Facilitator's Guide for

VIDEOS FOR NEWCOMERS:

PUTTING YOUR SKILLS TO WORK – WELCOME TO ONTARIO

AND

TRANSFER YOUR SKILLS TO A GREAT JOB

May, 2016

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Welcome!

Putting Your Skills to Work – Welcome to Ontario and ***Transfer Your Skills to a Great Job*** are projects of the Ontario Ministry of Education and the Ministry of Citizenship, Immigration and International Trade and are intended for use by settlement workers and employment specialists (employment counsellors, resource and information specialists, and job developers) in their work to support newcomers (immigrants and refugees). They can use the videos and resources to assist newcomers understand the considerable skills that they bring with them to Canada and how best to transfer them to employment and life in their new communities.

The Ontario Skills Passport (OSP) provides clear descriptions of Essential Skills and work habits important for success in work, learning and life. Newcomers can use the OSP tools and resources to **assess, build, document** and **track** their skills in training programs, volunteer activities and the workplace. The career development process, as outlined in Creating Pathways to Success, is a four-step inquiry process built on the following questions: *Who am I? What are my opportunities? Who do I want to become? What is my plan for achieving my goals?* These questions are relevant to newcomers at any age or stage of life. The OSP tools and resources provide newcomers – both job seekers and learners – with information that can assist them develop meaningful answers to these questions as part of their education and career/life planning process.

This video guide provides additional information and suggestions for facilitators using the video and includes:

- A set of worksheets to help newcomer clients (learners, job seekers and workers) better understand the Essential Skills and work habits (ESWH) that they bring with them to Ontario and see how they are using their skills in the settlement process and how they are transferable to the Ontario workplace.

- A set of templates with examples to help facilitators identify which Ontario Skills Passport (OSP) tools and resources to use with specific clients.

- A set of tips for using the OSP specifically for settlement workers and employment specialists working with newcomers.

- A complete transcript of the video – ***Transfer Your Skills to a Great Job***.

- A list of additional resources to support newcomers in their settlement to Ontario.

Learning Goals

Putting Your Skills to Work – Welcome to Ontario was designed to welcome newcomers and support them as they settle in Ontario. A focus of the resource is to promote resilience among newcomers as they are dealing with multiple changes and challenging situations in their settlement process through expanding their awareness of the importance of Essential Skills and work habits – including Critical Thinking, Problem-Solving, Initiative, Oral Communication and Self-advocacy – as tools to enhance their opportunities in Ontario. Settlement workers and employment specialists can use the video, along with the OSP tools and resources, to help newcomers recognize the significant skills and knowledge they are bringing to Canada and identify how best to transfer these skills to employment and life in their new communities.

Transfer Your Skills to a Great Job was developed to provide newcomers, settlement workers and employment specialists with the opportunity to:

1. Expand the awareness of Essential Skills and work habits (ESWH) among newcomers – pre and post-arrival in Canada – as a means to increase skill levels, enhance opportunity, and maximize their potential to contribute to Canada's workforce.

2. Contextualize the four inquiry questions to the experience of preparing for and successfully immigrating to Canada: *Who am I? What are my opportunities? Who do I want to become? What is my plan for achieving my goals?*

3. Support newcomers to use the OSP resources and tools to **assess**, **build**, **document** and **track** their ESWH and to **transfer** them to everyday life and the next place they go – whether to further education, training or the workplace.

4. Support arrived newcomers to explore career opportunities in their transition to work.

5. Support newcomers in pre-arrival mode to prepare for their transition to the labour market by understanding Canadian occupational skill requirements – and including where appropriate, the exploration of appropriate alternative employment.

Part 1: Using Essential Skills and Work Habits

The following worksheets can be used with individuals or with groups of clients.

Essential Skills and Work Habits Checklist (Page 6)

- Begin by reviewing the language on the checklist clarifying any terms that may be unfamiliar.
- Ask your clients to put a checkmark in the corresponding box each time they see an Essential Skill or work habit being used in the video. Share with your clients that some of the Essential Skills and work habits are identified for them in the video but there are others in use that they can identify for themselves.
- Compare results and discuss findings.

When working with clients with lower English language skills, you can build their knowledge of Essential Skills and work habits by using the following resources:

- Use **SkillsZone games**, the Essential Skills Walkabout – **Group** or **Individual** Activity to build vocabulary.
- Use the **Essential Skills and Work Habits Worksheet** to describe and reflect on how clients use their skills in work, learning and life.
- Use **Worksheets** to have clients write in sample tasks.

Your Essential Skills and Work Habits Video Worksheet for use with *Putting Your Skills to Work – Welcome to Ontario* Video (Page 7)

- Begin by reviewing the questions on the worksheet before watching the video.
- Ask your clients to complete the worksheet and compare results and discuss findings.

Critical Thinking Worksheet for use with *Transfer Your Skills to a Great Job* Video (Page 8)

- Begin by reviewing the questions on the worksheet before watching the video.
- Ask your clients to complete the worksheet and compare results and discuss findings.
- To gain more understanding of the Essential Skill of Critical Thinking, have your clients view this **video vignette**.

OSP Learning Activities

The SkillsZone website provides hundreds of Learning Activities showing how Essential Skills and work habits are used in the workplace. These learning activities help clients practise, build and demonstrate their skills. Each learning activity includes:

- Details about its source and course connections;
- A descriptive summary to explain what learners do in the activity;
- A statement of the Essential Skills task that learners will be carrying out;
- An analysis of the task for its Essential Skills and skill level demands;
- An indication of accompanying assessment tools; and
- Teacher/Facilitator notes.

In the video, ***Transfer Your Skills to a Great Job***, Ho Gan, a civil engineer from China, considers an alternate career as a construction estimator. The complete activity set, NOC 2234: Construction Estimator – *Quotes and Contracts*, is included in this guide in Appendix 1.

Additional learning activities available on SkillsZone that may be of interest to internationally-trained newcomers include:

- NOC 5123: Journalist – Who, What, Where, When and Why
- NOC 2132: Mechanical Engineer – Tensile Tests and Orthographic Computer-Aided Drawings
- NOC 7311: Industrial Mechanics (Millwrights) – Industrial Cleaner Workplace Safety Label
- NOC 4212: Community and Social Service Worker – Police Vulnerable Sector Check
- NOC 1226: Special Events Co-ordinator – Schedule of Events
- NOC 3152: Registered Nurse – Report Sheet
- NOC 5124: Public Relations Consultant – Family Literacy Day
- NOC 2153 Urban Planner – Project Status Report

The complete activity set, NOC 9617: Labourer in Food, Beverage and Tobacco Processing – *Recipe Directions*, is included in this guide in Appendix 1. Additional learning activities available on SkillsZone that may be of interest to lower-skilled newcomers include:

- NOC 9619: Box Packer – Packing Cards and Scrap Report
- NOC 9613: Oil and Gas Worker – Report of Injury
- NOC 8612: Landscaping and Grounds Maintenance Labourer – Daily Landscape Checklist
- NOC 8411: Underground Mine Service and Support Worker – Blasting Procedures
- NOC 7621: Public Works and Maintenance Labourer – Work Order
- NOC 7611: Construction Trades Helper and Labourer – Timesheet

For more information on how to connect Essential Skills and work habits to your work, please refer to *A Guide to Linking Essential Skills and the Ontario Curriculum*.

Essential Skills and Work Habits in the OSP Videos

Check off the Essential Skills and work habits that are demonstrated in the video.

Video Title: _____

Name(s): _____

	OSP Icon	Essential Skill
☐		Reading Text
☐		Writing
☐		Document Use
☐		Computer Use
☐		Oral Communication
☐		Money Math
☐		Scheduling or Budgeting and Accounting
☐		Measurement and Calculation
☐		Data Analysis
☐		Numerical Estimation
☐		Job Task Planning and Organizing
☐		Decision Making
☐		Problem Solving
☐		Finding Information
☐		Critical Thinking

	OSP Icon	Work Habit
☐		Working Safely
☐		Teamwork
☐		Reliability
☐		Organization
☐		Working Independently
☐		Initiative
☐		Self-Advocacy
☐		Customer Service
☐		Entrepreneurship

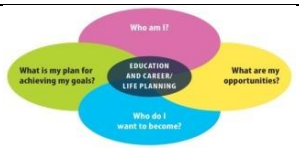
Skill levels are provided for each Essential Skill. Level 1 tasks are the least complex and level 4/5 are the most complex. Please note that there are no skill levels associated with the OSP work habits.

Skills for Work, Learning and Life

ontario.ca/skillspassport

Ontario Skills Passport
www.ontario.ca/skillspassport

Your Essential Skills & Work Habits Video Worksheet



1. In the video, ***Putting Your Skills to Work – Welcome to Ontario***, you hear stories from various newcomers, settlement workers, employment specialists and employers. Which person did you relate the most to and why?

2. What are two Essential Skills you have brought with you from your home country which are assisting you in your settlement in Ontario?

a) Essential Skill 1:

b) Essential Skill 2:

3. What are two Work Habits you have brought with you from your home country which are assisting you in your settlement in Ontario?

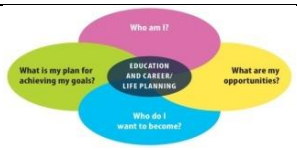
a) Work Habit 1:

b) Work Habit 2:

4. At the end of the video it states: "The OSP promotes resilience and confidence among newcomers in knowing that their skills can help them deal with multiple changes and challenging situations in their resettlement process, including searching for employment." What does resilience mean to you and how have you used resilience in overcoming a challenging situation in your resettlement process. When finished, share your ideas with a partner.

Ontario Skills Passport
www.ontario.ca/skillspassport

Essential Skills & Work Habits
Critical Thinking
Video Worksheet



1. Critical Thinking is one of the main Essential Skills shown at use in the video, ***Transfer Your Skills to a Great Job***. Critical thinking includes the abilities to form good questions; assess levels of risk; make judgments; predict results; and collect, organize, and evaluate information. The definition of critical thinking is: *"Making judgments by using criteria to evaluate ideas and information and the related consequences*." Rewrite this definition in your own words.

2. What are two important things that you remember about this skill from the video?

a)

b)

3. As all Essential Skills and work habits are transferable, provide an example to show how you would use this skill in each of the following contexts. If you don't think you have used this skill yet, describe a situation where you think you could use it. When finished, share your ideas with a partner.

a) Work:

b) Learning:

c) Life:

Part 2: How to Use the OSP with Specific Groups of Newcomers

The Ontario Skills Passport (OSP) offers a wide selection of tools and resources. Competing the template below for each client should help you determine which resources will be most effective.

Samples of completed templates are on the next pages.

Ontario Skills Passport — Skills for Work, Learning and Life	**Template for Using the OSP with Newcomers**
Client Description	
Educational Attainment	
# of Years Work Experience in Home Country	
Type of Work	
English Language Skills	
Additional Credentials	
OSP Tools and Resources You Would Use To:	
Assess Skills	•
Identify Career Goals	•
Track & Plan Skills Development	•
Transition to Work	•

Sample Template #1 for Highly-Skilled Newcomers

Description of Client	
Educational Attainment	*Master's Degree in Civil Engineering*
# of Years Work Experience in Home Country	*5*
Type of Work	*Robotics Engineer*
English Language Skills	*International English Language Testing System (IELTS) 6.5 with no band less than 6.0 (Canadian Language Benchmarks (CLB) Level 8)* *View the Skills Connection between the Essential Skills of the OSP and the CLB*
Additional Credentials	*WHMIS*

OSP Tools and Resources You Would Use To:	
Assess Skills	• *Choose a self-assessment to help clients get information on their Essential Skills and work habits (Part 1 of the self-assessment tool).* • *Choose OSP Learning Activities focused on the ESWH clients want to develop.* • *Use the OSP Check-In Tool to informally assess or gauge clients' demonstrations of ESWH*
Identify Career Goals	• *Compare self-assessment results to occupation(s) of interest (Part 2 of the self-assessment tool).* • *Choose OSP Learning Activities focused on the ESWH clients want to develop.* • *Use the list of OSP Occupations to identify occupations of interest and see how experienced workers use these skills on-the-job.* • *Find information on career exploration and planning tools, education and training, employment trends, and employment and volunteer opportunities in each OSP Occupational Profile.*
Track & Plan Skills Development	• *Create an OSP Work Plan that focuses on Essential Skills, job tasks and work habits related to a work placement* • *Create an OSP Training Plan that focuses on Essential Skills, job tasks and work habits related to learning activities.* • *Use the Experiential Learning Worksheet to help clients track their Essential Skills and work habits demonstrations in Experiential Learning activities such as work experience and internship programs.* • *Use the Volunteer Worksheet to help clients track their Essential Skills and work habits demonstrations in Volunteer Work.* • *After each experience, encourage clients to use the OSP Tracker and OSP Reflection Worksheet to track and plan their skills development so that they can reach their goal. This information can be used to create a résumé, conduct a job search and prepare for a job interview.*

Transition to Work	• *Use the Transfer Your Skills to a Great Job video to assist immigrants who are seeking employment to discover the Essential Skills and work habits they have that can be transferred to the Ontario workforce.* • *The video follows the conversation of two friends, Ho Gan, a civil engineer from China and Ananya, an accountant from India. Both have been in Canada several years and both came as internationally-trained professionals. Their conversation covers a range of topics including identifying alternate jobs, credentialing as a professional in Canada, and the importance of effective workplace communication to Canadian employers. The key messages underlying each of these topics is that the two individuals already have substantial skills they can contribute to Canada, and that there are resources available to help them develop those skills they do not have.* • *The two occupational profiles highlighted in the video – Civil Engineer (NOC 2131) and Construction Estimator (NOC 2234) – can be found at the end of this document in Appendices 2 and 3 starting on Page 57.* • *Create an OSP Transition Plan to help clients transfer their Essential Skills and work habits to a job or further education or training, including apprenticeship. Use this information to help them create a résumé and a cover letter that is targeted to a job advertisement and prepare for job interviews.* • *Use the OSP Social Media Resource, Module 4, to find out how to create, build and use their social media network as an important tool for realizing their personal and academic goals.* • *Find information about skills, education, training as well as employment and volunteer opportunities at the provincial and local levels on the Ontario WorkInfoNet and iWIN websites.*

Sample Template #2 for Lower-Skilled Newcomers

Client Description	
Educational Attainment	*Grade 8*
# of Years Work Experience in Home Country	*10*
Type of Work	*Construction Worker*
English Language Skills	*Canadian Language Benchmarks (CLB) Level 5* *View the Skills Connection between the Essential Skills of the Ontario Skills Passport and the CLB*
Additional Credentials:	*None*

OSP Tools and Resources You Would Use To:	
Assess Skills	• *Use the OSP Check-In Tool to informally assess or gauge clients' demonstrations of Essential Skills and work habits.* • *Choose OSP Learning Activities focused on the Essential Skills and work habits clients want to develop.*
Identify Career Goals	• *Use the list of OSP Occupations to identify occupations of interest and see how experienced workers use these skills on-the-job.* • *Find information on career exploration and planning tools, education and training, employment trends, and employment and volunteer opportunities in each OSP Occupational Profile.* • *Search for sample tasks in work, learning and life. This can help clients see how they have demonstrated these skills in different contexts and gather information to include in their résumés.*
Track & Plan Skills Development	• *Create an OSP Work Plan that focuses on Essential Skills, job tasks and work habits related to a work placement* • *Create an OSP Training Plan that focuses on Essential Skills, job tasks and work habits related to learning activities.* • *Use the Experiential Learning Worksheet to help clients track their Essential Skills and work habits demonstrations in Experiential Learning activities such as work experience and internship programs.* • *Use the Volunteer Worksheet to help clients track their Essential Skills and work habits demonstrations in Volunteer Work.* • *After each experience, encourage clients to use the OSP Tracker and OSP Reflection Worksheet to track and plan their skills development so that they can reach their goal. This information can be used to create a résumé, conduct a job search and prepare for a job interview.*

Transition to Work	• *Create an OSP Transition Plan to help clients transfer their Essential Skills and work habits to a job or further education or training, including apprenticeship. Use this information to help them create a résumé and a cover letter that is targeted to a job advertisement and prepare for job interviews.* • *Use the OSP Social Media Resource, Module 4, to find out how to create, build and use their social media network as an important tool for realizing their personal and academic goals.* • *Find information about skills, education, training as well as employment and volunteer opportunities at the provincial and local levels on the Ontario WorkInfoNet and iWIN websites.*

Part 3: Tips for Settlement Workers and Employment Specialists Working with Newcomers

This resource outlines how settlement workers and employment specialists (employment counsellors, resource and information specialists, and job developers) can use the Ontario Skills Passport (OSP) to help newcomers (immigrants and refugees) **assess, build, document** and **track** their Essential Skills and work habits and **transfer** them to further education, training, the workplace and everyday life. The OSP tools and resources can be used in employment preparation and training programs, internships, bridging programs, volunteer activities and the workplace.

