and service learning have shown to be particularly effective (Morrison Gutman & Schoon, 2013). Regular and appropriate soft skill assessments help indicate the importance of these skills and provide valuable feedback. Extra-curricular activities also offer the opportunity for youth to develop soft skills among peers. Improving access to evidence-based practices and training can help those who have limited information or experience in this issue.

Do workplace policies support the valuing and development of soft skills?

Employers can help young people develop soft skills by modelling them and explicitly discussing the importance of these skills. Supervisors can encourage young workers to set soft skill-development goals for themselves and assist them in finding opportunities to practice. Company mentorship programs are a good way to help new employees become aware of the soft skills and attitudes valued within a particular workplace as well.

Do families understand, value, and have the resources needed to help develop soft skills?

Many families do not realize the importance of soft skills to the future of their children and are not aware that they can provide assistance in learning these necessary skills. Adults can help children to face challenges where their personal, social, and thinking skills are tested. They can facilitate future learning by asking questions that help children develop their reflective capacity. Families can shape children's skill development by modelling key soft skills and dispositions themselves and sharing their own experiences of using soft skills daily.

Do individuals understand, value, and intentionally set soft skill development goals?

Most individuals spend more time on hard skill development than on intentionally building soft skills. Those who explicitly seek out experiences that challenge their soft skills, actively participate, reflect, build self-awareness, and take charge of their own skill development (with the right supports from their family, educators, and employers) will be best served.

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