The career development process, as outlined in *Creating Pathways to Success*, is a four-step inquiry process built on the following questions:

1. *Who am I?*
2. *What are my opportunities?*
3. *Who do I want to become?*
4. *What is my plan for achieving my goals?*

These questions are relevant to job seekers and learners at any age or stage of life. The OSP tools and resources provide newcomers with information that can assist them develop meaningful answers to these questions as part of their education and career/life planning process.

In particular, settlement workers and employment specialists can use the OSP tools and resources to help newcomers:

- learn about the Essential Skills and work habits important for success in the workplace;
- identify the considerable skills that they bring with them to Ontario;
- see how they are using their skills in the settlement process; and
- understand how their skills and work habits translate to the workplace.

Essential Skills are:

- Used in nearly all occupations and in everyday life.
- The foundation for learning other skills, such as technical skills.
- Transferable from school to work, further education or training, including apprenticeship, and from job to job and sector to sector.
- The skills that help people adapt to change and challenging situations.
- Skills that newcomers have used in their home country, are using in their settlement process and are transferable to the Ontario workplace

The Ontario Skills Passport also includes a section on work habits, since it is important for everyone in the workforce to have good work habits as well as Essential Skills.

See the complete list of Essential Skills and work habits at www.ontario.ca/skillspassport.

WHY DO ESSENTIAL SKILLS AND WORK HABITS MATTER?

At Huawei we have positions ranging from entry level to highly skilled. Our immigrant employees are committed to put in extra effort to adapt to the Canadian work environment - they usually come with the expectation to start new and go the extra mile to achieve their goals. They are confident that their skills from their home country can be transferred to working here in Canada. This helps them have a high level of resiliency, and they don't see obstacles as an endless list of challenges that cannot be overcome.

Grace Su, Manager, Human Resources, Huawei Canada

What you really want are employees that are very skilled and as skilled as they can be. There are very few jobs left in the 21st century that don't require a level of independent knowledge and action and interpretation of the written word or instructions. All the stuff that could be offshored has been offshored and basically what we're left with in the 21st century and 21st century economies are relatively complex jobs that are constantly changing. Because of that you need resilient, adaptable employees that have these foundational skills so that when the demand is there for something new and different, you have the employees who can rise to it.

Gillian Mason, President, ABC Life Literacy Canada

We use resiliency theory a lot in our counselling practices and our work with clients. First of all, resiliency theory wants the counsellor to focus on the client's strengths. So instead of trying to figure out what they don't have, we try to focus on what the client already has. One of the things that also we do is have the client think about accomplishments. So one way we do this is to write a little success story. For example, there was a challenge on the job, they took appropriate actions and they had a positive result. And these become very powerful for the client because the client can take this into an interview situation and show how they've got these skills from before. For example, their problem solving skills, their decision making skills, their ability to take initiative when something went wrong on a job previously. So we do encourage them to use these kinds of things in job interview situations.

Debra Marshall, Employment Specialist, Costi Immigrant Services

A host of recent employer surveys identify a set of skills considered critical for the modern workplace. Of greatest interest to employers are general skills and competencies – such as literacy, numeracy, communication, critical thinking, problem solving and various personal attributes such as resilience, creativity and being effective in teamwork – that are not specific to a particular discipline… Somebody beginning work now will likely have many jobs and even several careers before they retire. General competencies provide the fundamental and foundational skills that are transferable across jobs.

Don Drummond, Ross Finnie and Harvey Weingarten, The Globe and Mail, October 20, 2015

Introductory Resources (*Who am I?*)

Website	Location	Description
OSP	Skills in the OSP	• Read descriptions of Essential Skills, skill levels and work habits. • See a video clip for each Essential Skill and work habit. • Review the Skills Connections: A Comparison between the Essential Skills of the Ontario Skills Passport and the Canadian Language Benchmarks to see how the Essential Skills Complexity Levels intersect with the Canadian Language Benchmarks.
SkillsZone	Essential Skills Introduction	• Use the Essential Skills Introduction to view descriptions of Essential Skills, skill levels and see a video clip for each Essential Skill.
SkillsZone	Work Habits Introduction	• Use the Work Habits Introduction to view descriptions of work habits and see a video clip for each work habit.
OSP	Introduction and Tips for Job Seekers and Learners	• Access resources such as the *Ontario Skills Passport Overview for Job Seekers and Learners* and the Ontario Skills Passport Overview for Newcomers (Immigrants and Refugees). Identify sections of the chart for clients to complete before their next appointment to help keep them motivated and focused on their goals.
SkillsZone	OSP Training Materials	• Settlement workers and employment specialists can access training materials that focus on Essential Skills, skill-building activities and work habits. These materials can be adapted for different audiences.
SkillsZone	Interactive Learning Resources	• Use the Skills Pyramid to illustrate how Essential Skills are the foundation for learning other skills, such as technical skills. There is a *Skills Overview* video showing how a nurse uses Essential Skills, technical skills and job/workplace specific skills on-the-job.

Website	Location	Description
SkillsZone	SkillsZone Videos	• Use the *Putting Your Skills to Work – Welcome to Ontario* video and Facilitator's Guide to see how Essential Skills and work habits (ESWH) are used with newcomers in their settlement process. • Use the *Transfer Your Skills to a Great Job* video and Facilitator's Guide to assist newcomers who are seeking employment to discover the ESWH they have that can be transferred to the Ontario workforce. • Use the *Find The Skills You Need* video and *Tips Sheet for Employers* to assist employers with understanding the importance of using the ESWH in recruiting and developing their employees. • Use the *Discover Your Skills* video to see how ESWH are used every day and why they are important. • Use the *Make Social Media Work for You* video to get an introduction to using social media effectively. • Use the *Keeping Safe at Work* video and Facilitator's Guide to illustrate how workers use their ESWH and exercise health and safety rights to keep safe at work. • See other OSP videos, such as *The Lab Technologist,* which show how workers use their ESWH in the workplace and how these skills transfer to other jobs.
SkillsZone	Interactive Learning Resources	• Launch the OSP Interactive Education and Career/Life Planning Resources to locate resources for Adult Learners and Job Seekers. • Click the questions on the graphic to access OSP tools and resources to help clients answer the following four education and career/life planning inquiry questions: *Who am I? What are my opportunities? Who do I want to become? What is my plan for achieving my goals?* and develop their pathways planning portfolio. • Use the OSP Teacher/Facilitator Planning Chart and OSP Learner Chart for an overview of the OSP tools and resources.

Website	Location	Description
OSP	OSP News	• Check out the OSP News on a regular basis to see what tools and resources have been added to the OSP and/or SkillsZone websites. Subscribe to the OSP News to have it sent directly to your inbox. • Check out the Articles on Skills section which is featured in the OSP News. A "new" flag is shown beside each new article posted since the previous OSP News. • Check out the OSP Testimonials and submit your own skills story or that of your client.

Assess and Build Essential Skills and Work Habits (*Who am I? Who do I want to become?*)

Website	Location	Description
OSP	Assess and Build Your Skills	• Choose a self-assessment to help newcomers get information on their Essential Skills and work habits (Part 1 of the self-assessment tool). • Choose OSP Learning Activities focused on the ESWH clients want to develop.
OSP	Assess Skills Through an Interview	• Settlement workers and employment specialists can use this intake interview resource to informally assess or gauge newcomers' demonstrations of ESWH. The resource begins with sample questions to identify interests, goals and prior skills demonstrations. The observations and ideas gathered during the interview can be used to inform the development of an action plan to help clients achieve their goals. *"When the different clients come into my office, they talk to me and they tell me their story. Right away I'm able to deduce their skills, or the transferable skills they can utilize. For example, I got one client – she worked for many years in customer service and she had excellent skills. Not only did she speak very good English but she also spoke French and Arabic so she wasn't aware that those skills could be beneficial to an employer so they bring about many, many skills…sometimes what we do is just to highlight the fact to them that they already have them and they just have to tap into those skills."* Arturo Gonzales, Settlement Counselor, Costi Immigrant Services

Website	Location	Description
SkillsZone	SkillsZone Videos: OSP Social Media Resource	• Use the *OSP Social Media Resource, Module 2* to provide newcomers with the opportunity to create a great bio to make a good impression and to create online content that genuinely reflects who they are while showcasing their transferable ESWH. • Use the *OSP Social Media Resource, Module 3* to critically review and build their online reputation or "personal brand" so that they stand out from other people who are interested in pursuing the same career and learning or training opportunities.
SkillsZone	SkillsZone Videos: Keeping Safe at Work Facilitator's Guide	• Use the *Keeping Safe at Work Video Facilitator's Guide* to see how workers use their ESWH and exercise health and safety rights to keep safe at work.

Career Exploration (*What are my opportunities? Who do I want to become?*)

Website	Location	Description
OSP	Assess and Build Your Skills	• Compare self-assessment results to occupation(s) of interest (Part 2 of the self-assessment tool). • Choose OSP Learning Activities focused on the Essential Skills and work habits clients want to develop.
SkillsZone	SkillsZone Videos: OSP Social Media Resource	• Use the OSP Social Media Resource, Module 1 to help newcomers use social media to conduct research about their future career. • Use the OSP Social Media Resource, Module 2, to collect great social proof of their skills and accomplishments using OSP tools and resources such as the OSP Work Plans.

Website	Location	Description
OSP	Search for Tasks	• Use the list of OSP Occupations to identify occupations of interest and see how experienced workers use these skills on-the-job. • Find information on career exploration and planning tools, education and training, employment trends, and employment and volunteer opportunities in each OSP Occupational Profile. • Search for sample tasks in work, learning and life. This can help newcomers see how they have demonstrated these skills in different contexts and gather information to include in their résumés. *"We can use the OSP with clients from many different occupational backgrounds, including construction workers, medical professionals, cooks, engineers, truck drivers and food servers as well as people without any work experience, since everyone has skills! The OSP is versatile and a great tool because it links to other websites – such as Settlement.org and the Ministry of Citizenship, Immigration and International Trade that offers information on language training and Ontario Bridge Training programs. It also links to the Ministry of Training, Colleges and Universities that provides information on postsecondary education and training, Employment Ontario programs as well as Ontario labour market trends."* Debra Marshall, Employment Specialist, Costi Immigrant Services

Tracking and Planning Tools (*What are my opportunities? What is my plan for achieving my goals?*)

Website	Location	Description
OSP	Create an OSP Work Plan	• Create an OSP Work Plan* that focuses on Essential Skills, job tasks and work habits related to a work placement (see sample OSP Work Plans). • Employers document participants' skill demonstrations in the work plan. • Refer to the Tips for Creating a Work Plan.
OSP	Create an OSP Training Plan	• Create an OSP Training Plan that focuses on Essential Skills, job tasks and work habits related to learning activities (see sample OSP Training Plan). • Settlement workers and employment specialists document clients' skill demonstrations in the training plan. • Refer to the Tips for Creating a Training Plan
OSP	Create an OSP Transition Plan	• Create an OSP Transition Plan to help newcomers transfer their Essential Skills and work habits to a job or further education or training, including apprenticeship. • Use this information to help them create a résumé and a cover letter that is targeted to a job advertisement and prepare for job interviews.
SkillsZone	SkillsZone Videos – OSP Social Media Resource	• Use the OSP Social Media Resource, Module 4, to find out how to create, build and use their social media network as an important tool for realizing their personal and academic goals.
OSP	Resources and Links – Ontario WorkInfoNet and iWin	• Find information about skills, education, training as well as employment and volunteer opportunities at the provincial and local levels on the Ontario WorkInfoNet and iWIN websites.

**Note that the OSP Work Plan complements, but does not replace, mandatory documentation for Employment Ontario programs*

Website	Location	Description
OSP	Track Your Skills	• Use the Experiential Learning Worksheet to help newcomers track their Essential Skills and work habits demonstrations in Experiential Learning activities such as work experience, mentorship and internship programs. • Use the Volunteer Worksheet to help newcomers track their ESWH demonstrations in Volunteer Work. • Use the OSP Leadership Projects and Activities Worksheet to help newcomers track their ESWH demonstrations in leadership projects and activities they undertake in their community or in training programs. • After each experience, encourage newcomers to use the OSP Tracker and OSP Reflection Worksheet to track and plan their skills development so that they can reach their goal. This information can be used to create a résumé, conduct a job search and prepare for a job interview. • Refer to the sample copies of the OSP Tracker, OSP Reflection Worksheet. and the Volunteer Worksheet.

Tips for Tracking and Planning Skills Development

Newcomers are encouraged to:

- Keep all their OSP skills documents in a portfolio to track and plan their skills development over time.

- Use this skills information in answering the four education and career/life planning inquiry questions:
  - *Who am I?*
  - *What are my opportunities?*
  - *Who do I want to become?*
  - *What is my plan for achieving my goals?*

- Consider this skills information when making decisions about course, program, career and post-secondary destinations.

- Use this information to conduct job searches, update their résumé, create a cover letter and prepare for job interviews**.**

- Look for opportunities to further develop their Essential Skills and work habits to get a job, keep a job and progress in their career.

Tips for Creating an OSP Work Plan

Settlement Workers and Employment Specialists can use an OSP Work Plan to:

- Familiarize work placement participants with the kinds of tasks they could encounter in work placements, volunteer opportunities and internships. This can help manage expectations prior to placement.
- Have focused discussions with employers about the tasks that a participant will have an opportunity to demonstrate. This would be especially valuable when meeting with an employer for the first time.
- Complement, but not replace, mandatory documentation for Employment Ontario programs.

Prior to the Work Placement

- Keep it manageable for both the employer and the participant by focusing on a few skills that the job seeker really feels they want to develop/demonstrate during the placement.
- Delete any tasks that are inappropriate due to age requirements, licensing restrictions or that are not applicable for a particular workplace. Use the “Add tasks” button at the bottom of the page to add skills and tasks from other occupations to further customize the work plan.

During the Work Placement

- Encourage the participant and the employer to use the quick and easy checklist format of the work plan to have focused discussions about the skills and work habits that were demonstrated.
- Consult with the participant and employer to add additional tasks to the work plan should other training opportunities become available.
- Help employers and participants feel comfortable giving and receiving feedback on tasks. Some ideas are shown in the chart on the next page.

Tips for Participants	Tips for Employers
Be open to receiving feedback and ask your employer questions about your strengths and how you can improve your performance. Start the dialogue with statements or questions such as: • I *really want to do a good job in my placement here. Do you have a couple of minutes to talk about how I can improve my skills and work habits?* • *Which skills and work habits have I done well so far?* • *Which skills and work habits do you want me to focus on today or this week?* • *Can I check in with you next week to get more feedback?*	Focus on developing your employees' strengths and how you can help improve their performance. Start the dialogue with statements or questions such as: • *I know you want to do a good job here so let's talk about your skills development.* • *So far, I think you are really doing well with the following skills and work habits: _____.* • *Today, I'd like you to focus on _____ (fill in appropriate skills/tasks).* • *I think you would really benefit from improving your _____ (fill in appropriate work habits).* • *I'd like to have regular discussions with you about your performance. We can meet again on _____.*

At the End of the Work Placement

- Keep a copy of completed OSP Work Plans so you have a record of participants' skill development.
- Encourage participants to keep copies of completed OSP Work Plans in their portfolios and use this information to update their résumé, create a cover letter and prepare for job interviews**.**

  Note that only employers can complete the entries and sign OSP Work Plans.

TO LEARN MORE:

ontario.ca/skillspassport

skillszone.ca

onwin.ca iwin.ca

Tips for Creating an OSP Training Plan

Settlement workers and employment specialists can use the OSP Training Plan to:

- Familiarize newcomers with the kinds of tasks experienced workers perform on-the-job.
- Design opportunities for newcomers to practice and build their Essential Skills using real workplace tasks.
- Complement, but not replace, mandatory documentation for Employment Ontario programs.

Encourage newcomers to continue working towards the skill level demands of an occupation(s) with the understanding that while they may not be required to satisfactorily demonstrate the most complex tasks when first entering a job, they need to continually develop their Essential Skills and work habits to keep a job and progress in the workplace.

1. Start by reviewing the OSP Training Plan with clients. Check off which ESWH to focus on during training. You may want to begin with a few skills and work habits at first, allowing clients to experience success and then check off more tasks at higher levels as the training progresses.

2. Settlement workers and employment specialists record the learners' demonstration of Essential Skills and tasks in the right column of the OSP Training Plan and can write in the date demonstrated if appropriate.

3. Clients are encouraged to keep a copy of their OSP Training Plan(s) in their portfolio. They can use their OSP Training Plans to help prepare for job interviews and to show employers what they can do. Clients can also use the OSP Tracker to track and plan their skills development over time.

Sample OSP Work Plan: Landscape and Horticultural Technicians and Specialists (NOC Code: 2225)

Ontario Skills Passport — Skills and Work Habits for the Workplace

Skills and Tasks

Skill levels are assigned to workplace tasks:
Level 1 tasks are the least complex and level 4/5 tasks are the most complex.

Name: _____

Occupation: Landscape and Horticultural Technicians and Specialists (NOC Code: 2225)

Reading Text	
Tasks Performed	**Check**
Read short comments on forms and handwritten notes from co-workers, customers and supervisors.(1)	☐
Read directions on pesticide and fertilizer labels and in Material Safety Data Sheets for details of handling, mixing, application and first aid procedures.(2)	☐
Review specifications written by contractors, architects and designers. For example, read tree planting specifications written by contractors to ensure that provisions have been made for tree protection in landscape architecture projects and landscape maintenance contracts.(2)	☐
Read instruction manuals for landscaping equipment and supplies and computer programs. For example, refer to software user manuals to review specific functions or steps needed to create plant images, custom plant care packages and quotations using landscape design software.(3)	☐
Problem Solving	
Tasks Performed	**Check**
Encounter bad weather which prevents landscaping operations from proceeding. Advise supervisors or clients and make schedule changes for the crews.(1)	☐
Crews encounter unexpected difficulties such as the discovery of big boulders and tree stumps that are hard to remove. If project deadlines cannot be met, meet with supervisors or clients to outline the difficulties and provide estimates of the additional time and resources required.(2)	☐

Measurement and Calculation	
Tasks Performed	**Check**
Determine the quantities of materials and supplies needed for jobs. For example, determine the number of pesticide capsules needed for a job by totalling the diameters of all trees to be treated and dividing the total by the number of centimetres treated per capsule. Determine the quantity of paving stones in square feet required to meet design requirements. Golf course superintendents may determine the amount of sand needed for bunkers by calculating their areas.(2)	☐
Calculate weights and liquid volumes needed to prepare fertilizer, fungicide, herbicide and insecticide mixtures. Perform these calculations using ratios, rates and percentages.(2)	☐
Take measurements from landscape drawings to determine location to plant or place shrubs, trees and flowers.(2)	☐
Take various precise measurements. For example, take precise site measurements using laser distance and height instruments. Take a series of measurements of diameters of plant stems and tree trunks at precise intervals as specified in manuals of standards using callipers.(3)	☐
Finding Information	
Tasks Performed	**Check**
Find information about past landscaping or horticultural activities by searching databases.(2)	☐
Find legislation applying to current landscaping projects in building codes, zoning regulations and by-laws.(3)	☐
Search a wide range of sources including textbooks, trade publications, scientific journals and suppliers' websites to find information about trees, shrubs, plants, flowers, soils, inorganic materials, fertilizers, fungicides, herbicides, pesticides, treatment techniques and equipment.(3)	☐
Document Use	
Tasks Performed	**Check**
Read lists of names and addresses of horticultural product suppliers.(1)	☐
Scan labels on fertilizer, herbicide, insecticide and fungicide containers to find information on ingredients, concentrations, hazard warnings and expiry dates.(1)	☐
Check coloured pictures of varied types of diseases to assess the health and conditions of trees, shrubs, plants and lawns.(2)	☐
Locate and retrieve data from various tables, schedules and other table-like text. For example, locate information about the composition and health hazard of chemical products on Material Safety Data Sheets and other technical data sheets.(3)	☐
Other Tasks	
Tasks Performed	**Check**
	☐
	☐

Working Safely	
Description	**Check**
Working in a manner that prevents injury to self and others	☐
Reporting unsafe conditions	☐
Participating in health and safety training, as required	☐
Using and wearing all required protective equipment and devices	☐
Teamwork	
Description	**Check**
Working willingly with others	☐
Showing respect for the ideas and opinions of others	☐
Taking responsibility for his or her share of the work	☐
Contributing to the team effort by sharing information, resources, and expertise	☐
Reliability	
Description	**Check**
Being punctual	☐
Following directions	☐
Giving attention to detail	☐
Using time effectively and producing work on time	☐
Acting in accordance with health and safety practices	☐
Organization	
Description	**Check**
Organizing work priorities when faced with a number of tasks	☐
Devising and following a coherent plan to complete a task	☐
Revising the plan when necessary to complete a task or to make improvements	☐

Working Independently	
Description	**Check**
Accomplishing tasks independently	☐
Independently selecting, evaluating, and using appropriate materials, tools, resources, and activities	☐
Using prior knowledge and experience to solve problems and make decisions	☐
Initiative	
Description	**Check**
Beginning and completing tasks with little prompting	☐
Approaching new tasks with confidence and a positive attitude	☐
Seeking assistance when necessary	☐
Self-advocacy	
Description	**Check**
Asking questions and seeking clarification, where appropriate	☐
Identifying and making use of appropriate resources and support when needed	☐
Being proactive regarding individual rights and responsibilities, where appropriate	☐
Customer Service	
Description	**Check**
Listening effectively to determine and meet clients' needs	☐
Interacting positively with both co-workers and clients/customers	☐
Endeavouring to meet and exceed expectations	☐
Creating a positive impression of the company or organization	☐

Entrepreneurship	
Description	**Check**
Recognizing and acting on opportunities	☐
Showing perseverance	☐
Being innovative and creative	☐
Being versatile and resourceful	☐

Employer Information

Company Name	Supervisor's Name	Phone Number	Email	Duration of Placement

Employer Comments

Employer Signature

Date

http://www.ontario.ca/skillspassport

Sample OSP Work Plan: Labourers in Food, Beverage and Tobacco Processing (NOC Code: 9617)

Ontario Skills Passport Work Plan

Ontario Skills Passport — Skills and Work Habits for the Workplace

Skills and Tasks

Skill levels are assigned to workplace tasks:

Level 1 tasks are the least complex and level 4/5 tasks are the most complex.

Name: sample

Occupation: Labourers in Food, Beverage and Tobacco Processing (NOC Code: 9617)

Writing	
Tasks Performed	**Check**
Make log book entries to record tasks completed. (1)	☐
Problem Solving	
Tasks Performed	**Check**
Conveyor belts have been shut down. Look for the source of the problem, such as broken parts or the accidental tripping of a switch. If the belts cannot be immediately restarted, deal with products manually until repairs have been completed. (2)	☐
Oral Communication	
Tasks Performed	**Check**
Talk to truck drivers and railroad workers to get information or arrange for pickups. (1)	☐
Talk with customers to take orders or to answer questions about products and shipping. (1)	☐
Document Use	
Tasks Performed	**Check**
Refer to shift schedules and work orders. (2)	☐
Decision Making	

Tasks Performed	Check
Decide when to get additional materials to the production area. This decision is important since a bad decision can lead to production slowdowns because of lack of stock. (2)	☐
Data Analysis	
Tasks Performed	**Check**
Monitor changes in temperature and pressure over a number of days to identify trends which may have an impact on product quality. (3)	☐

Other Tasks	
Tasks Performed	**Check**

Working Safely	
Description	**Check**
Working in a manner that prevents injury to self and others	☐
Reporting unsafe conditions	☐
Participating in health and safety training, as required	☐
Using and wearing all required protective equipment and devices	☐
Teamwork	
Description	**Check**
Working willingly with others	☐
Showing respect for the ideas and opinions of others	☐
Taking responsibility for his or her share of the work	☐
Contributing to the team effort by sharing information, resources, and expertise	☐
Reliability	

Description	Check
Being punctual	☐
Following directions	☐
Giving attention to detail	☐
Using time effectively and producing work on time	☐
Acting in accordance with health and safety practices	☐
Organization	
Description	**Check**
Organizing work priorities when faced with a number of tasks	☐
Devising and following a coherent plan to complete a task	☐
Revising the plan when necessary to complete a task or to make improvements	☐
Working Independently	
Description	**Check**
Accomplishing tasks independently	☐
Independently selecting, evaluating, and using appropriate materials, tools, resources, and activities	☐
Using prior knowledge and experience to solve problems and make decisions	☐
Initiative	
Description	**Check**
Beginning and completing tasks with little prompting	☐
Approaching new tasks with confidence and a positive attitude	☐
Seeking assistance when necessary	☐

Self-advocacy	
Description	**Check**
Asking questions and seeking clarification, where appropriate	☐
Identifying and making use of appropriate resources and support when needed	☐
Being proactive regarding individual rights and responsibilities, where appropriate	☐
Customer Service	
Description	**Check**
Listening effectively to determine and meet clients' needs	☐
Interacting positively with both co-workers and clients/customers	☐
Endeavouring to meet and exceed expectations	☐
Creating a positive impression of the company or organization	☐
Entrepreneurship	
Description	**Check**
Recognizing and acting on opportunities	☐
Showing perseverance	☐
Being innovative and creative	☐
Being versatile and resourceful	☐

Employer Information

Company Name	Supervisor's Name	Phone Number	Email	Duration of Placement

Employer Comments

Employer Signature

Date

http://www.ontario.ca/skillspassport

Sample OSP Training Plan: Financial Auditors and Accountants (NOC Code: 1111)

Ontario Skills Passport — Skills and Work Habits for the Workplace

Essential Skills and Tasks

Skill levels are assigned to workplace tasks:
Level 1 tasks are the least complex and level 4/5 tasks are the most complex.

Name: _____

Occupation(s): Financial Auditors and Accountants (NOC Code: 1111)

Reading Text		
Tasks Performed	**Check**	**Date**
Read brief email from co-workers, managers and clients. For example, accountants may read email from co-workers requesting instructions for processing uncommon financial transactions. They may read email from suppliers who confirm delivery dates and ask about payments for invoices. (1)	☐	
Read letters and email from co-workers, managers, suppliers and officials in government departments. For example, cost accountants read about monthly expenses and explanations of budget variances in email from unit and department managers. Accountants for manufacturing plants read email in which managers and supervisors offer suggestions for draft budgets and provide their opinions about predicted changes in business activities. Self-employed accountants read requests for additional financial details and clarifications of financial reports in letters from clients, officials in government departments and financial auditors. (2)	☐	
Read minutes from meetings and short reports to learn about business activities and other matters. For example, accountants for not-for-profit organizations read minutes from committee meetings and short reports about monthly activities to remain current on such matters as delays in projects and reasons for emergency committee meetings. Program auditors for government departments read monthly reports from community service agencies to understand reasons for budget variances. (3)	☐	

Oral Communication		
Tasks Performed	**Check**	**Date**
Discuss a variety of accounting and work-related topics with co-workers and colleagues. For example, accountants answer clerks' questions about entering financial transactions. Accountants for construction companies may ask colleagues about calculating gains on sales of assets. Tax specialists discuss changes to tax rules for claimable expenses with clients and their staffs. Accountants discuss financial entries in tax returns with financial auditors and officials in government departments. (2)	☐	
Discuss prices, products and services and delivery arrangements with service providers and suppliers. For example, accountants may discuss costs and payment schedules for short-term loans with bank managers. Controllers for manufacturing plants discuss requirements for financial reporting with tax specialists. (2)	☐	
Interview and collect information from co-workers and clients. For example, managers of finance interview co-workers during annual risk management assessments and policy reviews. They discuss current procedures for completing business activities such as hiring consultants and purchasing supplies. Prior to audits, financial auditors interview chief accountants to understand clients' business operations. (3)	☐	
Scheduling or Budgeting and Accounting		
Tasks Performed	**Check**	**Date**
Calculate and verify account balances. For example, managers of finance reconcile records of financial transactions with financial summaries such as bank statements and source deduction and employer contribution summaries from the Canada Revenue Agency. (3)	☐	
Compare costs and revenues for different investment options. For example, accountants and tax specialists calculate the different tax liabilities and costs associated with various investments to determine which will generate the greatest earnings and tax savings while maintaining adequate cash flows. (Accountants) (3)	☐	
Prepare financial summaries such as balance sheets, income statements and statements of cash flows and retained earnings. Prepare summaries to report revenues, expenses, earnings, losses, assets, liabilities, shareholders' equities and the values of business operations. For example, accountants calculate retained earnings for oil wells using data such as revenues generated from oil sales, investment income and operational costs for drilling, processing and transportation. Financial auditors verify the accuracy of financial summaries. (4)	☐	

Data Analysis		
Tasks Performed	**Check**	**Date**
Analyze costs for goods and services. For example, project accountants calculate average operational costs such as those for supplies, resources and labour to prepare budgets. Accountants in manufacturing plants calculate per unit production costs for products. Controllers calculate price differences and identify lowest prices for goods and services. (Accountants) (3)	☐	
Analyze data for production, service delivery and sales and generate statistics to describe the growth of business enterprises, changes in revenue and expenses, the composition of markets and other factors. For example, accountants for manufacturing and construction companies analyze data on the composition of markets and past sales to forecast future sales and to predict growth potential for business enterprises. (Accountants) (3)	☐	
Decision Making		
Tasks Performed	**Check**	**Date**
Set credit limits for customers and fees and billing periods for clients. For example, accountants for construction firms and manufacturing plants set initial credit limits and billing periods for customers using credit histories and financial standings as key factors. They may choose to request advance payment for future services and goods to customers and clients who fail to pay invoices promptly. (2)	☐	
Choose accounting methods and strategies. Accountants make decisions about systems and processes to meet the evolving needs of organizations. For example, project accountants choose control features for cheque signing authorities. Accountants decide upon appropriate financial monitoring systems such as those for predicting cash flow requirements. They gather details about different options and strategies and discuss them with co-workers and colleagues before making final decisions. (Accountants) (3)	☐	
Critical Thinking		
Tasks Performed	**Check**	**Date**
Evaluate the suitability of services and supplies. For example, cost accountants and managers of finance evaluate the suitability of banking and investment accounts. (Financial Auditors and Accountants) (2)	☐	

Assess the financial health of organizations. For example, certified management accountants and financial auditors assess organizations' financial health. They examine financial records to identify trends such as changes in cash flows, indebtedness, expenses and revenues. They examine current accounting systems and management practices and plans for business development. They use their assessments to make recommendations for operational processes and strategic visions for organizations. (Financial Auditors and Accountants) (3)	☐	
Evaluate the accuracy of prospectuses and financial records such as financial statements and balance sheets before approving them. Examine supporting documents such as financial records and narrative reports about accounting activities and financial systems. Ensure documents are complete and identify potential anomalies and inaccuracies. Seek clarification from appropriate personnel and request supporting documentation if necessary. (Financial auditors) (3)	☐	
Other Tasks		
Tasks Performed	**Check**	**Date**
	☐	
	☐	

Working Safely		
Description	**Check**	**Date**
Working in a manner that prevents injury to self and others	☐	
Reporting unsafe conditions	☐	
Participating in health and safety training, as required	☐	
Using and wearing all required protective equipment and devices	☐	
Teamwork		
Description	**Check**	**Date**
Working willingly with others	☐	
Showing respect for the ideas and opinions of others	☐	
Taking responsibility for his or her share of the work	☐	
Contributing to the team effort by sharing information, resources, and expertise	☐	

Reliability		
Description	**Check**	**Date**
Being punctual	☐	
Following directions	☐	
Giving attention to detail	☐	
Using time effectively and producing work on time	☐	
Acting in accordance with health and safety practices	☐	
Organization		
Description	**Check**	**Date**
Organizing work priorities when faced with a number of tasks	☐	
Devising and following a coherent plan to complete a task	☐	
Revising the plan when necessary to complete a task or to make improvements	☐	
Working Independently		
Description	**Check**	**Date**
Accomplishing tasks independently	☐	
Independently selecting, evaluating, and using appropriate materials, tools, resources, and activities	☐	
Using prior knowledge and experience to solve problems and make decisions	☐	
Initiative		
Description	**Check**	**Date**
Beginning and completing tasks with little prompting	☐	
Approaching new tasks with confidence and a positive attitude	☐	
Seeking assistance when necessary	☐	
Self-advocacy		
Description	**Check**	**Date**
Asking questions and seeking clarification, where appropriate	☐	
Identifying and making use of appropriate resources and support when needed	☐	
Being proactive regarding individual rights and responsibilities, where appropriate	☐	
Customer Service		
Description	**Check**	**Date**
Listening effectively to determine and meet clients' needs	☐	
Interacting positively with both co-workers and clients/customers	☐	
Endeavouring to meet and exceed expectations	☐	
Creating a positive impression of the company or organization	☐	

Entrepreneurship		
Description	**Check**	**Date**
Recognizing and acting on opportunities	☐	
Showing perseverance	☐	
Being innovative and creative	☐	
Being versatile and resourceful	☐	

Learner's Name	Educator/Trainer's Name	Duration of Placement
		-

Employer's Additional Information

Educator/Trainer's Signature

Date

Learner's Signature

Date

http://www.ontario.ca/skillspassport

Ontario Skills Passport
Skills for Work, Learning and Life

Ontario Skills Passport Tracker

Name: _____ **Date:** _____

Track and plan your skills development!

The Ontario Skills Passport (OSP) offers tools and resources to **assess**, **build**, **document** and **track** your skills so you can **transfer** them to everyday life or the next place you go – whether it's further education, training or the workplace. It can help you:

- Learn about the Essential Skills and work habits that employers are looking for
- Assess, practice and build your Essential Skills and work habits
- Prepare a great résumé, conduct job searches and interview with confidence.

Check off in the chart below the Essential Skills and work habits you demonstrate in education and training programs, volunteer activities, in the community, at home and in the workplace.

	Skill Levels				
Essential Skills	Level 1	Level 2	Level 3	Level 4	Level 5
Reading Text					
Writing					
Document Use					
Computer Use					
Oral Communication					
Numeracy					
Money Math					
Scheduling or Budgeting and Accounting					
Measurement and Calculation					
Data Analysis					
Numerical Estimation					
Thinking Skills					
Job Task Planning and Organizing					
Decision Making					
Problem Solving					
Finding Information					
Critical Thinking					

Note: Level 1 tasks are the least complex and level 4/5 tasks are the most complex.

Work Habits					
Working Safely	☐	Organization	☐	Self-advocacy	☐
Teamwork	☐	Working Independently	☐	Customer Service	☐
Reliability	☐	Initiative	☐	Entrepreneurship	☐

Note: There are no skill levels associated with work habits featured in the OSP.
Visit the OSP website for descriptions of the Essential Skills and skill levels, as well as the work habits.

Ontario Skills Passport

The Ontario Skills Passport can be your ticket to a great job and a bright future

Skills for Work, Learning and Life

Skills in the OSP	View descriptions of Essential Skills and work habits. See videos that show how people use these skills in the workplace and in everyday life.
Search for Tasks	Search for sample tasks that show how people use Essential Skills and work habits in work, learning and life and in over 400 occupations. Get information on career planning, education and training, as well as employment and volunteer opportunities.
Assess and build your skills	Choose a self-assessment to get information on your Essential skills and work habits and compare your results to the occupations you are interested in. Choose activity sets to help you practice and build your skills.
Create an OSP Work Plan	Create an OSP Work Plan that focuses on the Essential Skills, job tasks and work habits related to your work placement. Employers record how you used your skills in this work plan.
Create an OSP Training Plan	Create an OSP Training Plan that focuses on ESWH related to learning activities. Learning practitioners and adult educators will document how you used your skills in the training plan.
Create an OSP Transition Plan	Create an OSP Transition Plan to help you transfer your Essential Skills and work habits to everyday life and the next place you go – whether it's to a job or further education and training.
SkillsZone and other resources	Go to SkillsZone for games and interactive learning activities. Go to Resources and Links to get sample résumés and cover letters and more!

Five Key Approaches to Skills Development

Follow your heart: Believe in yourself and use your strengths and interests, Essential Skills and work habits to turn your passion into a career.

Team up with others: Ask people for feedback on your skills and for opportunities to further develop them.

Be open to change: Essential Skills and work habits will help you adapt to change in work, learning and life.

Keep on learning: Take advantage of every learning opportunity to practice and build your Essential Skills and work habits.

Focus on the journey: Skills development is a lifelong journey. Continually develop your Essential Skills and work habits to get a job, progress in the workplace and contribute to your community.

Getting a job or work placement is easier with the Ontario Skills Passport!

EMPLOYMENT ONTARIO

Looking for work? Employment Ontario can help.
ontario.ca/employmentontario

Ontario Skills Passport Reflection Worksheet

Name: Date:

Experience:

Who am I?	What Essential Skills and work habits did I develop and demonstrate? What did I learn about myself from this experience?
What are my opportunities?	What other experiences can I pursue that can help me apply and further develop my Essential Skills and work habits?
Who do I want to become?	How do my Essential Skills and work habits prepare me for the types of occupations that I have identified in my goals?
What is my plan to achieve my goals?	Are there any Essential Skills and work habits that I need to further develop to achieve these goals? What is my next step to further develop my Essential Skills and work habits?

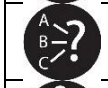
Save this reflection in your pathways planning portfolio.

Ontario.ca/skillspassport

Ontario Skills Passport
www.ontario.ca/skillspassport

Volunteer Worksheet

Name: _____ **Experience:** _____

OSP Icon	Essential Skill	Describe how you demonstrated the skill
	**Reading Text**	
	**Writing**	
	**Document Use**	
	**Computer Use**	
	**Oral Communication**	
	**Money Math**	
	**Scheduling or Budgeting and Accounting**	
	**Measurement and Calculation**	
	**Data Analysis**	
	**Numerical Estimation**	
	**Job Task Planning and Organizing**	
	**Decision Making**	
	**Problem Solving**	
	**Finding Information**	
	**Critical Thinking**	

OSP Icon	Work Habit	Describe how you demonstrated the work habit
	**Working Safely**	
	**Teamwork**	
	**Reliability**	
	**Organization**	
	**Working Independently**	
	**Initiative**	
	**Self-advocacy**	
	**Customer Service**	
	**Entrepreneurship**	

Number of Hours: _____

Supervisor's Signature: _____

TIP: Go to the OSP website at www.ontario.ca/skillspassport to search for tasks to help you describe how you used your Essential Skills and work habits!

Part 4: Video Script and Teaching Notes

The table below is intended to help you incorporate accurate health and safety information into the discussion of the video with the learners you are working with. Column 1 provides the full video script while Column 2 provides specific information of interest to newcomers related to the different parts of the video. Column 3 is for your own notes as you work with the material.

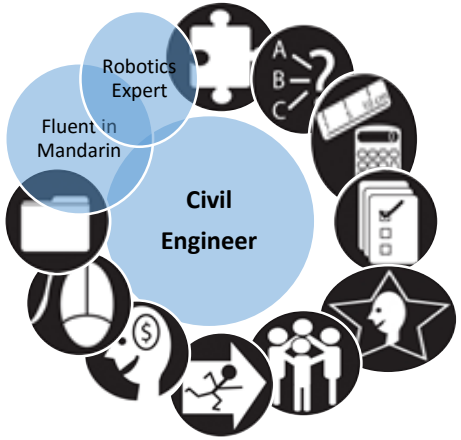
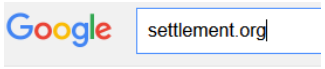
Video Script	Teaching Notes	Your Notes
Video Title: Transfer Your Skills to a Great Job!		
NARRATOR: Hi. I'd like to tell you about two friends of mine who put their skills to work. **HO GAN** is a civil engineer trained in China. Since immigrating to Canada three years ago as an internationally-trained professional, he has studied hard to improve his English. Because HO GAN is not licensed to work in Canada as a civil engineer, he works as a team supervisor at a business innovation centre. At the same time, he is working on the training he needs to re-certify and be able to work as an engineer in Ontario. **NARRATOR**: HO GAN is meeting his friend ANANYA here. **NARRATO**R: HO GAN and ANANYA met at an ESL class at the Toronto District School Board's Bathurst Heights Adult Learning Centre. While HO GAN is an engineer from China and ANANYA is an accountant from India, they found they shared many of the same experiences as newcomers and have stayed in touch to support each other in their careers. **NARRATOR**: During their meeting, ANANYA and HO GAN will use and talk about a number of different Essential Skills and work habits that are important for success in the workplace**.** Each time they do, we'll point it out by dropping in an icon like this one – oral communication.		

Video Script	Teaching Notes	Your Notes
HO GAN: Thanks for making time to meet. I really appreciate this; especially today [*clearly frustrated; raising coffee mug as "cheers" then drinks*]. **ANANYA**: Why? What's wrong? [*both seated by now*] **HO GAN**: It's not a big problem but… I have a co-op student at work and I asked her to do something and she gave me much more than I asked for. I don't understand. **ANANYA**: But did she do what you asked? **HO GAN**: Oh yes and it was good. But she talked to other people I work with and gave me extra like she was showing off… **ANANYA**: [*interrupting]* Wait a minute. She did what she was asked and then a little more and you are complaining? That's not showing off, that's showing initiative. She showed she's reliable, can solve problems and likes to contribute to the team. Most Canadian employers would love to have someone like that on their staff. **HO GAN:** Well, when you put it that way… I guess I can see what she was trying to do. [*sheepishly*] I'll talk to her when I get back to work.	**Essential Skills and Work Habits** **Oral Communication**  **Initiative**  **Reliability, Problem Solving, Teamwork** 	

Video Script	Teaching Notes	Your Notes
ANANYA: Good. Workplaces can be confusing when you come from somewhere else. [*new idea*] You know, I took this Workplace Culture and Communication Course that I think could be really good for you. **HO GAN**: [*as if it's last thing he thinks he needs*] I don't need another communication course. **ANANYA**: [*understanding where he's coming from*] No, it's not a regular language course. It's designed for professionals like us who already understand English. This is about workplace culture: the things you're not always taught but you really need to know in order to fit in and succeed. It focuses on what employers are looking for – and it's specific to what's needed in Ontario. It really helped me get my job here. I'll send you the link. [*making note in tablet*] **NARRATOR**: Ananya's right. The Canadian Workplace Culture and Communication Course – the CWCC is different. The course is designed for internationally trained professionals. It teaches professional communication skills needed to succeed in the workplace. It's specific to the expectations and needs of Ontario businesses. And it covers non-verbal communication. You know, body language and facial expressions. [*Narrator does something non-verbal to make point*.] **HO GAN**: Thanks. I'll look into it.	Canadian Workplace Culture & Communication (CWCC) • Designed for internationally educated professional. • Teaches professional communication skills required to succeed in the workplace. • Addresses expectations and needs of Ontario businesses • Covers non-verbal communication: body language and facial expressions	

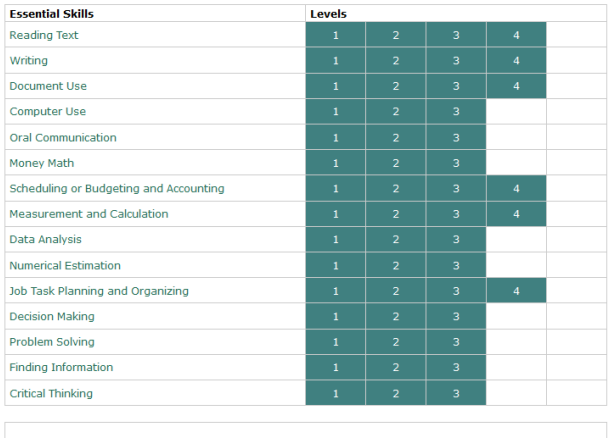
Video Script	Teaching Notes	Your Notes
ANANYA: Good. [*topic change*] But that's not what you came to talk about is it? It was credential recognition; right? **HO GAN**: Yes. Do you still have time? **ANANYA**: Sure. [*checking watch or screen*] I booked time for us in my schedule and I've still got 15 minutes. **HO GAN**: Great. I really appreciate your advice. **ANANYA**: It's not that long ago I was in the same situation. Trying to have your credentials recognized in Canada is definitely possible, but it takes time and effort. Tell me what's going on. **HO GAN**: That's just it. Everything is taking too much time and too much effort. I've decided to quit my course. I don't need to work as an engineer. I've got a job. **ANANYA**: Yes, and it's great -- for now, but you're a civil engineer and you're working as a supervisor on a group of business projects. Is that what you want? Are you sure giving up engineering is the answer? **HO GAN**: What do you mean? **ANANYA**: I followed the re-credentialing path and certified as a Canadian CPA and that worked great for me. But that doesn't mean that's what you have to do. There's more than one way to work in Canada. What if you didn't get your Canadian credential BUT you had a job that let you use more of the things you enjoy about being an engineer? A job that let you use the skills you already have.	**Job Task Planning and Organizing**  **Critical Thinking** 	

Video Script	Teaching Notes	Your Notes
HO GAN: That would be great, but how do I go about doing that? **ANANYA** [*taking out her table*] Let's say this is you. [*Draws circle and writes in it*] The "civil engineer". What are the skills you have that make you a good engineer? **HO GAN**: I don't know. **ANANYA**: You must have some idea. **HO GAN**: Well, I really like solving problems. **ANANYA**: And? **HO GAN**: Decision-making. Oh, and math. Especially measurement and calculation. And I am really good at working with documents. **ANANYA**: Good. So we add those too. What other skills do you have? **HO GAN**: I don't know. I haven't really thought about my skills this way before. **ANANYA**: You don't know right now, but there are resources that can help you. Being able to describe your skills in a way that makes sense to Canadian employers gives you a huge advantage in finding the job you want. [*HO GAN and ANANYA lean in together and make notes as narrator voice begins*.] **NARRATOR**: ANANYA told HO GAN about different resources she'd used. Resources like settlement dot org, and the Ontario Skills Passport, the OSP, where she could not only learn about skills but also assess her own skills and then look at different jobs – especially jobs in Ontario – where those skills were needed and could be transferred.		

Video Script	Teaching Notes	Your Notes
Working together, they identified more Essential Skills and work habits: working independently, teamwork, initiative, entrepreneurship, computer use and finding information. Then they looked at the unique skills HO GAN had beyond being a civil engineer like the facts he was fluent in Mandarin and had been a robotics expert in China. Skills that would be of great value to Canadian companies looking to expand internationally.		
NARRATOR (continued): Both Ho Gan and Ananya felt they had made a good start and HO GAN agreed to do some research using the OSP to learn more about the transferable skills he had before they met again.		
NARRATOR: HO GAN started his research at settlement dot org and looked at the section on alternative jobs. The site explained how working in a different job, but one that uses your experience and transferable skills, can be a good way to get Canadian work experience.	**Computer Use**   	

Video Script	Teaching Notes	Your Notes
He checked the section for Engineers And found that Construction Estimator was a good match. Remembering what ANANYA said, HO GAN then went to the OSP, the Ontario Skills Passport. He searched by Occupation and found Civil Engineers.	 *cursor and highlight on Occupation* *cursor and highlight civil engineer*	

Video Script	Teaching Notes	Your Notes
Clicking on Civil Engineers took him to the matching OSP Occupational Profile And showed him both the Essential Skills and the skill levels needed for that job. He could then click in to each of the Essential Skills And find authentic tasks that show how civil engineers use that skill in the workplace. For example, he read that civil engineers determine quantities of equipment, materials and labour needed for large scale projects: a Measurement and Calculation task at level 4.	**OSP Occupational Profile** <<Back **NOC Code: 2131** **Occupation: Civil Engineers** **Occupation Description:** Civil engineers plan, design, develop and manage projects for the construction or repair of buildings, earth structures, powerhouses, roads, airports, railways, rapid transit facilities, bridges, tunnels, canals, dams, ports and coastal installations and systems related to highway and transportation services, water distribution and sanitation. Civil engineers may also specialize in foundation analysis, building and structural inspection, surveying, geomatics and municipal planning. Civil engineers are employed by engineering consulting companies, in all levels of government, by construction firms and in many other industries, or they may be self-employed. **Essential Skills** / **Levels** Reading Text: 1 2 3 4 5 Writing: 1 2 3 4 5 Document Use: 1 2 3 4 Computer Use: 1 2 3 4 Oral Communication: 1 2 3 4 Money Math: 1 2 3 Scheduling or Budgeting and Accounting: 1 2 3 4 5 Measurement and Calculation: 1 2 3 4 5 Data Analysis: 1 2 3 4 5 Numerical Estimation: 1 2 3 Job Task Planning and Organizing: 1 2 3 4 Decision Making: 1 2 3 Problem Solving: 1 2 3 4 Finding Information: 1 2 3 4 • Determine quantities of equipment, materials and labour needed for large earth-moving, construction and material processing projects. For example, a municipal engineer may determine the amount of crushed limestone needed to cover a section of roadway. The engineer may also determine the size of crew required to dig a trench with backhoes, trenchers and bucket wheels and to lay a pipe system considering established production rates for machines and workers. (4)	

Video Script	Teaching Notes	Your Notes
HO GAN then went back to the occupation list and clicked on Construction Estimators.	2231 Civil Engineering Technologists and Technicians 2232 Mechanical Engineering Technologists and Technicians 2233a Industrial Engineering Technicians 2233b Quality Control Technicians 2233c Industrial Engineering and Manufacturing Technologists and Technicians 2234 Construction Estimators 2242 Electronic Service Technicians 2243 Industrial Instrument Mechanics	
He clicked into that occupational profile	**OSP Occupational Profile** Print Occupational Profile <<Back **NOC Code: 2234** **Occupation: Construction Estimators** **Occupation Description:** Construction estimators analyze costs of and prepare estimates on civil engineering, architectural, structural, electrical and mechanical construction projects. They are employed by residential, commercial and industrial construction companies and major electrical, mechanical and trade contractors, or they may be self-employed. • Click on any of the skill title to view sample workplace tasks for this occupation. • Scroll down the page to get information on career planning, education and training, and employment and volunteer opportunities.	
And then the skills	 **Essential Skills** / **Levels** Reading Text 1 2 3 4 Writing 1 2 3 4 Document Use 1 2 3 4 Computer Use 1 2 3 Oral Communication 1 2 3 Money Math 1 2 3 Scheduling or Budgeting and Accounting 1 2 3 4 Measurement and Calculation 1 2 3 4 Data Analysis 1 2 3 Numerical Estimation 1 2 3 Job Task Planning and Organizing 1 2 3 4 Decision Making 1 2 3 Problem Solving 1 2 3 Finding Information 1 2 3 Critical Thinking 1 2 3	
And that's where he discovered that construction estimators also calculate material quantities.		
Working through all the sample tasks in both profiles he could clearly see that both jobs use the same Essential Skills and often at the same skill levels. In other words, by using the Ontario Skills Passport, Ho Gan could see how he could transfer his skills as a civil engineer to work as a construction estimator.	**Measurement and Calculation** • Take measurements using a tape measure during site visits to verify quantities of material. For example, measure lengths of wiring. (1) • Calculate quantities and volumes. For example, when preparing estimates for roadway construction calculate the quantity of gravel required using area and depth of coverage and the grade of slopes as factors. (2) • Calculate missing dimensions on scale drawings to accurately determine quantities. Construction estimators must take measurements from scale drawings and calculate areas, perimeters and volumes, and may have to create a new scale drawing to determine the missing dimensions. (3) • Calculate material quantities for jobs involving complex and irregular shapes. Set up equations to calculate height, depth, angles and degree of curves using principles of geometry and trigonometry. Insert these dimensions into formulae to determine the volume of material required to bring sections of roadways up to grade level. (4)	

Video Script	Teaching Notes	Your Notes
NARRATOR: After talking with ANANYA and doing some research, HO GAN felt like a different person. He was excited about exploring alternate careers and finding one that would let him contribute the skills he already had as an engineer. And whatever job he decided on, he definitely planned to take the Workplace Communication Course so when he got the job he wanted, he'd be an even more valuable employee. It would still take time and nothing was going to change overnight, but having a plan definitely felt good. HO GAN and ANANYA followed similar but different paths to the same goal: to use the considerable skills they brought to Canada to contribute to their new community and its economy. **NARRATOR**: To learn more about how you can use your Essential Skills and work habits to explore alternative careers visit Ontario dot ca slash skills passport and settlement dot org		

Appendix 1: Learning Activity Sets

Construction Estimator

NOC 2234

Essential Skills Focus

Document Use: Level 2
Measurement and Calculation: Levels 2 and 3
Scheduling or Budgeting and Accounting: Level 1

Quotes and Contracts

Construction estimators analyze costs of and prepare estimates on civil engineering, architectural, structural, electrical and mechanical construction projects. They are employed by residential, commercial and industrial construction companies and major electrical, mechanical and trade contractors, or they may be self-employed.

1. Tasks

Construction Estimators give customers quotes for construction projects and jobs.

Task 1

A customer wants to know how much they would save by choosing ceramic tiles instead of porcelain tiles. Porcelain tiles cost $16.25/sq. ft. and ceramic tiles cost $4.72/sq. ft. The construction estimator adds 10% to all material amounts to account for waste. Look at the Estimate Detail Form to identify the number of square feet to be tiled. Calculate the cost savings to the client of using ceramic tiles.

Measurement and Calculation

Construction Estimators write contracts, reports and quotes for construction projects.

Task 2

a) Look at the Construction Contract. Highlight what the owner is responsible for removing.

Document Use

b) Look at the Construction Contract. Highlight what the owner is responsible for supplying.

Document Use

Construction Estimators analyze costs of and prepare estimates for construction projects.

Task 3

a) The construction estimator identifies the cost of supplies for the job by vendor. Look at the vendor price list. Which vendor offers the lowest total price for the supplies?

Document Use

b) Next the construction estimator costs the job by finding the lowest prices per item. Look at the vendor price list. Calculate the total cost of materials if each component were purchased from the least expensive source.

Document Use

c) Calculate the savings if the components are purchased at the lowest individual price instead of through the vendor who offers the lowest total price.

Scheduling or Budgeting and Accounting

Estimate Detail Form

Company: _____ Estimate #: _____ Estimator: _____ Date: _____

Job: _____ Estimate due: _____ Checked by: _____ Date: _____

Address: _____ Notes: Wall removal. New ceramic floor.

Job Description: _____

CSI Division/Account: _____

Item or Description	Qty	Unit	Material Unit $	Material Ext $	Manhours MH/Unit	Manhours MH Ext	Labor MH$	Labor Ext $	Equipment Unit $	Equipment Ext $	Subcontract Unit $	Subcontract Ext $	Total Cost
Waste Floor					6		$25 /man hr.						$150
Prep Floor					2		$40						$80
Refinish Wall													
Drywall					1		$40						$40
Paint					2		$40						$80
Tile	650 sq'						$3/sq'						$1,950
Grout	650 sq'				2 hours		$40						$80
Sealer	650 sq'				2		$40						$80
Total Direct Costs this sheet			Total Material $		Total Manhours		Total Labor $		Total Equipment $		Total Subcontract $		Total $

Construction Contract

Todd Hallissey Contracting

Estimate for upper bathroom:

To be removed by owner

-drywall and tile around tub

-all existing flooring materials

Remove and dispose by contractor

-one tub

- vanity

-toilet to be reinstalled

To be supplied by owner installed by contractor

-one two-piece shower unit

-shower faucets

-vanity with faucets

-one-piece vinyl flooring

-all paint done by owner

To be supplied and installed by contractor

-All ABS fittings and pipe

-All copper fittings and pipe

-drywall (dense shield)

-drywall compound and taping

-subflooring (1/4" mahogany)

Costs will be for materials and labor $3172.43

Terms 30% down $951.73 70% upon completion $2220.70

Time needed for job – we will require two full weekends,

Starting at 8:00 am finishing at 6:00 pm both Saturdays and Sundays

Start date to be determined between owner and contractor at a later date

Thank you

Todd Hallissey

519-555-0100

Vendor Price List

Quantity	Part	Description	Pope Electrical		Gerrie Electric		Westburne Ruddy	
			Price	Per	Price	Per	Price	Per
25 m	NMD90	Wire NMD2C#14	21.50	M	31.25	M	26.85	M
1	2 Gang Box	Device Box 2104LLEU2	3.66	each	2.40	each	3.25	each
1	Deep 2104	Device Box 2104LLEU	1.56	each	1.88	each	1.67	each
1	Octagon Box	Octagon Box 54151	2.28	each	1.62	each	1.99	each
1	2 Single Pole Switch	Toggle Switch	2.22	2	1.82	2	1.75	2
1	GFI Receptacle	GFCI Outlet	16.98	each	15.35	each	18.25	each
1	110 CFM Bathroom Fan	QT110CCA	152.50	each	115.00	each	155.90	each
1	4" Pot Light with Shower Trim	4" IC Housing with Shower Trim	45.75	each	49.68	each	42.00	each
1	Vanity Fixture	24" Vanity Fixture White	18.99	each	22.99	each	21.50	each
1	2 Gang Switch Plate	2 Gang Switch Plate White	0.53	each	0.65	each	0.60	each
1	Box Romex Staples	Box of 500	15.00	each	18.25	each	13.95	each
1	Box 1 1/2" #8 Wood Screws	Box of 600	15.98	each	16.25	each	14.90	each
1	Roll of Vapor Barrier		37.85	each	40.99	each	35.40	each
		Total Cost	$334.80		$318.13		$311.16	

2. Answer Key

Task 1

A customer wants to know how much they would save by choosing ceramic tiles instead of porcelain tiles. Porcelain tiles cost $16.25/sq. ft. and ceramic tiles cost $4.72/sq. ft. The construction estimator adds 10% to all material amounts to account for waste. Look at the Estimate Detail Form to identify the number of square feet to be tiled. Calculate the cost savings to the client of using ceramic tiles.

Answer

$8,243.95 savings

Essential Skills Focus: Measurement and Calculation - Level 3, Document Use - Level 2

Check **page 64** for one way to get this answer.

Task 2

a) Look at the Construction Contract. Highlight what the owner is responsible for removing.

b) Look at the Construction Contract. Highlight what the owner is responsible for supplying.

Answer

a) The owner will remove:

- **drywall and tile around tub**
- **all existing flooring materials**

Essential Skills Focus: Document Use - Level 2

b) The owner will supply:

- **one two-piece shower unit**
- **shower faucets**
- **vanity with faucets**
- **one-piece vinyl flooring**
- **all paint done by owner**

Essential Skills Focus: Document Use - Level 2

*Check **page 65** for one way to get this answer.*

Task 3

a) The construction estimator identifies the cost of supplies for the job by vendor. Look at the vendor price list. Which vendor offers the lowest total price for the supplies?

b) Next the construction estimator costs the job by finding the lowest prices per item. Look at the vendor price list. Calculate the total cost of materials if each component were purchased from the least expensive source.

c) Calculate the savings if the components are purchased at the lowest individual price instead of through the vendor who offers the lowest total price.

Answer

a) Westburne Ruddy

Essential Skills Focus: Document Use - Level 2, Scheduling or Budgeting and Accounting - Level 1

b) $284.95

Essential Skills Focus: Document Use - Level 2, Measurement and Calculation - Level 2

c) $26.21

Essential Skills Focus: Scheduling or Budgeting and Accounting - Level 1

*Check **page 66** for one way to get this answer.*

3. Answer Steps

Task 1

A customer wants to know how much they would save by choosing ceramic tiles instead of porcelain tiles. Porcelain tiles cost $16.25/sq. ft. and ceramic tiles cost $4.72/sq. ft. The construction estimator adds 10% to all material amounts to account for waste. Look at the Estimate Detail Form to identify the number of square feet to be tiled. Calculate the cost savings to the client of using ceramic tiles.

Answer

$8,243.95 savings

One way to get this answer...

1. Identify what is required: the cost savings to the client.
2. Find the number of square feet to be tiled.
3. Locate the column "***Item or Description***" in the ***Estimate Detail Form***.
4. Scan the column for the key word "***tile***".
5. Decide that 650 SQ' is the number of square feet to be tiled.
6. Identify what is required: 10% for waste allowance on materials.
7. Set up the problem to find the total required including waste allowance: (square feet x waste percentage) + square feet = square feet to be tiled including waste allowance.
8. Calculate: (650 x 10%) + 650 = 715 square feet.
9. Identify what is required: the cost for porcelain and ceramic tiles to cover 715 square feet.
10. Set up the problem to find the cost for porcelain tiles: price / sq. ft. coverage x 715 square feet = cost for porcelain tiles to cover 715 square feet.
11. Calculate: $16.25 x 715 = $11,618.75.
12. Set up problem to find the cost for ceramic tiles: price / sq. ft. coverage x 715 square feet = cost for ceramic tiles to cover 715 square feet.
13. Calculate: $4.72 sq. ft. x 715 = $3,374.80.
14. Identify what is required: the cost savings to the client by using ceramic tiles.
15. Set up the problem to find the cost difference: Total porcelain price for coverage – Total ceramic price for coverage = cost savings.
16. Calculate: $11,618.75 - $3,374.80 = $8,243.95.
17. Decide the savings to the customer would be $8,243.95.

Skill Focus: Measurement and Calculation - Level 3
Additional Skills: Document Use - Level 2

Task 2

a) Look at the Construction Contract. Highlight what the owner is responsible for removing.

b) Look at the Construction Contract. Highlight what the owner is responsible for supplying.

Answer

a) The owner will remove:

- **drywall and tile around tub**
- **all existing flooring materials**

b) The owner will supply:

- **one two-piece shower unit**
- **shower faucets**
- **vanity with faucets**
- **one-piece vinyl flooring**
- **all paint done by owner**

One way to get this answer...

Steps for a):

1. Scan the page and headings using the key words "***owner***" and "***remove***".2.
2. Locate the "***To be removed by owner***" heading.
3. Decide that "drywall and tile around tub" and "all existing flooring materials" is what the owner is responsible for removing.
4. Highlight the answer.

Skill Focus: Document Use - Level 2

Steps for b):

1. Scan the page and headings using the key words "***owner***" and "***supplied***".
2. Locate the "***To be supplied by owner installed by contractor***" heading.
3. Decide that "one two-piece shower unit", "shower faucets", "vanity with faucets", "one-piece vinyl flooring", and "all paint done by owner" is what the owner is responsible for supplying.
4. Highlight the answer.

Skill Focus: Document Use - Level 2

Task 3

a) The construction estimator identifies the cost of supplies for the job by vendor. Look at the vendor price list. Which vendor offers the lowest total price for the supplies?

b) Next the construction estimator costs the job by finding the lowest prices per item. Look at the vendor price list. Calculate the total cost of materials if each component were purchased from the least expensive source.

c) Calculate the savings if the components are purchased at the lowest individual price instead of through the vendor who offers the lowest total price.

Answer

a) Westburne Ruddy

b) $284.95

c) $26.21

One way to get this answer...

Steps for a):

1. Locate the supplier price list.
2. Scan the page for ***Total Cost***.
3. Locate the lowest supplier cost ($311.16).
4. Scan to find the name of the supplier associated with that column.
5. Decide that Westburne Ruddy is the supplier

Skill Focus: Document Use - Level 2
Additional Skills: Scheduling or Budgeting and Accounting - Level 1

Steps for b):

1. Locate the Price List
2. Scan the page for ***each component*** and locate the ***lowest supplier price***.
3. Locate the lowest supplier price for each component and add them together (21.50 + 2.40 + 1.56 + 1.62 + 1.75 + 15.35 + 115.00 + 42.00 + 18.99 + .53 + 13.95 + 14.90 + 35.40 = 284.95).
4. Decide that the lowest cost for materials is $284.95.

Skill Focus: Document Use - Level 2
Additional Skills: Measurement and Calculation - Level 2

Steps for c):

1. Locate the ***lowest total price by supplier*** ($311.16)
2. Locate the ***total by lowest individual item price*** ($284.95)
3. Decide that ***savings*** means ***the difference in cost between the two total prices***.
4. Calculate the difference between the two prices (311.16 - 284.95 = 26.21).
5. Decide that the savings is $26.21.

Skill Focus: Scheduling or Budgeting and Accounting - Level 1

Labourer in Food, Beverage and Tobacco Processing

NOC 9617

Essential Skills Focus
Document Use: Level 1
Oral Communication: Level 1
Problem Solving: Level 1

Recipe Directions

Labourers in this unit group perform material handling, clean-up, packaging and other elemental activities related to food, beverage and tobacco processing. They are employed in fruit and vegetable processing plants, dairies, flour mills, bakeries, sugar refineries, meat plants, breweries and other food, beverage and tobacco processing plants.

1. Tasks

Labourers in Food, Beverage and Tobacco Processing use directions to measure and dump ingredients into hoppers of mixing and grinding machines. Look at the Custard Powder Directions.

Task 1

How many 40 kg bags of fine granulated sugar are added?

Document Use

Task 2

The labourer checks the mixture in the first drum after ten minutes of mixing and finds white lumps. How can this problem be solved?

Problem Solving

Task 3

The labourer has just added the vanilla flavour and is now ready to go on a scheduled break. This worker tells a second labourer what has just been done and explains the next two steps.

Instructions: Refer to the Custard Powder Directions. Describe the step that was just completed and explain the next two steps of the procedure. When you are ready, ***record*** your explanation.

Oral Communication

Recipe Directions

2-Ton Mixer Custard Powder

Add: . . . . . .KG
Fine Granulated Sugar (4 1/2 x 40 kg) 180.0
Keltrol F (1 x 25 kg) 25.0

1st Drum:
Find Granulated Sugar 20.0
Vanillin (USP) “sift through #8 sieve” 1.8
21.8
Titanium Dioxice “sift through #8 sieve”. 3.5
25.3

Tartrazine (Yellow #5) Colour
Sunset Yellow (Yellow #6) Packet

Mix: 10 minutes minimum. If white lumps are present, mix an additional 5 minutes.

2nd Drum:
Salt 24.6
Keltrol F 1.7
26.3
Sodium Hexametaphosphate 6.4
32.7
Givaudan Vanilla Flavour C-229202. . . . . 7.8
40.5

Mix: 10 minutes

Add:
Therm-Flo Starch (16 x 45.45 kg) 727.0

Mix 5 minutes. “Reverse Ribbons”

Mix 5 additional minutes

Hammermill Japan Screen

***Thorough Cleaning Before and After Production**

2. Answer Key

Task 1

How many 40 kg bags of fine granulated sugar are added?

Answer

4 1/2 bags

Essential Skills Focus: Document Use - Level 1, Finding Information - Level 1

*Check **page 72** for one way to get this answer.*

Task 2

The labourer checks the mixture in the first drum after ten minutes of mixing and finds white lumps. How can this problem be solved?

Answer

mix an additional 5 minutes

Essential Skills Focus: Problem Solving - Level 1, Reading Text - Level 1, Document Use – Level 1, Finding Information - Level 1

*Check **page 73** for one way to get this answer.*

Task 3

The labourer has just added the vanilla flavour and is now ready to go on a scheduled break. This worker tells a second labourer what has just been done and explains the next two steps.

Instructions: Refer to the Custard Powder Directions. Describe the step that was just completed and explain the next two steps of the procedure. When you are ready, ***record*** your explanation.

Answer

Answers will vary. Possible answer AUDIO 3:

The vanilla was just added. It should mix for 10 minutes and then the Therm-Flo starch should be added.

Essential Skills Focus: Oral Communication - Level 1, Document Use - Level 2

*Check **page 74** for one way to get this answer.*

3. Answer Steps

Task 1

How many 40 kg bags of fine granulated sugar are added?

Answer

4 1/2 bags

One way to get this answer...

1. Scan the page using the keywords ***fine granulated sugar***.
2. Locate ***Fine Granulated Sugar (4 1/2 x 40 kg)……180.0***.
3. Decide that 4 1/2 is the number of 40 kg bags of fine granulated sugar that are added.

Skill Focus: Document Use - Level 1
Additional Skills: Finding Information - Level 1

Task 2

The labourer checks the mixture in the first drum after ten minutes of mixing and finds white lumps. How can this problem be solved?

Answer

mix an additional 5 minutes

One way to get this answer...

1. Identify the problem: white lumps are in the mixture.
2. Determine the goal: to get rid of the white lumps.
3. List the considerations: Whether there is a procedure in place to solve this problem, whether the white lumps can be removed, and other possibilities.
4. Decide which action to take: read the directions to find more information.
5. Locate: ***Mix: 10 minutes minimum. If white lumps are present, mix an additional 5 minutes***.
6. Solve the problem: mix an additional 5 minutes.

Skill Focus: Problem Solving - Level 1

Additional Skills: Reading Text - Level 1, Document Use - Level 1, Finding Information – Level 1

Task 3

The labourer has just added the vanilla flavour and is now ready to go on a scheduled break. This worker tells a second labourer what has just been done and explains the next two steps.

Instructions: Refer to the Custard Powder Directions. Describe the step that was just completed and explain the next two steps of the procedure. When you are ready, ***record*** your explanation.

Answer

Answers will vary. Possible answer AUDIO 3:

The vanilla was just added. It should mix for 10 minutes and then the Therm-Flo starch should be added.

One way to get this answer...

1. Identify the information requested: The step that was just completed and the next two steps of the procedure.
2. Decide on the information available: Refer to the Custard Powder Directions.
3. Locate ***Givaudan Vanilla Flavour……..7.8*** and the next two steps: ***Mix 10 minutes and Add: Therm-Flo Starch (16 x 45.45 kg)…..727.0***.
4. Repeat the information located in step 3 in your own words.

Skill Focus: Oral Communication - Level 1
Additional Skills: Document Use - Level 2

Appendix 2: Occupational Profile for Civil Engineer

OSP Occupational Profile: Civil Engineers

NOC Code: 2131

Occupation Description:

Civil engineers plan, design, develop and manage projects for the construction or repair of buildings, earth structures, powerhouses, roads, airports, railways, rapid transit facilities, bridges, tunnels, canals, dams, ports and coastal installations and systems related to highway and transportation services, water distribution and sanitation. Civil engineers may also specialize in foundation analysis, building and structural inspection, surveying, geomatics and municipal planning. Civil engineers are employed by engineering consulting companies, in all levels of government, by construction firms and in many other industries, or they may be self-employed.

Click on any of the skill title to view sample workplace tasks for this occupation.

Scroll down the page to get information on career planning, education and training, and employment and volunteer opportunities.

Essential Skills	Levels				
Reading Text	1	2	3	4	5
Writing	1	2	3	4	5
Document Use	1	2	3	4	
Computer Use	1	2	3	4	
Oral Communication	1	2	3	4	
Money Math	1	2	3		
Scheduling or Budgeting and Accounting	1	2	3	4	5
Measurement and Calculation	1	2	3	4	5
Data Analysis	1	2	3	4	5
Numerical Estimation	1	2	3		
Job Task Planning and Organizing	1	2	3	4	
Decision Making	1	2	3		
Problem Solving	1	2	3	4	
Finding Information	1	2	3	4	

- The skill levels represented in the above chart illustrate the full range of sample tasks performed by experienced workers and not individuals preparing for or entering this occupation for the first time.
- Note that some occupational profiles do not include all Numeracy and Thinking Essential Skills.

Reading Text

- Read instructions on the labels of workplace materials. For example, environmental, municipal and water management engineers may read handling and storage instructions on the labels of chemical products such as chlorine. (1)

- Read text entries in administrative and reporting forms. For example, structural engineers may read comments about roadways, interchanges and bridges in police accident reports. (1)

- Read short email from co-workers, colleagues and clients. For example, read messages from colleagues on matters such as meeting schedules, technical specifications and the coordination of work on joint projects. (2)

- Read manuals and guides to learn about methods and procedures for work. For example, read project management software manuals to review the operations needed to control the whole portfolio of projects, produce Gantt charts, identify underperforming projects and problem areas, assess resource efficiency and determine recruitment needs. (3)

- Read trade magazines and professional associations' newsletters to stay abreast of technological advances, legislative changes and other matters affecting the work. For example, a geomatics engineer may read a news article posted on the website of provincial land surveyors' association to learn about changes to certification requirements. (3)

- Read 'requests for proposals' for projects requiring structural, building, hydraulic, surveying, geotechnical, municipal, environmental, water management and transportation engineering expertise. Read proposal requests to learn about the scope of proposed work, mandatory requirements for credentials and experience, evaluation criteria and selection processes. (4)

- Read codes, standards and other legislation to verify rules and regulations and provide advice to co-workers, colleagues and clients. For example, building engineers may review building codes, zoning and energy consumption laws, municipal bylaws and other national, provincial and municipal legislation when designing residential, commercial and institutional structures. (4)

- Read articles in professional and academic journals such as the Canadian Journal of Civil Engineering, the Journal of Computing in Civil Engineering, Materials and Structures and the Journal of Materials in Civil Engineering. Select and read relevant articles to learn about new simulation models and experiments on materials, structures, infrastructures, procedures and equipment. For example, a civil engineer may read about experiments conducted to compare the performance of several asphalt mixtures at low temperatures. (5)

- Read lengthy reports and studies on topics such as environmental impacts, structural analysis, feasibility, hydrology and geology. For example, a transportation engineer may read land use, roadway configuration and other reports to learn about existing roadways and traffic patterns. A municipal engineer may read about a terrain analysis and hydrogeological investigation conducted at a proposed residential development site to investigate the sufficiency of groundwater supply and the requirements for sewage disposal systems. A public works engineer may read a geotechnical report about the nature of a harbour bottom prior to designing a wharf structure. (5)

Writing

- Write entries in reporting and administrative forms. For example, a public works engineer may write a short project description in a 'request for tender' call form. A municipal engineer may write brief entries in the recommendations section of a bridge inspection form. (1)

- Write email to co-workers, colleagues and clients. For example, a structural engineer may write a message to project staff to outline a change in priorities and the reallocation of tasks. A civil engineering consultant may write a message to a client asking for clarification of project requirements. (2)

- Prepare procedures for technicians, technologists, engineers and other workers. Establish the steps that other workers have to follow when carrying out job tasks. Be explicit and precise to reduce ambiguity and the possibility of misinterpretation. For example, environmental engineers may write comprehensive procedures for monitoring air, water and soil quality and cleaning up contaminated sites. (3)

- Write specifications for the construction, repair and maintenance of buildings, powerhouses, roads, airports, bridges, dams, ports and other structures. Prepare detailed descriptions of the tasks to be performed, materials, products, accessories, standards and processes to be used and other contract requirements such as the need to respect plans, permits, codes and regulations and to repair deficiencies. (4)

- Write lengthy proposals for projects requiring civil engineering expertise. In these proposals, address project objectives and discuss complex mathematical and physical science concepts. Identify project team members and describe academic backgrounds and relevant work experiences. For example, a civil engineering consultant may prepare a proposal for the assessment of a building's structural integrity. (4)

- Write technical reports for employers and clients. In these reports, describe mandates, backgrounds, objectives and methodologies, discuss findings and offer conclusions and recommendations. For example, building and structural engineers may write reports to describe the evaluation of construction materials and to make recommendations for particular applications. Geomatics engineers may write reports reviewing and approving survey design work. Geotechnical engineers may write reports analysing drainage patterns, investigating the properties of soils, rocks and ice and recommending slope stability solutions. Environmental engineers may write reports about the environmental impacts of industrial developments. (5)

- Write articles for scientific journals, conference proceedings and research publications. Summarize research protocols, outline difficulties encountered in conducting experiments, discuss scientific principles used to analyse data, present results obtained and explain their significance. For example, a structural engineer may write an article about the effects of pack ice on bridge structures. A transportation engineer may write an article about the development of a simulation model to assess public transit priorities. (5)

Document Use

- Scan labels for various data. For example, water management engineers may scan container labels to identify chemical products, concentrations and other data. Building, structural and hydraulic engineers may scan labels on construction materials for technical specifications. (1)

- Locate data in lists, tables and schedules. For example, a structural engineer may scan a list to identify materials to be used in a wharf reconstruction project. A municipal engineer may locate data on a bridge's location, value, deck length and width in a bridge inventory table. An environmental engineer may locate tasks and deadlines in a project schedule for the design of a sewage trunk main. (2)

- Enter data into tables and schedules. For example, a transportation engineer may enter traffic data into tables to study traffic flows. A municipal engineer may enter dates into a schedule for the maintenance of water, sewer and solid waste processing facilities. (2)

- Locate data in entry forms. For example, a public works engineer may review tender submission forms completed by contractors to locate data such as names, addresses and overall bid amounts. (2)

- Complete forms. For example, a municipal engineer may complete a bridge inspection form. A public works engineer may complete a request for tender call form. The engineer may collect and enter data such as the project number, title and location, the names of the client and funding departments, the work completion date and other details. (3)

- Locate data and identify trends in graphs. For example, a transportation engineer may locate data on community disruption resulting from several road interchange alternatives in a series of traffic flow graphs. A geotechnical engineer may scan graphs from a watershed study to locate data on precipitation and drainage patterns. A water management engineer may scan graphs generated by supervisory control and data acquisition systems to locate water readings and other data. (3)

- Locate dimensions, angles and other construction features in various technical drawings. For example, a building engineer may analyze load carrying capacity and structural forces in drawings of roof trusses. A municipal engineer may locate dimensions in underground construction drawings prior to digging up a section of water main. (4)

- Locate data in schematic drawings. For example, locate devices, device specifications, flow directions, capacities, voltages and other data in electrical, electronic, pneumatic and other schematic drawings. (4)

Computer Use

- Use the Internet. For example, access on-line software manuals and bulletins using Internet browsers such as Explorer and Netscape. Perform keyword searches to get information about codes, standards, materials, equipment and suppliers from websites. (2)

- Use databases. Create and modify databases for projects using programs such as Access. Search, display and print data from these databases. For example, a transportation engineer may create a database to manage data on signal light timings. A municipal engineer may create a database to track water treatment and road maintenance data. A bridge engineer may create a database to handle flow rate and fish population data. (3)

- Use spreadsheets. For example, use spreadsheet programs such as Excel to create scheduling, human resources allocation and budgeting matrices with which to monitor the progress of project activities. Embed formulas to perform calculations. (3)

- Use word processing. For example, create lengthy procedures, contract specifications, proposals, technical reports and journal articles using word processing programs such as Word. Supplement text with imported graphs, photographs and spreadsheet tables. Use formatting features such as page numbering, heading levels, indices, footnotes and columns. (3)

- Use communication software. For example, use email software such as Outlook to create and maintain distribution lists, receive correspondence and send email and attachments to colleagues, co-workers, contractors and clients. (3)

- Use other computer and software applications. For example, use project management software such as Project to control portfolios of projects, produce Gantt charts, identify underperforming projects, trends and problem areas, assess resource efficiency and determine recruitment needs. Also use specialized and industry-specific modelling software to simulate engineering processes. For example, transportation engineers may use transportation planning programs such as TransCAD to conduct traffic analyses and simulations. (4)

- Use computer-assisted design, manufacturing and machining. For example, structural engineers may use computer-assisted design software such as AutoCad, MicroStation and P-Frame and S-Frame to prepare two-dimensional and three-dimensional drawings of bridge and highway designs. Also use sheet pile design software like Prosheet to design steel sheet pile walls. Water management engineers may use supervisory control and data acquisition tools such as Aqua Cad Suite to monitor water readings, assess the operational status of wastewater collection and water distribution systems and detect pipe deficiencies. (4)

- Use statistical analysis software. For example, transportation engineers may use statistical analysis programs such as SPSS and SAS to perform statistical analyses of travel demand survey data, obtain means, medians, standard deviations and confidence intervals and to perform linear regressions. (4)

- Use graphics software. For example, produce schematic drawings using diagramming and drawing programs such as Visio and Draw. Create slide shows using presentation software such as PowerPoint. In order to develop effective presentations for managers, co-workers, colleagues and clients, import graphs, scanned images, schematic drawings, word processing files and spreadsheet tables. Use photo editing software such as Photoshop to develop and enlarge photos taken with digital cameras. (4)

Oral Communication

- Talk to suppliers and contractors about technical specifications, price quotes, service options and delivery times for materials, equipment and supplies. For example, a civil engineer may speak to a road building contractor about asphalt composition and compaction specifications. (1)

- Discuss ongoing work with co-workers and colleagues. For example, discuss project objectives, priorities, schedules and progress with engineering managers and ask for guidance and approvals. Assign tasks to workers and contractors, answer their questions and provide them with direction. (2)

- Discuss technical and legal matters with co-workers and colleagues. For example, a building engineer may discuss design and construction processes with architects, mechanical and electrical engineers and technologists at site meetings. A structural engineer may speak to colleagues in government departments

about national, provincial and municipal regulations governing the design and construction of bridges and highways. A transportation engineer may speak to urban planners about the collection and analysis of traffic data and the development of a simulation model to assess transit priority strategies. (3)

- Present proposals, recommendations, designs and research findings to senior management, clients and senior representatives from client organizations. Also negotiate project deadlines and budget amounts as appropriate. For example, a structural engineer may present proposals, designs, schedules and budgets for the construction of a length of pipeline. A transportation engineer may present the findings from a feasibility study of proposed airport development plans. (3)

- Facilitate and lead public information sessions on the construction and repair of structures and systems related to highway and transportation services, water distribution and sanitation. During these sessions, present information, designs and concepts, facilitate discussions and answer questions from participants. For example, a public works engineer may facilitate and lead a public information session on a bridge construction project. A municipal engineer may facilitate and lead a public information session on the closure of a landfill site. (4)

Money Math

- Calculate and verify travel claim amounts. Calculate reimbursements for use of personal vehicles at per kilometre rates and add amounts for accommodation, meals and other expenses. (2)

- Calculate and verify invoice amounts. For example, building engineers approve contractors' invoices for work done on construction projects. They make sure that contractors have used contract prices for equipment, materials and labour and have calculated taxes correctly. (3)

Scheduling or Budgeting and Accounting

- Determine the best value among competing tenders for large construction, repair and maintenance work. Perform comparative analyses of data submitted by several contractors and determine which bids offer the best prices. (3)

- Prepare resource allocation matrices and schedules for large construction, repair and maintenance projects. For example, a transportation engineer may prepare resource allocation matrices and schedules for a multi-phased highway rehabilitation project. The engineer may also have to reallocate human resources and adjust schedules several times throughout the project to ensure that the majority of work occurs during non-peak traffic periods. (4)

- Prepare and monitor budgets for large engineering projects such as the construction of buildings, earth structures, powerhouses, roads, airports, railways, rapid transit facilities, bridges and water distribution systems. Take into consideration the actual and projected costs of materials, equipment and labour. Factor in probabilities of delays and other events which may influence costs. Be fairly accurate to minimize budget overruns. (5)

Measurement and Calculation

- Measure the physical properties of geological formations, structures of all types and materials such as concrete and steel. Use specialized instruments such as soil compaction meters, flow meters, vibration analyzers, laser distance meters and transits. Identify measurement parameters and acceptable measurement methods. (3)

- Measure distances and determine locations using satellite, terrestrial, airborne and marine sensors. For example, a geodetic engineer may determine positions on the sea and water levels using radio positioning and satellite sensors. A surveying engineer may determine the location of contours and boundaries using surveys. A navigation and positioning engineer may determine the position of land, air and sea vehicles using navigation systems. A photogrammetric engineer may determine the location of several earth features using aerial photography and remote sensing technologies. (4)

- Determine quantities of equipment, materials and labour needed for large earth-moving, construction and material processing projects. For example, a municipal engineer may determine the amount of crushed limestone needed to cover a section of roadway. The engineer may also determine the size of crew required to dig a trench with backhoes, trenchers and bucket wheels and to lay a pipe system considering established production rates for machines and workers. (4)

- Calculate dimensions, forces and loads for structures and landforms. For instance, a structural engineer may calculate the carrying capacity of a proposed bridge given roadway geometry, drainage and soil conditions. A public works engineer may model the behaviour of a proposed concrete deck slab for a boat slipway. To this effect, the engineer may calculate the bending moments due to handling stresses, design shear force and shear stress carried by concrete and force at each lifting point. (5)

Data Analysis

- Investigate covariance, correlation and causation. For example, a transportation engineer may analyse historical collision data for a substandard vertical curve in a roadway to investigate the correlation between the illumination that exists along that curve, attainable speeds and accident rates. (4)

- Collect and analyse data to describe structures, landforms and civil engineering systems. Identify measurement parameters and determine data collection methods. For example, a transportation engineer may collect and analyse data on transit service frequency, fleet size, person throughput and travel speeds to quantify the impacts of various transit priority strategies. A water management engineer may collect water turbidity readings and other data using supervisory control and data acquisition tools to detect deficiencies in wastewater collection and water distribution systems. (5)

Numerical Estimation

- Estimate life spans of materials, structures and equipment. Use formulas which take into account corrosion or material degradation, but these equations do not incorporate all of the variables and engineers' judgement is also required. For example, a structural engineer may estimate the remaining life span of an earth dam. (3)

Job Task Planning and Organizing

- Civil engineers work in dynamic environments with many conflicting demands on their time. Their work is team-oriented so that they must integrate their own tasks and work schedules with those of many other engineers, technicians, technologists, architects, land surveyors and trades people to design, develop and manage construction, repair and installation projects. Their ability to work on several tasks at the same time and manage priorities is critical to their jobs. Resource shortages, delays in getting accurate information, public complaints, pressures from managers and clients, health and safety emergencies and other unexpected events force them to frequently reorganize job tasks. Civil engineers play a central role in organizing, planning, scheduling and monitoring the activities of project teams and contribute to the long-term and strategic planning of public and private sector organizations. They are responsible for assigning tasks to other engineers, civil engineering technologists and technicians, land surveyors and tradespeople. (4)

Decision Making

- Select technologists, technicians, land surveyors, trades people and engineers to carry out tasks. Consider individual academic backgrounds, skills, experiences, interests, strengths, weaknesses, workloads and availabilities. (2)

- Choose the methods, times, locations, durations and resources needed to train workers. Study the cost and feasibility of several different options and consider the need to replace workers during their training. (3)

- Choose to bid on and accept work on specific projects requiring structural, building, hydraulic, surveying, geotechnical, municipal, environmental, water management and transportation engineering expertise. For example, self-employed civil engineers may review 'requests for proposals', identify tasks and requirements and bid on projects for which they have the necessary time, skills and resources. Once projects are started, they may incur significant losses of money and credibility if they decide to withdraw their participation. (3)

- Select contractors for construction, repair and installation work. Review various tenders and determine which contractors offer the best prices and most feasible work plans. If contractors are selected who perform poorly, the organization may lose considerable time and money. (3)

Problem Solving

- Find that there are human resource shortages to complete projects. Alert co-workers and managers and discuss whether resources can be reallocated so projects can be completed. (2)

- Project deadlines are missed because of missing, inaccurate and inadequate data. Meet project managers and clients to review project plans and negotiate new deadlines. For example, a structural engineer has to locate and mark underground wires from area drawings provided by a client. Realizing that the drawings are inaccurate, the engineer asks the client to allocate additional time and money to allow for the area to be resurveyed and for new drawings to be prepared. (3)

- Deal with failures of structures and systems which constitute hazards to the environment, to the health and safety of populations and to local economies. For example, a municipal engineer learns that a gas spill was detected downtown. The engineer contains the spill, identifies its origin and stops the flow. Then, to ensure that no further contamination occurs, the engineer shuts the water drainage system down, cleans up the spill and reassesses the area. (4)

Finding Information

- Find information about past projects by talking to co-workers and searching databases and project files. (2)
- Find information about materials and equipment by talking to other engineers and manufacturers' representatives and by searching manufacturers' websites. (2)
- Find information about the various rules and regulations applying to construction projects by searching building and design codes, zoning regulations, energy consumption regulations, by-laws and other national, provincial and municipal documents. (3)
- Find information needed to plan construction, inspection, repair and maintenance projects by collecting, analysing, synthesizing and integrating information from a wide range of sources. For example, a municipal engineer may find information about an area of land that has been proposed for development by consulting legal, land surveyor and city plans and topographical, soil classification and flood plane maps. (4)

This information has been adapted from the Government of Canada's Essential Skills Profile for **2131**- **Civil Engineers**

HRSDC Essential Skills Profile

National Occupational Classification 2006

Occupational Language Analyses (OLAs)

Assessment, Tracking and Planning Tools

OSP Work Plan

OSP Training Plan

OSP Transition Plan

Track your skills

OSP Check-In Tool

OSP Check-Up Tools

SkillsZone Learning Activity Database

How Do Your Skills Measure Up?

TOWES

Career Exploration

Vector

Career Cruising

myBlueprint

Education and Training

Employment Ontario

Ontario Colleges

Ontario Universities

The Interprovincial Standards Red Seal Program

iWIN

Volunteer Opportunities

iWIN

Volunteer Canada

Employment Trends and Opportunities

Government of Ontario Labour Market Information

Ontario Job Futures *

Employment Ontario

apprenticesearch.com

Job Bank

Working in Canada

Ontario WorkinfoNet

iWIN

Potential to Prosperity

Appendix 3: Occupational Profile for Construction Estimators

OSP Occupational Profile: Construction Estimators

NOC Code: 2234

Occupation Description:

Construction estimators analyze costs of and prepare estimates on civil engineering, architectural, structural, electrical and mechanical construction projects. They are employed by residential, commercial and industrial construction companies and major electrical, mechanical and trade contractors, or they may be self-employed.

Click on any of the skill title to view sample workplace tasks for this occupation.

Scroll down the page to get information on career planning, education and training, and employment and volunteer opportunities.

Essential Skills	Levels				
Reading Text	1	2	3	4	
Writing	1	2	3	4	
Document Use	1	2	3	4	
Computer Use	1	2	3		
Oral Communication	1	2	3		
Money Math	1	2	3		
Scheduling or Budgeting and Accounting	1	2	3	4	
Measurement and Calculation	1	2	3	4	
Data Analysis	1	2	3		
Numerical Estimation	1	2	3		
Job Task Planning and Organizing	1	2	3	4	
Decision Making	1	2	3		
Problem Solving	1	2	3		
Finding Information	1	2	3		
Critical Thinking	1	2	3		

- The skill levels represented in the above chart illustrate the full range of sample tasks performed by experienced workers and not individuals preparing for or entering this occupation for the first time.
- Note that some occupational profiles do not include all Numeracy and Thinking Essential Skills.

Reading Text

- Read warnings, precautions and instructions on construction signs placed on buildings and equipment. (1)
- Read safety precautions and hazard warnings on Workplace Hazardous Material Information System labels and on Material Safety Data Sheets. This information is needed to ensure that the correct protective equipment is used during site visits. (2)
- Read short messages from clients, colleagues, co-workers, and supervisors. For example, read clients' and supervisors' notes on quotes and drawings. Read email such as co-workers' updates on projects and responses to queries. (2)
- Read short reports. For example, read general contractors' monthly project reports to stay current on projects, review activities and to determine if follow-up action is required. (2)
- Read descriptions and explanations on construction drawings, specification lists and architectural design reports to understand the scope and financing of construction projects. Note special procedures, materials and challenges that may affect project costs. It is important to understand industry and legal terminology to accurately interpret the information. (3)
- Read contractors' quotes and proposals. Review the quotes to determine what work and materials are included and excluded. On large projects, read and integrate information from many quotes to ensure that the work and materials are listed without duplication. (3)
- Refer to government legislation, regulations and subsequent bulletins. For example, read and interpret code standards for the installation of electrical wiring. You must be able to argue knowledgeably when you feel that materials do not meet code. Failing to correctly interpret codes can cost the company time and money. (3)
- Review trade publications to stay current on new products, estimating techniques, trends in the industry and the construction industry as a whole. For example, read articles about new products and cost analysis research in trade magazines. Use specialized expertise to evaluate the information for relevance and may incorporate the information into estimating or costing procedures. (4)

Writing

- Write notes and short memos to remind yourself, co-workers, supervisors or clients about tasks, confirm requests and to respond to questions. For example, write brief notes and comments on specification sheets and drawings to indicate changes, record questions or highlight specific points for bid analyses. (1)
- Write short memos and email to co-workers, supervisors, contractors and clients. For example, write estimation instructions to junior estimators. Give advice and share technical information with colleagues, clients and co-workers. Request approval on discounted quotes from supervisors. Write email to clients to request changes to project timelines. (2)

- Write detailed letters to supervisors, contractors and clients. For example, outline deliverables and work completion directives in letters of understanding provided to contractors. Write cover letters to outline details of construction bids. Explain and justify changes to the original bids or project specifications as appropriate. (2)

- Write technical instructions and explanations for co-workers and contractors. For example, write detailed installation instructions and tool requirements for installing modified equipment. (3)

- Prepare reports, which address a variety of operational matters for supervisors and clients. For example, write detailed progress reports, which describe work progress, detail work delays, outline corrective action taken and recommend follow-up actions. Submit the reports to financial institutions to release project funds. (4)

- Draft recommendation reports for actions such as the purchase of new equipment, change of product and supplier, or to modify installations, and then submit to management or clients for approval. These lengthy documents generally include a cost analysis and justifications for the various options selected. For example, recommendations may include a health and safety assessment; description of all specifications, and modification details; or the evaluation of several suppliers and a justification of the supplier chosen. (4)

Document Use

- Get specific pricing information from pricing tables, lists or databases. (1)

- Scan photographs and sketches of buildings and equipment to evaluate damage to estimate repair costs. (2)

- Scan tables in codebooks and manuals to locate specifications such as pipe or wire size. (2)

- Review and verify information from a variety of forms such as purchase orders and service requests. Review the forms to determine if additional details or follow-up actions are required, verify accuracy, and ensure overall consistency. (2)

- Complete estimating and administrative forms. For example, enter values, prices, quantities, dimensions and brief descriptions and explanations onto job quotes, building permits and insurance forms. Summarize information from other documents such as site drawings, specification sheets, costing and rate tables and project schedules and tracking forms to complete these forms. (3)

- Complete tracking and quality control forms. For example, enter scheduling, budget and operational data onto tracking forms. Summarize information from the tables, lists and textboxes of the document, as well as other forms such as financial and work progress reports to complete entries. Provide dates, times, locations and work details for daily and weekly schedules, and to date work summaries and associated costs for ongoing project status. (3)

- Review construction drawings such as engineering and architectural drawings to determine physical dimensions, material specifications and equipment requirements when costing project proposals. The drawings are often complex with multiple sections and detailed information on the specific material and methods of construction. (4)

Computer Use

- Use graphics software such as Power Point to create presentations. Use importing and presentation features such as fadeouts. (2)

- Conduct Internet searches for technical information such as information relating to a specific construction procedure. Access and download information to obtain and send bid drawings and specifications using file transfer protocol. (2)

- Use word processing. For example, write and format letters, memos and reports. Use functions such as page numbering and table of contents. Set the final layout, embedding illustrations and graphs within the text. (3)

- Use spreadsheets. For example, use software such as Excel to generate cash flow, resource and labour tables and graphs. Use formatting features to embed formulae to links columns, rows, cells and pages. (3)

- Use databases. For example, use software such as TOPS, Easyset, and Estimateur General to enter and obtain detailed information for quotes and to update databases. Use advanced features to set queries to input and access information and to enter commands to update data. (3)

- Use computer-assisted design, manufacturing and machining. For example, modify architectural drawings and add details to drawings. Zoom, rotate, enlarge and import drawings. (3)

- Use communication software. For example, use Outlook Express to receive and send email and attachments. Use Outlook features such as address books and group listings, calendars and reminder alarms. (3)

- Use bookkeeping, billing and accounting software. For example, prepare detailed summaries of project costs by creating cells to input data and embed calculation formulae into the cells. (3)

Oral Communication

- Interact with co-workers and staff to share routine information, to provide direction and to coordinate work. For example, provide brief job quote instructions to junior estimators and share job progress with co-workers. (1)

- Talk with clients, sub-contractors, competitors and suppliers for the purpose of exchanging information about construction progress, upcoming projects and to confirm availability and project timelines. Use these interactions to build and maintain your network and partnerships. (2)

- Speak regularly with clients, government officials, staff and contractors to provide and receive technical information, and respond to questions. For example, speak with clients and supervisors to outline project modifications. Speak with ministry officials to negotiate the use of alternative materials and construction methods that meet the required codes and regulations. Speak with senior co-workers and supervisors to discuss particular pricing or quantification problems. (2)

- Interact with clients to discuss and resolve construction problems such as code requirements being overlooked by architects. Clear and diplomatic communication is critical to reaching positive outcomes for the client and the company. (3)

- Instruct junior estimators on estimating procedures such as completing difficult and complex sections of project costing analyses. Communicate clearly to ensure there is a clear understanding of the processes. Miscommunications can lead to costly errors and additional training time. (3)

- Participate in weekly project meetings with staff to discuss topics such as productivity, project updates, scheduling, employee health and safety. At these meetings, present progress reports, make recommendations on production and procedures and assign tasks to staff. (3)

- Speak with architects, engineers, general and specialty trade contractors. For example, speak with these professionals to discuss building and equipment options, seek clarification on drawings and specification sheets and to develop an understanding of particular construction procedures and specifications that may impact on costs. (3)

- Negotiate the terms of agreements with contractors and suppliers. For example, negotiate prices and delivery timelines with suppliers; services, terms and conditions of agreements and project timelines with contractors; and contract adjustments with clients when inaccurate information and drawings create the need for additional work. (3)

- Make presentations to various levels of management to outline project proposals. The ability to organize, interpret and present ideas and to answer questions is important to winning contracts and achieving project approval. (3)

Money Math

- Calculate travel expense amounts using established rates such as per kilometre travel rates. Total the dollar amounts on expense sheets before submitting for reimbursement. (2)

- Prepare invoices for completed jobs. Calculate labour and equipment costs at hourly rates and add material costs. Apply price mark-ups, appropriate taxes and total the amounts. (3)

Scheduling or Budgeting and Accounting

- Schedule payments and orders so that cash flows provide maximum benefits to the company. For example, order supplies near the end of the month to reduce billing periods and receive discounts for paying within fifteen days of receipt. (3)

- Perform cost-benefit analyses for equipment and materials. For example, an electrical estimator tracks the initial and follow-up costs of two switches. The estimator determines the more expensive switch is more cost-effective when he factors in follow up labour and part replacement costs into the analysis. (3)

- Establish and monitor schedules for long-term multi-phased projects. Establish critical timelines and schedule the activities of staff, consultants and contractors. In addition, coordinate tasks with other departments and companies, including multiple specialty trade contractors. Many factors such as sub-contractor, material and equipment availability, construction difficulties, and extended wet weather have a large impact on project schedules and require constant monitoring. As a result continually adjust schedules to ensure project timelines are met. (4)

- Determine and monitor budgets for large and small concurrent projects. Consider labour, material, equipment, contractor and auxiliary equipment costs using established costing rates and profit mark-ups. Monitor expenses to ensure projects are within budget, and adjust schedules and budget lines to accommodate unexpected delays and costs. Project costs are often in the range of twenty thousand to on hundred thousand dollars but may run to millions of dollars for multi-phased projects. In addition, prepare financial summaries to monitor profits and losses. (4)

Measurement and Calculation

- Take measurements using a tape measure during site visits to verify quantities of material. For example, measure lengths of wiring. (1)

- Calculate quantities and volumes. For example, when preparing estimates for roadway construction calculate the quantity of gravel required using area and depth of coverage and the grade of slopes as factors. (2)

- Calculate missing dimensions on scale drawings to accurately determine quantities. Construction estimators must take measurements from scale drawings and calculate areas, perimeters and volumes, and may have to create a new scale drawing to determine the missing dimensions. (3)

- Calculate material quantities for jobs involving complex and irregular shapes. Set up equations to calculate height, depth, angles and degree of curves using principles of geometry and trigonometry. Insert these dimensions into formulae to determine the volume of material required to bring sections of roadways up to grade level. (4)

Data Analysis

- Average labour and material costs to guide future estimates. (2)

- Analyze monthly data on labour and material performance to identify problem areas and depict trends over time in quality, defects or efficiency. For example, monitor product failures and replacement costs to draw conclusions about the cost effectiveness of products. Analyze project costs such as labour costs versus budgeted costs and equipment downtimes to determine if there are areas to improve efficiencies. (3)

Numerical Estimation

- Estimate the time needed to complete construction projects. Consider factors such as the complexity and size of the projects, the weather conditions expected during construction, equipment and materials needed and special requirement for particular types of jobs. (2)

- Estimate profits. Consider factors such as potential variations in cost and charge rates, potential project delays and possible cost overruns. Most factors are known but fluctuations can occur within plus or minus two percent. (3)

Job Task Planning and Organizing

- Construction estimators organize their tasks to complete research, estimate project bids and manage project contracts for their employer or client organizations. They usually work on multiple projects, which can vary in length from one day to two years depending on the size and scope. Job tasks and priorities are project driven, but they decide the priority of tasks. They plan their daily, weekly and long term schedules to fit in activities, which may include: meetings, site visits, quote estimations, presentations, project management and quality control and productivity analysis. Their daily activities can vary widely from day-to-day. They work in fast paced environments in which they must be able to determine which projects and issues take priority. They must always be willing to reorganize their work schedule to deal with problems and situations as they arise to ensure projects stay on schedule. They interact with supervisors, contractors, colleagues and clients often in a coordinative role to integrate their tasks with others. Construction estimators are often involved in operational and strategic planning by virtue of their job. Based on their understanding of an organization, they identify and complete estimates for a wide range of construction projects. They may plan and monitor project budgets and schedules depending on their level of experience. They coordinate the overall project work plan and provide operational and quality control recommendations and directives. They identify and establish staffing and contractor requirements. They may coordinate activities and tasks to complete projects. Senior estimators are responsible for assigning and monitoring the work of junior estimators. (4)

Decision Making

- Make product-purchasing decisions. Decisions have a large impact on profit margins. For example, decide to purchase generic brands rather then name brands to increase profit margins. Decide to purchase products that are more expensive but have lower malfunction rates over time. (2)

- Decide which contractors and suppliers to use. Adapt and use standard evaluation criteria and price points when awarding contracts and accepting supplier's terms. Legal implications make decisions difficult to reverse. (2)

- Decide to bid on projects. In addition to set decision procedures consider the amount of work confirmed, project timeframes, costs, equipment and human resources availability, and the chances of winning the contract. Decisions usually cannot be reversed due to bidding deadlines and binding contracts. Deciding which estimate requests to respond to is an important business skill. (3)

- Decide how to deal with contractors who fail to show up for jobs or do not complete work to specifications. In some cases, withhold payment until completion of work or reduce payments to offset work delay costs. Consider past relationships with the contractors and the cost implications to the project when making decisions. Binding contracts can limit how to deal with these situations, and decisions must be geared towards motivating the contractor to meet their contractual obligations with minimal impact on overall project timelines and costs. (3)

Problem Solving

- Face clients who are upset because of inconveniences during construction such as the lack of an access road to sites. Take corrective action by building temporary driveways to enable the clients to reach the sites during construction. (1)

- Deal with unexpected physical obstructions or problems during construction. For example, find that roadway construction designs will result in the uneven seaming of connecting roads. Speak with project managers and technical experts to determine alternative constructive methods that will remain within budget. Obtain approval from clients to continue. (2)

- Deal with cost overruns or project delays due to weather, slower progress then expected, contractors not being available when required, and materials and equipment not arriving as scheduled. For example, discover that critical materials are on back order from the manufacturer. Identify alternative material and speak with clients to obtain approval. When possible speak to the clients to explain the unforeseen situation and to try to reach shared cost compromises. (2)

- Experience faulty work completed by contractors. For example, you discover incomplete installations of safety straps around inground gas tanks. Identify the deficiencies and have the contractors redo the jobs. Adjust work schedules to accommodate resulting delays. (3)

- You experience increases in service calls. Investigate the calls to determine causal factors such as equipment or components breakage, worker carelessness and faulty equipment. Make recommendations for corrective action such as replacing components, changing component brands and providing training to servicing staff. (3)

- Face owners and general contractors exerting pressure to resume work before receiving engineering approval. Emphasize the legal and cost implications of proceeding prematurely. (3)

Finding Information

- Locate pricing information for construction materials by searching internal and online supplier databases. (1)

- Locate technical information from past projects, professional publications, co-workers, supervisors and colleagues to evaluate specific products, procedures and contractors before deciding what to buy, who to hire and what to quote. (2)

- Identify and consult with content experts and co-workers to get their opinions on pricing and estimating details. (2)

- Draw on information from drawings, reports, timesheets and repair and replacement reports to monitor and improve project efficiencies and productivity. (3)

- Locate estimating information from bid specifications, codebooks, drawings, technical reports, costing and material databases and manuals. Use technical expertise to integrate the information to complete costing estimates. (3)

Critical Thinking

- Regularly evaluate the quality of construction materials and equipment by studying specifications, speaking with colleagues about their experiences, reading user reviews on supplier websites, and monitoring malfunctions and breakages. (2)

- Evaluate the feasibility of completing projects within clients' proposed budgets and timeframes. Consider timelines, season, equipment and human resources availability, complexity of project, including unknown factors. (2)

- Evaluate the quality of quotes using standard procedures. For example, review costing procedures used and compare prices and work details with specifications to ensure accuracy and overall consistency. In addition, use knowledge and expertise to interpret and assess more subtle information not implicit in the bid and make suggestions or modifications that will enhance the quality of the bid and the chances of winning. (3)

This information has been adapted from the Government of Canada's Essential Skills Profile for **2234**-**Construction Estimators**

HRSDC Essential Skills Profile

National Occupational Classification 2006

Occupational Language Analyses (OLAs)

Assessment, Tracking and Planning Tools

OSP Work Plan

OSP Training Plan

OSP Transition Plan

Track your skills

OSP Check-In Tool

OSP Check-Up Tools

SkillsZone Learning Activity Database

How Do Your Skills Measure Up?

TOWES

Career Exploration

Vector

Career Cruising

myBlueprint

Education and Training

Employment Ontario

Ontario Colleges

Ontario Universities

The Interprovincial Standards Red Seal Program

iWIN

Volunteer Opportunities

iWIN

Volunteer Canada

Employment Trends and Opportunities

Government of Ontario Labour Market Information

Ontario Job Futures *

Employment Ontario

apprenticesearch.com

Job Bank

Working in Canada

Ontario WorkinfoNet

iWIN

Potential to Prosperity

Appendix 4: Additional Resources

For more information on the Workplace Culture and Communication courses, go to:
http://www.ryerson.ca/ce/wcc/l
www.learn.utoronto.ca

For more information on how Ontario Bridge Training programs can help get you licensed or employed in your profession, go to:
citizenship.gov.on.ca/english/keyinitiatives/bridgetraining.shtml

For more information on regulated professions in Ontario, please go to:
http://www.ontario.ca/globalexperience

For more information on Services for Newcomers in Ontario go to:
www.citizenship.gov.on.ca

For information on English or French as a Second Language Classes in your area go to:
www.citizenship.gov.on.ca/english/keyinitiatives/language.shtml